



**Women's Health Initiative  
2010 Annual Progress Report**

**Data as of: September 17, 2010**

**Prepared by  
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**Appendix A – Women’s Health Initiative Memory Study (WHIMS) Progress Report**

## 1. Overview

### 1.0 Preliminary Remarks

This report documents the Women's Health Initiative (WHI) Extension Study (ES) activities through September 17, 2010, the fifth year of the post-intervention phase. Data presentations on consent to the current (2005-2010) and next (2010-2015) Extension Study, follow-up mailing response rates, vital status and outcome rates for each study component are provided with limited additional explanation as these follow the same conventions as have been previously described. A few comments are presented below as orientation to the presentation on aging related analyses. In addition, this report describes efforts using core resources for biomarker and intermediate endpoint studies, ancillary studies with particular focus on those using the biospecimen repository, and a list of publications.

During the past year, a major focus of the program was preparing for the next phase of the Extension Study (2010-2015). The 2010-2015 protocol was developed and approved. The Clinical Coordinating Center (CCC) reconsented participants by mail for continued centralized follow-up. The National Heart, Lung, and Blood Institute (NHLBI) implemented a streamlining of the program, reducing the operational sites from 39 Field Centers (FCs) to 4 Regional Centers (RCs) each with one or two satellite sites. These 10 sites and the CCC will be responsible for follow-up of non-responders from their assigned geographic areas and for obtaining medical records of designated outcomes occurring in participants in the newly created Medical Records Cohort (MRC), defined as former Hormone Therapy (HT) trial participants plus all African American and Hispanic participants from other study components. Additional changes in data collection will be described in subsequent reports.

### 1.1 Extension Study Follow-up

The ES study follow-up is conducted annually by mail to obtain self-reported outcomes (Form 33—*Medical History Update*), hormone therapy use (Form 150—*Hormone Use Update*) among HT trial participants, and quality of life (Form 151—*Activities of Daily Living*). A one-time collection of historical diagnoses of Parkinson's disease and diabetes (Form 134—*Addendum to Medical History Update*) was also collected during the first ES follow-up year.

The annual contact is administered through up to three mailings from the CCC over a five month period followed by FC follow-up of non-responders after seven months. Response rates to Form 33—*Medical History Update*, viewed as the primary indicator of response, indicate that participation rates remain high in year 5, with 78.7% responding to the first mailing and 89.2% responding to mailings overall (Table 1.7).

Field Centers are responsible for data collection from women who cannot be followed by mail and from non-responders to the three CCC mailings. In year 5, 4,185 required FC follow-up and of these, 86.3% provided a Form 33 giving a total estimated response rate of 96.3% (Table 1.8). Response rates for Form 151 are lower generally than for other instruments because FC follow-up for this form is optional. Differences between study components are generally small.

## 1.2 Outcomes

The list of potential outcomes being investigated for the WHI-ES has changed somewhat from WHI. The most important changes were:

- Outpatient stroke is adjudicated (not adjudicated during WHI intervention phase)
- Hip fracture continues to be adjudicated but no other fractures (during WHI intervention phase other fractures were adjudicated for Clinical Trial [CT] participants)
- Hospitalizations of a single night are no longer investigated, unless they occur in conjunction with a self-report of a designated WHI-ES outcome
- Angina and CHF are no longer adjudicated with the beginning of the Extension in 2005. In 2009, plans were developed to resume adjudication of CHF in HT participants from 2005 forward, in preparation for the next extension period from 2010 to 2015.
- VTE events continue to be adjudicated for former HT participants. In 2009, plans were developed to adjudicate VTE in all Black and Hispanic participants from 2005 forward, also in preparation for the next extension period.

For each outcome type, only the first occurrence since the beginning of WHI is investigated. A complete list of adjudicated outcomes for the WHI-ES may be found in the WHI-ES protocol.

Outcomes adjudication for the WHI-ES is centralized. Field Centers collect documents from self- or proxy-reported cases and forward them to the CCC. The CCC forwards purported cases of designated WHI outcomes to an adjudicator specific to the disease category. Outcomes identified from other hospitalizations are first reviewed by CCC outcomes staff and then either forwarded to an appropriate adjudicator, or closed administratively. Adjudicators are divided into committees responsible for cardiovascular events (which include VTE but not stroke), stroke, hip fractures, fatal events, and cancer. The cancer committee consists of trained cancer coders at the CCC. All other committees consist of physician adjudicators, many of whom were local physician adjudicators during the WHI intervention phase. There is a large overlap between the fatal events committee and the cardiovascular committee. Every case is reviewed by a single adjudicator. Quality Assurance procedures require a second adjudication of at least 10% of the cases by another adjudicator from the same committee.

A tabulation of all designated outcomes currently available based on the current procedures for adjudication are presented by age and race/ethnicity for each CT component in Sections 2 through 4, for Observational Study (OS) participants in Section 5 and for CT participants combined in Section 6. Additional tables of self-reported outcomes in women who did not report a prevalent condition at baseline are also provided in each section.

Agreement rates between self-report and confirmed outcomes occurring during the WHI extension are provided in Tables 7.1 and 7.2. Because there is not always a one-to-one correspondence between self-reported and adjudicated outcomes, the agreement is presented in two ways.

Table 7.1 presents the final status of all self-reports. A self-report for a particular outcome is considered closed if all adjudications associated with the outcome are closed. In the rare situation where a self-report of a specific event is associated with several adjudication cases, perhaps because of several associated hospitalizations, the original event would not be

considered closed in this table, even if the original event has been confirmed. This is a reason for discrepancies between numbers in these tables and other tables in this report.

If a self-report is closed, it is considered "confirmed" if any of the associated adjudication cases confirms the exact outcome. If this is not the case, we examine whether a related outcome has been found. All cardiovascular outcomes are considered related, all cancers are considered related, and all fractures are considered related. If no related outcome is confirmed, we determine whether any outcome has been confirmed. For the denied cases, we separate those that are denied for administrative reasons (e.g., no release of information [ROI] obtained) from those where the records indicate that no outcomes occurred.

Table 7.2 examines the source for confirmed outcomes to determine if a centrally confirmed case was investigated as a result of a self-report for the exact outcome, a related outcome, an unrelated outcome, or a hospitalization.

### 1.3 Aging Outcomes-WHI Extension

Table 8.1 shows the distribution by current age and race/ethnicity among WHI participants known to be alive on September 17, 2010. Thirty-one percent of the WHI Extension Study cohort has reached their ninth decade, with 33,172 women aged 80-89 including 2,834 women aged 90 and older.

Co-morbidity is quite common in the Extension Study cohort. Based on self-reported outcomes (including DVT, pulmonary embolism, treated diabetes, treated hypertension, hysterectomy, osteoarthritis, intestinal polyps, and lupus) nearly 47% of women have reported 4 or more outcomes (Table 8.2). Only 2.8% of women have reported no outcomes. The burden of self-reported co-morbidity appears to be highest in African American and Native American women and lowest in Asian women with similar percentages occurring among white and Hispanic/Latino women. For adjudicated outcomes (Table 8.3), 74.1% of women have none of our WHI-adjudicated outcomes, 22.5% have one such outcome, and 3.4% of women have had two or more adjudicated outcomes. Women over 80 years are two to three times as likely to have experienced at least one adjudicated outcome compared to younger women. Event rates for adjudicated outcomes are more similar across race/ethnicity groups than rates of self-reported outcomes. The combined self-reported and adjudicated outcomes that have occurred to date (Table 8.4) show that 89.2% of WHI women have had two or more diagnoses.

Self-reported aging outcomes items are shown by age on April 1, 2005 (the beginning of the WHI Extension), in Table 8.5 and by race/ethnicity in Table 8.6. Overall, 33.9% of women report their health status as "excellent or very good" and women ages 80 and older espouse this category about half as often. Approximately 94% of women report their quality of life as good and this holds for 89% of women in their 80s and 90s. Prevalence rates of ADL disabilities and instrumental activities of daily living increase dramatically with age. Difficulty with grocery shopping is the most common limitation. Difficulty with bathing, dressing, and taking medications becomes much more common in age groups 80 and above.

The need for nursing care doubles across each age category: 2.3% of women less than 65 years require nursing care, 17% of women over 80 years need care. Twice as many women over 80 years report living alone compared to the women under 70.

Under geriatric conditions, we report the percent of women who fell two or more times per year on average between April 1, 2002, and March 31, 2005. About 5% of women below age 80 are frequent fallers, compared to 8.2% of women ages 80-89. Incontinence, dizziness, and hearing and vision impairments are common in all age groups.

Figure 8.1 shows change in Rand-36 Physical Function scores according to age on April 1, 2005. There are clear differences amongst the age groups in levels of physical function with women younger than 70 having very high levels of physical function that hold over the 5 years of the extension. For women 70-90, levels of physical function are lower initially and fall slightly over the 5 years of the Extension. For the few women in their 90s on April 1, 2005, we observe a precipitous drop in physical function scores over this period.

These data illustrate the schism between accumulated morbidity and perceived health and quality of life in our older cohort. Many older women have multiple diagnoses, but the vast majority still report a high quality of life.

#### **1.4 Data Quality and Study Performance Reports**

Outcomes processing by FCs stopped on September 17, 2010. These reports in Tables 9.1-9.6 represent the final status of their outcomes efforts as of September 17, 2010. Where possible, the CCC or RC staff will attempt to complete the documentation of reported outcomes.

The current status of outcomes processing by FCs is somewhat variable. Most Centers are considered up-to-date in their efforts, with three identified by the Performance Monitoring Committee (PMC) as having significant backlogs. Working site visits were made to two of these RCs to assist in closing outcomes before the end of the study period.

Participants return questionnaires to the CCC by mail for scanning. Forms that cannot be scanned are key-entered. CCC staff also review all the returned forms for comments the participant may have written on the form and indicate which forms need to be reviewed by FC staff (Table 9.6).

The current status of outcomes adjudication indicates that outcomes processing by FCs is excellent (Table 9.7), with only 62 cases not yet forwarded to the CCC for adjudication. The status of adjudications is somewhat variable, with fracture and primary cancers up to date, stroke lagging somewhat behind, and a large number of CVD and death cases to be adjudicated. This lag in adjudication is in part due to increased numbers of outcomes due to the consolidated window for mailings during this final phase of the current extension. In addition, the CCC priority was to assist FCs in collecting and closing as many outcomes as possible by September 17 rather than completing the adjudications. Instead, the adjudications for this extension will be completed by February 2011 for the final database snapshot for this extension.

One outcomes priority this year was to complete SEER-coding the non-primary cancers that had been adjudicated only for fact of cancer. In WHI primary cancer cases are defined as breast, colon, rectum, ovary, and endometrium cancer. Currently 8,300 of the 11,170 other cancers have been SEER coded and the remaining 2,900 cases will be coded within the next 6 months. Adjudication of other hospitalizations is almost up to date, with the back log of cases to review reduced from 3,700 to 500.

Ascertainment and adjudication of heart failure (HF) was reinstated during Ext. 1 and will continue through 2010-2015. During the past year, an extensive retrospective pull to retrieve all MRC HF cases and to investigate any outstanding self-reports of HF was completed. Over 3,500 cases were retrieved and currently reside at the CCC; these will be adjudicated during the first two years of Ext. 2 using the Atherosclerosis Risk in Communities Study (ARIC) model for classifying and sub-typing HF.

In February, 2009, the Executive Committee (EC) approved an (Outcomes Adjudication Committee (OAC) proposal to retrieve and centrally adjudicate all Dietary Modification (DM) and OS strokes and self-reports of strokes that have never been centrally adjudicated by a stroke neurologist. Retrieval of final ~ 3000 stroke cases was completed this past year, and the cases will be adjudicated in Ext.2. Because of the significant number of cases to code relative to the small number of active stroke adjudicators, the CVD committee has been triaging self-reports of strokes that were denied by the local adjudicators. This year approximately 450 cases have been reviewed. Of these, all equivocal and confirmed strokes will be forwarded to the stroke committee when Ext. 2 commences.

### **1.5 Specimen Repository**

The current inventory of the WHI specimen repository is described in Tables 10.1–*CT Outcomes Cases with Blood* and 10.2–*OS Outcomes Cases with Blood* and Table 10.3–*CT and OS Outcomes with DNA Available*. These tabulations show the estimated volume of each type of specimen (serum, EDTA plasma, citrate plasma) available according to the primary outcomes of interest in the clinical trial and observational study components separately. Table 10.4 tabulates the number of funded studies using these specimens by outcome type and specimen type. Specimen availability is not shown for women who have not experienced one of these outcomes because of the large supply of potential controls. RBCs collected on all participants at baseline, CT Year 1, and OS Year 3 are not shown and urine samples, collected at the three bone mineral densitometry Centers, are also not shown. These samples have yet to receive much use.

The WHI specimen resources have been divided into three accounts, (1) that which is available to WHI investigators now to support core or ancillary study activities, (2) that which is reserved for Broad Agency Announcement awardees (see Table 11.2); and (3) that which is reserved for use by WHI investigators at the end of the 2005-2010 Extension Follow-up period. Tabulation for each of these accounts is available upon request.

### **1.6 Core, Broad Agency Announcement Activities, and Ancillary Studies**

WHI investigators are involved in numerous activities funded by the program designed to further explicate the results of the clinical trials, to expand the scope of our understanding of intervention effects, and to identify and evaluate biomarkers of disease through use of the WHI repository. These core studies are summarized briefly in Table 11.1.

In 2006 and 2008, the NHLBI released a Broad Agency Announcement (BAA) to the larger scientific community, requesting proposals designed to use WHI specimens. The 12 awardees announced in January 2007 and 10 awardees announced in January 2009 are listed in Table 11.2.



WHI investigators and their colleagues, as well as investigators without WHI connections, continue to propose ancillary studies to use WHI resources. Together these efforts are aimed to maximize the use of these resources to provide insight into the causes and mechanisms of disease. A summary of all proposed ancillary studies and associated status is found in Table 11.3 with a detailed listing in Table 11.4. For brevity, the following acronyms are used to refer to some of the larger Core/Ancillary Studies.

W8	NBS - Nutrient Biomarker Study
W25	WHI-CACS - WHI Coronary Artery Calcium Study
M5	SHARe - SNP Health Association Resource
M6	PAGE - Population Architecture of Genes and Environment
M13	GARNET - Genome-wide association studies of treatment response in Randomized Clinical Trials
M24	WHISP - WHI Sequencing Project
AS39	WHIMS - WHI Memory Study
AS62	WHISE - WHI Sight Exam
AS103	WHISCA - WHI Study of Cognitive Aging
AS105	CAREDS - Carotenoids in Age-Related Eye Disease Study
AS130	BBDS - Benign Breast Disease Study
AS183	WHIMS-MRI - WHI Magnetic Resonance Imaging Study
AS218	NPAAS - Nutrition and Physical Activity Assessment Study
AS233	WHIMS Extension
AS244	WHIMS ECHO - Epidemiology of Cognitive Health
AS262	WHIMS-Y - WHIMS in Younger Women

Participant enrollments to ancillary studies requiring a separate consent are tabulated by FC and shown in Table 11.5. More than 34,000 participants were involved in ancillary studies during WHI and over 29,000 during the Extension Study. Table 11.6 provides the distribution of enrollments per participant. Approximately 17.5% of Extension Study participants are enrolled in one or more ancillary study, and of these, the majority participate in only one.

A detailed progress report from the WHI Memory Study (WHIMS) Coordinating Center for the studies associated with cognition and dementia is provided in the Appendix.

## 1.7 Publications

WHI investigators remain engaged in the publication process. To date, 1,103 manuscript proposals have been received and 831 approved for development by the Publications and Presentations committee. Of these, 431 have been published or are in press, including 56 since the last report (Table 12.1). A full listing of approved manuscript proposals is provided in Table 12.2.

**Table 1.1**  
**WHI Centers and Principal Investigators**

<b>Principal Investigator</b>	<b>Institution</b>	<b>Location</b>
Shirley Beresford, PhD	Fred Hutchinson Cancer Research Center	Seattle, WA
Robert Brunner, PhD	University of Nevada	Reno, NV
Robert Brzyski, MD	University of Texas	San Antonio, TX
Bette Caan, PhD	Kaiser Foundation Research Institute	Oakland, CA
Rowan Chlebowski, MD, PhD	University of California, Los Angeles	Torrance, CA
J. David Curb, MD	University of Hawaii	Honolulu, HI
Charles Eaton, MD	Memorial Hospital of Rhode Island	Pawtucket, RI
Gerardo Heiss, MD MPH	University of North Carolina, Chapel Hill	Chapel Hill, NC
Barbara Howard, PhD	MedStar Research Institute	Washington, D.C.
Allan Hubbell, MD	University of California, Irvine	Irvine, CA
Rebecca Jackson, MD	Ohio State University	Columbus, OH
Karen Johnson, MD, MPH	University of Tennessee	Memphis, TN
Jane Kotchen, MD, MPH	Medical College of Wisconsin	Milwaukee, WI
Lewis Kuller, MD, DrPH	University of Pittsburgh	Pittsburgh, PA
Dorothy Lane, MD, MPH	Research Foundation SUNY, Stony Brook	Stony Brook, NY
Norman Lasser, MD, PhD	University of Medicine and Dentistry	Newark, NJ
Erin LeBlanc, M.D.	Oregon Health & Science University	Portland, OR
Cora Lewis, MD, MSPH	University of Alabama at Birmingham	Birmingham, AL
Marian Limacher, MD	University of Florida	Gainesville/ Jacksonville, FL
JoAnn Manson, MD, DrPH	Brigham and Women's Hospital	Boston, MA
Karen Margolis, MD	University of Minnesota	Minneapolis, MN
Lisa Martin, MD, FACC	George Washington University	Washington, DC
Lauren Nathan, MD	University of California, Los Angeles	Los Angeles, CA
Mary-Jo O'Sullivan, MD	University of Miami	Miami, FL
Judith Ockene, PhD	University of Massachusetts	Worcester, MA
Larry Phillips, MD	Emory University	Atlanta, GA
Lynda Powell, PhD	Rush University Medical Center	Chicago, IL
Haleh Sangi-Haghpeykar, PhD	Baylor College of Medicine	Houston, TX
John Robbins, MD	University of California, Davis	Sacramento, CA
Gloria Sarto, MD	University of Wisconsin	Madison, WI
Michael Simon, MD	Wayne State University	Detroit, MI
Marcia Stefanick, PhD	Stanford University	San Jose, CA
Michael Thomas, MD	University of Cincinnati	Cincinnati, OH
Cyndi Thomson, PhD, RD	University of Arizona	Tucson/ Phoenix, AZ
Linda Van Horn, PhD, RD	Northwestern University	Chicago/ Evanston, IL
Mara Vitolins, PhD	Wake Forest University	Winston-Salem/Greensboro, NC
Jean Wactawski-Wende, PhD	State University of New York, Buffalo	Buffalo, NY
Robert Wallace, MD	University of Iowa	Iowa City/ Bettendorf, IA
Sylvia Wassertheil-Smoller, PhD	Albert Einstein College of Medicine	Bronx, NY
Garnet Anderson, PhD	Clinical Coordinating Center,	
Ross Prentice, PhD	Fred Hutchinson Cancer Research Center	Seattle, WA
Sally Shumaker, PhD	WHI Memory Study Coordinating Center, Wake Forest University	Winston-Salem, NC

**Table 1.2**  
**Consent Status by Study Component and Arm**

Data as of: September 17, 2010

WHI Enrollment	Enrolled in WHI	Eligible for extension 2005-2010 <sup>1</sup>	Consented	
			N	%
Hormone Therapy	27347	25194	20433	81.1
With Uterus	16608	15408	12788	83.0
E+P	8506	7878	6545	83.1
Placebo	8102	7530	6243	82.9
Without Uterus	10739	9786	7645	78.1
E-alone	5310	4851	3778	77.9
Placebo	5429	4935	3867	78.4
Dietary Modification	48835	45560	37858	83.1
Intervention	19541	18207	14769	81.1
Comparison	29294	27353	23089	84.4
Calcium and Vitamin D	36282	34447	29862	86.7
Active	18176	17280	15025	87.0
Placebo	18106	17167	14837	86.4
Clinical Trial Total	68132	63332	52176	82.4
Observational Study	93676	86744	63231	72.9
Total	161808	150076	115407	76.9

WHI Enrollment	Enrolled in extension 2005-2010	Eligible for extension 2010-2015 <sup>1</sup>	Consented	
			N	%
Hormone Therapy	20433	18794	13700	72.9
With Uterus	12788	11789	8786	74.5
E+P	6545	6048	4478	74.0
Placebo	6243	5741	4308	75.0
Without Uterus	7645	7005	4914	70.1
E-alone	3778	3479	2446	70.3
Placebo	3867	3526	2468	70.0
Dietary Modification	37858	35594	27280	76.6
Intervention	14769	13922	10656	76.5
Comparison	23089	21672	16624	76.7
Calcium and Vitamin D	29862	27975	21644	77.4
Active	15025	14083	10949	77.7
Placebo	14837	13892	10695	77.0
Clinical Trial Total	52176	48697	36846	75.7
Observational Study	63231	59008	47607	80.7
Total	115407	107705	84453	78.4

<sup>1</sup> Eligibility defined as alive at the beginning of consent and willing to be contacted.

**Table 1.3**  
**Consent Status by Age and Race/Ethnicity**

Data as of: September 17, 2010

WHI Enrollment	Clinical Trial				Observational Study			
	Enrolled in WHI	Eligible for extension 2005-2010 <sup>1</sup>	Consented		Enrolled in WHI	Eligible for extension 2005-2010 <sup>1</sup>	Consented	
			N	%			N	%
<b>Total</b>	68132	63332	52176	82.4	93676	86744	63231	72.9
<b>Age</b>								
50-54	9188	8754	7237	82.7	12381	11969	8996	75.2
55-59	14661	13940	11724	84.1	17329	16565	12732	76.9
60-69	31389	29290	24528	83.7	41200	38502	28582	74.2
70-79	12894	11348	8687	76.6	22766	19708	12921	65.6
<b>Race/Ethnicity</b>								
American Indian	292	260	185	71.2	421	372	217	58.3
Asian/Pacific Islander	1519	1414	1105	78.1	2671	2444	1291	52.8
Black	6983	6423	4769	74.2	7635	6868	3585	52.2
Hispanic	2875	2686	1791	66.7	3609	3333	1598	47.9
White	55525	51682	43680	84.5	78016	72504	55767	76.9
Unknown	938	867	646	74.5	1324	1223	773	63.2

WHI Enrollment	Clinical Trial				Observational Study			
	Enrolled in extension 2005-2010	Eligible for extension 2010-2015 <sup>1</sup>	Consented		Enrolled in extension 2005-2010	Eligible for extension 2010-2015 <sup>1</sup>	Consented	
			N	%			N	%
<b>Total</b>	52176	48697	36846	75.7	63231	59008	47607	80.7
<b>Age</b>								
50-54	7237	7068	5450	77.1	8996	8801	7550	85.8
55-59	11724	11329	8920	78.7	12732	12400	10502	84.7
60-69	24528	22940	17554	76.5	28582	26820	21804	81.3
70-79	8687	7360	4922	66.9	12921	10987	7751	70.5
<b>Race/Ethnicity</b>								
American Indian	185	174	124	71.3	217	204	141	69.1
Asian/Pacific Islander	1105	1050	759	72.3	1291	1224	963	78.7
Black	4769	4459	2539	56.9	3585	3358	2180	64.9
Hispanic	1791	1701	964	56.7	1598	1527	1065	69.7
White	43680	40704	32043	78.7	55767	51968	42727	82.2
Unknown	646	609	417	68.5	773	727	531	73.0

<sup>1</sup> Eligibility defined as alive at the beginning of consent and willing to be contacted.

**Table 1.4**  
**Extension 2010-2015 Consent by Current Age and Medical Record Cohort<sup>1</sup>**

Data as of: September 17, 2010

	Enrolled in Extension 2005-2010	Eligible for Extension 2010-2015 <sup>2</sup>	Consented	
			N	%
<b>Age on 9/17/2010</b>				
<80	72620	69916	56818	81.3
≥80	42787	37789	27635	73.1
80-84	24504	22439	17204	76.7
85-89	14184	12238	8500	69.5
90-94	4036	3071	1906	62.1
95-99	63	41	25	61.0
<b>Medical Record Cohort</b>	29368	27221	19067	70.0

<sup>1</sup> Randomized to the hormone trial, or race/ethnicity is Black or Hispanic.

<sup>2</sup> Eligibility defined as alive at the beginning of consent and willing to be contacted.

**Table 1.5**  
**Extension 2005-2010 Consent Summary by Field Center**

Data as of: September 17, 2010

	DM		HT		CaD		CT		OS	
	Eligible	Consent %	Eligible	Consent %	Eligible	Consent %	Eligible	Consent %	Eligible	Consent %
Atlanta	1329	1068 80.4	534	441 82.6	834	722 86.6	1611	1298 80.6	2311	1831 79.2
Bettendorf	470	400 85.1	708	624 88.1	658	596 90.6	1051	922 87.7	1404	1110 79.1
Birmingham	1237	955 77.2	705	579 82.1	887	762 85.9	1695	1334 78.7	2303	1343 58.3
Bowman	1024	808 78.9	567	425 75.0	652	539 82.7	1408	1091 77.5	2083	1569 75.3
Brigham	1643	1429 87.0	770	664 86.2	1024	939 91.7	2206	1906 86.4	2841	2310 81.3
Buffalo	1057	1001 94.7	631	577 91.4	921	883 95.9	1490	1395 93.6	2042	1733 84.9
Chapel Hill	1061	943 88.9	586	488 83.3	719	650 90.4	1447	1264 87.4	1972	1584 80.3
Chi-Rush	872	627 71.9	495	353 71.3	785	604 76.9	1226	880 71.8	1881	1029 54.7
Chicago	1121	952 84.9	518	443 85.5	759	687 90.5	1493	1266 84.8	1754	1369 78.1
Cincinnati	967	881 91.1	495	444 89.7	859	803 93.5	1298	1176 90.6	2076	1616 77.8
Columbus	1072	898 83.8	558	454 81.4	845	732 86.6	1456	1199 82.3	2098	1705 81.3
Des Moines	478	400 83.7	865	624 72.1	807	638 79.1	1237	938 75.8	1513	1091 72.1
Detroit	914	707 77.4	470	360 76.6	806	650 80.6	1220	938 76.9	1911	1416 74.1
Gainesville	1289	1182 91.7	875	800 91.4	852	798 93.7	1935	1771 91.5	2565	2176 84.8
GWU-DC	1069	929 86.9	525	453 86.3	814	746 91.6	1443	1245 86.3	2132	1682 78.9
Honolulu	1006	804 79.9	372	283 76.1	628	523 83.3	1280	1003 78.4	1897	984 51.9
Houston	845	636 75.3	427	269 63.0	573	437 76.3	1160	829 71.5	1906	1403 73.6
Irvine	1104	943 85.4	550	452 82.2	881	779 88.4	1509	1274 84.4	2062	1665 80.7
L.A.	1156	912 78.9	554	410 74.0	971	803 82.7	1559	1213 77.8	2056	1615 78.6
La Jolla	1525	976 64.0	682	329 48.2	1080	721 66.8	1986	1194 60.1	3188	1884 59.1
Madison	1032	929 90.0	622	563 90.5	867	801 92.4	1484	1343 90.5	1855	1420 76.5
Medlantic	1027	880 85.7	544	448 82.4	782	694 88.7	1367	1157 84.6	2036	1456 71.5
Memphis	1164	866 74.4	663	483 72.9	839	661 78.8	1558	1148 73.7	2250	1249 55.5
Miami	1009	729 72.2	544	387 71.1	500	378 75.6	1377	987 71.7	1254	695 55.4

**Table 1.5 (continued)**  
**Extension 2005-2010 Consent Summary by Field Center**

Data as of: September 17, 2010

	DM		HT		CaD		CT		OS	
	Eligible	Consent %	Eligible	Consent %	Eligible	Consent %	Eligible	Consent %	Eligible	Consent %
Milwaukee	1084	973 89.8	683	589 86.2	953	876 91.9	1531	1352 88.3	2113	1586 75.1
Minneapolis	1262	1097 86.9	793	654 82.5	1045	949 90.8	1877	1606 85.6	2576	1949 75.7
Nevada	980	849 86.6	572	480 83.9	923	816 88.4	1362	1163 85.4	1957	1551 79.3
Newark	1269	1011 79.7	490	393 80.2	836	713 85.3	1600	1277 79.8	2369	1686 71.2
New Brunswick	375	328 87.5	368	330 89.7	436	402 92.2	657	580 88.3	779	651 83.6
NY-City	1223	1003 82.0	698	560 80.2	827	718 86.8	1767	1435 81.2	2710	1526 56.3
Oakland	1022	903 88.4	583	512 87.8	628	577 91.9	1468	1296 88.3	1895	1480 78.1
Pawtucket	1892	1676 88.6	898	780 86.9	1328	1217 91.6	2488	2187 87.9	3395	2685 79.1
Pittsburgh	1096	1005 91.7	595	540 90.8	804	754 93.8	1528	1395 91.3	1733	1381 79.7
Portland	1111	950 85.5	592	524 88.5	827	750 90.7	1523	1323 86.9	2082	1565 75.2
San Antonio	873	621 71.1	658	448 68.1	793	584 73.6	1261	875 69.4	1709	962 56.3
Seattle	1097	904 82.4	686	542 79.0	804	682 84.8	1681	1358 80.8	1515	1070 70.6
Stanford	1226	1071 87.4	633	558 88.2	948	866 91.4	1639	1445 88.2	2465	2045 83.0
Stonybrook	936	801 85.6	473	400 84.6	572	509 89.0	1266	1083 85.5	1915	1467 76.6
Torrance	745	554 74.4	288	206 71.5	507	405 79.9	916	673 73.5	1385	877 63.3
Tucson	1387	1077 77.6	714	508 71.1	1007	816 81.0	1929	1461 75.7	2544	1650 64.9
UC Davis	1358	1135 83.6	642	542 84.4	1033	904 87.5	1790	1488 83.1	2107	1393 66.1
Worcester	1153	1045 90.6	568	514 90.5	833	778 93.4	1553	1408 90.7	2105	1772 84.2
Total	45560	37858 83.1	25194	20433 81.1	34447	29862 86.7	63332	52176 82.4	86744	63231 72.9

**Table 1.6**  
**Extension 2010-2015 Consent Summary by Field Center**

Data as of: September 17, 2010

	DM		HT		CaD		CT		OS	
	Eligible	Consent %	Eligible	Consent %	Eligible	Consent %	Eligible	Consent %	Eligible	Consent %
Atlanta	1015	706 69.6	415	265 63.9	690	500 72.5	1233	840 68.1	1717	1330 77.5
Bettendorf	369	298 80.8	575	459 79.8	556	453 81.5	855	690 80.7	1044	859 82.3
Birmingham	892	527 59.1	529	323 61.1	707	464 65.6	1233	743 60.3	1238	862 69.6
Bowman	763	544 71.3	397	281 70.8	511	372 72.8	1024	729 71.2	1466	1046 71.4
Brigham	1358	1117 82.3	629	507 80.6	898	766 85.3	1811	1486 82.1	2215	1953 88.2
Buffalo	918	761 82.9	502	413 82.3	805	680 84.5	1260	1040 82.5	1560	1332 85.4
Chapel Hill	892	718 80.5	452	343 75.9	618	495 80.1	1187	941 79.3	1485	1260 84.8
Chi-Rush	575	369 64.2	320	196 61.3	544	342 62.9	800	502 62.8	967	756 78.2
Chicago	892	703 78.8	393	305 77.6	627	499 79.6	1173	921 78.5	1257	1033 82.2
Cincinnati	833	636 76.4	410	293 71.5	752	576 76.6	1104	826 74.8	1536	1240 80.7
Columbus	835	715 85.6	417	343 82.3	674	581 86.2	1109	947 85.4	1581	1361 86.1
Des Moines	383	321 83.8	579	481 83.1	602	509 84.6	879	738 84.0	1031	869 84.3
Detroit	679	525 77.3	332	239 72.0	615	472 76.7	886	670 75.6	1327	1086 81.8
Gainesville	1130	817 72.3	746	511 68.5	760	561 73.8	1680	1191 70.9	2024	1493 73.8
GWU-DC	882	690 78.2	422	315 74.6	701	550 78.5	1173	911 77.7	1601	1366 85.3
Honolulu	775	591 76.3	265	176 66.4	500	390 78.0	960	715 74.5	932	732 78.5
Houston	602	477 79.2	255	186 72.9	418	343 82.1	783	608 77.7	1323	1088 82.2
Irvine	886	732 82.6	407	320 78.6	726	604 83.2	1187	967 81.5	1559	1315 84.3
L.A.	857	705 82.3	368	286 77.7	747	599 80.2	1125	914 81.2	1484	1257 84.7
La Jolla	924	744 80.5	313	239 76.4	683	551 80.7	1129	894 79.2	1737	1368 78.8
Madison	879	757 86.1	524	432 82.4	759	653 86.0	1262	1068 84.6	1321	1145 86.7
Medlantic	839	527 62.8	415	247 59.5	663	422 63.7	1097	680 62.0	1376	1065 77.4
Memphis	792	536 67.7	425	262 61.6	602	422 70.1	1038	681 65.6	1127	862 76.5
Miami	692	428 61.8	374	179 47.9	363	223 61.4	941	545 57.9	657	496 75.5



**Table 1.6 (continued)**  
**Extension 2010-2015 Consent Summary by Field Center**

Data as of: September 17, 2010

	DM		HT		CaD		CT		OS	
	Eligible	Consent %	Eligible	Consent %	Eligible	Consent %	Eligible	Consent %	Eligible	Consent %
Milwaukee	918	759 82.7	545	431 79.1	825	692 83.9	1266	1030 81.4	1492	1263 84.7
Minneapolis	1047	872 83.3	620	521 84.0	912	763 83.7	1530	1276 83.4	1847	1581 85.6
Nevada	790	609 77.1	440	319 72.5	749	580 77.4	1073	814 75.9	1399	1072 76.6
Newark	962	704 73.2	367	257 70.0	678	518 76.4	1208	879 72.8	1590	1274 80.1
New Brunswick	306	208 68.0	298	183 61.4	371	244 65.8	535	342 63.9	600	447 74.5
NY-City	939	668 71.1	516	324 62.8	678	455 67.1	1337	912 68.2	1444	1127 78.0
Oakland	852	743 87.2	467	393 84.2	552	488 88.4	1208	1041 86.2	1367	1177 86.1
Pawtucket	1557	1152 74.0	726	516 71.1	1139	855 75.1	2031	1488 73.3	2495	1974 79.1
Pittsburgh	934	704 75.4	476	344 72.3	683	525 76.9	1274	949 74.5	1281	963 75.2
Portland	874	668 76.4	477	347 72.7	699	520 74.4	1215	922 75.9	1475	1186 80.4
San Antonio	587	364 62.0	415	222 53.5	544	320 58.8	818	486 59.4	903	679 75.2
Seattle	851	729 85.7	502	414 82.5	635	541 85.2	1268	1073 84.6	984	818 83.1
Stanford	1003	828 82.6	508	407 80.1	808	679 84.0	1342	1095 81.6	1903	1554 81.7
Stonybrook	753	590 78.4	373	280 75.1	482	388 80.5	1016	787 77.5	1368	1158 84.6
Torrance	530	394 74.3	194	135 69.6	385	287 74.5	641	471 73.5	817	678 83.0
Tucson	983	765 77.8	448	302 67.4	737	547 74.2	1320	987 74.8	1524	1168 76.6
UC Davis	1058	806 76.2	492	362 73.6	842	644 76.5	1371	1040 75.9	1287	1012 78.6
Worcester	988	773 78.2	466	342 73.4	735	571 77.7	1315	1007 76.6	1667	1302 78.1
Total	35594	27280 76.6	18794	13700 72.9	27975	21644 77.4	48697	36846 75.7	59008	47607 80.7

**Table 1.7**  
**Response Rates to CCC Annual Mailings, Extension 2005-2010 Year 1**

Data as of: September 17, 2010

Study	1st Mailing Period		2nd Mailing Period		3rd Mailing Period		Cumulative Response	Cumulative Response
	Form	Sent Mail 1 Response	Past 2 <sup>nd</sup> mailing period	Sent Mail 2 Response	Past 3 <sup>rd</sup> mailing period	Sent Mail 3 Response		
Total	33	113981 96606 84.8%	113981 17826 15.6%	8717 48.9%	113981 17826 15.6%	2903 36.8%	95.0%	
	134	113991 95147 83.5%	113991 19196 16.8%	9588 50.0%	113991 19196 16.8%	3042 36.6%	94.6%	
	150	20240 15902 78.6%	20240 4496 22.2%	1904 42.4%	20240 4496 22.2%	737 32.8%	91.6%	
	151	81906 67509 82.4%	81906 14826 18.1%	7200 48.6%	81906 14826 18.1%	2374 36.2%	94.1%	
HT	33	20235 15886 78.5%	20235 4503 22.3%	1903 42.3%	20235 4503 22.3%	734 32.7%	91.5%	
	134	20237 15706 77.6%	20237 4680 23.1%	1999 42.7%	20237 4680 23.1%	736 31.9%	91.1%	
	150	20240 15902 78.6%	20240 4496 22.2%	1904 42.4%	20240 4496 22.2%	737 32.8%	91.6%	
	151	20241 15874 78.4%	20241 4520 22.3%	1917 42.4%	20241 4520 22.3%	747 33.1%	91.6%	
DM	33	37611 30715 81.7%	37611 7216 19.2%	3430 47.5%	37611 7216 19.2%	1153 35.4%	93.9%	
	134	37614 30339 80.7%	37614 7589 20.2%	3648 48.1%	37614 7589 20.2%	1189 34.9%	93.5%	
	150	6060 4655 76.8%	6060 1473 24.3%	615 41.8%	6060 1473 24.3%	235 30.8%	90.8%	
	151	37618 30564 81.3%	37618 7390 19.6%	3573 48.4%	37618 7390 19.6%	1178 35.8%	93.9%	
CaD	33	29670 24166 81.5%	29670 5746 19.4%	2673 46.5%	29670 5746 19.4%	943 35.8%	93.6%	
	134	29673 23898 80.5%	29673 6008 20.3%	2819 46.9%	29673 6008 20.3%	964 35.3%	93.3%	
	150	12815 10148 79.2%	12815 2771 21.6%	1187 42.8%	12815 2771 21.6%	469 34.4%	92.1%	
	151	29678 24078 81.1%	29678 5846 19.7%	2756 47.1%	29678 5846 19.7%	963 36.2%	93.7%	
OS	33	62195 54661 87.9%	62195 7578 12.2%	3991 52.7%	62195 7578 12.2%	1251 39.8%	96.3%	
	134	62200 53707 86.4%	62200 8447 13.6%	4581 54.2%	62200 8447 13.6%	1347 39.9%	95.9%	
	151	30107 25724 85.4%	30107 4391 14.6%	2329 53.0%	30107 4391 14.6%	683 38.6%	95.5%	

Table 1.7 (continued for year 2)  
Response Rates to CCC Annual Mailings, Extension 2005-2010 Year 2

Data as of: September 17, 2010

Study	1st Mailing Period			2nd Mailing Period			3rd Mailing Period			Cumulative Response	Cumulative Response				
	Form	Sent Mail 1	Response	Past 2 <sup>nd</sup> mailing period	Sent Mail 2	Response	Past 3 <sup>rd</sup> mailing period	Sent Mail 3	Response						
Total	33 134 <sup>1</sup> 150 151	112945 1414 19782 112991	95638 550 15708 95498	84.7% 38.9% 79.4% 84.5%	112945 1414 19782 112991	18499 778 4167 18693	16.4% 55.0% 21.1% 16.5%	7846 126 1552 7986	42.4% 16.2% 37.3% 42.7%	112945 1414 19782 112991	6282 429 1561 6323	5.6% 30.3% 7.9% 5.6%	2185 63 468 2212	34.8% 14.7% 30.0% 35.0%	93.6% 52.3% 89.6% 93.5%
HT	33 134 <sup>1</sup> 150 151	19780 332 19782 19785	15693 63 15708 15700	79.3% 19.0% 79.4% 79.4%	19780 332 19782 19785	4182 237 4167 4195	21.1% 71.4% 21.1% 21.2%	1564 32 1552 1569	37.4% 13.5% 37.3% 37.4%	19780 332 19782 19785	1563 148 1561 1567	7.9% 44.6% 7.9% 7.9%	472 11 468 473	30.2% 7.4% 30.0% 30.2%	89.6% 31.9% 89.6% 89.7%
DM	33 134 <sup>1</sup> 150 151	36972 376 5931 36981	30737 87 4657 30703	83.1% 23.1% 78.5% 83.0%	36972 376 5931 36981	6651 249 1321 6703	18.0% 66.2% 22.3% 18.1%	2750 23 478 2793	41.4% 9.2% 36.2% 41.7%	36972 376 5931 36981	2229 144 502 2238	6.0% 38.3% 8.5% 6.1%	767 21 154 768	34.4% 14.6% 30.7% 34.3%	92.7% 34.8% 89.2% 92.7%
CaD	33 134 <sup>1</sup> 150 151	29172 351 12538 29173	24141 77 10066 24109	82.8% 21.9% 80.3% 82.6%	29172 351 12538 29173	5309 236 2529 5350	18.2% 67.2% 20.2% 18.3%	2139 22 958 2165	40.3% 9.3% 37.9% 40.5%	29172 351 12538 29173	1823 146 940 1832	6.3% 41.6% 7.5% 6.3%	609 15 286 613	33.4% 10.3% 30.4% 33.5%	92.2% 32.5% 90.2% 92.2%
OS	33 134 <sup>1</sup> 151	62122 805 62155	53853 416 53746	86.7% 51.7% 86.5%	62122 805 62155	8997 365 9125	14.5% 45.3% 14.7%	4017 79 4107	44.7% 21.6% 45.0%	62122 805 62155	2995 179 3025	4.8% 22.2% 4.9%	1102 32 1124	36.8% 17.9% 37.2%	94.9% 65.5% 94.9%

<sup>1</sup> Required only in Extension Study 2005-2010 Follow-up Year 1. Year 2 and 3 responses reflect data collected from Year 1 non-respondents.  
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**Table 1.7 (continued for year 3)  
Response Rates to CCC Annual Mailings, Extension 2005-2010 Year 3**

Data as of: September 17, 2010

Study	1st Mailing Period		2nd Mailing Period		Cumulative Response	3rd Mailing Period		Cumulative Response									
	Form	Sent Mail 1 Response	Past 2 <sup>nd</sup> mailing period	Sent Mail 2 Response		Past 3 <sup>rd</sup> mailing period	Sent Mail 3 Response										
Total	33 134 <sup>1</sup> 150 151	111075 92911 35 15165 92848 83.7% 14.8% 78.3% 83.6%	111075 237 19363 111073	17976 160 4012 18055	7626 8 1489 7676	42.4% 5.0% 37.1% 42.5%	8266 136 2018 8319	7.4% 57.4% 10.4% 7.5%	2608 11 576 2643	31.6% 8.1% 28.5% 31.8%	90.5% 18.1% 86.0% 90.5%	111075 237 19363 111073	8266 136 2018 8319	7.4% 57.4% 10.4% 7.5%	2608 11 576 2643	31.6% 8.1% 28.5% 31.8%	92.9% 22.8% 89.0% 92.9%
HT	33 134 <sup>1</sup> 150 151	19367 15144 7 15165 15170 78.2% 8.6% 78.3% 78.3%	19367 81 19363 19366	4032 64 4012 4012	1509 2 1489 1492	37.4% 3.1% 37.1% 37.2%	2011 57 2018 2011	10.4% 70.4% 10.4% 10.4%	575 4 576 579	28.6% 7.0% 28.5% 28.8%	86.0% 11.1% 86.0% 86.0%	19367 81 19363 19366	2011 57 2018 2011	10.4% 70.4% 10.4% 10.4%	575 4 576 579	28.6% 7.0% 28.5% 28.8%	89.0% 16.1% 89.0% 89.0%
DM	33 134 <sup>1</sup> 150 151	36412 29759 2 4469 29757 81.7% 2.5% 76.7% 81.7%	36412 79 5825 36411	6528 63 1292 6540	2682 3 465 2692	41.1% 4.8% 36.0% 41.2%	36412 79 5825 36411	8.6% 69.6% 11.4% 8.6%	1012 5 198 1023	32.5% 9.1% 29.7% 32.7%	89.1% 6.3% 84.7% 89.1%	36412 79 5825 36411	3113 55 666 3126	8.6% 69.6% 11.4% 8.6%	1012 5 198 1023	32.5% 9.1% 29.7% 32.7%	91.9% 12.7% 88.1% 91.9%
CaD	33 134 <sup>1</sup> 150 151	28672 23416 4 9743 23427 81.7% 4.8% 79.4% 81.7%	28672 84 12278 28671	5135 68 2444 5130	2130 4 918 2134	41.5% 5.9% 37.6% 41.6%	28672 84 12278 28671	8.4% 71.4% 9.9% 8.4%	753 1 347 754	31.2% 1.7% 28.7% 31.2%	89.1% 9.5% 86.8% 89.2%	28672 84 12278 28671	2415 60 1210 2414	8.4% 71.4% 9.9% 8.4%	753 1 347 754	31.2% 1.7% 28.7% 31.2%	91.7% 10.7% 89.7% 91.8%
OS	33 134 <sup>1</sup> 151	61123 52467 27 52394 85.8% 25.0% 85.7%	61123 108 61122	8717 60 8792	3904 4 3951	44.8% 6.7% 44.9%	61123 108 61122	6.2% 45.4% 6.3%	1224 5 1243	32.1% 10.2% 32.3%	92.2% 28.7% 92.2%	61123 108 61122	3813 49 3851	6.2% 45.4% 6.3%	1224 5 1243	32.1% 10.2% 32.3%	94.2% 33.3% 94.2%

<sup>1</sup> Required only in Extension Study 2005-2010 Follow-up Year 1. Year 2 and 3 responses reflect data collected from Year 1 non-respondents.  
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**Table 1.7 (continued for year 4)  
Response Rates to CCC Annual Mailings, Extension 2005-2010 Year 4**

Data as of: September 17, 2010

Study	1st Mailing Period			2nd Mailing Period			3rd Mailing Period			Cumulative Response	Cumulative Response			
	Form	Sent Mail 1	Response	Past 2 <sup>nd</sup> mailing period	Sent Mail 2	Response	Past 3 <sup>rd</sup> mailing period	Sent Mail 3	Response					
Total	33	109177	89462	109177	19328	17.7%	7970	41.2%	109177	8173	7.5%	2640	32.3%	91.7%
	150	18905	14530	18905	4187	22.2%	1473	35.2%	18905	1855	9.8%	533	28.7%	87.5%
	151	109177	89452	81.9%	109177	19360	17.7%	8034	41.5%	109177	8169	7.5%	2693	33.0%
HT	33	18905	14495	18905	4216	22.3%	1482	35.2%	18905	1865	9.9%	531	28.5%	87.3%
	150	18905	14530	18905	4187	22.2%	1473	35.2%	18905	1855	9.8%	533	28.7%	87.5%
	151	18905	14509	76.8%	18905	4208	22.3%	1494	35.5%	18905	1858	9.8%	542	29.2%
DM	33	35843	28885	35843	6757	18.9%	2706	40.1%	35843	2837	7.9%	884	31.2%	90.6%
	150	5724	4349	5724	1304	22.8%	464	35.6%	5724	553	9.7%	155	28.0%	86.8%
	151	35843	28886	80.6%	35843	6773	18.9%	2725	40.2%	35843	2840	7.9%	888	31.3%
CaD	33	28196	22665	28196	5372	19.1%	2070	38.5%	28196	2326	8.3%	705	30.3%	90.2%
	150	12031	9372	12031	2551	21.2%	883	34.6%	12031	1134	9.4%	322	28.4%	87.9%
	151	28196	22668	80.4%	28196	5374	19.1%	2096	39.0%	28196	2318	8.2%	708	30.5%
OS	33	60153	50416	60153	9670	16.1%	4245	43.9%	60153	4032	6.7%	1385	34.4%	93.2%
	151	60153	50401	83.8%	60153	9689	16.1%	4280	44.2%	60153	4028	6.7%	1419	35.2%

Table 1.7 (continued for year 5)  
Response Rates to CCC Annual Mailings, Extension 2005-2010 Year 5

Data as of: September 17, 2010

Study	1st Mailing Period			2nd Mailing Period			3rd Mailing Period			Cumulative Response					
	Form	Sent Mail 1	Response	Past 2 <sup>nd</sup> mailing period	Sent Mail 2	Response	Cumulative Response	Past 3 <sup>rd</sup> mailing period	Sent Mail 3		Response				
Total	33	106952	84125	78.7%	106952	21850	20.4%	8322	38.1%	106952	9039	8.5%	2947	32.6%	89.2%
	150	18442	13429	72.8%	18442	4634	25.1%	1585	34.2%	18442	1805	9.8%	583	32.3%	84.6%
	151	106959	84125	78.7%	106959	21899	20.5%	8393	38.3%	106959	9015	8.4%	2962	32.9%	89.3%
HT	33	18439	13399	72.7%	18439	4646	25.2%	1600	34.4%	18439	1792	9.7%	572	31.9%	84.5%
	150	18442	13429	72.8%	18442	4634	25.1%	1585	34.2%	18442	1805	9.8%	583	32.3%	84.6%
	151	18443	13425	72.8%	18443	4636	25.1%	1598	34.5%	18443	1793	9.7%	581	32.4%	84.6%
DM	33	35196	26599	75.6%	35196	8377	23.8%	3178	37.9%	35196	3066	8.7%	1047	34.2%	87.6%
	150	5601	4006	71.5%	5601	1476	26.4%	515	34.9%	5601	557	9.9%	192	34.5%	84.2%
	151	35201	26596	75.6%	35201	8398	23.9%	3196	38.1%	35201	3067	8.7%	1050	34.2%	87.6%
CaD	33	27628	21019	76.1%	27628	6428	23.3%	2382	37.1%	27628	2368	8.6%	805	34.0%	87.6%
	150	11731	8683	74.0%	11731	2861	24.4%	993	34.7%	11731	1105	9.4%	352	31.9%	85.5%
	151	27631	21026	76.1%	27631	6436	23.3%	2395	37.2%	27631	2368	8.6%	809	34.2%	87.7%
OS	33	58918	48124	81.7%	58918	10305	17.5%	4063	39.4%	58918	4735	8.0%	1519	32.1%	91.2%
	151	58916	48109	81.7%	58916	10339	17.6%	4116	39.8%	58916	4709	8.0%	1522	32.3%	91.2%

**Table 1.8**  
**Response Rates to Field Center Follow-up and Cumulative Response--Extension 2005-2010 Study Follow-up Year 1**

Data as of: September 17, 2010

<b>Study</b>	<b>Form</b>	<b>Eligible for FC Follow-up</b>	<b>Respondents</b>	<b>Total Estimated Response Rate</b>	
<b>Total</b>	33	5436	4983	91.7%	98.3%
	134	6095	4970	81.5%	97.9%
	150	1615	1151	71.3%	96.8%
	151	4876	1668	34.2%	94.7%
<b>HT</b>	33	1543	1327	86.0%	97.5%
	134	1678	1302	77.6%	97.0%
	150	1615	1151	71.3%	96.8%
	151	1632	603	37.0%	94.0%
<b>DM</b>	33	2174	1876	86.3%	98.4%
	134	2365	1839	77.8%	98.0%
	150	541	390	72.1%	96.7%
	151	2282	736	32.3%	95.4%
<b>CaD</b>	33	1718	1478	86.0%	98.2%
	134	1876	1457	77.7%	97.8%
	150	947	673	71.1%	96.9%
	151	1810	622	34.4%	95.4%
<b>OS</b>	33	2242	2230	99.5%	98.4%
	134	2610	2271	87.0%	98.0%
	151	1505	525	34.9%	94.2%

**Table 2.1**  
**Hormone Therapy Component Age – and Race/Ethnicity**

Data as of: September 17, 2010

<b>HT Participants</b>	<b>Total Randomized</b>	<b>% of Overall Goal</b>	<b>Distribution</b>	<b>Design Assumption</b>
<b>Age</b>				
<b>Overall</b>	<b>27,347</b>			
50-54	3,420	125%	13%	10%
55-59	5,413	99%	20%	20%
60-69	12,360	100%	45%	45%
70-79	6,154	90%	23%	25%
<b>Without Uterus</b>				
<b>Overall</b>	<b>10,739</b>			
50-54	1,396	113%	13%	10%
55-59	1,917	78%	18%	20%
60-69	4,851	88%	45%	45%
70-79	2,575	84%	24%	25%
<b>With Uterus</b>				
<b>Overall</b>	<b>16,608</b>			
50-54	2,024	135%	12%	10%
55-59	3,496	116%	21%	20%
60-69	7,509	111%	45%	45%
70-79	3,579	95%	22%	25%
<b>Race/Ethnicity</b>				
<b>Overall</b>	<b>27,347</b>			
American Indian	130		<1%	
Asian	527		2%	
Black	2,738		10%	
Hispanic	1,537		6%	
White	22,030		81%	
Unknown	385		1%	
<b>Without Uterus</b>				
<b>Overall</b>	<b>10,739</b>			
American Indian	75		1%	
Asian	164		2%	
Black	1,616		15%	
Hispanic	651		6%	
White	8,084		75%	
Unknown	149		1%	
<b>With Uterus</b>				
<b>Overall</b>	<b>16,608</b>			
American Indian	55		<1%	
Asian	363		2%	
Black	1,122		7%	
Hispanic	886		5%	
White	13,946		84%	
Unknown	236		1%	



**Table 2.2**  
**Lost-to-Follow-up and Vital Status: HT Participants by Hysterectomy Status**

Data as of: September 17, 2010

**Extension Participants Only**

Vital Status/Participation	Without Uterus (N=7,645)		With Uterus (N=12,788)		HT Participants (N=20,433)	
	N	%	N	%	N	%
Deceased	645	8.4	995	7.8	1640	8.0
Alive: Current Participation <sup>1</sup>	6674	87.3	11307	88.4	17981	88.0
Alive: Recent Participation <sup>2</sup>	91	1.2	117	0.9	208	1.0
Alive: Past/Unknown Participation <sup>3</sup>	3	<0.1	11	0.1	14	0.1
Stopped Follow-Up <sup>4</sup>	138	1.8	236	1.8	374	1.8
Lost to Follow-Up <sup>5</sup>	94	1.2	122	1.0	216	1.1

Data as of: September 12, 2005

**Events through Study Closeout**

Vital Status/Participation	Without Uterus (N=10,739)		With Uterus (N=16,608)		HT Participants (N=27,347)	
	N	%	N	%	N	%
Deceased	727	6.8	918	5.5	1645	6.0
Alive: Current Participation <sup>6</sup>	9302	86.6	14897	89.7	24199	88.5
Alive: Recent Participation <sup>7</sup>	89	0.8	78	0.5	167	0.6
Alive: Past/Unknown Participation <sup>8</sup>	4	<0.1	4	<0.1	8	<0.1
Stopped Follow-Up <sup>4</sup>	475	4.4	538	3.2	1013	3.7
Lost to Follow-Up <sup>5</sup>	142	1.3	173	1.0	315	1.2

<sup>1</sup> Participants who have filled in a Form 33 within the last 15 months.<sup>2</sup> Participants who last filled in a Form 33 between 15 and 24 months ago.<sup>3</sup> Participants without a Form 33 within the last 24 months, who have been located (as indicated on Form 23) within the last 6 months.<sup>4</sup> Participants with codes 5 (no follow-up) or 8 (absolutely no follow-up) on Form 7 or 9.<sup>5</sup> Participants not in any of the above categories.<sup>6</sup> Participants who have filled in a Form 33 within the last 9 months.<sup>7</sup> Participants who last filled in a Form 33 between 9 and 18 months ago.<sup>8</sup> Participants without a Form 33 within the last 18 months, who have been located (as indicated on Form 23) within the last 6 months.

**Table 2.3**  
**Verified Outcomes (Annualized Percentages) by Age for Hormone Therapy**

Data as of: September 17, 2010

Outcomes	Total		Age				
			50-54	55-59	60-69	70-79	
Number randomized	27347		3420	5413	12360	6154	
Mean follow-up (months)	138.4		146.3	143.4	138.6	129.1	
<b>Cardiovascular</b>							
CHD <sup>1</sup>	1542	(0.49%)	80 (0.19%)	170 (0.26%)	712 (0.50%)	580 (0.88%)	
CHD death <sup>2</sup>	469	(0.15%)	16 (0.04%)	37 (0.06%)	189 (0.13%)	227 (0.34%)	
Total MI <sup>3</sup>	1211	(0.38%)	66 (0.16%)	144 (0.22%)	569 (0.40%)	432 (0.65%)	
Clinical MI	1178	(0.37%)	65 (0.16%)	142 (0.22%)	552 (0.39%)	419 (0.63%)	
CABG/PTCA	1776	(0.56%)	96 (0.23%)	253 (0.39%)	877 (0.61%)	550 (0.83%)	
Carotid artery disease	322	(0.10%)	9 (0.02%)	38 (0.06%)	177 (0.12%)	98 (0.15%)	
Stroke	1097	(0.35%)	43 (0.10%)	101 (0.16%)	498 (0.35%)	455 (0.69%)	
Non-disabling stroke <sup>4</sup>	613	(0.19%)	33 (0.08%)	71 (0.11%)	271 (0.19%)	238 (0.36%)	
Fatal/disabling stroke <sup>4</sup>	421	(0.13%)	7 (0.02%)	24 (0.04%)	194 (0.14%)	196 (0.30%)	
Unknown status from stroke <sup>4</sup>	63	(0.02%)	3 (0.01%)	6 (0.01%)	33 (0.02%)	21 (0.03%)	
PVD	321	(0.10%)	15 (0.04%)	40 (0.06%)	167 (0.12%)	99 (0.15%)	
DVT	603	(0.19%)	40 (0.10%)	86 (0.13%)	281 (0.20%)	196 (0.30%)	
Pulmonary embolism	452	(0.14%)	30 (0.07%)	63 (0.10%)	214 (0.15%)	145 (0.22%)	
Coronary disease <sup>5</sup>	3404	(1.08%)	191 (0.46%)	426 (0.66%)	1598 (1.12%)	1189 (1.80%)	
DVT/PE	849	(0.27%)	50 (0.12%)	115 (0.18%)	412 (0.29%)	272 (0.41%)	
<b>Total cardiovascular disease</b>	<b>5240</b>	<b>(1.66%)</b>	<b>288 (0.69%)</b>	<b>652 (1.01%)</b>	<b>2469 (1.73%)</b>	<b>1831 (2.77%)</b>	
<b>Cancer</b>							
Breast cancer	1366	(0.43%)	147 (0.35%)	253 (0.39%)	652 (0.46%)	314 (0.47%)	
Invasive breast cancer	1100	(0.35%)	111 (0.27%)	206 (0.32%)	512 (0.36%)	271 (0.41%)	
Non-invasive breast cancer	280	(0.09%)	37 (0.09%)	49 (0.08%)	148 (0.10%)	46 (0.07%)	
Ovarian cancer	120	(0.04%)	9 (0.02%)	23 (0.04%)	66 (0.05%)	22 (0.03%)	
Endometrial cancer <sup>6</sup>	160	(0.05%)	18 (0.04%)	34 (0.05%)	75 (0.05%)	33 (0.05%)	
Colorectal cancer	454	(0.14%)	30 (0.07%)	55 (0.09%)	222 (0.16%)	147 (0.22%)	
Other cancer <sup>7</sup>	1877	(0.60%)	139 (0.33%)	276 (0.43%)	907 (0.64%)	555 (0.84%)	
<b>Total cancer</b>	<b>3774</b>	<b>(1.20%)</b>	<b>331 (0.79%)</b>	<b>621 (0.96%)</b>	<b>1810 (1.27%)</b>	<b>1012 (1.53%)</b>	
<b>Fractures</b>							
Hip fracture	723	(0.23%)	11 (0.03%)	49 (0.08%)	270 (0.19%)	393 (0.59%)	
<b>Deaths</b>							
Cardiovascular deaths	895	(0.28%)	30 (0.07%)	66 (0.10%)	353 (0.25%)	446 (0.67%)	
Cancer deaths	1152	(0.37%)	60 (0.14%)	135 (0.21%)	567 (0.40%)	390 (0.59%)	
Other known cause	699	(0.22%)	29 (0.07%)	75 (0.12%)	281 (0.20%)	314 (0.47%)	
Unknown cause	109	(0.03%)	7 (0.02%)	12 (0.02%)	44 (0.03%)	46 (0.07%)	
Not yet adjudicated	576	(0.18%)	22 (0.05%)	52 (0.08%)	251 (0.18%)	251 (0.38%)	
<b>Total death</b>	<b>3431</b>	<b>(1.09%)</b>	<b>148 (0.36%)</b>	<b>340 (0.53%)</b>	<b>1496 (1.05%)</b>	<b>1447 (2.19%)</b>	

<sup>1</sup> "CHD" includes clinical MI, evolving Q-wave MI, and CHD death; Q-wave MI is not collected in the WHI Extension Study.

<sup>2</sup> "CHD death" includes definite and possible CHD death.

<sup>3</sup> "Total MI" includes clinical MI and evolving Q-wave MI; Q-wave MI is not collected in the WHI Extension Study.

<sup>4</sup> Non-disabling stroke includes Glasgow scales 1 and 2; fatal/disabling includes Glasgow scales 3-5 and death within 1 month of stroke; and unknown status includes Glasgow scale 6 and status not yet known.

<sup>5</sup> "Coronary disease" includes clinical MI, evolving Q-wave MI, possible evolving Q-wave MI, CHD death, angina, congestive heart failure, and CABG/PTCA; Q-wave MI, angina, and congestive heart failure are not collected in the WHI Extension Study.

<sup>6</sup> Only women without a baseline hysterectomy are used to compute the annual rates of endometrial cancer.

<sup>7</sup> Only one report of "other cancer" is counted per woman; however, the first of each type is adjudicated. Excludes non-melanoma skin cancer.

**Table 2.4**  
**Verified Outcomes (Annualized Percentages) by Race/Ethnicity for Hormone Therapy**

Data as of: September 17, 2010

Outcomes	Race/Ethnicity					
	American Indian/ Alaskan Native	Asian/Pacific Islander	Black/African American	Hispanic/ Latino	White	Unknown
Number randomized	130	527	2738	1537	22030	385
Mean follow-up (months)	127.4	129.8	134.5	126.4	140.1	131.6
<b>Cardiovascular</b>						
CHD <sup>1</sup>	5 (0.36%)	20 (0.35%)	146 (0.48%)	40 (0.25%)	1306 (0.51%)	25 (0.59%)
CHD death <sup>2</sup>	2 (0.14%)	8 (0.14%)	67 (0.22%)	10 (0.06%)	378 (0.15%)	4 (0.09%)
Total MI <sup>3</sup>	4 (0.29%)	17 (0.30%)	94 (0.31%)	32 (0.20%)	1041 (0.40%)	23 (0.54%)
Clinical MI	4 (0.29%)	16 (0.28%)	93 (0.30%)	30 (0.19%)	1013 (0.39%)	22 (0.52%)
CABG/PTCA	7 (0.51%)	22 (0.39%)	133 (0.43%)	62 (0.38%)	1526 (0.59%)	26 (0.62%)
Carotid artery disease	1 (0.07%)	2 (0.04%)	11 (0.04%)	4 (0.02%)	301 (0.12%)	3 (0.07%)
Stroke	7 (0.51%)	14 (0.25%)	134 (0.44%)	29 (0.18%)	896 (0.35%)	17 (0.40%)
Non-disabling stroke <sup>4</sup>	4 (0.29%)	8 (0.14%)	75 (0.24%)	18 (0.11%)	501 (0.19%)	7 (0.17%)
Fatal/disabling stroke <sup>4</sup>	3 (0.22%)	6 (0.11%)	49 (0.16%)	7 (0.04%)	349 (0.14%)	7 (0.17%)
Unknown status from stroke <sup>4</sup>	0 (0.00%)	0 (0.00%)	10 (0.03%)	4 (0.02%)	46 (0.02%)	3 (0.07%)
PVD	2 (0.14%)	5 (0.09%)	34 (0.11%)	4 (0.02%)	274 (0.11%)	2 (0.05%)
DVT	4 (0.29%)	3 (0.05%)	63 (0.21%)	10 (0.06%)	520 (0.20%)	3 (0.07%)
Pulmonary embolism	4 (0.29%)	1 (0.02%)	59 (0.19%)	4 (0.02%)	380 (0.15%)	4 (0.09%)
Coronary disease <sup>5</sup>	12 (0.87%)	44 (0.77%)	350 (1.14%)	118 (0.73%)	2832 (1.10%)	48 (1.14%)
DVT/PE	7 (0.51%)	3 (0.05%)	96 (0.31%)	12 (0.07%)	725 (0.28%)	6 (0.14%)
<b>Total cardiovascular disease</b>	<b>24 (1.74%)</b>	<b>62 (1.09%)</b>	<b>549 (1.79%)</b>	<b>157 (0.97%)</b>	<b>4385 (1.71%)</b>	<b>63 (1.49%)</b>
<b>Cancer</b>						
Breast cancer	3 (0.22%)	28 (0.49%)	120 (0.39%)	44 (0.27%)	1157 (0.45%)	14 (0.33%)
Invasive breast cancer	3 (0.22%)	21 (0.37%)	99 (0.32%)	35 (0.22%)	933 (0.36%)	9 (0.21%)
Non-invasive breast cancer	0 (0.00%)	8 (0.14%)	21 (0.07%)	10 (0.06%)	236 (0.09%)	5 (0.12%)
Ovarian cancer	0 (0.00%)	3 (0.05%)	9 (0.03%)	0 (0.00%)	106 (0.04%)	2 (0.05%)
Endometrial cancer <sup>6</sup>	1 (0.07%)	2 (0.03%)	12 (0.04%)	6 (0.04%)	137 (0.05%)	2 (0.05%)
Colorectal cancer	1 (0.07%)	13 (0.23%)	36 (0.12%)	17 (0.10%)	378 (0.15%)	9 (0.21%)
Other cancer <sup>7</sup>	8 (0.58%)	35 (0.61%)	140 (0.46%)	62 (0.38%)	1607 (0.63%)	25 (0.59%)
<b>Total cancer</b>	<b>13 (0.94%)</b>	<b>79 (1.39%)</b>	<b>303 (0.99%)</b>	<b>121 (0.75%)</b>	<b>3210 (1.25%)</b>	<b>48 (1.14%)</b>
<b>Fractures</b>						
Hip fracture	3 (0.22%)	8 (0.14%)	17 (0.06%)	12 (0.07%)	677 (0.26%)	6 (0.14%)
<b>Deaths</b>						
Cardiovascular deaths	4 (0.29%)	13 (0.23%)	116 (0.38%)	18 (0.11%)	736 (0.29%)	8 (0.19%)
Cancer deaths	5 (0.36%)	25 (0.44%)	96 (0.31%)	44 (0.27%)	967 (0.38%)	15 (0.36%)
Other known cause	4 (0.29%)	8 (0.14%)	52 (0.17%)	16 (0.10%)	607 (0.24%)	12 (0.28%)
Unknown cause	0 (0.00%)	3 (0.05%)	18 (0.06%)	3 (0.02%)	84 (0.03%)	1 (0.02%)
Not yet adjudicated	3 (0.22%)	6 (0.11%)	48 (0.16%)	11 (0.07%)	501 (0.19%)	7 (0.17%)
<b>Total Death</b>	<b>16 (1.16%)</b>	<b>55 (0.97%)</b>	<b>330 (1.08%)</b>	<b>92 (0.57%)</b>	<b>2895 (1.13%)</b>	<b>43 (1.02%)</b>

<sup>1</sup> "CHD" includes clinical MI, evolving Q-wave MI, and CHD death; Q-wave MI is not collected in the WHI Extension Study.

<sup>2</sup> "CHD death" includes definite and possible CHD death.

<sup>3</sup> "Total MI" includes clinical MI and evolving Q-wave MI; Q-wave MI is not collected in the WHI Extension Study.

<sup>4</sup> Non-disabling stroke includes Glasgow scales 1 and 2; fatal/disabling includes Glasgow scales 3-5 and death within 1 month of stroke; and unknown status includes Glasgow scale 6 and status not yet known.

<sup>5</sup> "Coronary disease" includes clinical MI, evolving Q-wave MI, possible evolving Q-wave MI, CHD death, angina, congestive heart failure, and CABG/PTCA; Q-wave MI, angina, and congestive heart failure are not collected in the WHI Extension Study.

<sup>6</sup> Only women without a baseline hysterectomy are used to compute the annual rates of endometrial cancer.

<sup>7</sup> Only one report of "other cancer" is counted per woman; however, the first of each type is adjudicated. Excludes non-melanoma skin cancer.

**Table 2.5**  
**Verified Outcomes (Annualized Percentages) for HT Participants Without and With Uterus**

Data as of: September 17, 2010

Outcomes	Without Uterus		With Uterus	
Number randomized	10739		16608	
Mean follow-up (months)	135.7		140.1	
<b>Cardiovascular</b>				
CHD <sup>1</sup>	709	(0.58%)	833	(0.43%)
CHD death <sup>2</sup>	236	(0.19%)	233	(0.12%)
Total MI <sup>3</sup>	546	(0.45%)	665	(0.34%)
Clinical MI	531	(0.44%)	647	(0.33%)
CABG/PTCA	807	(0.66%)	969	(0.50%)
Carotid artery disease	161	(0.13%)	161	(0.08%)
Stroke	482	(0.40%)	615	(0.32%)
Non-disabling stroke <sup>4</sup>	252	(0.21%)	361	(0.19%)
Fatal/disabling stroke <sup>4</sup>	196	(0.16%)	225	(0.12%)
Unknown status from stroke <sup>4</sup>	34	(0.03%)	29	(0.01%)
PVD	144	(0.12%)	177	(0.09%)
DVT	247	(0.20%)	356	(0.18%)
Pulmonary embolism	183	(0.15%)	269	(0.14%)
Coronary disease <sup>5</sup>	1606	(1.32%)	1798	(0.93%)
DVT/PE	353	(0.29%)	496	(0.26%)
<b>Total cardiovascular disease</b>	<b>2377</b>	<b>(1.96%)</b>	<b>2863</b>	<b>(1.48%)</b>
<b>Cancer</b>				
Breast cancer	457	(0.38%)	909	(0.47%)
Invasive breast cancer	371	(0.31%)	729	(0.38%)
Non-invasive breast cancer	89	(0.07%)	191	(0.10%)
Ovarian cancer	28	(0.02%)	92	(0.05%)
Endometrial cancer <sup>6</sup>	0	N/A	160	(0.08%)
Colorectal cancer	186	(0.15%)	268	(0.14%)
Other cancer <sup>7</sup>	739	(0.61%)	1138	(0.59%)
<b>Total cancer</b>	<b>1350</b>	<b>(1.11%)</b>	<b>2424</b>	<b>(1.25%)</b>
<b>Fractures</b>				
Hip fracture	263	(0.22%)	460	(0.24%)
<b>Deaths</b>				
Cardiovascular deaths	422	(0.35%)	473	(0.24%)
Cancer deaths	471	(0.39%)	681	(0.35%)
Other known cause	272	(0.22%)	427	(0.22%)
Unknown cause	44	(0.04%)	65	(0.03%)
Not yet adjudicated	226	(0.19%)	350	(0.18%)
<b>Total death</b>	<b>1435</b>	<b>(1.18%)</b>	<b>1996</b>	<b>(1.03%)</b>

<sup>1</sup> "CHD" includes clinical MI, evolving Q-wave MI, and CHD death; Q-wave MI is not collected in the WHI Extension Study.

<sup>2</sup> "CHD death" includes definite and possible CHD death.

<sup>3</sup> "Total MI" includes clinical MI and evolving Q-wave MI; Q-wave MI is not collected in the WHI Extension Study.

<sup>4</sup> Non-disabling stroke includes Glasgow scales 1 and 2; fatal/disabling includes Glasgow scales 3-5 and death within 1 month of stroke; and unknown status includes Glasgow scale 6 and status not yet known.

<sup>5</sup> "Coronary disease" includes clinical MI, evolving Q-wave MI, possible evolving Q-wave MI, CHD death, angina, congestive heart failure, and CABG/PTCA; Q-wave MI, angina, and congestive heart failure are not collected in the WHI Extension Study.

<sup>6</sup> Only women without a baseline hysterectomy are used to compute the annual rates of endometrial cancer.

<sup>7</sup> Only one report of "other cancer" is counted per woman; however, the first of each type is adjudicated. Excludes non-melanoma skin cancer.

**Table 2.6**  
**Counts (Annualized Percentages) of Participants with Self-Reported Outcomes by Age and Race/Ethnicity**  
**for HT Participants Who Did Not Report a Prevalent Condition at Baseline**

Data as of: September 17, 2010

Outcome	Total	Age								
		50-54		55-59		60-69		70-79		
Number randomized	27347	3420		5413		12360		6154		
Mean follow-up (months)	138.4	146.3		143.4		138.6		129.1		
<b>Hospitalizations</b>										
Ever	17227 (5.46%)	1578 (3.79%)	2838 (4.39%)	8087 (5.66%)	4724 (7.14%)					
Two or more	11213 (3.56%)	834 (2.00%)	1667 (2.58%)	5299 (3.71%)	3413 (5.16%)					
<b>Other</b>										
Diabetes (treated)	3391 (1.13%)	489 (1.22%)	691 (1.13%)	1575 (1.17%)	636 (1.02%)					
Gallbladder disease <sup>1,2</sup>	2117 (0.98%)	282 (0.96%)	443 (0.99%)	988 (1.03%)	404 (0.90%)					
Hysterectomy	1003 (0.52%)	100 (0.40%)	217 (0.51%)	495 (0.56%)	191 (0.49%)					
Glaucoma <sup>2</sup>	3201 (1.30%)	286 (0.86%)	548 (1.07%)	1519 (1.37%)	848 (1.66%)					
Osteoporosis <sup>2</sup>	6112 (2.50%)	476 (1.43%)	962 (1.88%)	2954 (2.68%)	1720 (3.45%)					
Osteoarthritis <sup>3</sup>	6734 (3.43%)	892 (2.80%)	1421 (3.13%)	3078 (3.59%)	1343 (4.00%)					
Rheumatoid arthritis <sup>2</sup>	1697 (0.69%)	211 (0.64%)	341 (0.68%)	763 (0.69%)	382 (0.73%)					
Intestinal polyps	5634 (1.92%)	666 (1.65%)	1124 (1.82%)	2778 (2.09%)	1066 (1.82%)					
Lupus	385 (0.12%)	44 (0.11%)	79 (0.12%)	178 (0.13%)	84 (0.13%)					
Kidney stones <sup>2,3</sup>	769 (0.35%)	94 (0.33%)	143 (0.32%)	346 (0.35%)	186 (0.39%)					
Cataracts <sup>2,3</sup>	8648 (4.46%)	505 (1.78%)	1344 (3.06%)	4577 (5.14%)	2222 (6.82%)					
Pills for hypertension	9545 (4.23%)	1144 (3.38%)	1918 (3.82%)	4387 (4.41%)	2096 (4.99%)					

Outcomes	Race/Ethnicity					
	Am Indian/ Alaskan Native	Asian/Pacific Islander	Black/African American	Hispanic/ Latino	White	Unknown
Number randomized	130	527	2738	1537	22030	385
Mean follow-up (months)	127.4	129.8	134.5	126.4	140.1	131.6
<b>Hospitalizations</b>						
Ever	80 (5.80%)	249 (4.37%)	1703 (5.55%)	726 (4.48%)	14237 (5.54%)	232 (5.50%)
Two or more	59 (4.27%)	136 (2.39%)	1116 (3.64%)	382 (2.36%)	9370 (3.64%)	150 (3.55%)
<b>Other</b>						
Diabetes (treated)	17 (1.40%)	68 (1.29%)	499 (1.85%)	280 (1.87%)	2477 (1.00%)	50 (1.28%)
Gallbladder disease <sup>1,2</sup>	13 (1.47%)	32 (0.75%)	187 (0.82%)	129 (1.25%)	1730 (0.99%)	26 (0.91%)
Hysterectomy	4 (0.71%)	10 (0.25%)	69 (0.54%)	49 (0.52%)	858 (0.52%)	13 (0.50%)
Glaucoma <sup>2</sup>	16 (1.47%)	60 (1.33%)	408 (1.75%)	190 (1.44%)	2480 (1.23%)	47 (1.46%)
Osteoporosis <sup>2</sup>	32 (2.91%)	141 (3.12%)	348 (1.43%)	338 (2.64%)	5160 (2.60%)	93 (2.84%)
Osteoarthritis <sup>3</sup>	42 (4.48%)	136 (3.36%)	665 (3.55%)	465 (4.12%)	5325 (3.35%)	101 (3.68%)
Rheumatoid arthritis <sup>2</sup>	15 (1.47%)	30 (0.67%)	272 (1.18%)	219 (1.68%)	1126 (0.56%)	35 (1.07%)
Intestinal polyps	29 (2.27%)	88 (1.70%)	601 (2.10%)	257 (1.66%)	4591 (1.92%)	68 (1.76%)
Lupus	2 (0.14%)	4 (0.07%)	42 (0.14%)	28 (0.17%)	305 (0.12%)	4 (0.10%)
Kidney stones <sup>2,3</sup>	9 (0.97%)	25 (0.62%)	82 (0.38%)	62 (0.54%)	583 (0.33%)	8 (0.27%)
Cataracts <sup>2,3</sup>	44 (4.90%)	143 (4.01%)	790 (4.11%)	450 (4.03%)	7108 (4.54%)	113 (4.32%)
Pills for hypertension	54 (5.47%)	169 (4.23%)	817 (5.29%)	557 (4.56%)	7834 (4.12%)	114 (4.07%)

<sup>1</sup> "Gallbladder disease" includes self-reports of both hospitalized and non-hospitalized events.

<sup>2</sup> Data not collected for WHI Extension Study.

<sup>3</sup> These outcomes have not been self-reported on all versions of Form 33 during WHI follow-up. The annualized percentages are corrected for the different amounts of follow-up.

**Table 2.7**  
**Selected Medication Use after Stopping of the HT Intervention**

Data as of: September 17, 2010

	Without Uterus				With Uterus			
	E-alone		Placebo		E+P		Placebo	
	N	%	N	%	N	%	N	%
<b>Use after stopping but before closeout<sup>1</sup></b>								
Number due for medication collection					7463		7063	
% missing medication information					20.3%		21.0%	
Estrogen	N/A		N/A		385	6.5	301	5.4
Osteoporosis <sup>2</sup>	N/A		N/A		739	12.4	949	17.0
SERM	N/A		N/A		124	2.1	118	2.1
<b>Use during extension<sup>3</sup></b>								
Number in extension	3778		3867		6545		6243	
<b>Extension Year 1</b>								
Any prescription hormone	219	6.6	122	3.7	240	4.2	177	3.2
E-alone use	126	3.9	54	1.6	94	1.7	78	1.4
E+P use	14	0.4	15	0.5	97	1.7	36	0.7
Non-prescription (natural) hormone	92	2.8	84	2.5	172	3.0	155	2.8
Osteoporosis <sup>4</sup>	531	16.6	626	19.5	1185	21.4	1341	25.4
SERM	72	2.2	95	2.9	222	3.9	167	3.0
<b>Extension Year 2</b>								
Any prescription hormone	181	5.5	112	3.4	214	3.7	133	2.4
E-alone use	90	2.8	53	1.6	82	1.4	55	1.0
E+P use	16	0.5	13	0.4	61	1.1	31	0.6
Non-prescription (natural) hormone	60	1.8	66	2.0	118	2.1	123	2.2
Osteoporosis <sup>4</sup>	501	15.7	598	18.5	1161	20.8	1298	24.5
SERM	78	2.4	100	3.0	193	3.3	174	3.2
<b>Extension Year 3</b>								
Any prescription hormone	152	4.8	110	3.4	200	3.6	138	2.6
E-alone use	78	2.5	52	1.6	77	1.4	57	1.1
E+P use	14	0.5	11	0.3	47	0.9	31	0.6
Non-prescription (natural) hormone	52	1.7	47	1.5	122	2.2	107	2.0
Osteoporosis <sup>4</sup>	451	14.7	555	17.7	1102	20.3	1207	23.5
SERM	67	2.1	88	2.7	197	3.5	155	2.9
<b>Extension Year 4</b>								
Any prescription hormone	148	5.1	94	3.2	184	3.6	148	3.0
E-alone use	68	2.4	45	1.5	70	1.4	57	1.2
E+P use	13	0.5	8	0.3	52	1.0	28	0.6
Non-prescription (natural) hormone	48	1.7	43	1.5	109	2.1	86	1.7
Osteoporosis <sup>4</sup>	415	14.6	492	17.1	990	19.8	1093	22.8
SERM	62	2.1	73	2.4	158	3.0	151	3.0
<b>Extension Year 5</b>								
Any prescription hormone	130	4.2	103	3.3	186	3.5	135	2.6
E-alone use	60	2.0	48	1.6	81	1.5	55	1.1
E+P use	5	0.2	12	0.4	45	0.8	30	0.6
Non-prescription (natural) hormone	38	1.2	40	1.3	84	1.6	97	1.9
Osteoporosis <sup>4</sup>	375	12.6	481	16.0	914	17.6	1018	20.6
SERM	54	1.8	76	2.4	164	3.0	144	2.8

<sup>1</sup> Collected at annual visits 1, 3, 6, and 9. Insufficient data available on the E-alone participants.<sup>2</sup> Bisphosphonate or calcitonin.<sup>3</sup> Use at any time during the extension year.<sup>4</sup> Bisphosphonate, calcitonin, or PTH.

**Table 3.1**  
**Dietary Modification Component Age – and Race/Ethnicity – Specific Recruitment**

Data as of: September 17, 2010

	<b>Total Randomized</b>	<b>% of Overall Goal</b>	<b>Distribution</b>	<b>Design Assumption</b>
<b>Age</b>	<b>48,835</b>			
50-54	6,961	149%	14%	10%
55-59	11,037	118%	23%	20%
60-69	22,715	108%	47%	45%
70-79	8,122	70%	17%	25%
<b>Race/Ethnicity</b>	<b>48,835</b>			
American Indian	202		<1%	
Asian	1,105		2%	
Black	5,262		11%	
Hispanic	1,845		4%	
White	39,762		81%	
Unknown	659		1%	

**Table 3.2**  
**Lost-to-Follow-up and Vital Status: DM Participants**

Data as of: September 17, 2010  
**Extension Participants Only**

<b>Vital Status/Participation</b>	<b>DM Participants (N=37,858)</b>	
	<b>N</b>	<b>%</b>
Deceased	2362	6.2
Alive: Current Participation <sup>1</sup>	34497	91.1
Alive: Recent Participation <sup>2</sup>	308	0.8
Alive: Past/Unknown Participation <sup>3</sup>	12	<0.1
Stopped Follow-Up <sup>4</sup>	435	1.1
Lost to Follow-Up <sup>5</sup>	244	0.6

Data as of: September 12, 2005  
**Events through Study Closeout**

<b>Vital Status/Participation</b>	<b>DM Participants (N =48,835)</b>	
	<b>N</b>	<b>%</b>
Deceased	2404	4.9
Alive: Current Participation <sup>6</sup>	44116	90.3
Alive: Recent Participation <sup>7</sup>	235	0.5
Alive: Past/Unknown Participation <sup>8</sup>	5	<0.1
Stopped Follow-Up <sup>4</sup>	1553	3.2
Lost to Follow-Up <sup>5</sup>	522	1.1

<sup>1</sup> Participants who have filled in a Form 33 within the last 15 months.

<sup>2</sup> Participants who last filled in a Form 33 between 15 and 24 months ago.

<sup>3</sup> Participants without a Form 33 within the last 24 months, who have been located (as indicated on Form 23) within the last 6 months.

<sup>4</sup> Participants with codes 5 (no follow-up) or 8 (absolutely no follow-up) on Form 7 and 9.

<sup>5</sup> Participants not in any of the above categories.

<sup>6</sup> Participants who have filled in a Form 33 within the last 9 months.

<sup>7</sup> Participants who last filled in a Form 33 between 9 and 18 months ago.

<sup>8</sup> Participants without a Form 33 within the last 18 months, who have been located (as indicated on Form 23) within the last 6 months.



**Table 3.3**  
**Nutrient Intake Monitoring**

Data as of: September 17, 2010

	Intervention			Control			Difference		
	N	Mean	SD	N	Mean	SD	Mean <sup>1</sup>	SE	p-value <sup>2</sup>
<b>% Energy from Fat</b>									
24 Hr Recall, post-baseline	226	23.0	9.2	262	32.1	7.6	9.2	0.8	<.01
24 Hr Recall, Year 3 Cohort	787	24.8	8.5	1183	33.0	7.6	8.3	0.4	<.01
24 Hr Recall, Year 6 Cohort	766	26.6	9.1	1167	33.9	7.8	7.3	0.4	<.01
24 Hr Recall, Year 9 Cohort	154	28.5	8.6	264	35.2	8.4	6.7	0.9	<.01
24 Hr Recall, Ext. Year 1 Cohort	281	30.4	9.4	392	34.4	9.2	4.0	0.7	<.01
24 Hr Recall, Ext. Year 2 Cohort	273	30.8	9.3	377	33.9	8.7	3.1	0.7	<.01
24 Hr Recall, Ext. Combined	554	30.6	9.3	769	34.2	9.0	3.6	0.5	<.01
<b>Total Energy (kcal)</b>									
24 Hr Recall, post-baseline	226	1519.8	418.2	262	1652.8	516.5	133.0	43.0	<.01
24 Hr Recall, Year 3 Cohort	787	1431.8	391.6	1183	1589.9	489.3	158.1	20.8	<.01
24 Hr Recall, Year 6 Cohort	766	1388.8	391.0	1167	1544.2	482.1	155.4	20.8	<.01
24 Hr Recall, Year 9 Cohort	154	1406.7	384.6	264	1516.8	452.9	110.2	43.5	0.02
24 Hr Recall, Ext. Year 1 Cohort	281	1419.1	457.4	392	1578.7	533.7	159.7	39.3	<.01
24 Hr Recall, Ext. Year 2 Cohort	273	1409.4	478.1	377	1505.9	526.5	96.5	40.3	0.03
24 Hr Recall, Ext. Combined	554	1414.3	467.3	769	1543.0	531.0	128.7	28.2	<.01
<b>Total Fat (g)</b>									
24 Hr Recall, post-baseline	226	39.6	21.9	262	60.5	26.9	20.9	2.2	<.01
24 Hr Recall, Year 3 Cohort	787	39.8	18.7	1183	59.9	25.6	20.0	1.1	<.01
24 Hr Recall, Year 6 Cohort	766	41.5	20.0	1167	59.7	26.1	18.1	1.1	<.01
24 Hr Recall, Year 9 Cohort	154	45.1	18.6	264	60.9	26.3	15.9	2.4	<.01
24 Hr Recall, Ext. Year 1 Cohort	281	48.9	24.7	392	62.2	30.9	13.3	2.2	<.01
24 Hr Recall, Ext. Year 2 Cohort	273	49.1	25.0	377	58.4	30.6	9.3	2.3	<.01
24 Hr Recall, Ext. Combined	554	49.0	24.8	769	60.3	30.8	11.3	1.6	<.01
<b>Saturated Fat (g)</b>									
24 Hr Recall, post-baseline	226	12.9	7.9	262	20.1	9.6	7.2	0.8	<.01
24 Hr Recall, Year 3 Cohort	787	12.4	6.8	1183	19.7	9.3	7.3	0.4	<.01
24 Hr Recall, Year 6 Cohort	766	13.1	7.1	1167	19.5	9.7	6.4	0.4	<.01
24 Hr Recall, Year 9 Cohort	154	14.5	6.8	264	20.6	10.2	6.1	0.9	<.01
24 Hr Recall, Ext. Year 1 Cohort	281	15.6	9.3	392	20.8	13.4	5.2	0.9	<.01
24 Hr Recall, Ext. Year 2 Cohort	273	16.0	9.5	377	18.9	10.3	2.9	0.8	<.01
24 Hr Recall, Ext. Combined	554	15.8	9.4	769	19.8	12.0	4.1	0.6	<.01
<b>Polyunsaturated Fat (g)</b>									
24 Hr Recall, post-baseline	226	8.3	5.0	262	12.6	7.3	4.3	0.6	<.01
24 Hr Recall, Year 3 Cohort	787	8.7	4.6	1183	12.2	6.9	3.6	0.3	<.01
24 Hr Recall, Year 6 Cohort	766	8.8	4.6	1167	12.3	6.2	3.5	0.3	<.01
24 Hr Recall, Year 9 Cohort	154	9.6	4.4	264	12.2	5.7	2.7	0.5	<.01
24 Hr Recall, Ext. Year 1 Cohort	281	10.8	7.0	392	13.2	8.3	2.4	0.6	<.01
24 Hr Recall, Ext. Year 2 Cohort	273	11.0	6.4	377	13.3	9.1	2.3	0.6	<.01
24 Hr Recall, Ext. Combined	554	10.9	6.7	769	13.2	8.7	2.3	0.4	<.01

<sup>1</sup> Absolute difference.<sup>2</sup> P-values based on testing in the natural log scale except for % Energy from fat.

**Table 3.4**  
**Verified Outcomes (Annualized Percentages) by Age for Dietary Modification**

Data as of: September 17, 2010

Outcome	Total	Age				
		50-54	55-59	60-69	70-79	
<b>Number randomized</b>	48835	6961	11037	22715	8122	
<b>Mean follow-up (months)</b>	143.1	151.9	148.3	141.9	131.6	
<b>Cancer</b>						
Breast cancer	3066 (0.53%)	384 (0.44%)	714 (0.52%)	1457 (0.54%)	511 (0.57%)	
Invasive breast cancer	2475 (0.43%)	287 (0.33%)	578 (0.42%)	1186 (0.44%)	424 (0.48%)	
Non-invasive breast cancer	631 (0.11%)	102 (0.12%)	144 (0.11%)	288 (0.11%)	97 (0.11%)	
Ovarian cancer	268 (0.05%)	30 (0.03%)	51 (0.04%)	136 (0.05%)	51 (0.06%)	
Endometrial cancer <sup>1</sup>	439 (0.07%)	56 (0.06%)	108 (0.08%)	214 (0.08%)	61 (0.07%)	
Colorectal cancer	745 (0.13%)	50 (0.06%)	132 (0.10%)	364 (0.14%)	199 (0.22%)	
Other cancer <sup>2</sup>	3096 (0.53%)	279 (0.32%)	556 (0.41%)	1581 (0.59%)	680 (0.76%)	
<b>Total cancer</b>	<b>7178 (1.23%)</b>	<b>761 (0.86%)</b>	<b>1470 (1.08%)</b>	<b>3524 (1.31%)</b>	<b>1423 (1.60%)</b>	
<b>Cardiovascular</b>						
CHD <sup>3</sup>	2129 (0.37%)	123 (0.14%)	262 (0.19%)	1027 (0.38%)	717 (0.80%)	
CHD death <sup>4</sup>	612 (0.11%)	31 (0.04%)	46 (0.03%)	283 (0.11%)	252 (0.28%)	
Total MI <sup>5</sup>	1709 (0.29%)	97 (0.11%)	227 (0.17%)	824 (0.31%)	561 (0.63%)	
Clinical MI	1656 (0.28%)	91 (0.10%)	220 (0.16%)	798 (0.30%)	547 (0.61%)	
CABG/PTCA	2648 (0.45%)	146 (0.17%)	377 (0.28%)	1440 (0.54%)	685 (0.77%)	
Carotid artery disease	422 (0.07%)	20 (0.02%)	55 (0.04%)	227 (0.08%)	120 (0.13%)	
Stroke	1716 (0.29%)	80 (0.09%)	192 (0.14%)	819 (0.30%)	625 (0.70%)	
PVD	375 (0.06%)	17 (0.02%)	51 (0.04%)	195 (0.07%)	112 (0.13%)	
Coronary disease <sup>6</sup>	5003 (0.86%)	293 (0.33%)	682 (0.50%)	2546 (0.95%)	1482 (1.66%)	
<b>Total cardiovascular disease</b>	<b>6860 (1.18%)</b>	<b>390 (0.44%)</b>	<b>920 (0.67%)</b>	<b>3439 (1.28%)</b>	<b>2111 (2.37%)</b>	
<b>Fractures</b>						
Hip fracture	1000 (0.17%)	20 (0.02%)	72 (0.05%)	437 (0.16%)	471 (0.53%)	
<b>Deaths</b>						
Cardiovascular deaths	1217 (0.21%)	51 (0.06%)	93 (0.07%)	527 (0.20%)	546 (0.61%)	
Cancer deaths	1796 (0.31%)	118 (0.13%)	262 (0.19%)	908 (0.34%)	508 (0.57%)	
Other known cause	1005 (0.17%)	44 (0.05%)	98 (0.07%)	446 (0.17%)	417 (0.47%)	
Unknown cause	133 (0.02%)	7 (0.01%)	14 (0.01%)	57 (0.02%)	55 (0.06%)	
Not yet adjudicated	812 (0.14%)	33 (0.04%)	85 (0.06%)	386 (0.14%)	308 (0.35%)	
<b>Total death</b>	<b>4963 (0.85%)</b>	<b>253 (0.29%)</b>	<b>552 (0.40%)</b>	<b>2324 (0.87%)</b>	<b>1834 (2.06%)</b>	

<sup>1</sup> Only women without a baseline hysterectomy are used to compute the annual rates of endometrial cancer.

<sup>2</sup> Only one report of "other cancer" is counted per woman; however, the first of each type is adjudicated. Excludes non-melanoma skin cancer.

<sup>3</sup> "CHD" includes clinical MI, evolving Q-wave MI, and CHD death; Q-wave MI is not collected in the WHI Extension Study.

<sup>4</sup> "CHD death" includes definite and possible CHD death.

<sup>5</sup> "Total MI" includes clinical MI and evolving Q-wave MI is not collected in the WHI Extension Study.

<sup>6</sup> "Coronary disease" includes clinical MI, evolving Q-wave MI, possible evolving Q-wave MI, CHD death, angina, congestive heart failure, and CABG/PTCA; Q-wave MI, angina, and congestive heart failure are not collected in the WHI Extension Study.

**Table 3.5**  
**Verified Outcomes (Annualized Percentages) by Race/Ethnicity for Dietary Modification**

Data as of: September 17, 2010

Outcome	Race/Ethnicity											
	American Indian/Alaskan Native		Asian/Pacific Islander		Black/African American		Hispanic/Latino		White		Unknown	
Number randomized	202		1105		5262		1845		39762		659	
Mean follow-up (months)	134.5		138.3		136.3		129.4		145.0		134.0	
<b>Cancer</b>												
Breast cancer	7	(0.31%)	69	(0.54%)	264	(0.44%)	73	(0.37%)	2619	(0.55%)	34	(0.46%)
Invasive breast cancer	5	(0.22%)	53	(0.42%)	200	(0.33%)	58	(0.29%)	2132	(0.44%)	27	(0.37%)
Non-invasive breast cancer	2	(0.09%)	17	(0.13%)	68	(0.11%)	17	(0.09%)	520	(0.11%)	7	(0.10%)
Ovarian cancer	1	(0.04%)	6	(0.05%)	19	(0.03%)	9	(0.05%)	230	(0.05%)	3	(0.04%)
Endometrial cancer <sup>1</sup>	0	(0.00%)	5	(0.04%)	28	(0.05%)	9	(0.04%)	391	(0.08%)	6	(0.08%)
Colorectal cancer	4	(0.18%)	12	(0.09%)	86	(0.14%)	22	(0.11%)	612	(0.13%)	9	(0.12%)
Other cancer <sup>2</sup>	7	(0.31%)	48	(0.38%)	233	(0.39%)	59	(0.30%)	2712	(0.56%)	37	(0.50%)
<b>Total cancer</b>	<b>17</b>	<b>(0.75%)</b>	<b>131</b>	<b>(1.03%)</b>	<b>593</b>	<b>(0.99%)</b>	<b>161</b>	<b>(0.81%)</b>	<b>6195</b>	<b>(1.29%)</b>	<b>81</b>	<b>(1.10%)</b>
<b>Cardiovascular</b>												
CHD <sup>3</sup>	4	(0.18%)	26	(0.20%)	228	(0.38%)	39	(0.20%)	1806	(0.38%)	26	(0.35%)
CHD death <sup>4</sup>	0	(0.00%)	5	(0.04%)	88	(0.15%)	13	(0.07%)	494	(0.10%)	12	(0.16%)
Total MI <sup>5</sup>	4	(0.18%)	24	(0.19%)	162	(0.27%)	31	(0.16%)	1468	(0.31%)	20	(0.27%)
Clinical MI	4	(0.18%)	24	(0.19%)	157	(0.26%)	30	(0.15%)	1422	(0.30%)	19	(0.26%)
CABG/PTCA	8	(0.35%)	25	(0.20%)	244	(0.41%)	61	(0.31%)	2285	(0.48%)	25	(0.34%)
Carotid artery disease	2	(0.09%)	1	(0.01%)	27	(0.05%)	4	(0.02%)	382	(0.08%)	6	(0.08%)
Stroke	6	(0.26%)	27	(0.21%)	217	(0.36%)	43	(0.22%)	1400	(0.29%)	23	(0.31%)
PVD	3	(0.13%)	3	(0.02%)	71	(0.12%)	6	(0.03%)	287	(0.06%)	5	(0.07%)
Coronary disease <sup>6</sup>	17	(0.75%)	59	(0.46%)	600	(1.00%)	124	(0.62%)	4144	(0.86%)	59	(0.80%)
<b>Total cardiovascular disease</b>	<b>27</b>	<b>(1.19%)</b>	<b>88</b>	<b>(0.69%)</b>	<b>822</b>	<b>(1.38%)</b>	<b>171</b>	<b>(0.86%)</b>	<b>5669</b>	<b>(1.18%)</b>	<b>83</b>	<b>(1.13%)</b>
<b>Fractures</b>												
Hip fracture	2	(0.09%)	11	(0.09%)	25	(0.04%)	14	(0.07%)	939	(0.20%)	9	(0.12%)
<b>Deaths</b>												
Cardiovascular deaths	4	(0.18%)	15	(0.12%)	174	(0.29%)	23	(0.12%)	987	(0.21%)	14	(0.19%)
Cancer deaths	7	(0.31%)	25	(0.20%)	152	(0.25%)	45	(0.23%)	1542	(0.32%)	25	(0.34%)
Other known cause	10	(0.44%)	10	(0.08%)	100	(0.17%)	21	(0.11%)	852	(0.18%)	12	(0.16%)
Unknown cause	1	(0.04%)	1	(0.01%)	18	(0.03%)	2	(0.01%)	106	(0.02%)	5	(0.07%)
Not yet adjudicated	1	(0.04%)	9	(0.07%)	90	(0.15%)	16	(0.08%)	687	(0.14%)	9	(0.12%)
<b>Total death</b>	<b>23</b>	<b>(1.02%)</b>	<b>60</b>	<b>(0.47%)</b>	<b>534</b>	<b>(0.89%)</b>	<b>107</b>	<b>(0.54%)</b>	<b>4174</b>	<b>(0.87%)</b>	<b>65</b>	<b>(0.88%)</b>

<sup>1</sup> Only women without a baseline hysterectomy are used to compute the annual rates of endometrial cancer.

<sup>2</sup> Only one report of "other cancer" is counted per woman; however, the first of each type is adjudicated. Excludes non-melanoma skin cancer.

<sup>3</sup> "CHD" includes clinical MI, evolving Q-wave MI, and CHD death; Q-wave MI is not collected in the WHI Extension Study.

<sup>4</sup> "CHD death" includes definite and possible CHD death.

<sup>5</sup> "Total MI" includes clinical MI and evolving Q-wave MI; Q-wave MI is not collected in the WHI Extension Study.

<sup>6</sup> "Coronary disease" includes clinical MI, evolving Q-wave MI, possible evolving Q-wave MI, CHD death, angina, congestive heart failure, and CABG/PTCA; Q-wave MI, angina, and congestive heart failure are not collected in the WHI Extension Study.

**Table 3.6**  
**Counts (Annualized Percentages) of Participants with Self-Reported Outcomes by Age and Race/Ethnicity**  
**for DM Participants Who Did Not Report a Prevalent Condition at Baseline**

Data as of: September 17, 2010

Outcome	Total	Age				
		50-54	55-59	60-69	70-79	
Number randomized	48835	6961	11037	22715	8122	
Mean follow-up (months)	143.1	151.9	148.3	141.9	131.6	
<b>Hospitalizations</b>						
Ever	30323 (5.21%)	3286 (3.73%)	5939 (4.35%)	14855 (5.53%)	6243 (7.01%)	
Two or more	19316 (3.32%)	1693 (1.92%)	3423 (2.51%)	9722 (3.62%)	4478 (5.03%)	
<b>Other</b>						
DVT <sup>1</sup>	825 (0.15%)	54 (0.06%)	124 (0.09%)	411 (0.16%)	236 (0.28%)	
Pulmonary embolism	628 (0.11%)	50 (0.06%)	93 (0.07%)	332 (0.12%)	153 (0.17%)	
Diabetes (treated)	5777 (1.03%)	859 (1.00%)	1338 (1.02%)	2708 (1.06%)	872 (1.03%)	
Gallbladder disease <sup>2, 3</sup>	3830 (0.98%)	573 (0.91%)	902 (0.97%)	1802 (1.02%)	553 (0.93%)	
Hysterectomy	2101 (0.63%)	306 (0.61%)	517 (0.62%)	1009 (0.67%)	269 (0.55%)	
Glaucoma <sup>3</sup>	5315 (1.18%)	567 (0.81%)	1098 (1.03%)	2587 (1.25%)	1063 (1.55%)	
Osteoporosis <sup>3</sup>	10218 (2.31%)	1128 (1.62%)	1968 (1.86%)	5020 (2.49%)	2102 (3.18%)	
Osteoarthritis <sup>4</sup>	12915 (3.57%)	2034 (3.07%)	3111 (3.31%)	5899 (3.76%)	1871 (4.21%)	
Rheumatoid arthritis <sup>3</sup>	2848 (0.63%)	399 (0.58%)	631 (0.60%)	1319 (0.64%)	499 (0.71%)	
Intestinal polyps	10917 (2.02%)	1561 (1.83%)	2602 (2.01%)	5285 (2.14%)	1469 (1.86%)	
Lupus	666 (0.11%)	99 (0.11%)	153 (0.11%)	323 (0.12%)	91 (0.10%)	
Kidney stones <sup>3, 4</sup>	1319 (0.34%)	175 (0.30%)	281 (0.31%)	654 (0.36%)	209 (0.33%)	
Cataracts <sup>3, 4</sup>	15480 (4.32%)	1157 (1.98%)	2858 (3.17%)	8460 (5.11%)	3005 (6.82%)	
Pills for hypertension	16470 (4.03%)	2261 (3.18%)	3804 (3.69%)	7804 (4.31%)	2601 (4.89%)	

Outcomes	Race/Ethnicity					
	Am Indian/ Alaskan Native	Asian/Pacific Islander	Black/African American	Hispanic/ Latino	White	Unknown
Number randomized	202	1105	5262	1845	39762	659
Mean follow-up (months)	134.5	138.3	136.3	129.4	145.0	134.0
<b>Hospitalizations</b>						
Ever	114 (5.03%)	498 (3.91%)	3137 (5.25%)	898 (4.51%)	25303 (5.27%)	373 (5.07%)
Two or more	74 (3.27%)	258 (2.03%)	2016 (3.37%)	513 (2.58%)	16233 (3.38%)	222 (3.02%)
<b>Other</b>						
DVT <sup>1</sup>	3 (0.14%)	2 (0.02%)	95 (0.16%)	16 (0.08%)	697 (0.15%)	12 (0.17%)
Pulmonary embolism	4 (0.18%)	1 (0.01%)	74 (0.13%)	9 (0.05%)	533 (0.11%)	7 (0.10%)
Diabetes (treated)	29 (1.38%)	142 (1.18%)	965 (1.81%)	283 (1.51%)	4274 (0.92%)	84 (1.20%)
Gallbladder disease <sup>2, 3</sup>	14 (1.05%)	60 (0.65%)	304 (0.70%)	152 (1.22%)	3250 (1.01%)	50 (0.98%)
Hysterectomy	6 (0.57%)	35 (0.43%)	140 (0.52%)	65 (0.61%)	1841 (0.66%)	14 (0.33%)
Glaucoma <sup>3</sup>	30 (1.68%)	108 (1.10%)	762 (1.67%)	201 (1.26%)	4150 (1.11%)	64 (1.14%)
Osteoporosis <sup>3</sup>	43 (2.41%)	272 (2.82%)	678 (1.44%)	409 (2.67%)	8676 (2.39%)	140 (2.53%)
Osteoarthritis <sup>4</sup>	52 (3.95%)	305 (3.30%)	1304 (3.62%)	530 (3.90%)	10538 (3.55%)	186 (4.06%)
Rheumatoid arthritis <sup>3</sup>	23 (1.38%)	49 (0.50%)	505 (1.10%)	222 (1.42%)	1998 (0.54%)	51 (0.90%)
Intestinal polyps	56 (2.65%)	232 (1.99%)	1205 (2.16%)	354 (1.87%)	8924 (2.00%)	146 (2.15%)
Lupus	5 (0.22%)	10 (0.08%)	97 (0.16%)	23 (0.12%)	519 (0.11%)	12 (0.16%)
Kidney stones <sup>3, 4</sup>	9 (0.60%)	27 (0.31%)	137 (0.33%)	58 (0.42%)	1071 (0.33%)	17 (0.34%)
Cataracts <sup>3, 4</sup>	61 (4.44%)	306 (3.86%)	1509 (3.99%)	537 (4.04%)	12863 (4.39%)	204 (4.44%)
Pills for hypertension	62 (4.20%)	348 (4.05%)	1578 (5.24%)	649 (4.40%)	13635 (3.91%)	198 (3.98%)

<sup>1</sup> Inpatient DVT only.<sup>2</sup> "Gallbladder disease" includes self-reports of both hospitalized and non-hospitalized events.<sup>3</sup> Data not collected for WHI Extension Study.<sup>4</sup> These outcomes have not been self-reported on all versions of Form 33 during WHI follow-up. The annualized percentages are corrected for the different amounts of follow-up.

**Table 4.1**  
**Calcium and Vitamin D Component Age – and Race/Ethnicity – Specific Recruitment**

Data as of: September 17, 2010

	<b>Total Randomized</b>	<b>% of Overall Goal</b>	<b>Distribution</b>	<b>Design Assumption</b>
<b>Age</b>	<b>36,282</b>			
50-54	5,153	118%	14%	10%
55-59	8,269	95%	23%	20%
60-69	16,519	84%	46%	45%
70-79	6,341	58%	17%	25%
<b>Race/Ethnicity</b>	<b>36,282</b>			
American Indian	149		<1%	
Asian	721		2%	
Black	3,315		9%	
Hispanic	1,502		4%	
White	30,155		83%	
Unknown	440		1%	

**Table 4.2**  
**Lost-to-Follow-up and Vital Status: CaD Participants**

Data as of: September 17, 2010  
Extension Participants Only

Vital Status/Participation	CaD Participants (N = 29,862)	
	N	%
Deceased	1950	6.5
Alive: Current Participation <sup>1</sup>	27054	90.6
Alive: Recent Participation <sup>2</sup>	241	0.8
Alive: Past/Unknown Participation <sup>3</sup>	13	<0.1
Stopped Follow-Up <sup>4</sup>	387	1.3
Lost to Follow-Up <sup>5</sup>	217	0.7

Data as of: September 12, 2005  
Events through Study Closeout

Vital Status/Participation	CaD Participants (N = 36,282)	
	N	%
Deceased	1551	4.3
Alive: Current Participation <sup>6</sup>	32652	90.0
Alive: Recent Participation <sup>7</sup>	1099	3.0
Alive: Past/Unknown Participation <sup>8</sup>	27	0.1
Stopped Follow-Up <sup>4</sup>	684	1.9
Lost to Follow-Up <sup>5</sup>	269	0.7

<sup>1</sup> Participants who have filled in a Form 33 within the last 15 months.

<sup>2</sup> Participants who last filled in a Form 33 between 15 and 24 months ago.

<sup>3</sup> Participants without a Form 33 within the last 24 months, who have been located (as indicated on Form 23) within the last 6 months.

<sup>4</sup> Participants with codes 5 (no follow-up) or 8 (absolutely no follow-up) on Form 7 or 9.

<sup>5</sup> Participants not in any of the above categories.

<sup>6</sup> Participants who have filled in a Form 33 within the last 9 months.

<sup>7</sup> Participants who last filled in a Form 33 between 9 and 18 months ago.

<sup>8</sup> Participants without a Form 33 within the last 18 months, who have been located (as indicated on Form 23) within the last 6 months.

**Table 4.3**  
**Verified Outcomes (Annualized Percentages) by Age for Calcium and Vitamin D Participants**

Data as of: September 17, 2010

Outcome	Total	Age			
		50-54	55-59	60-69	70-79
Number randomized	36282	5153	8269	16519	6341
Mean follow-up (months)	133.2	140.6	138.1	132.3	123.3
<b>Fractures</b>					
Hip fracture	759 (0.19%)	16 (0.03%)	73 (0.08%)	305 (0.17%)	365 (0.56%)
<b>Cancer</b>					
Colorectal cancer	525 (0.13%)	38 (0.06%)	81 (0.09%)	256 (0.14%)	150 (0.23%)
Breast cancer	2046 (0.51%)	253 (0.42%)	485 (0.51%)	961 (0.53%)	347 (0.53%)
Invasive breast cancer	1637 (0.41%)	188 (0.31%)	392 (0.41%)	770 (0.42%)	287 (0.44%)
Non-invasive breast cancer	436 (0.11%)	66 (0.11%)	97 (0.10%)	203 (0.11%)	70 (0.11%)
Ovarian cancer	182 (0.05%)	21 (0.03%)	44 (0.05%)	87 (0.05%)	30 (0.05%)
Endometrial cancer <sup>1</sup>	283 (0.07%)	39 (0.06%)	70 (0.07%)	127 (0.07%)	47 (0.07%)
Other cancer <sup>2</sup>	2207 (0.55%)	195 (0.32%)	386 (0.41%)	1109 (0.61%)	517 (0.79%)
<b>Total cancer</b>	<b>4973 (1.23%)</b>	<b>526 (0.87%)</b>	<b>1021 (1.07%)</b>	<b>2394 (1.31%)</b>	<b>1032 (1.58%)</b>
<b>Cardiovascular</b>					
CHD <sup>3</sup>	1604 (0.40%)	88 (0.15%)	203 (0.21%)	769 (0.42%)	544 (0.84%)
CHD death <sup>4</sup>	450 (0.11%)	20 (0.03%)	39 (0.04%)	186 (0.10%)	205 (0.31%)
Total MI <sup>5</sup>	1289 (0.32%)	72 (0.12%)	170 (0.18%)	642 (0.35%)	405 (0.62%)
Clinical MI	1240 (0.31%)	68 (0.11%)	165 (0.17%)	618 (0.34%)	389 (0.60%)
CABG/PTCA	1992 (0.49%)	111 (0.18%)	293 (0.31%)	1054 (0.58%)	534 (0.82%)
Carotid artery disease	339 (0.08%)	14 (0.02%)	46 (0.05%)	190 (0.10%)	89 (0.14%)
Stroke	1257 (0.31%)	62 (0.10%)	147 (0.15%)	579 (0.32%)	469 (0.72%)
PVD	310 (0.08%)	11 (0.02%)	48 (0.05%)	154 (0.08%)	97 (0.15%)
Coronary disease <sup>6</sup>	3676 (0.91%)	215 (0.36%)	521 (0.55%)	1831 (1.01%)	1109 (1.70%)
<b>Total cardiovascular disease</b>	<b>5088 (1.26%)</b>	<b>292 (0.48%)</b>	<b>712 (0.75%)</b>	<b>2502 (1.37%)</b>	<b>1582 (2.43%)</b>
<b>Deaths</b>					
Cardiovascular deaths	897 (0.22%)	37 (0.06%)	75 (0.08%)	370 (0.20%)	415 (0.64%)
Cancer deaths	1280 (0.32%)	94 (0.16%)	180 (0.19%)	646 (0.35%)	360 (0.55%)
Other known cause	734 (0.18%)	32 (0.05%)	82 (0.09%)	311 (0.17%)	309 (0.47%)
Unknown cause	103 (0.03%)	5 (0.01%)	14 (0.01%)	45 (0.02%)	39 (0.06%)
Not yet adjudicated	643 (0.16%)	26 (0.04%)	66 (0.07%)	305 (0.17%)	246 (0.38%)
<b>Total death</b>	<b>3657 (0.91%)</b>	<b>194 (0.32%)</b>	<b>417 (0.44%)</b>	<b>1677 (0.92%)</b>	<b>1369 (2.10%)</b>

<sup>1</sup> Only women without a baseline hysterectomy are used to compute the annual rates of endometrial cancer.

<sup>2</sup> Only one report of "other cancer" is counted per woman; however, the first of each type is adjudicated. Excludes non-melanoma skin cancer.

<sup>3</sup> "CHD" includes clinical MI, evolving Q-wave MI, and CHD death; Q-wave MI is not collected in the WHI Extension Study.

<sup>4</sup> "CHD death" includes definite and possible CHD death.

<sup>5</sup> "Total MI" includes clinical MI and evolving Q-wave MI; Q-wave MI is not collected in the WHI Extension Study.

<sup>6</sup> "Coronary disease" includes clinical MI, evolving Q-wave MI, possible evolving Q-wave MI, CHD death, angina, congestive heart failure, and CABG/PTCA; Q-wave MI, angina, and congestive heart failure are not collected in the WHI Extension Study.

**Table 4.4**  
**Verified Outcomes (Annualized Percentages) by Race/Ethnicity for Calcium and Vitamin D Participants**

Data as of: September 17, 2010

Outcome	Race/Ethnicity											
	American Indian/Alaskan Native		Asian/Pacific Islander		Black/African American		Hispanic/Latino		White		Unknown	
Number randomized	149		721		3315		1502		30155		440	
Mean follow-up (months)	126.6		127.0		127.9		122.4		134.6		124.0	
<b>Fractures</b>												
Hip fracture	3	(0.19%)	10	(0.13%)	14	(0.04%)	8	(0.05%)	722	(0.21%)	2	(0.04%)
<b>Cancer</b>												
Colorectal cancer	2	(0.13%)	9	(0.12%)	53	(0.15%)	15	(0.10%)	439	(0.13%)	7	(0.15%)
Breast cancer	4	(0.25%)	40	(0.52%)	161	(0.46%)	51	(0.33%)	1770	(0.52%)	20	(0.44%)
Invasive breast cancer	3	(0.19%)	29	(0.38%)	124	(0.35%)	41	(0.27%)	1423	(0.42%)	17	(0.37%)
Non-invasive breast cancer	1	(0.06%)	13	(0.17%)	40	(0.11%)	12	(0.08%)	367	(0.11%)	3	(0.07%)
Ovarian cancer	0	(0.00%)	7	(0.09%)	12	(0.03%)	6	(0.04%)	155	(0.05%)	2	(0.04%)
Endometrial cancer <sup>1</sup>	1	(0.07%)	4	(0.05%)	14	(0.04%)	6	(0.04%)	254	(0.07%)	4	(0.09%)
Other cancer <sup>2</sup>	6	(0.38%)	37	(0.48%)	145	(0.41%)	46	(0.30%)	1950	(0.58%)	23	(0.51%)
<b>Total cancer</b>	<b>12</b>	<b>(0.76%)</b>	<b>92</b>	<b>(1.21%)</b>	<b>368</b>	<b>(1.04%)</b>	<b>116</b>	<b>(0.76%)</b>	<b>4331</b>	<b>(1.28%)</b>	<b>54</b>	<b>(1.19%)</b>
<b>Cardiovascular</b>												
CHD <sup>3</sup>	5	(0.32%)	13	(0.17%)	143	(0.40%)	35	(0.23%)	1387	(0.41%)	21	(0.46%)
CHD death <sup>4</sup>	1	(0.06%)	3	(0.04%)	56	(0.16%)	9	(0.06%)	373	(0.11%)	8	(0.18%)
Total MI <sup>5</sup>	5	(0.32%)	12	(0.16%)	98	(0.28%)	30	(0.20%)	1126	(0.33%)	18	(0.40%)
Clinical MI	5	(0.32%)	12	(0.16%)	95	(0.27%)	29	(0.19%)	1082	(0.32%)	17	(0.37%)
CABG/PTCA	6	(0.38%)	19	(0.25%)	149	(0.42%)	61	(0.40%)	1733	(0.51%)	24	(0.53%)
Carotid artery disease	1	(0.06%)	1	(0.01%)	17	(0.05%)	4	(0.03%)	311	(0.09%)	5	(0.11%)
Stroke	8	(0.51%)	22	(0.29%)	126	(0.36%)	31	(0.20%)	1053	(0.31%)	17	(0.37%)
PVD	2	(0.13%)	5	(0.07%)	44	(0.12%)	3	(0.02%)	253	(0.07%)	3	(0.07%)
Coronary disease <sup>6</sup>	11	(0.70%)	37	(0.48%)	364	(1.03%)	110	(0.72%)	3111	(0.92%)	43	(0.95%)
<b>Total cardiovascular disease</b>	<b>19</b>	<b>(1.21%)</b>	<b>60</b>	<b>(0.79%)</b>	<b>510</b>	<b>(1.44%)</b>	<b>146</b>	<b>(0.95%)</b>	<b>4292</b>	<b>(1.27%)</b>	<b>61</b>	<b>(1.34%)</b>
<b>Deaths</b>												
Cardiovascular deaths	2	(0.13%)	12	(0.16%)	112	(0.32%)	20	(0.13%)	740	(0.22%)	11	(0.24%)
Cancer deaths	2	(0.13%)	25	(0.33%)	95	(0.27%)	36	(0.23%)	1106	(0.33%)	16	(0.35%)
Other known cause	7	(0.45%)	8	(0.10%)	52	(0.15%)	14	(0.09%)	644	(0.19%)	9	(0.20%)
Unknown cause	0	(0.00%)	2	(0.03%)	16	(0.05%)	2	(0.01%)	81	(0.02%)	2	(0.04%)
Not yet adjudicated	3	(0.19%)	5	(0.07%)	50	(0.14%)	12	(0.08%)	565	(0.17%)	8	(0.18%)
<b>Total death</b>	<b>14</b>	<b>(0.89%)</b>	<b>52</b>	<b>(0.68%)</b>	<b>325</b>	<b>(0.92%)</b>	<b>84</b>	<b>(0.55%)</b>	<b>3136</b>	<b>(0.93%)</b>	<b>46</b>	<b>(1.01%)</b>

<sup>1</sup> Only women without a baseline hysterectomy are used to compute the annual rates of endometrial cancer.

<sup>2</sup> Only one report of "other cancer" is counted per woman; however, the first of each type is adjudicated. Excludes non-melanoma skin cancer.

<sup>3</sup> "CHD" includes clinical MI, evolving Q-wave MI, and CHD death; Q-wave MI is not collected in the WHI Extension Study.

<sup>4</sup> "CHD death" includes definite and possible CHD death.

<sup>5</sup> "Total MI" includes clinical MI and evolving Q-wave MI; Q-wave MI is not collected in the WHI Extension Study.

<sup>6</sup> "Coronary disease" includes clinical MI, evolving Q-wave MI, possible evolving Q-wave MI, CHD death, angina, congestive heart failure, and CABG/PTCA; Q-wave MI, angina, and congestive heart failure are not collected in the WHI Extension Study.



**Table 4.5**  
**Counts (Annualized Percentages) of Participants with Self-Reported Outcomes by Age and Race/Ethnicity**  
**for CaD Participants Who Did Not Report a Prevalent Condition at Baseline**

Data as of: September 17, 2010

Outcome	Total	Age				
		50-54	55-59	60-69	70-79	
Number randomized	36282	5153	8269	16519	6341	
Mean follow-up (months)	133.2	140.6	138.1	132.3	123.3	
<b>Hospitalizations</b>						
Ever	21887 (5.43%)	2305 (3.82%)	4287 (4.51%)	10521 (5.78%)	4774 (7.33%)	
Two or more	13496 (3.35%)	1113 (1.84%)	2414 (2.54%)	6652 (3.65%)	3317 (5.09%)	
<b>Other</b>						
DVT <sup>1</sup>	606 (0.15%)	39 (0.07%)	97 (0.10%)	284 (0.16%)	186 (0.29%)	
Pulmonary embolism	457 (0.11%)	38 (0.06%)	77 (0.08%)	239 (0.13%)	103 (0.16%)	
Diabetes (treated)	4320 (1.12%)	659 (1.12%)	982 (1.07%)	2007 (1.15%)	672 (1.08%)	
Gallbladder disease <sup>2,3</sup>	2484 (0.91%)	367 (0.85%)	602 (0.92%)	1156 (0.96%)	359 (0.82%)	
Hysterectomy	1402 (0.59%)	189 (0.54%)	361 (0.61%)	662 (0.62%)	190 (0.52%)	
Glaucoma <sup>3</sup>	3725 (1.19%)	400 (0.83%)	769 (1.03%)	1771 (1.27%)	785 (1.57%)	
Osteoporosis <sup>3</sup>	7130 (2.31%)	733 (1.53%)	1361 (1.85%)	3450 (2.50%)	1586 (3.26%)	
Osteoarthritis <sup>4</sup>	9313 (3.69%)	1439 (3.16%)	2226 (3.38%)	4210 (3.90%)	1438 (4.32%)	
Rheumatoid arthritis <sup>3</sup>	1876 (0.60%)	267 (0.57%)	435 (0.59%)	833 (0.60%)	341 (0.67%)	
Intestinal polyps	7772 (2.07%)	1120 (1.92%)	1824 (2.01%)	3692 (2.19%)	1136 (1.96%)	
Lupus	485 (0.12%)	70 (0.12%)	115 (0.12%)	213 (0.12%)	87 (0.13%)	
Kidney stones <sup>3,4</sup>	819 (0.29%)	111 (0.27%)	180 (0.28%)	383 (0.30%)	145 (0.31%)	
Cataracts <sup>3,4</sup>	11117 (4.50%)	818 (2.04%)	2094 (3.33%)	5934 (5.29%)	2271 (7.07%)	
Pills for hypertension	12567 (4.35%)	1722 (3.48%)	2917 (3.97%)	5817 (4.63%)	2111 (5.22%)	

Outcomes	Race/Ethnicity					
	American Indian/ Alaskan Native	Asian/Pacific Islander	Black/African American	Hispanic/ Latino	White	Unknown
Number randomized	149	721	3315	1502	30155	440
Mean follow-up (months)	126.6	127.0	127.9	122.4	134.6	124.0
<b>Hospitalizations</b>						
Ever	82 (5.22%)	328 (4.30%)	1943 (5.50%)	690 (4.50%)	18590 (5.49%)	254 (5.59%)
Two or more	55 (3.50%)	172 (2.25%)	1215 (3.44%)	358 (2.34%)	11540 (3.41%)	156 (3.43%)
<b>Other</b>						
DVT <sup>1</sup>	6 (0.39%)	1 (0.01%)	65 (0.19%)	13 (0.09%)	514 (0.16%)	7 (0.16%)
Pulmonary embolism	4 (0.26%)	0 (0.00%)	45 (0.13%)	7 (0.05%)	395 (0.12%)	6 (0.13%)
Diabetes (treated)	20 (1.36%)	93 (1.29%)	596 (1.88%)	261 (1.81%)	3286 (1.00%)	64 (1.51%)
Gallbladder disease <sup>2,3</sup>	10 (1.00%)	39 (0.70%)	169 (0.65%)	121 (1.23%)	2117 (0.93%)	28 (0.90%)
Hysterectomy	4 (0.62%)	21 (0.42%)	82 (0.54%)	46 (0.54%)	1236 (0.60%)	13 (0.50%)
Glaucoma <sup>3</sup>	20 (1.62%)	59 (1.01%)	471 (1.75%)	177 (1.43%)	2965 (1.13%)	33 (0.94%)
Osteoporosis <sup>3</sup>	30 (2.42%)	156 (2.64%)	407 (1.47%)	299 (2.50%)	6156 (2.39%)	82 (2.38%)
Osteoarthritis <sup>4</sup>	49 (4.87%)	186 (3.31%)	830 (3.87%)	437 (4.15%)	7681 (3.64%)	130 (4.31%)
Rheumatoid arthritis <sup>3</sup>	17 (1.49%)	29 (0.50%)	304 (1.14%)	151 (1.24%)	1348 (0.52%)	27 (0.78%)
Intestinal polyps	40 (2.75%)	124 (1.77%)	759 (2.30%)	253 (1.72%)	6506 (2.06%)	90 (2.15%)
Lupus	4 (0.26%)	3 (0.04%)	57 (0.16%)	19 (0.12%)	395 (0.12%)	7 (0.15%)
Kidney stones <sup>3,4</sup>	7 (0.64%)	18 (0.33%)	73 (0.30%)	46 (0.42%)	667 (0.28%)	8 (0.25%)
Cataracts <sup>3,4</sup>	51 (5.03%)	178 (3.77%)	909 (4.10%)	440 (4.28%)	9404 (4.56%)	135 (4.66%)
Pills for hypertension	47 (4.70%)	230 (4.34%)	1061 (5.76%)	553 (4.68%)	10548 (4.23%)	128 (4.42%)

<sup>1</sup> Inpatient DVT only.<sup>2</sup> "Gallbladder disease" includes self-reports of both hospitalized and non-hospitalized events.<sup>3</sup> Data not collected for WHI Extension Study.<sup>4</sup> These outcomes have not been self-reported on all versions of Form 33 during WHI follow-up. The annualized percentages are corrected for the different amounts of follow-up.

**Table 5.1**  
**Observational Study Age and Race/Ethnicity Specific Recruitment**

Data as of: September 17, 2010

	<b>Total Enrolled</b>	<b>Distribution</b>
<b>Age</b>	<b>93,676</b>	
50-54	12,381	13%
55-59	17,329	18%
60-69	41,200	44%
70-79	22,766	24%
<b>Race/Ethnicity</b>	<b>93,676</b>	
American Indian	421	<1%
Asian	2,671	3%
Black	7,635	8%
Hispanic	3,609	4%
White	78,016	83%
Unknown	1,324	1%

**Table 5.2**  
**Lost-to-Follow-up and Vital Status: OS Participants**

Data as of: September 17, 2010  
Extension Participants Only

Vital Status/Participation	OS Participants (N=63,231)	
	N	%
Deceased	4441	7.0
Alive: Current Participation <sup>1</sup>	57397	90.8
Alive: Recent Participation <sup>2</sup>	389	0.6
Alive: Past/Unknown Participation <sup>3</sup>	20	<0.1
Stopped Follow-Up <sup>4</sup>	685	1.1
Lost to Follow-Up <sup>5</sup>	299	0.5

Data as of: September 12, 2005  
Events through Study Closeout

Vital Status/Participation	OS Participants (N =93,676)	
	N	%
Deceased	6260	6.7
Alive: Current Participation <sup>1</sup>	78092	83.4
Alive: Recent Participation <sup>2</sup>	4818	5.1
Alive: Past/Unknown Participation <sup>3</sup>	51	0.1
Stopped Follow-Up <sup>4</sup>	2347	2.5
Lost to Follow-Up <sup>5</sup>	2105	2.2

<sup>1</sup> Participants who have filled in a Form 33 within the last 15 months.

<sup>2</sup> Participants who last filled in a Form 33 between 15 and 24 months ago.

<sup>3</sup> Participants without a Form 33 within the last 24 months, who have been located (as indicated on Form 23) within the last 6 months.

<sup>4</sup> Participants with codes 5 (no follow-up) or 8 (absolutely no follow-up) on Form 7 or 9.

<sup>5</sup> Participants not in any of the above categories.

**Table 5.3**  
**Verified Outcomes (Annualized Percentages) by Age for OS Participants**

Data as of: September 17, 2010

Outcome	Total	Age				
		50-54	55-59	60-69	70-79	
Number enrolled	93676	12381	17329	41200	22766	
Mean follow-up (months)	131.9	140.5	139.4	132.3	120.6	
<b>Cardiovascular</b>						
CHD <sup>1</sup>	3820 (0.37%)	137 (0.09%)	323 (0.16%)	1615 (0.36%)	1745 (0.76%)	
CHD death <sup>2</sup>	1273 (0.12%)	30 (0.02%)	66 (0.03%)	441 (0.10%)	736 (0.32%)	
Clinical MI	2936 (0.29%)	113 (0.08%)	273 (0.14%)	1307 (0.29%)	1243 (0.54%)	
Angina <sup>3</sup>	2834 (0.28%)	124 (0.09%)	318 (0.16%)	1319 (0.29%)	1073 (0.47%)	
CABG/PTCA	4568 (0.44%)	196 (0.14%)	527 (0.26%)	2268 (0.50%)	1577 (0.69%)	
Carotid artery disease	835 (0.08%)	42 (0.03%)	74 (0.04%)	383 (0.08%)	336 (0.15%)	
Congestive heart failure <sup>3</sup>	2295 (0.22%)	81 (0.06%)	174 (0.09%)	882 (0.19%)	1158 (0.51%)	
Stroke	3000 (0.29%)	90 (0.06%)	216 (0.11%)	1268 (0.28%)	1426 (0.62%)	
PVD	810 (0.08%)	22 (0.02%)	72 (0.04%)	366 (0.08%)	350 (0.15%)	
Coronary disease <sup>4</sup>	8751 (0.85%)	373 (0.26%)	896 (0.45%)	3901 (0.86%)	3581 (1.56%)	
<b>Total cardiovascular disease</b>	<b>12335 (1.20%)</b>	<b>501 (0.35%)</b>	<b>1189 (0.59%)</b>	<b>5430 (1.20%)</b>	<b>5215 (2.28%)</b>	
<b>Cancer</b>						
Breast cancer	5753 (0.56%)	677 (0.47%)	1025 (0.51%)	2684 (0.59%)	1367 (0.60%)	
Invasive breast cancer	4772 (0.46%)	545 (0.38%)	832 (0.41%)	2219 (0.49%)	1176 (0.51%)	
Non-invasive breast cancer	1039 (0.10%)	142 (0.10%)	202 (0.10%)	492 (0.11%)	203 (0.09%)	
Ovarian cancer	521 (0.05%)	57 (0.04%)	95 (0.05%)	236 (0.05%)	133 (0.06%)	
Endometrial cancer <sup>5</sup>	786 (0.08%)	72 (0.05%)	143 (0.07%)	364 (0.08%)	207 (0.09%)	
Colorectal cancer	1283 (0.12%)	75 (0.05%)	134 (0.07%)	586 (0.13%)	488 (0.21%)	
Other cancer <sup>6</sup>	5989 (0.58%)	435 (0.30%)	814 (0.40%)	2851 (0.63%)	1889 (0.83%)	
<b>Total cancer</b>	<b>13468 (1.31%)</b>	<b>1254 (0.86%)</b>	<b>2090 (1.04%)</b>	<b>6289 (1.38%)</b>	<b>3835 (1.68%)</b>	
<b>Fractures</b>						
Hip fracture	2117 (0.21%)	50 (0.03%)	127 (0.06%)	742 (0.16%)	1198 (0.52%)	
<b>Deaths</b>						
Cardiovascular deaths	2776 (0.27%)	63 (0.04%)	155 (0.08%)	947 (0.21%)	1611 (0.70%)	
Cancer deaths	3845 (0.37%)	230 (0.16%)	431 (0.21%)	1733 (0.38%)	1451 (0.63%)	
Other known cause	2439 (0.24%)	99 (0.07%)	173 (0.09%)	915 (0.20%)	1252 (0.55%)	
Unknown cause	384 (0.04%)	20 (0.01%)	36 (0.02%)	142 (0.03%)	186 (0.08%)	
Not yet adjudicated	1690 (0.16%)	66 (0.05%)	138 (0.07%)	682 (0.15%)	804 (0.35%)	
<b>Total death</b>	<b>11134 (1.08%)</b>	<b>478 (0.33%)</b>	<b>933 (0.46%)</b>	<b>4419 (0.97%)</b>	<b>5304 (2.32%)</b>	

<sup>1</sup> "CHD" includes clinical MI and CHD death.

<sup>2</sup> "CHD death" includes definite and possible CHD death.

<sup>3</sup> Angina and CHF are not verified outcomes in the WHI Extension Study. Reported statistics represent experience during the original program.

<sup>4</sup> "Coronary disease" includes clinical MI, CHD death, angina, congestive heart failure, and CABG/PTCA; angina and congestive heart failure are not collected in the WHI Extension Study.

<sup>5</sup> Only women without a baseline hysterectomy are used to compute the annual rates of endometrial cancer.

<sup>6</sup> Only one report of "other cancer" is counted per woman; however, the first of each type is adjudicated. Excludes non-melanoma skin cancer.

**Table 5.4**  
**Verified Outcomes (Annualized Percentages) by Race/Ethnicity for OS Participants**

Data as of: September 17, 2010

Outcomes	Race/Ethnicity					
	American Indian/Alaskan Native	Asian/Pacific Islander	Black/African American	Hispanic/Latino	White	Unknown
Number enrolled	421	2671	7635	3609	78016	1324
Mean follow-up (months)	117.1	117.2	114.3	109.8	135.3	123.9
<b>Cardiovascular</b>						
CHD <sup>1</sup>	21 (0.51%)	56 (0.21%)	318 (0.44%)	74 (0.22%)	3298 (0.37%)	53 (0.39%)
CHD death <sup>2</sup>	11 (0.27%)	19 (0.07%)	144 (0.20%)	21 (0.06%)	1058 (0.12%)	20 (0.15%)
Clinical MI	12 (0.29%)	43 (0.16%)	210 (0.29%)	60 (0.18%)	2573 (0.29%)	38 (0.28%)
Angina <sup>3</sup>	18 (0.44%)	40 (0.15%)	250 (0.34%)	80 (0.24%)	2412 (0.27%)	34 (0.25%)
CABG/PTCA	24 (0.58%)	58 (0.22%)	277 (0.38%)	116 (0.35%)	4026 (0.46%)	67 (0.49%)
Carotid artery disease	5 (0.12%)	9 (0.03%)	37 (0.05%)	17 (0.05%)	754 (0.09%)	13 (0.10%)
Congestive heart failure <sup>3</sup>	16 (0.39%)	22 (0.08%)	233 (0.32%)	42 (0.13%)	1948 (0.22%)	34 (0.25%)
Stroke	13 (0.32%)	68 (0.26%)	236 (0.32%)	62 (0.19%)	2569 (0.29%)	52 (0.38%)
PVD	3 (0.07%)	6 (0.02%)	85 (0.12%)	8 (0.02%)	695 (0.08%)	13 (0.10%)
Coronary disease <sup>4</sup>	52 (1.27%)	119 (0.46%)	737 (1.01%)	208 (0.63%)	7517 (0.85%)	118 (0.86%)
<b>Total cardiovascular disease</b>	63 (1.53%)	193 (0.74%)	1021 (1.40%)	277 (0.84%)	10598 (1.20%)	183 (1.34%)
<b>Cancer</b>						
Breast cancer	17 (0.41%)	122 (0.47%)	352 (0.48%)	129 (0.39%)	5075 (0.58%)	58 (0.42%)
Invasive breast cancer	16 (0.39%)	102 (0.39%)	282 (0.39%)	105 (0.32%)	4217 (0.48%)	50 (0.37%)
Non-invasive breast cancer	1 (0.02%)	22 (0.08%)	76 (0.10%)	26 (0.08%)	905 (0.10%)	9 (0.07%)
Ovarian cancer	1 (0.02%)	4 (0.02%)	24 (0.03%)	18 (0.05%)	472 (0.05%)	2 (0.01%)
Endometrial cancer <sup>5</sup>	1 (0.02%)	12 (0.05%)	26 (0.04%)	12 (0.04%)	720 (0.08%)	15 (0.11%)
Colorectal cancer	4 (0.10%)	27 (0.10%)	116 (0.16%)	27 (0.08%)	1095 (0.12%)	14 (0.10%)
Other cancer <sup>6</sup>	20 (0.49%)	111 (0.43%)	360 (0.49%)	105 (0.32%)	5311 (0.60%)	82 (0.60%)
<b>Total cancer</b>	43 (1.05%)	261 (1.00%)	829 (1.14%)	285 (0.86%)	11890 (1.35%)	160 (1.17%)
<b>Fractures</b>						
Hip fracture	5 (0.12%)	20 (0.08%)	43 (0.06%)	19 (0.06%)	2009 (0.23%)	21 (0.15%)
<b>Deaths</b>						
Cardiovascular deaths	17 (0.41%)	49 (0.19%)	272 (0.37%)	54 (0.16%)	2342 (0.27%)	42 (0.31%)
Cancer deaths	13 (0.32%)	75 (0.29%)	285 (0.39%)	82 (0.25%)	3350 (0.38%)	40 (0.29%)
Other known cause	26 (0.63%)	39 (0.15%)	185 (0.25%)	74 (0.22%)	2089 (0.24%)	26 (0.19%)
Unknown cause	1 (0.02%)	5 (0.02%)	61 (0.08%)	14 (0.04%)	298 (0.03%)	5 (0.04%)
Not yet adjudicated	12 (0.29%)	20 (0.08%)	131 (0.18%)	34 (0.10%)	1463 (0.17%)	30 (0.22%)
<b>Total death</b>	69 (1.68%)	188 (0.72%)	934 (1.28%)	258 (0.78%)	9542 (1.08%)	143 (1.05%)

<sup>1</sup> "CHD" includes clinical MI and CHD death.

<sup>2</sup> "CHD death" includes definite and possible CHD death.

<sup>3</sup> Angina and CHF are not verified outcomes in the WHI Extension Study. Reported statistics represent experience during the original program.

<sup>4</sup> "Coronary disease" includes clinical MI, CHD death, angina, congestive heart failure, and CABG/PTCA; angina and congestive heart failure are not collected in the WHI Extension Study.

<sup>5</sup> Only women without a baseline hysterectomy are used to compute the annual rates of endometrial cancer.

<sup>6</sup> Only one report of "other cancer" is counted per woman; however, the first of each type is adjudicated. Excludes non-melanoma skin.

**Table 5.5**  
**Counts (Annualized Percentages) of Participants with Self-Reported Outcomes by Age and Race/Ethnicity**  
**for OS Participants Who Did Not Report a Prevalent Condition at Baseline**

Data as of: September 17, 2010

Outcome	Total	Age				
		50-54	55-59	60-69	70-79	
Number enrolled	93676	12381	17329	41200	22766	
Mean follow-up (months)	131.9	140.5	139.4	132.3	120.6	
<b>Hospitalizations</b>						
Ever	54801 (5.32%)	5206 (3.59%)	8425 (4.19%)	25017 (5.51%)	16153 (7.06%)	
Two or more	33363 (3.24%)	2552 (1.76%)	4553 (2.26%)	15336 (3.38%)	10922 (4.77%)	
<b>Other</b>						
DVT <sup>1</sup>	1188 (0.12%)	79 (0.06%)	152 (0.08%)	552 (0.13%)	405 (0.18%)	
Pulmonary embolism	925 (0.09%)	78 (0.05%)	136 (0.07%)	426 (0.09%)	285 (0.13%)	
Diabetes (treated)	8025 (0.81%)	1077 (0.76%)	1512 (0.77%)	3678 (0.84%)	1758 (0.80%)	
Gallbladder disease <sup>2,3</sup>	5673 (0.97%)	834 (0.98%)	1148 (1.00%)	2543 (1.00%)	1148 (0.86%)	
Hysterectomy	4553 (0.44%)	633 (0.44%)	932 (0.46%)	2072 (0.46%)	916 (0.40%)	
Glaucoma <sup>3</sup>	8481 (1.28%)	845 (0.90%)	1372 (1.07%)	3899 (1.35%)	2365 (1.58%)	
Osteoporosis <sup>3</sup>	20718 (3.26%)	2100 (2.27%)	3378 (2.68%)	9523 (3.44%)	5717 (4.05%)	
Osteoarthritis <sup>4</sup>	21312 (3.55%)	3027 (2.89%)	4198 (3.18%)	9474 (3.74%)	4613 (4.20%)	
Rheumatoid arthritis <sup>3</sup>	4587 (0.70%)	636 (0.69%)	883 (0.70%)	1888 (0.66%)	1180 (0.77%)	
Intestinal polyps	18214 (1.95%)	2379 (1.72%)	3753 (1.99%)	8454 (2.07%)	3628 (1.84%)	
Lupus	1338 (0.13%)	178 (0.12%)	257 (0.13%)	604 (0.13%)	299 (0.13%)	
Kidney stones <sup>3,4</sup>	2314 (0.39%)	292 (0.37%)	433 (0.39%)	994 (0.38%)	595 (0.43%)	
Cataracts <sup>3,4</sup>	27103 (5.41%)	1726 (2.17%)	4088 (3.77%)	14045 (6.26%)	7244 (8.16%)	
Pills for hypertension	28395 (3.82%)	3474 (2.87%)	5267 (3.33%)	12714 (3.99%)	6940 (4.78%)	

Outcomes	Race/Ethnicity					
	American Indian/ Alaskan Native	Asian/Pacific Islander	Black/African American	Hispanic/ Latino	White	Unknown
Number enrolled	421	2671	7635	3609	78016	1324
Mean follow-up (months)	117.1	117.2	114.3	109.8	135.3	123.9
<b>Hospitalizations</b>						
Ever	247 (6.01%)	999 (3.83%)	4074 (5.60%)	1517 (4.60%)	47239 (5.37%)	725 (5.30%)
Two or more	157 (3.82%)	465 (1.78%)	2316 (3.18%)	777 (2.35%)	29215 (3.32%)	433 (3.17%)
<b>Other</b>						
DVT <sup>1</sup>	4 (0.10%)	5 (0.02%)	106 (0.15%)	22 (0.07%)	1038 (0.12%)	13 (0.10%)
Pulmonary embolism	3 (0.07%)	4 (0.02%)	65 (0.09%)	11 (0.03%)	836 (0.10%)	6 (0.04%)
Diabetes (treated)	63 (1.76%)	236 (0.95%)	1033 (1.60%)	433 (1.40%)	6131 (0.72%)	129 (0.99%)
Gallbladder disease <sup>2,3</sup>	31 (1.33%)	81 (0.46%)	374 (0.80%)	231 (1.22%)	4879 (0.99%)	77 (0.97%)
Hysterectomy	21 (0.51%)	86 (0.33%)	275 (0.38%)	203 (0.62%)	3896 (0.44%)	72 (0.53%)
Glaucoma <sup>3</sup>	45 (1.65%)	253 (1.38%)	991 (2.04%)	309 (1.35%)	6761 (1.21%)	122 (1.34%)
Osteoporosis <sup>3</sup>	90 (3.33%)	626 (3.57%)	1073 (2.13%)	737 (3.32%)	17869 (3.34%)	323 (3.71%)
Osteoarthritis <sup>4</sup>	78 (3.46%)	645 (3.50%)	1597 (3.78%)	889 (4.11%)	17797 (3.51%)	306 (3.67%)
Rheumatoid arthritis <sup>3</sup>	38 (1.40%)	98 (0.53%)	662 (1.37%)	383 (1.71%)	3319 (0.59%)	87 (0.98%)
Intestinal polyps	64 (1.71%)	421 (1.80%)	1367 (2.05%)	542 (1.76%)	15599 (1.96%)	221 (1.80%)
Lupus	9 (0.22%)	24 (0.09%)	128 (0.18%)	66 (0.20%)	1095 (0.13%)	16 (0.12%)
Kidney stones <sup>3,4</sup>	17 (0.69%)	40 (0.24%)	263 (0.57%)	125 (0.60%)	1825 (0.37%)	44 (0.54%)
Cataracts <sup>3,4</sup>	102 (4.81%)	683 (5.00%)	1937 (4.92%)	894 (4.66%)	23094 (5.50%)	393 (5.74%)
Pills for hypertension	118 (4.46%)	701 (3.80%)	1941 (5.40%)	1065 (4.27%)	24145 (3.71%)	425 (4.38%)

<sup>1</sup> Inpatient DVT only.

<sup>2</sup> "Gallbladder disease" includes self-reports of both hospitalized and non-hospitalized events.

<sup>3</sup> Data not collected for WHI extension study.

<sup>4</sup> These outcomes have not been self-reported on all versions of Form 33. The annualized percentages are corrected for the different amounts of follow-up.

**Table 5.6**  
**First Reported Verified Outcomes Before and After AV-3<sup>1</sup> for OS Participants**

Data as of: September 17, 2010

Outcome	Number of Events	
	Before AV-3	After AV-3
<b>Cardiovascular</b>		
CHD <sup>2</sup>	752	3068
CHD death <sup>3</sup>	167	1106
Clinical MI	640	2296
Angina	1270	1564
CABG/PTCA	1166	3402
Carotid artery disease	231	604
Congestive heart failure	719	1576
Stroke	576	2424
PVD	198	612
Coronary disease <sup>4</sup>	2579	6172
<b>Total cardiovascular disease</b>	<b>3447</b>	<b>8888</b>
<b>Cancer</b>		
Breast cancer	1606	4147
Invasive breast cancer	1340	3432
Non-invasive breast cancer	272	767
Ovarian cancer	136	385
Endometrial cancer	214	572
Colorectal cancer	332	951
Other cancer <sup>5</sup>	1400	4589
<b>Total cancer</b>	<b>3610</b>	<b>9858</b>
<b>Fractures</b>		
Hip fracture	294	1823
<b>Deaths</b>		
Cardiovascular deaths	367	2409
Cancer deaths	618	3227
Deaths: other known cause	228	2211
Deaths: unknown cause	61	323
Deaths: not yet adjudicated	0	1690
<b>Total death</b>	<b>1274</b>	<b>9860</b>

<sup>1</sup> AV-3 date is the blood draw date for participants with an AV-3 blood draw and the OS enrollment date plus 3 years for participants without an AV-3 blood draw. All participants have been enrolled for at least 3 years.

<sup>2</sup> "CHD" includes clinical MI and CHD death.

<sup>3</sup> "CHD death" includes definite and possible CHD death.

<sup>4</sup> "Coronary disease" includes clinical MI, CHD death, angina, congestive heart failure, and CABG/PTCA; angina and congestive heart failure are not collected in the WHI Extension Study.

<sup>5</sup> Only one report of "other cancer" is counted per woman; however, the first of each type is adjudicated. Excludes non-melanoma skin cancer.

**Table 5.7**  
**Counts of Participants with Self-Reported Outcomes Before and After AV-3<sup>1</sup>**  
**for OS Participants Who Did Not Report a Prevalent Condition at Baseline**

Data as of: September 17, 2010

Outcome	Number of Events	
	Before AV-3	After AV-3
Ever hospitalized	20207	34594
DVT <sup>2</sup>	236	952
Pulmonary embolism	136	789
Diabetes (treated)	1740	6285
Gallbladder disease <sup>3, 4</sup>	2137	3536
Hysterectomy	1391	3162
Glaucoma <sup>4</sup>	2755	5726
Osteoporosis <sup>4</sup>	8703	12015
Osteoarthritis <sup>5</sup>	6339	14973
Rheumatoid arthritis <sup>4</sup>	1723	2864
Intestinal polyps	4397	13817
Lupus	348	990
Kidney stones <sup>4, 5</sup>	646	1668
Cataracts <sup>4, 5</sup>	9145	17958
Pills for hypertension	8141	20254

<sup>1</sup> AV-3 date is the blood draw date for participants with an AV-3 blood draw and the OS enrollment date plus 3 years for participants without an AV-3 blood draw.

All participants have been enrolled for at least 3 years.

<sup>2</sup> Inpatient DVT only.

<sup>3</sup> "Gallbladder disease" includes self-reports of both hospitalized and non-hospitalized events.

<sup>4</sup> Not collected on Form 33 after March 31, 2005.

<sup>5</sup> These outcomes have not been self-reported on all versions of Form 33. The annualized percentages are corrected for the different amounts of follow-up.



**Table 6.1**  
**Verified Outcomes (Annualized Percentages) by Age for CT Participants**

Data as of: September 17, 2010

Outcome	Total	Age			
		50-54	55-59	60-69	70-79
Number randomized	68132	9188	14661	31389	12894
Mean follow-up (months)	141.4	150.2	146.9	140.7	130.5
<b>Cardiovascular</b>					
CHD <sup>1</sup>	3264 (0.41%)	182 (0.16%)	381 (0.21%)	1519 (0.41%)	1182 (0.84%)
CHD death <sup>2</sup>	968 (0.12%)	42 (0.04%)	71 (0.04%)	413 (0.11%)	442 (0.32%)
Total MI <sup>3</sup>	2589 (0.32%)	147 (0.13%)	326 (0.18%)	1216 (0.33%)	900 (0.64%)
Clinical MI	2512 (0.31%)	141 (0.12%)	318 (0.18%)	1178 (0.32%)	875 (0.62%)
Angina <sup>4</sup>	2414 (0.30%)	129 (0.11%)	331 (0.18%)	1215 (0.33%)	739 (0.53%)
CABG/PTCA	3934 (0.49%)	216 (0.19%)	546 (0.30%)	2051 (0.56%)	1121 (0.80%)
Carotid artery disease	663 (0.08%)	24 (0.02%)	85 (0.05%)	354 (0.10%)	200 (0.14%)
Congestive heart failure <sup>4</sup>	1748 (0.22%)	81 (0.07%)	172 (0.10%)	745 (0.20%)	750 (0.53%)
Stroke	2486 (0.31%)	101 (0.09%)	252 (0.14%)	1160 (0.32%)	973 (0.69%)
PVD	612 (0.08%)	29 (0.03%)	84 (0.05%)	314 (0.09%)	185 (0.13%)
Coronary disease <sup>5</sup>	7466 (0.93%)	429 (0.37%)	977 (0.54%)	3637 (0.99%)	2423 (1.73%)
<b>Total cardiovascular disease</b>	<b>10196 (1.27%)</b>	<b>553 (0.48%)</b>	<b>1297 (0.72%)</b>	<b>4935 (1.34%)</b>	<b>3411 (2.43%)</b>
<b>Cancer</b>					
Breast cancer	4003 (0.50%)	477 (0.41%)	880 (0.49%)	1896 (0.52%)	750 (0.53%)
Invasive breast cancer	3231 (0.40%)	361 (0.31%)	715 (0.40%)	1526 (0.41%)	629 (0.45%)
Non-invasive breast cancer	822 (0.10%)	122 (0.11%)	174 (0.10%)	393 (0.11%)	133 (0.09%)
Ovary cancer	354 (0.04%)	33 (0.03%)	71 (0.04%)	183 (0.05%)	67 (0.05%)
Endometrial cancer <sup>6</sup>	545 (0.07%)	63 (0.05%)	130 (0.07%)	264 (0.07%)	88 (0.06%)
Colorectal cancer	1054 (0.13%)	67 (0.06%)	168 (0.09%)	515 (0.14%)	304 (0.22%)
Other cancer <sup>7</sup>	4437 (0.55%)	362 (0.31%)	748 (0.42%)	2217 (0.60%)	1110 (0.79%)
<b>Total cancer</b>	<b>9814 (1.22%)</b>	<b>956 (0.83%)</b>	<b>1897 (1.06%)</b>	<b>4768 (1.30%)</b>	<b>2193 (1.56%)</b>
<b>Fractures</b>					
Hip fracture	1541 (0.19%)	29 (0.03%)	111 (0.06%)	623 (0.17%)	778 (0.55%)
<b>Deaths</b>					
Cardiovascular deaths	1884 (0.23%)	69 (0.06%)	138 (0.08%)	770 (0.21%)	907 (0.65%)
Cancer deaths	2621 (0.33%)	158 (0.14%)	357 (0.20%)	1308 (0.36%)	798 (0.57%)
Other known cause	1520 (0.19%)	64 (0.06%)	147 (0.08%)	646 (0.18%)	663 (0.47%)
Unknown cause	220 (0.03%)	13 (0.01%)	22 (0.01%)	91 (0.02%)	94 (0.07%)
Not yet adjudicated	1238 (0.15%)	44 (0.04%)	121 (0.07%)	570 (0.15%)	503 (0.36%)
<b>Total death</b>	<b>7483 (0.93%)</b>	<b>348 (0.30%)</b>	<b>785 (0.44%)</b>	<b>3385 (0.92%)</b>	<b>2965 (2.11%)</b>

<sup>1</sup> "CHD" includes clinical MI and CHD death.

<sup>2</sup> "CHD death" includes definite and possible CHD death.

<sup>3</sup> "Total MI" includes clinical MI and evolving Q-wave MI.

<sup>4</sup> Angina and CHF are not verified outcomes in the WHI Extension Study. Reported statistics represent experience during the original program.

<sup>5</sup> "Coronary disease" includes clinical MI, evolving Q-wave MI, possible evolving Q-wave MI, CHD death, angina, congestive heart failure, and CABG/PTCA.

<sup>6</sup> Only women without a baseline hysterectomy are used to compute the annual rates of endometrial cancer.

<sup>7</sup> Only one report of "other cancer" is counted per woman; however, the first of each type is adjudicated. Excludes non-melanoma skin cancer.

**Table 6.2**  
**Verified Outcomes (Annualized Percentages) by Race/Ethnicity for CT Participants**

Data as of: September 17, 2010

Outcome	Race/Ethnicity					
	American Indian/Alaskan Native	Asian/Pacific Islander	Black/African American	Hispanic/Latino	White	Unknown
Number randomized	292	1519	6983	2875	55525	938
Mean follow-up (months)	131.2	135.8	135.3	128.0	143.2	132.9
<b>Cardiovascular</b>						
CHD <sup>1</sup>	8 (0.25%)	44 (0.26%)	319 (0.41%)	68 (0.22%)	2782 (0.42%)	43 (0.41%)
CHD death <sup>2</sup>	2 (0.06%)	12 (0.07%)	134 (0.17%)	19 (0.06%)	786 (0.12%)	15 (0.14%)
Total MI <sup>3</sup>	7 (0.22%)	39 (0.23%)	219 (0.28%)	55 (0.18%)	2234 (0.34%)	35 (0.34%)
Clinical MI	7 (0.22%)	38 (0.22%)	214 (0.27%)	53 (0.17%)	2167 (0.33%)	33 (0.32%)
Angina <sup>4</sup>	12 (0.38%)	30 (0.17%)	298 (0.38%)	80 (0.26%)	1964 (0.30%)	30 (0.29%)
CABG/PTCA	14 (0.44%)	43 (0.25%)	336 (0.43%)	104 (0.34%)	3392 (0.51%)	45 (0.43%)
Carotid artery disease	3 (0.09%)	3 (0.02%)	37 (0.05%)	6 (0.02%)	605 (0.09%)	9 (0.09%)
Congestive heart failure <sup>4</sup>	5 (0.16%)	17 (0.10%)	244 (0.31%)	49 (0.16%)	1409 (0.21%)	24 (0.23%)
Stroke	10 (0.31%)	39 (0.23%)	300 (0.38%)	63 (0.21%)	2040 (0.31%)	34 (0.33%)
PVD	5 (0.16%)	7 (0.04%)	92 (0.12%)	8 (0.03%)	493 (0.07%)	7 (0.07%)
Coronary disease <sup>5</sup>	26 (0.81%)	96 (0.56%)	822 (1.04%)	206 (0.67%)	6223 (0.94%)	93 (0.90%)
<b>Total cardiovascular disease</b>	<b>40 (1.25%)</b>	<b>138 (0.80%)</b>	<b>1132 (1.44%)</b>	<b>272 (0.89%)</b>	<b>8488 (1.28%)</b>	<b>126 (1.21%)</b>
<b>Cancer</b>						
Breast cancer	9 (0.28%)	89 (0.52%)	343 (0.44%)	98 (0.32%)	3423 (0.52%)	41 (0.39%)
Invasive breast cancer	7 (0.22%)	68 (0.40%)	269 (0.34%)	80 (0.26%)	2776 (0.42%)	31 (0.30%)
Non-invasive breast cancer	2 (0.06%)	23 (0.13%)	78 (0.10%)	20 (0.07%)	689 (0.10%)	10 (0.10%)
Ovary cancer	1 (0.03%)	9 (0.05%)	24 (0.03%)	9 (0.03%)	306 (0.05%)	5 (0.05%)
Endometrial cancer <sup>6</sup>	1 (0.03%)	7 (0.04%)	36 (0.05%)	13 (0.04%)	480 (0.07%)	8 (0.08%)
Colorectal cancer	5 (0.16%)	22 (0.13%)	109 (0.14%)	31 (0.10%)	871 (0.13%)	16 (0.15%)
Other cancer <sup>7</sup>	13 (0.41%)	76 (0.44%)	318 (0.40%)	107 (0.35%)	3872 (0.58%)	51 (0.49%)
<b>Total cancer</b>	<b>27 (0.85%)</b>	<b>192 (1.12%)</b>	<b>786 (1.00%)</b>	<b>242 (0.79%)</b>	<b>8456 (1.28%)</b>	<b>111 (1.07%)</b>
<b>Fractures</b>						
Hip fracture	5 (0.16%)	16 (0.09%)	37 (0.05%)	21 (0.07%)	1450 (0.22%)	12 (0.12%)
<b>Deaths</b>						
Cardiovascular deaths	8 (0.25%)	26 (0.15%)	249 (0.32%)	36 (0.12%)	1545 (0.23%)	20 (0.19%)
Cancer deaths	10 (0.31%)	45 (0.26%)	216 (0.27%)	76 (0.25%)	2240 (0.34%)	34 (0.33%)
Other known cause	11 (0.34%)	16 (0.09%)	132 (0.17%)	31 (0.10%)	1310 (0.20%)	20 (0.19%)
Unknown cause	1 (0.03%)	4 (0.02%)	33 (0.04%)	5 (0.02%)	171 (0.03%)	6 (0.06%)
Not yet adjudicated	4 (0.13%)	14 (0.08%)	125 (0.16%)	24 (0.08%)	1056 (0.16%)	15 (0.14%)
<b>Total death</b>	<b>34 (1.07%)</b>	<b>105 (0.61%)</b>	<b>755 (0.96%)</b>	<b>172 (0.56%)</b>	<b>6322 (0.95%)</b>	<b>95 (0.91%)</b>

<sup>1</sup> "CHD" includes clinical MI, evolving Q-wave MI, and CHD death.

<sup>2</sup> "CHD death" includes definite and possible CHD death.

<sup>3</sup> "Total MI" includes clinical MI and evolving Q-wave MI.

<sup>4</sup> Angina and CHF are not verified outcomes in the WHI Extension Study. Reported statistics represent experience during the original program.

<sup>5</sup> "Coronary disease" includes clinical MI, evolving Q-wave MI, possible evolving Q-wave MI, CHD death, angina, congestive heart failure, and CABG/PTCA.

<sup>6</sup> Only women without a baseline hysterectomy are used to compute the annual rates of endometrial cancer.

<sup>7</sup> Only one report of "other cancer" is counted per woman; however, the first of each type is adjudicated. Excludes non-melanoma skin cancer.

**Table 6.3**  
**Counts (Annualized Percentages) of Participants with Self-Reported Outcomes by Age and Race/Ethnicity**  
**for CT Participants Who Did Not Report a Prevalent Condition at Baseline**

Data as of: September 17, 2010

Outcome	Total	Age				
		50-54	55-59	60-69	70-79	
Number randomized	68132	9188	14661	31389	12894	
Mean follow-up (months)	141.4	150.2	146.9	140.7	130.5	
<b>Hospitalizations</b>						
Ever	42485 (5.29%)	4294 (3.73%)	7827 (4.36%)	20475 (5.56%)	9889 (7.05%)	
Two or more	27189 (3.39%)	2232 (1.94%)	4517 (2.52%)	13330 (3.62%)	7110 (5.07%)	
<b>Other</b>						
DVT <sup>1</sup>	1225 (0.16%)	81 (0.07%)	175 (0.10%)	584 (0.16%)	385 (0.28%)	
Pulmonary embolism	894 (0.11%)	69 (0.06%)	129 (0.07%)	460 (0.13%)	236 (0.17%)	
Diabetes (treated)	7976 (1.04%)	1144 (1.02%)	1748 (1.01%)	3744 (1.07%)	1340 (1.01%)	
Gallbladder disease <sup>2,3</sup>	5248 (0.96%)	746 (0.91%)	1195 (0.97%)	2463 (1.01%)	844 (0.90%)	
Hysterectomy	2823 (0.60%)	360 (0.54%)	671 (0.60%)	1374 (0.65%)	418 (0.53%)	
Glaucoma <sup>3</sup>	7565 (1.21%)	744 (0.81%)	1457 (1.03%)	3662 (1.29%)	1702 (1.58%)	
Osteoporosis <sup>3</sup>	14697 (2.40%)	1451 (1.59%)	2635 (1.89%)	7142 (2.57%)	3469 (3.33%)	
Osteoarthritis <sup>4</sup>	17555 (3.53%)	2601 (3.00%)	4045 (3.26%)	8006 (3.71%)	2903 (4.12%)	
Rheumatoid arthritis <sup>3</sup>	4010 (0.64%)	538 (0.60%)	866 (0.62%)	1822 (0.64%)	784 (0.71%)	
Intestinal polyps	14805 (1.99%)	1990 (1.79%)	3332 (1.95%)	7207 (2.12%)	2276 (1.84%)	
Lupus	954 (0.12%)	134 (0.12%)	212 (0.12%)	449 (0.12%)	159 (0.11%)	
Kidney stones <sup>3,4</sup>	1877 (0.34%)	241 (0.32%)	379 (0.32%)	898 (0.36%)	359 (0.36%)	
Cataracts <sup>3,4</sup>	21570 (4.38%)	1468 (1.91%)	3731 (3.12%)	11649 (5.13%)	4722 (6.83%)	
Pills for hypertension	23168 (4.08%)	3010 (3.23%)	5062 (3.69%)	10866 (4.32%)	4230 (4.91%)	

Outcomes	Race/Ethnicity					
	Am Indian/ Alaskan Native	Asian/Pacific Islander	Black/African American	Hispanic/ Latino	White	Unknown
	Number randomized	292	1519	6983	2875	55525
Mean follow-up (months)	131.2	135.8	135.3	128.0	143.2	132.9
<b>Hospitalizations</b>						
Ever	172 (5.39%)	696 (4.05%)	4223 (5.36%)	1383 (4.51%)	35472 (5.35%)	539 (5.19%)
Two or more	118 (3.70%)	365 (2.12%)	2709 (3.44%)	763 (2.49%)	22904 (3.46%)	330 (3.18%)
<b>Other</b>						
DVT <sup>1</sup>	6 (0.19%)	5 (0.03%)	138 (0.18%)	23 (0.08%)	1039 (0.16%)	14 (0.14%)
Pulmonary embolism	6 (0.19%)	4 (0.02%)	95 (0.12%)	12 (0.04%)	767 (0.12%)	10 (0.10%)
Diabetes (treated)	40 (1.38%)	196 (1.21%)	1265 (1.81%)	476 (1.66%)	5886 (0.92%)	113 (1.16%)
Gallbladder disease <sup>2,3</sup>	22 (1.12%)	86 (0.68%)	420 (0.73%)	243 (1.25%)	4403 (0.99%)	74 (1.03%)
Hysterectomy	8 (0.57%)	45 (0.40%)	188 (0.55%)	99 (0.57%)	2458 (0.62%)	25 (0.41%)
Glaucoma <sup>3</sup>	40 (1.59%)	153 (1.15%)	1005 (1.67%)	338 (1.37%)	5930 (1.15%)	99 (1.25%)
Osteoporosis <sup>3</sup>	66 (2.61%)	389 (2.96%)	909 (1.46%)	639 (2.68%)	12485 (2.48%)	209 (2.64%)
Osteoarthritis <sup>4</sup>	80 (4.15%)	416 (3.34%)	1707 (3.59%)	839 (3.98%)	14252 (3.49%)	261 (3.95%)
Rheumatoid arthritis <sup>3</sup>	32 (1.34%)	74 (0.56%)	682 (1.14%)	357 (1.46%)	2788 (0.54%)	77 (0.96%)
Intestinal polyps	72 (2.44%)	298 (1.90%)	1576 (2.15%)	516 (1.76%)	12148 (1.98%)	195 (2.04%)
Lupus	7 (0.22%)	14 (0.08%)	128 (0.16%)	46 (0.15%)	745 (0.11%)	14 (0.14%)
Kidney stones <sup>3,4</sup>	15 (0.70%)	47 (0.40%)	190 (0.35%)	100 (0.46%)	1501 (0.33%)	24 (0.33%)
Cataracts <sup>3,4</sup>	92 (4.63%)	428 (4.00%)	2002 (4.04%)	828 (3.99%)	17927 (4.45%)	293 (4.50%)
Pills for hypertension	97 (4.60%)	485 (4.12%)	2087 (5.26%)	1010 (4.40%)	19213 (3.96%)	276 (3.97%)

<sup>1</sup> Inpatient DVT only.<sup>2</sup> "Gallbladder disease" includes self-reports of both hospitalized and non-hospitalized events.<sup>3</sup> Data not collected for WHI extension study.<sup>4</sup> These outcomes have not been self-reported on all versions of Form 33 during WHI follow-up. The annualized percentages are corrected for the different amounts of follow-up.

**Table 6.4**  
**First Reported Verified Outcomes Before and After AV-1<sup>1</sup> for CT Participants**

Data as of: September 17, 2010

Outcome	Number of Events	
	Before AV-1	After AV-1
<b>Cardiovascular</b>		
CHD <sup>2</sup>	215	3049
CHD death <sup>3</sup>	44	924
Clinical MI	181	2331
Angina	300	2114
CABG/PTCA	252	3682
Carotid artery disease	63	600
Congestive heart failure	114	1634
Stroke	143	2343
PVD	33	579
Coronary disease <sup>4</sup>	611	6855
<b>Total cardiovascular disease</b>	839	9357
<b>Cancer</b>		
Breast cancer	201	3802
Invasive breast cancer	158	3073
Non-invasive breast cancer	43	779
Ovarian cancer	20	334
Endometrial cancer	40	505
Colorectal cancer	79	975
Other cancer <sup>5</sup>	271	4166
<b>Total cancer</b>	604	9210
<b>Fractures</b>		
Hip fracture	50	1491
<b>Deaths</b>		
Cardiovascular deaths	73	1811
Cancer deaths	53	2568
Deaths: other known cause	17	1503
Deaths: unknown cause	5	215
Deaths: not yet adjudicated	0	1238
<b>Total death</b>	148	7335

<sup>1</sup> AV-1 date is the blood draw for participants with an AV-1 blood draw and the CT randomization date plus 1 year for participants without an AV-1 blood draw. All participants have been enrolled for at least 1 year.

<sup>2</sup> "CHD" includes clinical MI and CHD death.

<sup>3</sup> "CHD death" includes definite and possible CHD death.

<sup>4</sup> "Coronary disease" includes clinical MI, CHD death, angina, congestive heart failure, and CABG/PTCA; angina and congestive heart failure are not collected in the WHI Extension Study.

<sup>5</sup> Only one report of "other cancer" is counted per woman; however, the first of each type is adjudicated. Excludes non-melanoma skin cancer.

**Table 6.5**  
**Counts of Participants with Self-Reported Outcomes Before and After AV-1<sup>1</sup>**  
**for CT Participants Who Did Not Report a Prevalent Condition at Baseline**

Data as of: September 17, 2010

Outcome	Number of Events	
	Before AV-1	After AV-1
Ever hospitalized	6136	36349
DVT <sup>2</sup>	99	1126
Pulmonary embolism	50	844
Diabetes (treated)	573	7403
Gallbladder disease <sup>3,4</sup>	606	4642
Hysterectomy	184	1960
Glaucoma <sup>4</sup>	767	6798
Osteoporosis <sup>4</sup>	1502	13195
Osteoarthritis <sup>5</sup>	1248	16307
Rheumatoid arthritis <sup>4</sup>	587	3423
Intestinal polyps	956	13849
Lupus	75	879
Kidney stones <sup>4,5</sup>	128	1749
Cataracts <sup>4,5</sup>	1660	19910
Pills for hypertension	2190	20978

<sup>1</sup> AV-1 date is the blood draw date for participants with an AV-1 blood draw and the CT randomization date plus 1 year for participants without an AV-1 blood draw. All participants have been enrolled for at least 1 year.

<sup>2</sup> Inpatient DVT only.

<sup>3</sup> "Gallbladder disease" includes self-reports of both hospitalized and non-hospitalized events.

<sup>4</sup> Not collected on Form 33 after March 31, 2005.

<sup>5</sup> These outcomes have not been self-reported on all versions of Form 33. The annualized percentages are corrected for the different amounts of follow-up.

**Table 6.6**  
**Verified Other Cancers (Annualized Percentages): CT and OS Participants**

Data as of: September 17, 2010

	CT		OS	
<b>Number of participants</b>	68132		93676	
<b>Mean follow-up time (months)</b>	141.4		131.9	
<b>Ppts with other cancer</b>	4437	(0.55%)	5989	(0.58%)
Accessory sinus	1	<0.01%	2	<0.01%
Adrenal gland	3	<0.01%	8	<0.01%
Anus	23	<0.01%	39	<0.01%
Appendix	13	<0.01%	15	<0.01%
Biliary tract, parts of (other/unspecified)	57	(0.01%)	62	(0.01%)
Bladder	258	(0.03%)	328	(0.03%)
Bones/joints/articular cartilage (limbs)	4	<0.01%	8	<0.01%
Bones/joints/articular cartilage (other)	8	<0.01%	2	<0.01%
Brain	96	(0.01%)	112	(0.01%)
Cervix	55	(0.01%)	50	<0.01%
Central Nervous System (excludes brain)	0	(0.00%)	4	<0.01%
Connective/subcutaneous/soft tissues	39	<0.01%	55	(0.01%)
Endocrine glands, related structures	6	<0.01%	7	<0.01%
Esophagus	37	<0.01%	40	<0.01%
Eye and adnexa	25	<0.01%	21	<0.01%
Genital organs	33	<0.01%	43	<0.01%
Kidney	214	(0.03%)	240	(0.02%)
Larynx	22	<0.01%	18	<0.01%
Leukemia	219	(0.03%)	304	(0.03%)
Liver	56	(0.01%)	70	(0.01%)
Lung	922	(0.11%)	1193	(0.12%)
Lymph nodes	12	<0.01%	9	<0.01%
Lymphoma, Hodgkins	19	<0.01%	26	<0.01%
Lymphoma, Non-Hodgkins	410	(0.05%)	565	(0.05%)
Melanoma of the skin	573	(0.07%)	741	(0.07%)
Multiple myeloma	152	(0.02%)	148	(0.01%)
Oral (mouth)	29	<0.01%	20	<0.01%
Palate	11	<0.01%	16	<0.01%
Pancreas	226	(0.03%)	274	(0.03%)
Parotid gland (Stensen's duct)	14	<0.01%	32	<0.01%
Peripheral nerves and autonomic nervous system	1	<0.01%	5	<0.01%
Pyriform sinus	1	<0.01%	4	<0.01%
Respiratory system, intrathoracic, other	11	<0.01%	20	<0.01%
Salivary glands, major (other/unspecified)	5	<0.01%	13	<0.01%
Stomach	69	(0.01%)	96	(0.01%)
Thyroid	138	(0.02%)	199	(0.02%)
Tongue, part of (other/unspecified)	24	<0.01%	31	<0.01%
Urinary organs (other/unspecified)	18	<0.01%	36	<0.01%
Uterus, not otherwise specified	45	(0.01%)	86	(0.01%)
Other/unknown site of cancer	352	(0.04%)	485	(0.05%)
Other/unknown cancers reported on death form	380	(0.05%)	742	(0.07%)

**Table 6.7**  
**Other Fractures (Annualized Percentages): CT and OS Participants**

Data as of: September 17, 2010

	CT		OS	
<b>Number of participants</b>	68132		93676	
<b>Mean follow-up time (months)</b>	141.4		131.9	
<b><u>Self-Reports</u></b>				
Elbow	843	(0.11%)	1106	(0.11%)
Foot	2914	(0.36%)	3644	(0.35%)
Hand	746	(0.09%)	841	(0.08%)
Hip	1653	(0.21%)	2299	(0.22%)
Knee	1115	(0.14%)	1474	(0.14%)
Lower arm	4093	(0.51%)	5137	(0.50%)
Lower leg	3236	(0.40%)	3927	(0.38%)
Pelvis	838	(0.10%)	1379	(0.13%)
Tailbone	298	(0.04%)	413	(0.04%)
Upper arm	2095	(0.26%)	2578	(0.25%)
Upper leg	610	(0.08%)	844	(0.08%)
Spine	2388	(0.30%)	3452	(0.34%)
Other	5251	(0.65%)	6654	(0.65%)
<b>Total fracture</b>	<b>18658</b>	<b>(2.32%)</b>	<b>24250</b>	<b>(2.36%)</b>

Data as of: August 18, 2006

**Events through Intervention Closeout**

	CT		OS	
<b>Number of participants</b>	68132		6365	
<b>Mean follow-up time (months)</b>	96.1		97.6	
<b><u>Locally verified</u></b>				
<b>Ppts with other fractures<sup>1</sup></b>	8341	(1.53%)	780	(1.51%)
Ankle	1353	(0.25%)	129	(0.25%)
Carpal bone(s) in wrist	192	(0.04%)	13	(0.03%)
Clavicle or collar bone	147	(0.03%)	14	(0.03%)
Elbow, not otherwise specified	31	(0.01%)	1	<(0.01%)
Humerus, shaft/unspecified	86	(0.02%)	7	(0.01%)
Humerus, upper end	844	(0.15%)	71	(0.14%)
Lower end of humerus	104	(0.02%)	10	(0.02%)
Metacarpal bone(s)	272	(0.05%)	27	(0.05%)
Patella	359	(0.07%)	29	(0.06%)
Pelvis	364	(0.07%)	51	(0.10%)
Radius or ulna	2227	(0.41%)	210	(0.41%)
Sacrum and coccyx	108	(0.02%)	12	(0.02%)
Scapula	37	(0.01%)	6	(0.01%)
Shaft of femur	113	(0.02%)	9	(0.02%)
Tarsal/metatarsal bones	1291	(0.24%)	129	(0.25%)
Tibia and fibula	641	(0.12%)	32	(0.06%)
Tibial plateau	176	(0.03%)	10	(0.02%)
Upper radius/ulna	382	(0.07%)	34	(0.07%)
Vertebral	830	(0.15%)	122	(0.24%)
<b>Unknown other fracture</b>	<b>0</b>	<b>(0.00%)</b>	<b>0</b>	<b>(0.00%)</b>

<sup>1</sup> "Other fractures" excludes non-vertebral fractures indicated as pathological.

**Table 6.8**  
**Cause of Death (Annualized Percentages): CT and OS Participants**

Data as of: September 17, 2010

	CT		OS	
<b>Number of participants</b>	68132		93676	
<b>Mean Follow-up Time (months)</b>	141.4		131.9	
Total death	7483	(0.93%)	11134	(1.08%)
Adjudicated death	6245	(0.78%)	9444	(0.92%)
Centrally adjudicated death	6206	(0.77%)	3516	(0.34%)
Locally adjudicated death (final)	1	<0.01%	5808	(0.56%)
Temporary adjudicated death	0	(0.00%)	0	(0.00%)
Identified by NDI search	38	<0.01%	120	(0.01%)
<b>Cardiovascular</b>				
Atherosclerotic cardiac	968	(0.12%)	1273	(0.12%)
CHD deaths locally adjudicated before 10/99	0	(0.00%)	1	<0.01%
Definite CHD deaths	451	(0.06%)	569	(0.06%)
Possible CHD deaths	517	(0.06%)	703	(0.07%)
Cerebrovascular	483	(0.06%)	722	(0.07%)
Pulmonary embolism	64	(0.01%)	61	(0.01%)
Other cardiovascular	342	(0.04%)	614	(0.06%)
Unknown cardiovascular	27	<0.01%	106	(0.01%)
<b>Total cardiovascular deaths</b>	1884	(0.23%)	2776	(0.27%)
<b>Cancer</b>				
Breast cancer	194	(0.02%)	554	(0.05%)
Ovarian cancer	167	(0.02%)	271	(0.03%)
Endometrial cancer	45	(0.01%)	62	(0.01%)
Colorectal cancer	232	(0.03%)	309	(0.03%)
Other cancer	1846	(0.23%)	2458	(0.24%)
Unknown cancer site	137	(0.02%)	191	(0.02%)
<b>Total cancer deaths</b>	2621	(0.33%)	3845	(0.37%)
<b>Accident/injury</b>				
Homicide	11	<0.01%	12	<0.01%
Accident	185	(0.02%)	207	(0.02%)
Suicide	18	<0.01%	36	<0.01%
Other injury	9	<0.01%	26	<0.01%
<b>Total accidental deaths</b>	223	(0.03%)	281	(0.03%)
<b>Other</b>				
Other known cause	1297	(0.16%)	2158	(0.21%)
Unknown cause	1458	(0.18%)	2074	(0.20%)
<b>Total deaths – other causes</b>	2755	(0.34%)	4232	(0.41%)



**Table 7.1**  
**Agreement of the Central Adjudications with Self-Reports**

Data as of: September 17, 2010

	Participants with a self-report <sup>1</sup>		Closed % <sup>3</sup>		Confirmed (%) <sup>3</sup>		Denied – related outcome found <sup>2</sup> (%) <sup>3</sup>		Denied – unrelated outcome found (%) <sup>3</sup>		Denied – no outcome found (%) <sup>3</sup>		Administrative denials (%) <sup>3</sup>	
	N	% <sup>3</sup>	N	% <sup>3</sup>	N	(%) <sup>3</sup>	N	(%) <sup>3</sup>	N	(%) <sup>3</sup>	N	(%) <sup>3</sup>	N	(%) <sup>3</sup>
<b>Cardiovascular</b>														
Clinical MI	1700	91%	1082	(70%)	95	(6%)	9	(1%)	362	(23%)	3	(0%)		
CABG	763	93%	618	(87%)	29	(4%)	3	(0%)	58	(8%)	0	(0%)		
PTCA	2407	93%	1800	(80%)	144	(6%)	31	(1%)	274	(12%)	0	(0%)		
Carotid artery disease	519	92%	385	(80%)	43	(9%)	0	(0%)	47	(10%)	4	(1%)		
Stroke/TIA <sup>4</sup>	2845	87%	1497	(61%)	27	(1%)	0	(0%)	931	(38%)	6	(0%)		
PVD	582	91%	282	(53%)	35	(7%)	26	(5%)	186	(35%)	1	(0%)		
DVT <sup>5</sup>	251	87%	150	(69%)	9	(4%)	22	(10%)	36	(17%)	1	(0%)		
Pulmonary embolism <sup>5</sup>	161	83%	113	(84%)	1	(1%)	5	(4%)	14	(10%)	1	(1%)		
<b>Cancers</b>														
Breast cancer	2740	97%	2562	(97%)	11	(0%)	0	(0%)	70	(3%)	3	(0%)		
Ovarian cancer	307	95%	205	(70%)	73	(25%)	1	(0%)	13	(4%)	0	(0%)		
Endometrial cancer	340	94%	294	(92%)	17	(5%)	1	(0%)	9	(3%)	0	(0%)		
Cervical cancer	58	88%	7	(14%)	35	(69%)	0	(0%)	9	(18%)	0	(0%)		
Colorectal cancer	765	96%	624	(85%)	57	(8%)	0	(0%)	49	(7%)	3	(0%)		
Melanoma	568	78%	390	(88%)	6	(1%)	0	(0%)	39	(9%)	10	(2%)		
Lung cancer	894	84%	679	(90%)	12	(2%)	0	(0%)	58	(8%)	3	(0%)		
Liver cancer	161	87%	81	(58%)	15	(11%)	0	(0%)	43	(31%)	1	(1%)		
Bone cancer	83	84%	27	(39%)	8	(11%)	1	(1%)	34	(49%)	0	(0%)		
Lymphoma/Hodgkin's	376	74%	259	(94%)	2	(1%)	0	(0%)	16	(6%)	0	(0%)		
Leukemia	234	72%	142	(84%)	3	(2%)	0	(0%)	24	(14%)	0	(0%)		
Meningioma	22	86%	7	(37%)	0	(0%)	0	(0%)	12	(63%)	0	(0%)		
Other cancer <sup>6</sup>	1790	84%	1198	(79%)	94	(6%)	0	(0%)	199	(13%)	18	(1%)		
<b>Fractures</b>														
Hip fracture	1767	92%	1366	(84%)	0	(0%)	0	(0%)	257	(16%)	6	(0%)		
Upper leg fracture <sup>7</sup>	631	93%	587	(90%)	291	(50%)	0	(0%)	295	(50%)	1	(0%)		

<sup>1</sup> Excludes duplicates and prior conditions.  
<sup>2</sup> All cardiovascular outcomes are considered related, all cancers are considered related and all fractures are considered related.  
<sup>3</sup> Percentages between parentheses are relative to "closed".  
<sup>4</sup> Stroke and TIA have a combined self-report. Only stroke is monitored.  
<sup>5</sup> HRT participants only.  
<sup>6</sup> Any cancer other than those listed above, excluding non-melanoma skin cancer.  
<sup>7</sup> Upper leg fractures are only investigated for possible occurrence of hip fracture.  
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**Table 7.2**  
**Source of Outcomes Identified by Central Adjudications**

Data as of: September 17, 2010

	Centrally confirmed N	Reason for central investigation					
		Self-report same outcome		Self-report related outcome <sup>1</sup>		Self-report unrelated outcome <sup>2</sup>	
		N	%	N	%	N	%
<b>Cardiovascular</b>							
Clinical MI	1723	1052	61%	481	28%	190	11%
CABG	481	430	89%	44	9%	7	1%
PTCA	1910	1765	92%	130	7%	15	1%
Carotid artery disease	419	295	70%	41	10%	83	20%
Stroke	1747	1550	89%	0	0%	197	11%
PVD	455	279	61%	107	24%	69	15%
DVT	191	147	77%	13	7%	31	16%
Pulmonary embolism	149	112	75%	9	6%	28	19%
<b>Cancers</b>							
Breast cancer	2567	2551	99%	11	<1%	5	<1%
Ovarian cancer	234	206	88%	17	7%	11	5%
Endometrial cancer	375	294	78%	73	19%	8	2%
Cervical cancer	9	7	78%	0	0%	2	22%
Colorectal cancer	650	606	93%	12	2%	32	5%
Melanoma	392	379	97%	10	3%	3	1%
Lung cancer	724	665	92%	35	5%	24	3%
Liver cancer	51	38	75%	11	22%	2	4%
Lymphoma/Hodgkin's	301	247	82%	45	15%	9	3%
Leukemia	173	138	80%	20	12%	15	9%
Other cancer	1409	0	0%	1350	96%	59	4%
<b>Fractures</b>							
Hip fracture	1652	1358	82%	245	15%	49	3%

<sup>1</sup> All cardiovascular outcomes are considered related, all cancers are considered related and all fractures are considered related.

<sup>2</sup> Includes self-report of hospitalizations.

**Table 8.1**  
**Current Age<sup>1</sup> Distribution by Race/Ethnicity for Active<sup>2</sup> CT and OS Extension Study Participants**

Data as of: September 17, 2010

Age group on September 17, 2010	Race/Ethnicity													
	Total		American Indian/ Alaskan Native		Asian/Pacific Islander		Black/African American		Hispanic/ Latino		White		Unknown	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<65	12157	10.5	50	12.4	255	10.6	1142	13.7	510	15.0	10030	10.1	170	12.0
65-69	16558	14.3	89	22.1	455	19.0	1606	19.2	785	23.2	13412	13.5	211	14.9
70-79	50686	43.9	174	43.3	1017	42.4	3869	46.3	1491	44.0	43576	43.8	559	39.4
80-89	33172	28.7	87	21.6	613	25.6	1594	19.1	576	17.0	29870	30.0	432	30.4
90+	2834	2.5	2	0.5	56	2.3	143	1.7	27	0.8	2559	2.6	47	3.3

<sup>1</sup> Age on September 17, 2010.

<sup>2</sup> Vital status is alive with current participation on September 17, 2010.

**Table 8.2**  
**Counts (Percentages) of Participants with Self-Reported Outcomes by Age at the Beginning of the Extension and Race/Ethnicity for CT and OS Extension Study Participants**

Data as of: September 17, 2010

Outcome	Total	Age on April 1, 2005											
		60-64		65-69		70-79		80-89		90+			
Number enrolled	115407	20767		27346		50793		16482		19			
Mean follow-up	157.5	160.8		158.7		156.2		155.1		171.8			
Number of outcomes <sup>1</sup> reported at baseline and during follow-up	Total		60-64		65-69		70-79		80-89		90+		
	N	%	N	%	N	%	N	%	N	%	N	%	
0	3240	2.8	1415	6.8	994	3.6	732	1.4	99	0.6	0	0	
1	11139	9.7	3724	17.9	3468	12.7	3362	6.6	583	3.5	2	10.5	
2	20705	17.9	5045	24.3	5841	21.4	8017	15.8	1801	10.9	1	5.3	
3	26301	22.8	4656	22.4	6466	23.6	11746	23.1	3429	20.8	4	21.1	
4+	54022	46.8	5927	28.5	10577	38.7	26936	53.0	10570	64.1	12	63.2	

Outcome	Race/Ethnicity													
	American Indian/ Alaskan Native		Asian/Pacific Islander		Black/African American		Hispanic/ Latino		White		Unknown			
Number enrolled	402		2396		8354		3389		99447		1419			
Mean follow-up (months)	156.8		155.4		156.9		154.5		157.7		155.2			
Number of outcomes <sup>1</sup> reported at baseline and during follow-up	Total		American Indian/ Alaskan Native		Asian/Pacific Islander		Black/African American		Hispanic/ Latino		White		Unknown	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0	9	2.2	97	4.0	117	1.4	87	2.6	2887	2.9	43	3.0		
1	25	6.2	284	11.9	513	6.1	351	10.4	9834	9.9	132	9.3		
2	49	12.2	511	21.3	1246	14.9	549	16.2	18117	18.2	233	16.4		
3	78	19.4	570	23.8	1838	22.0	729	21.5	22789	22.9	297	20.9		
4+	241	60.0	934	39.0	4640	55.5	1673	49.4	45820	46.1	714	50.3		

<sup>1</sup> Self-reported outcomes include DVT, pulmonary embolism, diabetes (treated), hypertension (treated), hysterectomy, osteoarthritis, intestinal polyps, lupus, gallbladder disease, glaucoma, osteoporosis, kidney stones, cataracts, and rheumatoid arthritis. Data for gallbladder disease, glaucoma, osteoporosis, kidney stones, cataracts, and rheumatoid arthritis not collected for WHI Extension Study.

**Table 8.3**  
**Counts (Percentages) of Participants with Adjudicated Outcomes by Age at the Beginning of the Extension and Race/Ethnicity for CT and OS Extension Study Participants**

Data as of: September 17, 2010

	Total		Age on April 1, 2005									
			<65		65-69		70-79		80-89		90+	
Number enrolled	115407		20767		27346		50793		16482		19	
Mean follow-up (months)	157.5		160.8		158.7		156.2		155.1		171.8	
Number of outcomes <sup>1</sup> since WHI enrollment	N %		N %		N %		N %		N %		N %	
0	85515	74.1	17544	84.5	21827	79.8	36189	71.2	9946	60.3	9	47.4
1	25959	22.5	3038	14.6	5052	18.5	12650	24.9	5211	31.6	8	42.1
2	3547	3.1	170	0.8	429	1.6	1771	3.5	1175	7.1	2	10.5
3	357	0.3	15	0.1	36	0.1	170	0.3	136	0.8	0	0
4+	29	0.0	0	0	2	0.0	13	0.0	14	0.1	0	0

	Race/Ethnicity											
	American Indian/Alaskan Native		Asian/Pacific Islander		Black/African American		Hispanic/Latino		White		Unknown	
Number enrolled	402		2396		8354		3389		99447		1419	
Mean follow-up (months)	156.8		155.4		156.9		154.5		157.7		155.2	
Number of outcomes <sup>1</sup> since WHI enrollment	N %		N %		N %		N %		N %		N %	
0	313	77.9	1933	80.7	6369	76.2	2776	81.9	73030	73.4	1094	77.1
1	80	19.9	427	17.8	1741	20.8	558	16.5	22870	23.0	283	19.9
2	8	2.0	34	1.4	218	2.6	55	1.6	3194	3.2	38	2.7
3	1	0.2	2	0.1	24	0.3	0	0	327	0.3	3	0.2
4+	0	0	0	0	2	0.0	0	0	26	0.0	1	0.1

<sup>1</sup> Adjudicated outcomes include incident reports of coronary disease (clinical MI, (possible) evolving Q-wave MI, CHD death, and CABG/PTCA), stroke, PVD, cancer (all), and hip fracture.

**Table 8.4**  
**Counts (Percentages) of Participants Reporting Any (Self-reported or Adjudicated) Outcomes by Age at the Beginning of the Extension and Race/Ethnicity for CT and OS Extension Study Participants**

Data as of: September 17, 2010

	Total	Age on April 1, 2005										
		<65		65-69		70-79		80-89		90+		
Number enrolled	115407	20767		27346		50793		16482		19		
Mean follow-up (months)	157.5	160.8		158.7		156.2		155.1		171.8		
Number of outcomes <sup>1</sup> reported at baseline <sup>2</sup> and during follow-up	N		N		N		N		N		N	
	%	%	%	%	%	%	%	%	%	%	%	%
0	2825	2.4	1273	6.1	872	3.2	606	1.2	74	0.4	0	0
1	9694	8.4	3433	16.5	3047	11.1	2797	5.5	415	2.5	2	10.5
2	18253	15.8	4764	22.9	5361	19.6	6731	13.3	1397	8.5	0	0
3	23802	20.6	4571	22.0	6157	22.5	10398	20.5	2674	16.2	2	10.5
4+	60833	52.7	6726	32.4	11909	43.5	30261	59.6	11922	72.3	15	78.9

	Race/Ethnicity											
	American Indian/Alaskan Native		Asian/Pacific Islander		Black/African American		Hispanic/Latino		White		Unknown	
Number enrolled	402		2396		8354		3389		99447		1419	
Mean follow-up (months)	156.8		155.4		156.9		154.5		157.7		155.2	
Number of outcomes <sup>1</sup> reported at baseline <sup>2</sup> and during follow-up	N		N		N		N		N		N	
	%	%	%	%	%	%	%	%	%	%	%	%
0	9	2.2	86	3.6	104	1.2	78	2.3	2508	2.5	40	2.8
1	21	5.2	267	11.1	459	5.5	321	9.5	8505	8.6	121	8.5
2	49	12.2	461	19.2	1114	13.3	516	15.2	15910	16.0	203	14.3
3	60	14.9	539	22.5	1639	19.6	681	20.1	20612	20.7	271	19.1
4+	263	65.4	1043	43.5	5038	60.3	1793	52.9	51912	52.2	784	55.3

<sup>1</sup> Self-reported outcomes include first report (baseline or incident) of DVT, pulmonary embolism, diabetes (treated), hypertension (treated), hysterectomy, osteoarthritis, intestinal polyps, lupus, gallbladder disease, glaucoma, osteoporosis, kidney stones, cataracts, and rheumatoid arthritis. Adjudicated outcomes include incident reports of coronary disease (clinical MI, (possible) evolving Q-wave MI, CHD death, and CABG/PTCA), stroke, PVD, cancer (all), and hip fracture. Data for gallbladder disease, glaucoma, osteoporosis, kidney stones, cataracts, and rheumatoid arthritis is not collected for the WHI Extension Study.

<sup>2</sup> Only reports of DVT, pulmonary embolism, diabetes (treated), hypertension (treated), hysterectomy, osteoarthritis, osteoarthritis, intestinal polyps, lupus, gallbladder disease, glaucoma, osteoporosis, kidney stones, cataracts, and rheumatoid arthritis at baseline are counted.

**Table 8.5**  
**Distribution of Aging Indicators Collected During the WHI Extension Study Stratified by Age at the Beginning of the Extension for CT and OS Extension Study Participants**

Data as of: September 17, 2010

	Age on April 1, 2005											
	Total (N = 115,407)		<65 (N = 20,767)		65-69 (N = 27,346)		70-79 (N = 50,793)		80-89 (N = 16,482)		90+ (N = 19)	
	N	%	N	%	N	%	N	%	N	%	N	%
<b>Never completed Form 151</b>	2025	1.8	224	1.1	281	1.0	861	1.7	658	4.0	1	5.3
<b>Perceived Health Status</b>												
Excellent	5205	4.6	1616	7.9	1660	6.1	1666	3.3	263	1.7	0	0.0
Very good	33163	29.3	7765	37.8	9478	35.0	13143	26.4	2774	17.6	3	17.6
Good	50497	44.6	8372	40.8	11726	43.3	23247	46.6	7145	45.3	7	41.2
Fair	20602	18.2	2421	11.8	3623	13.4	9991	20.0	4560	28.9	7	41.2
Poor	3766	3.3	362	1.8	563	2.1	1810	3.6	1031	6.5	0	0.0
<b>Quality of Life</b>												
Worst, 0-3	450	0.4	35	0.2	64	0.2	185	0.4	166	1.1	0	0.0
Halfway, 4-6	5969	5.3	741	3.6	1001	3.7	2690	5.4	1535	9.7	2	11.8
Best, 7-10	106845	94.3	19761	96.2	25985	96.1	46997	94.2	14087	89.2	15	88.2
<b>Functional Capacity, ADL Dependencies</b>												
None <sup>1</sup>	91158	80.5	18824	91.7	23980	88.7	39421	79.0	8928	56.5	5	29.4
Eating	2373	2.1	189	0.9	312	1.2	1080	2.2	790	5.0	2	11.8
Dressing	5623	5.0	418	2.0	778	2.9	2583	5.2	1840	11.7	4	23.5
Transferring	3716	3.3	300	1.5	489	1.8	1654	3.3	1270	8.0	3	17.6
Bathing	7880	7.0	524	2.6	953	3.5	3566	7.2	2829	17.9	8	47.1
Grocery Shopping	20067	17.7	1478	7.2	2726	10.1	9430	18.9	6421	40.7	12	70.6
Taking Medication	8106	7.2	440	2.1	804	3.0	3730	7.5	3125	19.8	7	41.2
<b>Performance Measures, Rand-36 Scale</b>												
0-25	18146	16.1	1638	8.0	2752	10.2	8611	17.3	5138	32.9	7	41.2
25-50	20793	18.4	2303	11.2	3904	14.5	10476	21.1	4105	26.3	5	29.4
51-75	28929	25.6	4395	21.4	6770	25.1	13970	28.1	3789	24.3	5	29.4
76-100	44959	39.8	12173	59.4	13569	50.3	16650	33.5	2567	16.5	0	0.0
<b>Independence</b>												
Supportive Services Availability	40152	35.5	5262	25.7	8107	30.0	18613	37.4	8157	52.1	13	76.5
Supportive Services Use	11113	28.3	434	8.5	950	12.0	5024	27.6	4693	58.4	12	92.3
Need for nursing care	8470	7.5	466	2.3	1094	4.0	4219	8.5	2685	17.0	6	35.3
Use of walking aid <sup>2</sup>	22180	19.6	1496	7.3	2880	10.7	10589	21.3	7203	45.8	12	70.6
Lives alone <sup>3</sup>	15492	31.4	1880	21.8	3046	24.3	7547	34.3	3014	48.4	5	45.5
<b>Geriatric Conditions<sup>3</sup></b>	(N = 52,176)		(N = 9,228)		(N = 13,150)		(N = 23,118)		(N = 6,669)		(N = 11)	
Cognitive Impairment <sup>4</sup>	524	5.9	0	0.0	5	55.6	237	4.2	279	8.9	3	50.0
Falls <sup>5</sup>	2849	5.5	443	4.8	625	4.8	1233	5.3	548	8.2	0	0.0
Incontinence	37667	76.2	6316	73.2	9384	74.9	16998	77.2	4961	79.5	8	72.7
Low BMI (<18.5 kg/m <sup>2</sup> )	366	0.7	47	0.5	74	0.6	170	0.7	75	1.1	0	0.0
Dizziness	11340	23.0	1663	19.3	2517	20.1	5329	24.3	1827	29.4	4	36.4
Vision Impairment	11713	23.9	1694	19.8	2513	20.2	5526	25.3	1976	32.2	4	36.4
Hearing Impairment	15288	31.1	1618	18.8	2889	23.2	7608	34.7	3169	51.2	4	36.4

<sup>1</sup> No limitations or need for help reported at any follow-up visit.<sup>2</sup> Cane, crutches, walker, or wheelchair.<sup>3</sup> Data not collected during WHI Extension Study; limited to WHI-CT participants.<sup>4</sup> Limited to WHI HT participants 65 years and older at baseline.<sup>5</sup> Two or more falls per year between April 1, 2002 and March 31, 2005.

**Table 8.6**  
**Distribution of Aging Indicators Collected During the WHI Extension Study Stratified by Race/Ethnicity**  
**for CT and OS WHI Extension Study Participants**

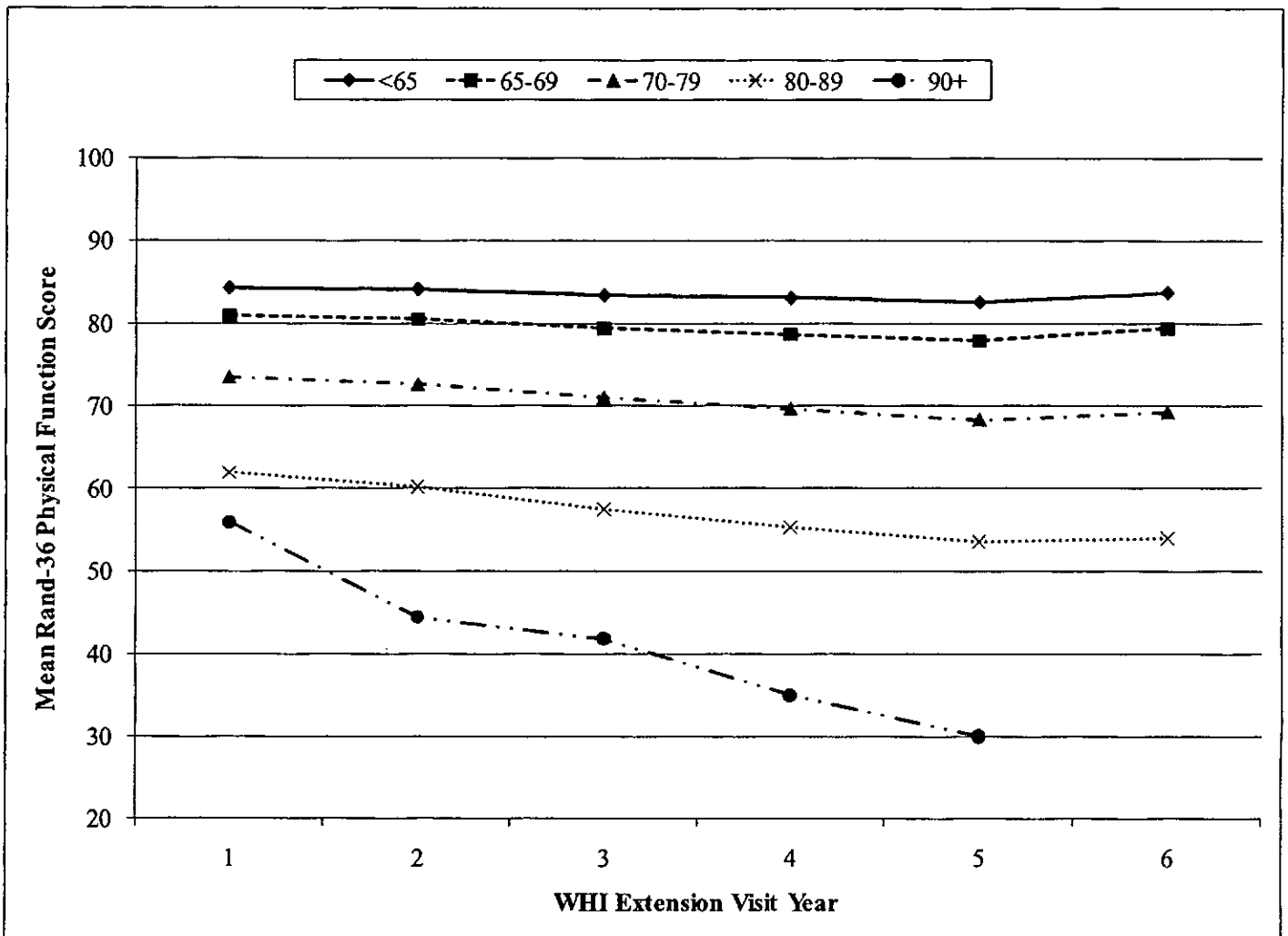
Data as of: September 17, 2010

	Race/Ethnicity											
	American Indian/ Alaskan Native (N = 402)		Asian/Pacific Islander (N = 2,396)		Black/African American (N = 8,354)		Hispanic/ Latino (N = 3,389)		White (N = 99,447)		Unknown (N = 1,419)	
	N	%	N	%	N	%	N	%	N	%	N	%
<b>Never completed Form</b>	13	3.2	59	2.5	219	2.6	96	2.8	1614	1.6	23	1.6
<b>Perceived Health Status</b>												
Excellent	14	3.6	92	3.9	154	1.9	101	3.1	4801	4.9	43	3.1
Very good	101	26.0	625	26.8	1372	16.9	689	21.0	30031	30.7	345	24.8
Good	153	39.3	1132	48.5	4052	49.9	1491	45.4	43004	44.0	665	47.7
Fair	100	25.7	418	17.9	2224	27.4	849	25.8	16718	17.1	293	21.0
Poor	21	5.4	65	2.8	319	3.9	157	4.8	3157	3.2	47	3.4
<b>Quality of Life</b>												
Worst, 0-3	2	0.5	6	0.3	14	0.2	15	0.5	406	0.4	7	0.5
Halfway, 4-6	30	7.7	104	4.5	500	6.2	267	8.1	4969	5.1	99	7.1
Best, 7-10	357	91.8	2225	95.3	7609	93.7	3004	91.4	92363	94.5	1287	92.4
<b>Functional Capacity, ADL Dependencies</b>												
None <sup>1</sup>	282	72.5	1981	84.8	6104	75.1	2625	79.9	79083	80.9	1083	77.6
Eating	6	1.5	23	1.0	198	2.4	87	2.6	2025	2.1	34	2.4
Dressing	28	7.2	69	3.0	492	6.1	149	4.5	4807	4.9	78	5.6
Transferring	18	4.6	47	2.0	330	4.1	114	3.5	3149	3.2	58	4.2
Bathing	37	9.5	79	3.4	775	9.5	182	5.5	6710	6.9	97	7.0
Grocery Shopping	94	24.2	318	13.6	1840	22.6	586	17.8	16949	17.3	280	20.1
Taking Medication	37	9.5	109	4.7	656	8.1	222	6.8	6967	7.1	115	8.2
<b>Performance Measures, Rand-36 Scale</b>												
0-25	86	22.2	249	10.7	1642	20.4	448	13.8	15500	15.9	221	16.0
25-50	81	20.9	337	14.5	1684	20.9	546	16.8	17879	18.4	266	19.2
51-75	85	22.0	616	26.5	2036	25.2	852	26.2	24994	25.7	346	25.0
76-100	135	34.9	1126	48.4	2704	33.5	1408	43.3	39037	40.1	549	39.7
<b>Independence</b>												
Supportive Services												
Availability	187	48.4	1039	44.6	2980	36.9	1174	36.0	34232	35.1	540	38.9
Supportive Services Use	44	23.8	163	16.0	852	29.3	250	21.8	9659	28.8	145	27.4
Need for nursing care	22	5.7	57	2.4	420	5.2	127	3.9	7746	7.9	98	7.0
Use of walking aid <sup>2</sup>	103	26.6	316	13.6	2249	27.7	534	16.3	18667	19.1	311	22.3
Lives alone <sup>3</sup>	59	33.7	192	18.3	1620	36.8	395	25.1	13046	31.4	180	29.8
<b>Geriatric Conditions<sup>3</sup></b>	(N=185)		(N=1,105)		(N=4,769)		(N=1,791)		(N=43,680)		(N=646)	
Cognitive Impairment <sup>4</sup>	0	0.0	23	15.0	109	19.5	30	15.1	352	4.5	10	9.4
Falls <sup>5</sup>	15	8.1	38	3.4	181	3.8	72	4.0	2501	5.7	42	6.5
Incontinence	133	76.0	719	68.4	2614	59.2	1048	66.6	32739	78.7	414	68.0
Low BMI (<18.5 kg/m <sup>2</sup> )	0	0.0	21	1.9	19	0.4	9	0.5	314	0.7	3	0.5
Dizziness	44	25.4	226	21.5	1143	26.0	418	26.7	9363	22.6	146	24.1
Vision Impairment	55	32.0	312	29.8	1193	27.5	453	29.4	9544	23.1	156	26.1
Hearing Impairment	49	28.5	332	31.6	938	21.4	453	29.0	13320	32.2	196	32.5

<sup>1</sup> No limitations or need for help reported at any follow-up visit.<sup>2</sup> Cane, crutches, walker, or wheelchair.<sup>3</sup> Data not collected during WHI Extension Study; limited to WHI-CT participants.<sup>4</sup> Limited to WHI HT participants 65 years and older at baseline.<sup>5</sup> Two or more falls per year between April 1, 2002 and March 31, 2005.



**Figure 8.1**  
**Mean Rand-36 Physical Function Score Over Time by Age<sup>1</sup> at the Beginning of the Extension**



<sup>1</sup> Age on April 1, 2005.

**Table 9.1**  
**Form 33/33D - Medical History Update/(Detail) Workload**

Data as of 9-19-10

	Form 33 - Medical History Update 6-1-09 thru 5-31-10				Form 33D - Medical History Update (Detail) 9-20-09 thru 9-19-10 <sup>1&amp;2</sup>							
	# Due <sup>1</sup>	% Collected	CCC Mailings Not Collected	Outstanding Info Errors (Cum)	#	% of Due	# Due	Missing	Incomplete	Average Collected per Month last 12 mo	Form 33D Workload (miss + incomp)	
			#	%	#	%	#	%	#	#	cases	# months
Atlanta	3,393	99.4	593	17.5	5	0.1	29	0.9	393	5	5	0.1
Birmingham	3,076	97.7	818	26.6			111	3.6	467	1	1	0.0
Bowman	2,998	95.8	411	13.7	1	0.0	131	4.4	330	2	4	0.1
Brigham	4,479	99.1	441	9.8			55	1.2	606			
Buffalo	3,284	99.1	358	10.9	2	0.1	18	0.5	445	1	1	0.0
ChapelHill	3,247	99.6	389	12.0	2	0.1	15	0.5	363			
Chicago-Rush	2,038	95.0	380	18.6	1	0.1	150	7.4	257	4	2	0.8
Chicago	2,959	98.0	292	9.9			45	1.5	390			
Cincinnati	3,116	98.2	299	9.6	1	0.0	93	3.0	433	3	3	0.1
Columbus	3,176	99.6	244	7.7			19	0.6	418			
Detroit	2,525	97.3	273	10.8			79	3.1	383	9	9	0.3
Gainesville	4,435	96.5	753	17.0	4	0.1	163	3.7	671	9	9	0.2
GWU-DC	3,244	98.4	285	8.8	6	0.2	74	2.3	378	7	7	0.2
Honolulu	2,282	98.4	269	11.8	5	0.2	23	1.0	183	2	2	0.1
Houston	2,467	98.3	275	11.1			53	2.1	291	1	1	0.0
IC-Bettendorf	2,314	99.4	175	7.6	1	0.0	10	0.4	278			
IC-Des Moines	2,274	98.8	168	7.4	1	0.0	41	1.8	262	5	5	0.2
Irvine	3,158	98.7	193	6.1	1	0.0	67	2.1	324	2	3	0.9
LA	2,948	97.8	239	8.1	2	0.1	111	3.8	357	20	5.6	1
LaJolla	3,204	96.6	315	9.8	13	0.4	99	3.1	425	7	7	0.2
Madison	3,079	97.7	177	5.7	1	0.0	79	2.6	345			
Medlantic	3,046	96.0	834	27.4	3	0.1	131	4.3	300	2	1	0.3
Memphis	2,620	98.7	438	16.7			59	2.3	322			
Miami	1,880	91.6	411	21.9	2	0.1	166	8.8	242	2	2	0.8
Milwaukee	3,115	95.2	175	5.6			124	4.0	322			

Table 9.1 (continued)  
Form 33/33D - Medical History Update/(Detail) Workload

Data as of 9-19-10

	Form 33 - Medical History Update 6-1-09 thru 5-31-10			Form 33D - Medical History Update (Detail) 9-20-09 thru 9-19-10 <sup>1&amp;2</sup>			
	# Due <sup>1</sup>	% Collected	Outstanding Info Errors (Cum)	# Due	%	Average Collected per Month last 12 mo	Form 33D Workload (miss + incomp)
Minneapolis	3,845	99.5	235	23	0.6	42	
Nevada	2,974	96.3	375	130	4.4	33	
Newark	3,378	96.8	356	91	2.7	43	13 0.3
New Brunswick	1,442	97.9	229	26	1.8	14	9 0.6
NYC	3,376	99.5	595	35	1.0	38	
Oakland	3,141	98.9	333	45	1.4	27	
Pawtucket	5,193	95.8	692	213	4.1	59	8 0.1
Pittsburgh	3,107	99.1	458	83	2.7	46	1 0.0
Portland	3,187	97.2	337	112	3.5	34	12 0.4
San Antonio	2,156	95.4	429	110	5.1	12	1 0.1
Seattle	2,715	97.8	266	41	1.5	29	
Stanford	3,855	99.5	349	24	0.6	39	
StonyBrook	2,889	99.2	422	22	0.8	38	1 0.0
Torrance	1,788	93.2	167	81	4.5	12	4 0.3
Tucson	3,421	96.6	519	88	2.6	39	1 0.0
UCDavis	3,113	94.1	341	162	5.2	31	1 0.0
Worcester	3,510	99.7	419	15	0.4	43	
All FCs	127,447	97.7	15,727	3,246	2.5	1,429	142 0.1

1 - Excludes absolutely no contact and deceased participants  
2 - Form 33Ds due, missing, and incomplete in the last 12 months

Table 9.2  
Outcomes Processing Workload

Data as of 9/19/10

	Open Cases				No Docs				No Docs		Open > 12 Mos		Closed Cases		Outcomes Workload			Deaths (Ext)		# Open cases with Deaths
	#	No Docs Request	No Docs Receive	No Docs Process	#	No Docs Process	#	≥ 1 Doc Process	#	#	Avg # per Mo for last 12 Mo	Est # Months to Process Open Cases	Est Workload for Open cases and Form 33D	# cases	# months	Cum <sup>1</sup>	Open	%		
Atlanta	75		60	15				14	41	1.8	80	2.0	196	5	2.6	17				
Birmingham	25	12	10	3			1	1	44	0.6	26	0.6	213	12	5.6	13				
Bowman	31	22	5	4			1	1	36	0.9	35	1.0	182	4	2.2	6				
Brigham	4		4						50	0.1	4	0.1	209							
Buffalo	20	2	12	6			1	1	57	0.3	21	0.4	292	6	2.1	9				
ChapelHill									33				174							
Chicago-Rush	32	18	11	3			3	3	18	1.7	38	2.0	111	15	13.5	8				
Chicago	13	3	9	1					48	0.3	13	0.3	221	1	0.5	3				
Cincinnati	2		2						50	0.0	5	0.1	182	1	0.5					
Columbus	44	2	41	1					41	1.1	44	1.1	219	9	4.1	14				
Detroit	66	34	24	8			1	1	38	1.7	75	2.0	138	9	6.5	21				
Gainesville	31	14	16	1					71	0.4	40	0.6	274	8	2.9	9				
GWU-DC	48	3	39	6					40	1.2	55	1.4	176	20	11.4	33				
Honolulu									14		2	0.1	77							
Houston	14	6	5	3					28	0.5	15	0.5	122	4	3.3	5				
IC-Bettendorf	8		6	2					34	0.2	8	0.2	136	3	2.2	6				
IC-Des Moines	33	11	7	15			1	1	33	1.0	38	1.2	130	13	10.0	20				
Irvine	6	3		3					38	0.2	11	0.3	178	3	1.7	1				
LA	29	3	22	4					33	0.9	50	1.5	183			2				
LaJolla	38	11	19	8					51	0.7	45	0.9	233	4	1.7	12				
Madison	12		7	5					33	0.4	12	0.4	183	2	1.1	7				
Medlantic	37		23	14			3	3	30	1.2	40	1.3	164	17	10.4	20				
Memphis	3	3							34	0.1	3	0.1	206	1	0.5	1				
Miami	50	26	17	7					27	1.9	52	2.0	102	19	18.6	35				
Milwaukee	10	10							28	0.4	10	0.4	183	4	2.2	10				

Table 9.2 (continued)  
Outcomes Processing Workload

Data as of 9/19/10

	Open Cases		No Docs Request		No Docs Receive		No Docs Process		No Docs Process		Open > 12 Mos		Closed Cases		Outcomes Workload			Deaths (Ext)		# Open cases with Deaths
	#		#		#		#		#		#		Avg # per Mo for last 12 Mo	Est # Months to Process Open Cases	Est Workload for Open cases and Form 33D	Cum <sup>1</sup>	Open	%		
Minneapolis	41		17	4	4	20							40	1.0	41	196	20	10.2	34	
Nevada	10			6	6	4					1		42	0.2	10	255	4	1.6	4	
Newark	84		26	55	3	3				5		54	1.6	97	162	8	4.9	14		
New Brunswick	15		1		14							20	0.7	24	101	3	3.0	4		
NYC	69		12	47	10							37	1.9	69	198	37	18.7	45		
Oakland	6			2	4							34	0.2	6	195	3	1.5	4		
Pawtucket	50			48	2					1		66	0.8	58	358	9	2.5	21		
Pittsburgh	52		5	45	1	1						63	0.8	53	224	12	5.4	18		
Portland	73		59	9	5					1		40	1.8	85	196			5		
San Antonio	4		1		3					1		9	0.5	5	90	4	4.4	2		
Seattle	3		2	1								35	0.1	3	172	2	1.2	2		
Stanford	28			9	19							42	0.7	28	253	12	4.7	20		
StonyBrook	12		1	10	1					2		57	0.2	13	176	5	2.8	7		
Torrance	24			24						5		17	1.4	28	107	4	3.7	7		
Tucson	16		1	12	3					1		51	0.3	17	269	11	4.1	14		
UCDavis	42		15	15	12					1		39	1.1	43	242	17	7.0	27		
Worcester												51			222					
All FCs	1,160		323	626	210	1				45		1,646	0.7	1,302	7,900	311	3.9	480		

1 - Deaths from Form 120-Initial Notification of Death, Ver. 8

Table 9.3  
Closure Codes for Closed Outcomes Cases

Data as of 9/19/10

	Form 33 - Medical History Update #	Forwarded to CCC C-9		Not Adjudicated C-10		Duplicate C-11		No Doc in 12 Months C-12		No ROI C-13		Admin C-14	
		#	%	#	%	#	%	#	%	#	%	No	%
Atlanta	2,128	1,859	87.4	92	4.3	88	4.1	78	3.7	11	0.5		
Birmingham	2,164	2,011	92.9	128	5.9	24	1.1					1	0.0
Bowman	1,625	1,421	87.4	94	502.0	58	3.6	3	0.2	49	3.0		
Brigham	2,662	2,253	84.6	221	8.3	169	6.3	2	0.1	16	0.6	1	0.0
Buffalo	2,523	2,246	87.7	180	7.0	96	3.7	3	0.1	35	1.4		
ChapelHill	1,771	1,722	97.2	32	1.8	14	0.8			3	0.2		
Chicago-Rush	1,167	867	74.3	188	16.1	70	6.0	24	2.1	16	1.4	2	0.2
Chicago	2,263	1,933	85.4	157	6.9	107	4.7	22	1.0	40	1.8	4	0.2
Cincinnati	2,213	1,988	89.8	123	5.6	101	4.6	1	0.0				
Columbus	2,388	2,134	89.4	200	8.4	37	1.5	2	0.1	13	0.5	2	0.1
Detroit	1,402	1,139	81.2	152	10.8	47	3.4	7	0.5	56	4.0	1	0.1
Gainesville	3,302	2,878	87.2	297	9.0	101	3.1	12	0.4	14	0.4		
GWU-DC	1,656	1,348	81.4	177	10.7	110	6.6	12	0.7	9	0.5		
Honolulu	799	714	89.4	51	6.4	31	3.9	1	0.1	2	0.3		
Houston	1,400	1,162	83.0	130	9.3	51	3.6	21	1.5	36	2.6		
IC-Bettendorf	1,698	1,511	89.0	100	5.9	72	4.2	1	0.1	13	0.8	1	0.1
IC-Des Moines	1,434	1,228	85.6	114	7.9	62	4.3	7	0.5	19	1.3	4	0.3
Irvine	1,386	1,104	79.7	132	9.5	33	2.4	65	4.7	48	3.5	4	0.3
LA	1,388	1,085	78.2	199	14.3	46	3.3	44	3.2	11	0.8	3	0.2
LaJolla	2,111	1,706	80.8	214	10.1	134	6.3	28	1.3	29	1.4		
Madison	1,794	1,580	88.1	118	6.6	79	4.4	10	0.6	7	0.4		
Medlantic	1,607	1,406	87.5	139	8.6	50	3.1	6	0.4	5	0.3	1	0.1
Memphis	1,689	1,485	87.9	159	9.4	35	2.1			8	0.5	2	0.1
Miami	1,073	900	83.9	108	10.1	48	4.5	7	0.7	9	0.8	1	0.1
Milwaukee	1,656	1,533	92.6	97	5.9	17	1.0			8	0.5	1	0.1

Table 9.3 (continued)  
Closure Codes for Closed Outcomes Cases

Data as of 9/19/10

	Form 33 - Medical History Update #	Forwarded to CCC C-9 # %	Not Adjudicated C-10 # %	Duplicate C-11 # %	No Doc in 12 Months C-12 # %	No ROI C-13 # %	Admin C-14 No %
Minneapolis	1,949	1,751 89.8	119 6.1	55 2.8	24 1.2		
Nevada	2,367	1,898 80.2	240 10.1	209 8.8	11 0.5	9 0.4	
Newark	2,031	1,597 78.6	279 13.7	53 2.6	40 2.0	62 3.1	
New Brunswick	931	818 87.9	49 5.3	13 1.4	35 3.8	15 1.6	1 0.1
NYC	1,804	1,651 91.5	91 5.0	40 2.2	2 0.1	20 1.1	
Oakland	1,659	1,488 89.7	82 4.9	56 3.4	12 0.7	21 1.3	
Pawtucket	3,620	3,257 90.0	246 6.8	83 2.3	4 0.1	30 0.8	
Pittsburgh	2,925	2,585 88.4	130 4.4	200 6.8	5 0.2	5 0.2	
Portland	1,798	1,438 80.0	145 8.1	134 7.5	43 2.4	22 1.2	15 0.8
San Antonio	520	452 86.9	36 6.9	15 2.9	6 1.2	11 2.1	
Seattle	1,703	1,440 84.6	160 9.4	77 4.5	8 0.5	18 1.1	
Stanford	2,149	1,829 85.1	224 10.4	80 3.7	1 0.0	15 0.7	
StonyBrook	2,630	2,095 79.7	273 10.4	241 9.2	12 0.5	4 0.2	5 0.2
Torrance	978	821 83.9	117 12.0	36 3.7	3 0.3	1 0.1	
Tucson	2,395	1,961 81.9	174 7.3	119 5.0	40 1.7	94 3.9	7 0.3
UCDavis	2,005	1,756 87.6	159 7.9	59 2.9	4 0.2	26 1.3	1 0.0
Worcester	2,404	2,102 87.4	249 10.4	42 1.7	2 0.1	9 0.4	
All FCs	79,205	68,152 86.0	6,375 8.0	3,192 4.0	584 0.7	832 1.1	68 0.1

**Table 9.4  
Participant Follow-up Status'**

Data as of 9/19/10

	# Participants	Full		Partial/Custom		Proxy		Lost		No Follow-up		Absolutely No Contact		Deceased	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
Atlanta	3,128	2,586	82.7	102	3.3	68	2.2	6	0.2	16	0.5	50	1.6	300	9.6
Birmingham	2,848	2,530	88.8	42	1.5	59	2.1			12	0.4	26	0.9	179	6.3
Bowman	1,909	1,592	83.4	131	6.9			24	1.3			51	2.7	111	5.8
Brigham	2,635	2,048	77.7	298	11.3	25	0.9	12	0.5	21	0.8	8	0.3	223	8.5
Buffalo	2,792	2,453	87.9	89	3.2	26	0.9	9	0.3	10	0.4	22	0.8	183	6.6
Chapel Hill	2,904	2,551	87.8	116	4.0	3	0.1	3	0.1			10	0.3	221	7.6
Chicago-Rush	2,354	1,935	82.2	215	9.1	12	0.5	18	0.8	2	0.1	33	1.4	139	5.9
Chicago	3,947	3,164	80.2	424	10.7	17	0.4	36	0.9	15	0.4	15	0.4	276	7.0
Cincinnati	2,927	2,587	88.4	96	3.3	19	0.6	21	0.7	6	0.2	19	0.6	179	6.1
Columbus	1,987	1,788	90.0	64	3.2	1	0.1	11	0.6	6	0.3	40	2.0	77	3.9
Detroit	2,232	1,939	86.9	109	4.9	16	0.7	15	0.7	2	0.1	28	1.3	123	5.5
Gainesville	2,032	1,720	84.6	126	6.2	25	1.2	1	0.0	10	0.5	11	0.5	139	6.8
GWU-DC	2,029	1,702	83.9	140	6.9	26	1.3			14	0.7	16	0.8	131	6.5
Honolulu	2,939	2,463	83.8	187	6.4	16	0.5	16	0.5	1	0.0	76	2.6	180	6.1
Houston	2,828	2,418	85.5	129	4.6	11	0.4	22	0.8	10	0.4	53	1.9	185	6.5
Iowa City-Bettendorf	3,078	2,564	83.3	199	6.5	23	0.7	40	1.3	5	0.2	14	0.5	233	7.6
Iowa City - Des Moines	2,763	2,399	86.8	114	4.1	43	1.6	1	0.0	11	0.4	10	0.4	185	6.7
Irvine	2,613	2,030	77.7	336	12.9	16	0.6	46	1.8	7	0.3	14	0.5	164	6.3
LA	2,397	1,968	82.1	137	5.7	41	1.7	2	0.1			41	1.7	208	8.7
LaJolla	1,682	1,306	77.6	208	12.4	14	0.8	37	2.2	10	0.6	5	0.3	102	6.1
Madison	2,938	2,558	87.1	94	3.2	20	0.7	52	1.8	2	0.1	28	1.0	184	6.3
Medlantic	3,128	2,586	82.7	102	3.3	68	2.2	6	0.2	16	0.5	50	1.6	300	9.6
Memphis	2,848	2,530	88.8	42	1.5	59	2.1			12	0.4	26	0.9	179	6.3
Miami	1,909	1,592	83.4	131	6.9			24	1.3			51	2.7	111	5.8
Milwaukee	2,635	2,048	77.7	298	11.3	25	0.9	12	0.5	21	0.8	8	0.3	223	8.5



**Table 9.4 (continued)  
Participant Follow-up Status<sup>1</sup>**

Data as of 9/19/10

	# Participants	Full		Partial/Custom		Proxy		Lost		No Follow-up		Absolutely No Contact		Deceased	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
Minneapolis	3,555	3,142	88.4	157	4.4	20	0.6	1	0.0	16	0.5	19	0.5	200	5.6
Nevada	2,714	2,282	84.1	109	4.0	11	0.4	24	0.9	11	0.4	12	0.4	265	9.8
Newark	2,963	2,575	86.9	113	3.8	15	0.5	56	1.9	15	0.5	26	0.9	163	5.5
New Brunswick	1,231	882	71.6	210	17.1	17	1.4	6	0.5	8	0.6	6	0.5	102	8.3
NYC	2,961	2,704	91.3	22	0.7	6	0.2	12	0.4	3	0.1	14	0.5	200	6.8
Oakland	2,776	2,444	88.0	57	2.1	35	1.3	10	0.4	4	0.1	26	0.9	200	7.2
Pawucket	4,872	4,322	88.7	37	0.8	80	1.6	1	0.0	55	1.1	10	0.2	367	7.5
Pittsburgh	2,776	2,336	84.1	145	5.2	41	1.5	2	0.1	9	0.3	17	0.6	226	8.1
Portland	2,888	2,541	88.0	80	2.8	4	0.1	17	0.6	7	0.2	42	1.5	197	6.8
San Antonio	1,837	1,568	85.4	119	6.5	6	0.3	15	0.8			35	1.9	94	5.1
Seattle	2,428	1,973	81.3	196	8.1	39	1.6	19	0.8	8	0.3	19	0.8	174	7.2
Stanford	3,490	2,997	85.9	198	5.7	14	0.4	4	0.1	1	0.0	16	0.5	260	7.4
StonyBrook	2,550	2,237	87.7	107	4.2	2	0.1	4	0.2	1	0.0	20	0.8	179	7.0
Torrance	1,550	1,233	79.5	147	9.5	1	0.1	39	2.5	17	1.1	6	0.4	107	6.9
Tucson	3,111	2,396	77.0	315	10.1	30	1.0	43	1.4	25	0.8	31	1.0	271	8.7
UCDavis	2,881	2,335	81.0	203	7.0	14	0.5	50	1.7	17	0.6	18	0.6	244	8.5
Worcester	3,180	2,836	89.2	35	1.1	69	2.2					12	0.4	228	7.2
All FCS	115,407	98,080	85.0	6,261	5.4	961	0.8	689	0.6	443	0.4	961	0.8	8,012	6.9

<sup>1</sup> - Follow-up Status from Form 9-WHI ES Participation Status, Ver 8; Lost calculated by WHIX (see April 4, 2007, upgrade notes); Deceased from Form 120-Initial Notification of Death (all versions)

**Table 9.5**  
**Form Collection: Forms 150 and 151**

Data as of 9/19/10

Collections for 06-01-09 thru 05-31-10	Form 150- Hormone Use Update (HT)			Form 151 - Activities of Daily Living		
	# Due <sup>1</sup>	Total % Collected	CCC Mailings Not Collected # %	# Due <sup>1</sup>	Total % Collected	CCC Mailings Not Collected # %
Atlanta	502	97.8	105 20.9	3,351	96.9	105 3.1
Birmingham	653	96.6	195 29.9	3,034	96.9	93 3.1
Bowman	493	95.9	96 19.5	2,998	95.3	142 4.7
Brigham	723	97.4	110 15.2	4,383	91.9	353 8.1
Buffalo	601	98.7	84 14.0	3,253	97.0	97 3.0
Chapel Hill	547	97.3	104 19.0	3,140	90.4	302 9.6
Chicago-Rush	402	94.3	119 29.6	2,037	95.1	99 4.9
Chicago	468	94.9	74 15.8	2,930	94.3	167 5.7
Cincinnati	475	94.9	70 14.7	3,114	92.9	220 7.1
Columbus	489	99.6	64 13.1	3,164	98.4	50 1.6
Detroit	394	90.1	64 16.2	2,522	90.0	251 10.0
Gainesville	907	94.2	179 19.7	4,404	93.5	285 6.5
GWU-DC	486	92.6	67 13.8	3,216	92.2	251 7.8
Honolulu	310	97.1	47 15.2	2,201	90.9	200 9.1
Houston	324	97.8	62 19.1	2,460	94.2	142 5.8
IC-Bettendorf	696	98.7	70 10.1	2,258	94.1	133 5.9
IC-Des Moines	659	98.9	47 7.1	2,230	94.3	126 5.7
Irvine	468	96.6	52 11.1	3,162	98.6	43 1.4
LA	422	91.0	43 10.2	2,943	92.5	222 7.5
LaJolla	354	89.5	41 11.6	3,199	90.9	290 9.1
Madison	594	95.8	35 5.9	3,078	97.5	77 2.5
Medlantic	567	92.8	211 37.2	3,044	95.9	126 4.1
Memphis	538	97.6	174 32.3	2,600	97.8	56 2.2
Miami	450	78.4	174 38.7	1,869	83.8	302 16.2
Milwaukee	637	92.3	52 8.2	3,115	94.4	174 5.6

Table 9.5 (continued)  
Form Collection: Forms 150 and 151

Data as of 9/19/10

Collections for 06-01-08 thru 05-31-09	Form 150- Hormone Use Update (HT)			Form 151 - Activities of Daily Living		
	# Due <sup>1</sup>	Total % Collected	CCC Mailings Not Collected # %	# Due <sup>1</sup>	Total % Collected	CCC Mailings Not Collected # %
Minneapolis	721	98.9	59 8.2	3,809	94.8	197 5.2
Nevada	541	95.7	92 17.0	2,963	96.1	115 3.9
Newark	426	86.2	72 16.9	3,362	90.0	337 10.0
New Brunswick	378	96.3	82 21.7	1,430	97.3	38 2.7
NYC	668	99.1	186 27.8	3,198	87.9	388 12.1
Oakland	556	97.3	64 11.5	3,098	97.1	89 2.9
Pawtucket	864	93.5	136 15.7	5,187	95.6	227 4.4
Pittsburgh	563	98.4	82 14.6	3,082	98.0	63 2.0
Portland	548	90.1	91 16.6	3,182	93.6	205 6.4
San Antonio	549	92.7	174 31.7	2,128	93.8	131 6.2
Seattle	585	96.4	73 12.5	2,680	93.5	175 6.5
Stanford	608	99.0	78 12.8	3,829	96.7	125 3.3
Stony Brook	443	98.6	100 22.6	2,838	98.8	35 1.2
Torrance	236	85.6	36 15.3	1,777	91.1	159 8.9
Tucson	589	94.6	156 26.5	3,295	88.1	391 11.9
UC Davis	582	91.6	87 14.9	3,100	92.8	222 7.2
Worcester	546	98.9	96 17.6	3,398	90.7	315 9.3
All FCs	22,562	95.2	4,003 17.7	126,061	94.0	7,518 6.0

1 - Excludes absolutely no contact and deceased participants

**Table 9.6**  
**CCC Data Entry Volume**

10-1-09 to 9-30-10

Form	Forms			Sheets Scanned #	Forms with Comments # %		
	Total #	Key-Entered #	Scanned %				
33 - Medical History Update	95,217	2,024	2.1	93,193	97.9	13,726	14.4
115- Ext. 2 Consent Status	87,374	87,374	100.0				
120 - Initial Notice of Death	22	22	100.0				
150 - Hormone Use Update	15,518	170	1.1	15,348	98.9	61,392	0.3
151 - Activities of Daily Living	93,489	109	0.1	93,380	99.9	93,380	0.8
153 - Medication and Supplement	98,933	98,933	100.0				
154 - Breast Health Supplement	5,933	5,933	100.0				
<b>Totals</b>	<b>396,486</b>	<b>194,565</b>	<b>49.1</b>	<b>201,921</b>	<b>50.9</b>	<b>341,158</b>	<b>3.7</b>

Table 9.7  
Status of Adjudication

Data as of 10/15/10

Committees	Cases at FCs Not Yet Forwarded to CCC				Cases at CCC									
	Total # Cases in WHIX	Total (not fwd to CCC)			Referred From (Included in total # of cases in WHIX)			Total Cases (exc QA)	QA			Total QA	Total Cases	
		< 14 Days	14-29 Days	≥ 30 Days	Rec'd from FCs	Form 125 Review	Other Committee		Adj QA <sup>1</sup>	Pull List <sup>2</sup>	CD E <sup>3</sup>			
<b>Extension</b>														
Primary Cancers	5,228	4	1	5	4,919	210	94	5,223	261	1076	677	2014	7,237	
Other Cancers <sup>4</sup>	11,172	10	1	11	11,157		4	11,161	128	599	87	814	11,975	
CVD (plus PE, DVT)	10,149	7		7	8,668	1,249	225	10,142	965	2142	5	3112	13,254	
Fatal Events	7,983	22		22	7,937	15	9	7,961	356	135		491	8,452	
Stroke	5,582	13	1	14	4,563	861	144	5,568	295	3564	412	4271	9,839	
Fracture	2,786	2	1	3	2,669	87	27	2,783	128			128	2,911	
Misc (non committee specific)										323		323	323	
<b>Extension Total</b>	<b>42,900</b>	<b>58</b>	<b>4</b>	<b>62</b>	<b>39,913</b>	<b>2,422</b>	<b>503</b>	<b>42,838</b>	<b>2,133</b>	<b>7,839</b>	<b>1,181</b>	<b>11153</b>	<b>53,991</b>	
<b>Form 125-Hospital</b>	<b>40,651</b>	<b>30</b>	<b>3</b>	<b>39</b>	<b>40,612</b>			<b>40,612</b>					<b>40,612</b>	

1 - Adj QA = All Cases assigned as an adjudicator QA case (open & closed).

2 - Pull List see r:\reports\outcomes\status of adj qa added: tab 'Pull Lists/CDE/Misc QA summary'.

3 - CDE (Custom Data Extract) see r:\reports\outcomes\status of adj qa added: tab 'Pull Lists/CDE/Misc QA summary'.

4 - Other Cancers - Includes WHI and Extension Other Cancers. For breakdown refer to r:\reports\outcomes\2009\Status of Adj QA added: tab 'Other Cancer SEER Coding'.

**Table 9.8  
CCC Adjudication Workload**

Data as of 10/15/10

	# Cases at CCC			CCC Action Required					Pull List/CDE To Do
	Total	Closed	Remaining	To Forward to Adjudicator	Wait for Return from Adjudicator	Data Enter and Close	Total	Total QA To Do	
<b>Extension</b>									
Primary Cancers	7,237	6,222	1,015	61	6	55	122	261	637
Other Cancers <sup>1</sup>	11,975	8,702	3,273					128	281
CVD (plus PE, DVT)	13,254	12,061	1,193	652	204	129	985	13	196
Fatal Events	8,452	6,495	1,957	1,345	289	73	1,707	122	128
Stroke	9,839	5,153	4,686	505	117	99	721	7	3,960
Fracture	2,911	2,764	147	101	30	16	147		
Misc (non committee specific)	323	264	59						59
<b>Extension Total</b>	<b>53,991</b>	<b>41,661</b>	<b>12,330</b>	<b>2,664</b>	<b>646</b>	<b>372</b>	<b>3,682</b>	<b>531</b>	<b>5,261</b>
<b>Form 125-Hospital</b>	<b>40,612</b>	<b>40,058</b>	<b>554</b>	<b>240</b>	<b>256</b>	<b>58</b>	<b>554</b>		

**Total Number of Cases to Data Enter & Close: 855**

**Breakdown of Above Cases:**

Cases Ready for Data Entry:

Adjudicator Forms: 199

Forms Requiring Adj Review: 120

Pending Full Committee Review: 18

Pending Queries: 88

1 - Other Cancers - Includes WHI and Extension Other Cancers. For breakdown refer to 'r:\reports\outcomes\2009>Status of Adj QA added: tab 'Other Cancer SEER Coding'.

Table 10.1  
CT Outcomes Cases with Remaining Blood Sample by Estimated Volume (in ml)  
After Accounting for Approved Core, BAA, and Ancillary Studies

Visit	Outcome As of 9/10	Total Ppts***	No Draw*	Blood Type	Volume of Designated Blood Components (ml)** as of 9/30/10															
					0*	>0-<.5	.5-<1	1-<1.5	1.5-<2	2-<2.5	2.5-<3	3-<3.5	3.5-<4	4+						
					Ppt %	Ppt %	Ppt %	Ppt %	Ppt %	Ppt %	Ppt %	Ppt %	Ppt %	Ppt %	Ppt %	Ppt %	Ppt %			
Base-line	Breast Cancer	4003	9	Serum	15 0%	3 0%	4 0%	36 1%	26 1%	180 4%	126 3%	852 21%	177 4%	2584 65%						
				Citrate	29 1%	7 0%	2 0%	58 1%	11 0%	252 6%	21 1%	3529 88%		94 2%						
				EDTA	57 1%		1 0%	16 0%	15 0%	292 7%	34 1%	3496 87%		92 2%						
	Breast Cancer In Situ	822	3	Serum	4 0%	1 0%	1 0%	5 1%	1 0%	22 3%	13 2%	117 14%	71 9%	587 71%						
				Citrate	6 1%	2 0%	1 0%	7 1%	2 0%	49 6%	5 1%	734 89%		16 2%						
				EDTA	12 1%			5 1%	5 1%	51 6%	7 1%	726 88%		16 2%						
	Breast Cancer Invasive	3231	6	Serum	11 0%	2 0%	3 0%	32 1%	25 1%	159 5%	113 3%	745 23%	108 3%	2033 63%						
				Citrate	23 1%	5 0%	1 0%	52 2%	9 0%	205 6%	17 1%	2838 88%		81 3%						
				EDTA	46 1%		1 0%	11 0%	10 0%	243 8%	28 1%	2813 87%		79 2%						
	CHD	3263	10	Serum	19 1%	7 0%	30 1%	62 2%	106 3%	194 6%	179 5%	538 16%	295 9%	1833 56%						
				Citrate	34 1%	32 1%	31 1%	224 7%	60 2%	322 10%	25 1%	2442 75%		93 3%						
				EDTA	51 2%	9 0%	23 1%	70 2%	188 6%	402 12%	85 3%	2344 72%	2 0%	89 3%						
	Clinical MI	2511	9	Serum	16 1%	4 0%	22 1%	46 2%	90 4%	147 6%	135 5%	400 16%	225 9%	1426 57%						
				Citrate	26 1%	28 1%	25 1%	176 7%	48 2%	252 10%	14 1%	1869 74%		73 3%						
				EDTA	42 2%	8 0%	18 1%	59 2%	139 6%	316 13%	48 2%	1809 72%	1 0%	71 3%						
	Colorectal Cancer	1054	2	Serum	3 0%	1 0%	4 0%	17 2%	17 2%	77 7%	66 6%	377 36%	56 5%	436 41%						
				Citrate	10 1%	4 0%	3 0%	18 2%	3 0%	78 7%	15 1%	905 86%		18 2%						
				EDTA	19 2%		3 0%	5 0%	6 1%	94 9%	21 2%	888 84%		18 2%						
	DVT/PE	849	2	Serum	2 0%	3 0%	7 1%	13 2%	16 2%	79 9%	85 10%	286 34%	119 14%	239 28%						
				Citrate	11 1%	20 2%	15 2%	166 20%	43 5%	69 8%	5 1%	490 58%	1 0%	29 3%						
				EDTA	10 1%	3 0%	5 1%	28 3%	18 2%	261 31%	15 2%	478 56%		31 4%						
	Endometrial Cancer	546	2	Serum	5 1%	1 0%	2 0%	5 1%	3 1%	13 2%	8 1%	76 14%	19 3%	416 76%						
				Citrate	5 1%			11 2%	3 1%	33 6%	1 0%	480 88%		11 2%						
				EDTA	6 1%			4 1%	6 1%	42 8%	4 1%	474 87%		10 2%						
	Hip Fracture	1541	2	Serum	9 1%	2 0%	1 0%	22 1%	19 1%	72 5%	68 4%	279 18%	137 9%	932 60%						
				Citrate	16 1%	5 0%	6 0%	55 4%	13 1%	101 7%	7 0%	1303 85%		35 2%						
				EDTA	19 1%	1 0%	2 0%	12 1%	18 1%	150 10%	12 1%	1293 84%		34 2%						
	Ovarian Cancer	354	1	Serum	1 0%		2 1%	4 1%	3 1%	11 3%	8 2%	48 14%	10 3%	267 75%						
				Citrate	5 1%	1 0%	1 0%	8 2%	26 7%			304 86%		9 3%						
				EDTA	2 1%			5 1%	5 1%	30 8%	5 1%	298 84%		9 3%						
	Stroke	2486	7	Serum	16 1%	6 0%	13 1%	43 2%	55 2%	196 8%	237 10%	731 29%	97 4%	1092 44%						
				Citrate	36 1%	24 1%	26 1%	267 11%	33 1%	719 29%	27 1%	1298 52%		56 2%						
				EDTA	37 1%	3 0%	3 0%	38 2%	41 2%	810 33%	40 2%	1458 59%		56 2%						

\* Participants with no draw included in 0 volume column

\*\* Includes sample reserved for BAA (2 ml serum, 1 ml citrate, and 1 ml EDTA) and future WHI use (1 ml each serum, citrate, and EDTA)

Represents conservative estimate of 1 ml in each vial collected, with 4 serum, 3 citrate, and 3 EDTA vials collected at baseline for CT/OS, at AV1 for CT, and at AV3 for OS.

\*\*\* Total # of participants whose first occurrence of outcome occurred after blood draw.

Table 10.1 (continued)  
 CT Outcomes Cases with Remaining Blood Sample by Estimated Volume (in ml)  
 After Accounting for Approved Core, BAA, and Ancillary Studies

Visit	Outcome As of 9/10	Total** Ppts	No Draw	Blood Type	Volume of Designated Blood Components (ml)** as of 9/30/10																			
					0 <sup>*</sup> Ppt %	>0 - <5 Ppt %	.5 - <1 Ppt %	1 - <1.5 Ppt %	1.5 - <2 Ppt %	2 - <2.5 Ppt %	2.5 - <3 Ppt %	3 - <3.5 Ppt %	3.5 - <4 Ppt %	4+ Ppt %										
AV1	Breast Cancer	3802	196	Serum	203	5%	1	0%	2	0%	29	1%	7	0%	88	2%	83	2%	537	14%	400	11%	2452	64%
	Citrate			213	6%	4	0%	1	0%	43	1%	5	0%	238	6%	12	0%	3284	86%			5	0%	
	EDTA			250	7%	1	0%			18	0%	11	0%	252	7%	9	0%	3261	86%			5	0%	
	Breast Cancer In Situ	779	26	Serum	26	3%					6	1%			9	1%	5	1%	58	7%	42	5%	633	81%
	Citrate			30	4%	2	0%			8	1%	1	0%	49	6%	2	0%	687	88%			1	0%	
	EDTA			40	5%	1	0%			3	0%	2	0%	48	6%	2	0%	683	88%			1	0%	
	Breast Cancer Invasive	3073	171	Serum	178	6%	1	0%	2	0%	25	1%	7	0%	79	3%	78	3%	483	16%	364	12%	1856	60%
	Citrate			184	6%	2	0%	1	0%	36	1%	4	0%	190	6%	10	0%	2643	86%			5	0%	
	EDTA			212	7%					15	0%	9	0%	205	7%	7	0%	2624	85%			5	0%	
	CHD	3049	220	Serum	228	7%	1	0%	3	0%	17	1%	10	0%	44	1%	50	2%	303	10%	201	7%	2194	72%
	Citrate			258	8%	20	1%	15	0%	150	5%	47	2%	251	8%	14	0%	2297	75%			2	0%	
	EDTA			271	9%	4	0%	13	0%	48	2%	103	3%	302	10%	7	0%	2305	76%			2	0%	
	Clinical MI	2331	154	Serum	160	7%	1	0%	3	0%	14	1%	10	0%	32	1%	38	2%	226	10%	156	7%	1693	73%
	Citrate			187	8%	17	1%	13	1%	121	5%	39	2%	184	8%	9	0%	1764	76%			2	0%	
	EDTA			197	8%	4	0%	8	0%	42	2%	80	3%	229	10%	6	0%	1769	76%			2	0%	
	Colorectal Cancer	975	62	Serum	64	7%	1	0%			10	1%	4	0%	11	1%	10	1%	90	9%	77	8%	709	73%
	Citrate			68	7%	3	0%	2	0%	14	1%	2	0%	76	8%	2	0%	808	83%			1	0%	
	EDTA			74	8%			1	0%	6	1%	4	0%	78	8%	2	0%	810	83%			1	0%	
	DVT/PE	764	38	Serum	39	5%							1	0%	12	2%	21	3%	119	16%	77	10%	495	65%
	Citrate			51	7%	12	2%	13	2%	95	12%	26	3%	73	10%	3	0%	491	64%			1	0%	
	EDTA			48	6%	2	0%	2	0%	22	3%	10	1%	179	23%			501	66%			1	0%	
	Endometrial Cancer	506	24	Serum	24	5%					3	1%	1	0%	11	2%	4	1%	39	8%	18	4%	406	80%
	Citrate			30	6%					10	2%	1	0%	29	6%			437	86%					
	EDTA			29	6%					2	0%	3	1%	38	8%			436	86%					
	Hip Fracture	1491	74	Serum	77	5%	1	0%	1	0%	13	1%	3	0%	26	2%	28	2%	130	9%	136	9%	1076	72%
	Citrate			90	6%	4	0%	6	0%	45	3%	5	0%	90	6%	7	0%	1246	84%					
	EDTA			98	7%	1	0%	1	0%	16	1%	8	1%	112	8%	3	0%	1255	84%					
	Ovarian Cancer	334	18	Serum	18	5%					3	1%	1	0%	1	0%	3	1%	38	11%	7	2%	264	79%
	Citrate			19	6%	1	0%	1	0%	4	1%	1	0%	30	9%			278	83%					
	EDTA			22	7%					1	0%	2	1%	34	10%			275	82%					
	Stroke	2343	137	Serum	145	6%	3	0%			16	1%	7	0%	28	1%	66	3%	248	11%	193	8%	1637	70%
	Citrate			163	7%	21	1%	22	1%	178	8%	24	1%	325	14%	27	1%	1583	68%			1	0%	
	EDTA			178	8%	1	0%	1	0%	34	1%	21	1%	316	13%	7	0%	1786	76%			1	0%	

\*Participants with no draw included in 0 volume column  
 \*\*Includes sample reserved for BAA (2 ml serum, 1 ml citrate, and 1 ml EDTA) and future WHI use (1 ml each serum, citrate, and EDTA).  
 Represents conservative estimate of 1 ml in each vial collected, with 4 serum, 3 citrate, and 3 EDTA vials collected at baseline for CT/OS, at AV1 for CT, and at AV3 for OS.  
 \*\*\* Total # of participants whose first occurrence of outcome occurred after blood draw.



**Table 10.2**  
**OS Outcomes Cases with Remaining Blood Sample by Estimated Volume (in ml)**  
**After Accounting for Approved Core, BAA, and Ancillary Studies**

Visit	Outcome As of 9/10	Total*** Ppts	No Draw	Blood Type	Volume of Designated Blood Components (ml)** as of 9/30/10																			
					0*	>0 - <5	.5 - <1	1 - <1.5	1.5 - <2	2 - <2.5	2.5 - <3	3 - <3.5	3.5 - <4	4+										
					Ppt	%	Ppt	%	Ppt	%	Ppt	%	Ppt	%	Ppt	%	Ppt	%	Ppt	%	Ppt	%		
Base-line	Breast Cancer	5753	3	Serum	18	0%	3	0%	8	0%	39	1%	29	1%	256	4%	328	6%	819	14%	670	12%	3583	62%
				Citrate	65	1%	5	0%	6	0%	52	1%	68	1%	436	8%	911	16%	4100	71%			110	2%
				EDTA	116	2%	4	0%	5	0%	99	2%	114	2%	613	11%	824	14%	3868	67%	3	0%	107	2%
	Breast Cancer In Situ	1039	0	Serum	2	0%			2	0%	7	1%	5	0%	24	2%	29	3%	107	10%	79	8%	784	75%
				Citrate	9	1%	1	0%	1	0%	9	1%	6	1%	57	5%	114	11%	829	80%			14	1%
				EDTA	18	2%			11	1%	19	2%	109	10%	63	6%	805	77%					14	1%
	Breast Cancer Invasive	4772	3	Serum	16	0%	3	0%	7	0%	32	1%	25	1%	233	5%	303	6%	722	15%	595	12%	2836	59%
				Citrate	57	1%	5	0%	5	0%	43	1%	62	1%	383	8%	807	17%	3314	69%			96	2%
				EDTA	99	2%	4	0%	5	0%	89	2%	96	2%	510	11%	765	16%	3108	65%	3	0%	93	2%
	Colorectal Cancer	1283	1	Serum	4	0%	3	0%	8	1%	25	2%	24	2%	147	11%	158	12%	406	32%	325	25%	183	14%
				Citrate	15	1%	6	0%	6	0%	24	2%	74	6%	245	19%	613	48%	263	20%			37	3%
				EDTA	35	3%	9	1%	10	1%	95	7%	120	9%	607	47%	180	14%	193	15%			34	3%
	CHD	3820	1	Serum	16	0%	9	0%	21	1%	84	2%	58	2%	312	8%	107	3%	518	14%	550	14%	2145	56%
				Citrate	60	2%	30	1%	37	1%	176	5%	169	4%	725	19%	513	13%	2008	53%	2	0%	100	3%
				EDTA	95	2%	9	0%	40	1%	178	5%	261	7%	936	25%	731	19%	1469	38%	3	0%	98	3%
	Clinical MI	2936	0	Serum	12	0%	8	0%	16	1%	66	2%	49	2%	240	8%	83	3%	398	14%	469	16%	1595	54%
				Citrate	48	2%	25	1%	36	1%	138	5%	145	5%	577	20%	380	13%	1511	51%	2	0%	74	3%
				EDTA	76	3%	6	0%	37	1%	140	5%	210	7%	753	26%	555	19%	1083	37%	1	0%	75	3%
	Endometrial Cancer	786	1	Serum	3	0%	1	0%	4	1%	12	2%	45	6%	52	7%	107	14%	168	21%	304	39%	90	11%
				Citrate	9	1%			10	1%	10	1%	12	2%	81	10%	190	24%	468	60%			16	2%
				EDTA	19	2%			19	2%	19	2%	18	2%	75	10%	64	8%	573	73%			16	2%
	Hip Fracture	2117	2	Serum	7	0%	10	0%	30	1%	80	4%	86	4%	203	10%	170	8%	297	14%	206	10%	1028	49%
				Citrate	23	1%	2	0%	1	0%	19	1%	37	2%	179	8%	149	7%	1668	79%			39	2%
				EDTA	46	2%	3	0%	2	0%	51	2%	62	3%	258	12%	249	12%	1408	67%	1	0%	37	2%
	Ovarian Cancer	521	0	Serum			1	0%	3	1%	3	1%	11	2%	16	3%	79	15%	155	30%	174	33%	79	15%
				Citrate	4	1%			1	0%	4	1%	3	1%	28	5%	26	5%	445	85%			10	2%
				EDTA	6	1%	2	0%	1	0%	8	2%	14	3%	56	11%	84	16%	340	65%			10	2%
	Stroke	3000	0	Serum	3	0%	6	0%	10	0%	37	1%	44	1%	150	5%	95	3%	739	25%	528	18%	1388	46%
				Citrate	31	1%	15	0%	18	1%	178	6%	329	11%	891	30%	131	4%	1335	44%			72	2%
				EDTA	54	2%	37	1%	64	2%	465	16%	385	13%	777	26%	422	14%	727	24%	3	0%	66	2%

\*Participants with no draw included in 0 volume column  
 \*\*Includes sample reserved for BAA (2 ml serum, 1 ml citrate, and 1 ml EDTA) and future WHI use (1 ml each serum, citrate, and EDTA)  
 Represents conservative estimate of 1 ml in each vial collected, with 4 serum, 3 citrate, and 3 EDTA vials collected at baseline for CT/OS, at AV1 for CT, and at AV3 for OS.  
 \*\*\* Total # of participants whose first occurrence of outcome occurred after blood draw.

Table 10.2 (continued)  
OS Outcomes Cases with Remaining Blood Sample by Estimated Volume (in ml)  
After Accounting for Approved Core, BAA, and Ancillary Studies

Visit	Outcome As of 9/10	Total Ppts	No Draw*	Blood Type	Volume of Designated Blood Components (ml)** as of 9/30/10																					
					0*	>0 - <.5	.5 - <1	1 - <1.5	1.5 - <2	2 - <2.5	2.5 - <3	3 - <3.5	3.5 - <4	4+												
		Ppt	%	Ppt	%	Ppt	%	Ppt	%	Ppt	%	Ppt	%	Ppt	%	Ppt	%	Ppt	%							
AV3	Breast Cancer	4146	512	Serum	530	13%				12	0%				27	1%	1	0%	65	2%	79	2%	3437	83%		
				Citrate	583	14%				21	1%				46	1%			3520	85%					1	0%
				EDTA	636	15%	1	0%		25	1%	5	0%		171	4%	338	8%	3013	73%					2	0%
	Breast Cancer In Situ	767	81	Serum	81	11%				2	0%				2	0%			11	1%	14	2%	657	86%		
				Citrate	91	12%				5	1%				7	1%			666	87%						
				EDTA	104	14%				2	0%	1	0%		23	3%	9	1%	637	83%						
	Breast Cancer Invasive	3431	438	Serum	456	13%				11	0%				25	1%	1	0%	55	2%	65	2%	2823	82%		
				Citrate	499	15%				17	0%				39	1%			2898	84%					1	0%
				EDTA	539	16%	1	0%		23	1%	5	0%		151	4%	330	10%	2416	70%					2	0%
	Colorectal Cancer	951	152	Serum	160	17%				3	0%				6	1%	3	0%	49	5%	230	24%	499	52%		
				Citrate	165	17%				2	0%				15	2%			774	81%						
				EDTA	174	18%				9	1%	4	0%		59	6%	73	8%	638	67%						
	CHD	3068	533	Serum	553	18%				5	0%				19	1%	13	0%	85	3%	100	3%	2299	75%		
				Citrate	582	19%				7	0%				100	3%			2389	78%					1	0%
				EDTA	616	20%	1	0%		36	1%	32	1%		514	17%	133	4%	1754	57%					1	0%
	Clinical MI	2295	336	Serum	355	15%				3	0%				14	1%	11	0%	62	3%	75	3%	1781	78%		
				Citrate	376	16%				5	0%				80	3%			1845	80%						
				EDTA	401	17%	1	0%		30	1%	26	1%		418	18%	106	5%	1332	58%						
	Endometrial Cancer	573	82	Serum	85	15%									5	1%			15	3%	15	3%	454	79%		
				Citrate	90	16%				3	1%				8	1%			474	83%						
				EDTA	96	17%				2	0%	1	0%		15	3%	14	2%	450	79%						
	Hip Fracture	1823	269	Serum	283	16%				1	0%				9	0%			28	2%	26	1%	1477	81%		
				Citrate	298	16%				6	0%				15	1%			1503	82%					1	0%
				EDTA	315	17%	1	0%		8	0%	2	0%		63	3%	28	2%	1407	77%					1	0%
	Ovarian Cancer	385	66	Serum	69	18%									2	1%			20	5%	57	15%	237	62%		
				Citrate	72	19%				2	1%				2	1%			310	81%					30	8%
				Urine	417	108%																				
	Stroke	2424	401	Serum	417	17%				5	0%				21	1%	2	0%	47	2%	30	1%	1905	79%		
				Citrate	441	18%				14	1%				41	2%			1937	80%						
				EDTA	479	20%				15	1%	4	0%		104	4%	45	2%	1791	74%						

\*Participants with no draw included in 0 volume column  
 \*\*Includes sample reserved for BAA (2 ml serum, 1 ml citrate, and 1 ml EDTA) and future WHI use (1 ml each serum, citrate, and EDTA)  
 Represents conservative estimate of 1 ml in each vial collected, with 4 serum, 3 citrate, and 3 EDTA vials collected at baseline for CT/OS, at AV1 for CT, and at AV3 for OS.  
 \*\*\* Total # of participants whose first occurrence of outcome occurred after blood draw.

Table 10.3  
CT and OS Outcomes Cases with DNA \* Available  
Data as of 9/30/10

Outcome As of 9/10	Ppts	No DNA Available <sup>1</sup>		< 25 ug Extracted, no Buffy Coat Available for Extraction <sup>2</sup>		< 25 ug Extracted, with Buffy Coat Available for Extraction <sup>3</sup>		> 25 ug Extracted <sup>4</sup>	
		#	%	#	%	#	%	#	%
<b>CT</b>									
Breast Cancer	4003	64	1.6%	31	0.8%	704	17.6%	3204	80%
Breast Cancer Invasive	3231	46	1.4%	29	0.9%	249	7.7%	2907	90%
CHD	3264	59	1.8%	49	1.5%	550	16.9%	2606	79.8%
Clinical MI	2512	45	1.8%	38	1.5%	411	16.4%	2018	80.3%
Colorectal Cancer	1054	13	1.2%	18	1.7%	151	14.3%	872	82.7%
DVT/PE	849	12	1.4%	20	2.4%	90	10.6%	727	85.6%
Endometrial Cancer	546	9	1.6%	6	1.1%	81	14.8%	450	82.4%
Hip Fracture	1541	38	2.5%	47	3%	150	9.7%	1306	84.8%
Ovarian Cancer	354	3	0.8%	3	0.8%	56	15.8%	292	82.5%
Stroke	2486	33	1.3%	76	3.1%	385	15.5%	1992	80.1%
<b>OS</b>									
Breast Cancer	5753	59	1%	14	0.2%	936	16.3%	4744	82.5%
Breast Cancer Invasive	4772	54	1.1%	13	0.3%	381	8%	4324	90.6%
CHD	3820	48	1.3%	23	0.6%	376	9.8%	3373	88.3%
Clinical MI	2936	33	1.1%	16	0.5%	289	9.8%	2598	88.5%
Colorectal Cancer	1283	19	1.5%	6	0.5%	84	6.5%	1174	91.5%
Endometrial Cancer	786	8	1%	1	0.1%	92	11.7%	685	87.2%
Hip Fracture	2117	21	1%	11	0.5%	218	10.3%	1867	88.2%
Ovarian Cancer	521	7	1.3%	2	0.4%	94	18%	418	80.2%
Stroke	3000	43	1.4%	13	0.4%	345	11.5%	2599	86.6%

\*DNA measured by OD ratio or Pico Green

<sup>1</sup> < 25 ug DNA in inventory, either in daughter or parent aliquots, and no buffy coat available

<sup>2</sup> < 25 ug DNA in inventory, either in daughter or parent aliquots, and no buffy coat available

<sup>3</sup> < 25 ug DNA in inventory, either in daughter or parent aliquots, and 1 or more buffy coats not yet extracted

<sup>4</sup> 25+ ug DNA in inventory, either in daughter or parent aliquots, regardless of number of buffy coats not yet extracted

**Table 10.4**  
**Number of Funded Core, BAA, and Ancillary Studies**  
**Using Blood Sample**  
**by Outcome<sup>1</sup> and Specimen Type**

	Serum/Plasma Only	Both Serum/Plasma and DNA	DNA Only	GWAS <sup>2</sup>	Urine	RBCs	Total <sup>3</sup>
<b>Cancer</b>							
Bladder Cancer			1	1			1
Breast Cancer	9	1	6		1		17
Colon Cancer	1		1				2
Colorectal Cancer	5	4	4	1		1	13
Endometrial Cancer	3		2				5
Kidney Cancer			1	1			1
Lung Cancer	1	2	1				4
Lymphoma, Non Hodgkins		1	2	1			3
Melanoma			2				2
Multiple Myeloma		1					1
Stomach Cancer		1		1			1
Pancreatic Cancer	1	2	1	1		1	4
Ovarian Cancer	4		1				5
<b>Cardiovascular</b>							
CHD	11	2	5	2		1	18
Hypertension		1					1
Stroke	9	2	6	2		1	17
VTE	2	1	2	1			5
<b>Fracture</b>							
Elbow, Lower Humerus	1						1
Hip Fracture	4	2	2	1		1	8
Spine	2						2
Overall Fracture	1						1
<b>Other</b>							
Eye Disease	1						1
Frailty-disability		1					1
Sarcopenia		1					1
Type 2 Diabetes		2	3	1			5
Blacks/Hispanics			1	1			1

<sup>1</sup> Several studies include more than one outcome

<sup>2</sup> GWAS counted in number of DNA studies

<sup>3</sup> Several studies may use more than one specimen type

Table 11.1  
Approved and Proposed Core Studies<sup>1</sup>

Ref #	Title	Status	Study Population	Blood	Analytes/Data	Used in Approved Publications
W1	CT core analytes on 6% subsample; quarterly core analytes on QC pools A and B	Funded	CT Controls:3800 *B, Y1, Y3, Y6 on 6% Blood Subsample	Y	Citrate 1ml: FVII Ag; FVII Conc; Fibrinogen EDTA 1ml: Cholesterol; HDL2; HDL3; HDLC; LDLC; Lp(a); Trig Serum 1ml: Carotene, alpha; Carotene, beta; Cryptoxan, beta; Glucose; Insulin; Lutein+Zeax; Lycopene; Retinol; Tocopherol, alpha; Tocopherol, gamma	204, 210, 222, 240, 273, 345, 347, 350, 447, 448, 449, 520, 521, 524, 866
W2	OS-measurement precision study (OS-MPS)	Complete	OS Controls:800 *B, 3 month	Y	Citrate 1ml: FVII Ag; FVII Conc; Fibrinogen EDTA 1ml: Cholesterol; HDL2; HDL3; HDLC; LDLC; Lp(a); Trig Serum 1ml: Carotene, alpha; Carotene, beta; Cryptoxan, beta; Glucose; Insulin; Lutein+Zeax; Lycopene; Retinol; Tocopherol, alpha; Tocopherol, gamma	524, 442
W4	National validation and quality control assurance of vitamin D absorption from CaD tablets for WHI	Complete	CaD Controls:448 *Y3	Y	Serum 1ml: Vit D 25-OH	
W5	Correlates of endogenous sex hormone concentrations in WHI	Complete	DM Controls:300 *150 DM Intervention + 150 DM controls at B and Y1	Y	Serum 3ml: Albumin; Androstenedione; DHEA; DHEAS; DHT; Estradiol (E2); Estradiol, bioavail; Estradiol, bioavail (%); Estrone (E1); Estrone sulfate; Progesterone; Prolactin; SHBG; Testosterone	20, 280

Table 11.1 (continued)  
Approved and Proposed Core Studies<sup>1</sup>

Ref #	Title	Status	Study Population	Blood	Analytes/Data	Used in Approved Publications
W6	HT CVD Biomarkers: study of CHD, Stroke and VTE - Phase I	Complete	HRT CHD:402 Stroke:272 VTE:223 Controls:877 *B, Y1	Y	Citrate 1ml: ATIII; CRP; D-dimers; F1+2; FIX Conc; FVIII Activity; Fibrinogen; PAI-1 Ag; PAP; Protein C; Protein S Free; Protein S Total; Prothrombin Ag; TAFI; vWF  DNA 3ug: ESR1; ESR2; GP3A-P1A; GPIIb/IIIa; ITGA2807CT  DNA 3ug: FV Leiden; FV-HR2; FXIII val34leu; MTHFR; PAI-1; PRO2; PROT  EDTA .25ml: NMR Lipids  EDTA 1ml: Cholesterol; E-Selectin; HDL2; HDL3; HDLC; Homocysteine; IL-6; LDLC; Lipo-particles; Lp(a); Trig  Serum 1ml: MMP-9	204, 210, 222, 273, 345, 347, 350, 380, 429, 445, 462, 526, 589, 854, 866, 972
W7	Genome-wide scan on breast cancer, CHD, and stroke	Analysis	OS/CT Breast Cancer:2145 CHD:2119 Stroke:2215 Controls:6479	Y	DNA 2ug: Pooled GWAS	1104

Table 11.1 (continued)  
Approved and Proposed Core Studies<sup>1</sup>

Ref #	Title	Status	Study Population	Blood	Analytes/Data	Used in Approved Publications
W8	Nutritional biomarkers study (NBS)	Complete	DM	Y	EDTA 1ml: NBS-24hr Urine 1.85ml: 24 hr Urine Volume; PABA; PABA24; PABACMP; PABACMPH; PABARCVR; PABARCVRH; Paba mg/24hr (hplc); Paba mg/L (hplc); Urine N g/L; Urine N g/day; 24 hr urine volume, nitrogen g/day, nitrogen g/L, sodium, potassium; Paba mg/L (colorimetric and HPLC); Paba mg/24 hr (colorimetric); Paba completeness (colorimetric and HPLC); Paba recovery (colorimetric and HPLC); NBS-24hr Urine 4ml: BUN; Urinary potassium NBS-Spot Urine 4ml: % Fat; DE-SU3; DE-SU4; DE-SU5; DE-SU6; DSRATIO; EE3/5; EE4/6; Fat-free mass; Fluid; H2CONST; LOT; Nd; No; O18-SU3; O18-SU4; O18-SU5; O18-SU6; O18CONST; RCO2-3/5; RCO2-4/6; TEE-CONRQ; TEE-INTVRQ; TEE-USRQ; Total Body Water; r-H2O; NBS Spot Urine 4 ml: %Fat; DE-SU3; DE-SU4; DE-SU5; DE-SU6; EE3/5; EE4/6; Fat-free mass; Fluid; H2CONST; Internal check DSRatio; LOT; Nd; No; O18-SU3; O18-SU4; O18-SU5; O18-SU6; O18CONST; RCO2-3/5; RCO2-4/6; TEE-CONRQ RQ Control group (38.1/44.7/17.2 %E from F/C/P); TEE-Intervention (29.8/52.7/17.5 %E from F/C/P); TEE-USRQ RQ assumed general US (34/47/18 %E F/C/P); Total Body Water; r-H2O Serum .2ml: Carotene, alpha; Carotene, beta; Cholesterol; Folate; Tocopherol, alpha; Tocopherol, gamma; Alpha-carotene, alpha-tocopherol, beta-carotene, folate, gamma-tocopherol, total cholesterol	464, 624, 646, 708, 831, 941, 945, 1178
W9	Biological markers of the effect of HT on risk of fractures in the Women's Health Initiative clinical trial	Analysis	HRT Fracture - Hip:750 Controls:750 *Fill in with non-spine fractures to make 750	Y	Serum .65ml: Estradiol (E2); Estradiol, bioavail (FE2+AE2); Estradiol, free; SHBG Serum .25ml:	433

Table 11.1 (continued)  
Approved and Proposed Core Studies<sup>1</sup>

Ref #	Title	Status	Study Population	Blood	Analytes/Data	Used in Approved Publications
W10	Biological markers of the effect of HT on risk of breast cancer in the Women's Health Initiative clinical trial	Funded	HRT Breast Cancer:755 Controls:755 *498 E+P and 260 E-Along cases through Sept 2005; B, Y1	Y	Serum .95ml: Estradiol (E2); Estradiol, bioavail (FE2+AE2); Estradiol, free; Estrone (E1); Estrone sulfate; Progesterone; SHBG; Testosterone; Testosterone, bioavail; Testosterone, free; (progesterone and testosterone at baseline only)	
W11	CVD biomarkers - Phase II: strokes after Feb. 2001	Funded	HRT Stroke:316 Controls:316 *108 new E+P cases up to July 2002, 174 E alone cases up to March 2005 (316 total as of 4-8-05); B, Y1	Y	Citrate .35ml: TFPI activity; TFPI, free; TFPI, total Citrate .65ml: APC-ETP; LT_APC; NAPCSR DNA 1ug: ESR1; ESR2; GP3A-P1A; GPIIb <sub>a</sub> ; ITGA2807CT;	435, 462, 1114
W14	CVD biomarkers - Phase I: additional assays	Analysis	HRT CHD:390 Stroke:270 VTE:220 Controls:880 *B, Y1	Y	Serum .25ml: Glucose; Insulin Citrate .95ml:	866, 972, 1114
W15	CaD Vitamin D levels in CaD participants with colorectal cancer or fractures	Complete	CaD Colorectal Cancer:334 Fracture - Hip:360 Fracture - Elbow, Lower humerus:853 Fracture - Spine Only:283 Controls:1830 *Y1; B only if Y1 not available	Y	Serum .25ml: Glucose; Insulin; Serum .2ml: Vit D 25-OH	450, 451, 581, 861, 876, 878, 910, 1121
W18	HT Hormone Pretest	Analysis	HRT Controls:240 *120 active + 120 placebo; B, Y1	Y	Serum .95ml: Estradiol (E2); Estradiol, bioavail (FE2+AE2); Estradiol, free; Estrone (E1); Progesterone; SHBG; Testosterone; Testosterone, bioavail; Testosterone, free; (progesterone and testosterone only on E+P samples)	795



Table 11.1 (continued)  
Approved and Proposed Core Studies<sup>1</sup>

Ref #	Title	Status	Study Population	Blood	Analytes/Data	Used in Approved Publications
W19	WHI HT Proteomic Pilot Study	Analysis	HRT Controls:200 *100 active, 100 control; B, AV1	Y	Serum .1ml: Proteomics  Serum .3ml: Phase II proteins	843, 921
W20	WHI-EDRN pilot study for the identification of circulating biomarkers for colon cancer in pre-clinical specimens	Analysis	OS Colorectal Cancer:100 Controls:120 *Colon cancer cases 6-18 mo after Year 3	Y	EDTA .2ml: Proteomics; Calibration for Wayne State lab.  EDTA .55ml: Proteomics	
W22	Vitamin D levels in 6% blood subsample of CaD	Funded	CaD *600 ppts from CaD trial at AV1 and AV3	Y	Serum .2ml: 25-OH Vitamin D3	
W23	Genotyping to explore CaD intervention effect on hip fracture	Dropped	CaD Fracture - Hip	Y	DNA 1ug: 3 SNPs of VDR: Bsm I, Apa I, Taq I; 4 SNPs in the non-coding region of CYP27B1; 4 SNPs CASR: CA repeat; A986; R990G; Q1011E	470, 861, 876, 878, 910
W24	CaD vitamin D and breast cancer	Analysis	CaD Breast Cancer:1081 Controls:1081 *Use controls from W15 when possible	Y	Serum .2ml: Vit D 25-OH	470, 503, 506, 570, 591, 806, 816, 861, 876, 878, 910, 912, 955, 1121
W25	WHI coronary artery calcification study in E-alone (WHI-CACS)	Complete	HRT *1150 E-Along ppts aged 50-59	N		503, 506, 570, 591, 806, 816, 912, 955
W26	Food grouping in WHI by FHCRC nutrition shared resource group	Funded	DM	N		

Table 11.1 (continued)  
Approved and Proposed Core Studies<sup>1</sup>

Ref #	Title	Status	Study Population	Blood	Analytes/Data	Used in Approved Publications
W27	Nutrition and physical activity assessment study (AS218) lab work	Funded	OS *450 ppts	Y	EDTA 1.8ml: NPAAS-24hr Urine 1.8ml 4ml: 24 hr urine volume, urinary nitrogen g/day, urinary nitrogen g/L NPAAS-24hr Urine 1.8ml 4ml NPAAS-24hr Urine 1.8ml 1ml NPAAS-Spot Urine 4ml: % Fat; BMI; DSRATIO; Fat-free mass; Fluid; Isotope Approval; Nd; No; RCO2-3/5; RCO2-4/6; RQ; TEE; TEE mj/day; Total Body Water; r-H2O; %Fat; DE-SU3; DE-SU4; DE-SU5; DE-SU6; EE3/5; EE4/6; Fat-free mass; Fluid; H2CONST; Internal check DSRatio; LOT; Nd; No; O18-SU3; O18-SU4; O18-SU5; O18-SU6; O18CONST; RCO2-3/5; RCO2-4/6; TEE-CONRQ RQ Control group (38.1/44.7/17.2 %E from F/C/P); TEE-INTVRQ Intervention (29.8/52.7/17.5 %E from F/C/P); TEE-USRQ RQ assumed general US (34/47/18 %E F/C/P); Total Body Water; r-H2O	
W28	Medicare claims data linkage	Complete	OS/CT	N	Scrum 1ml	
W30	Dietary assessment study	Complete	DM *160 ppts for 4DFR analyses, repeat 24 hr recalls, and repeat FFQs	N		35
W31	4DFR on DM ovarian cancers	Complete	DM Ovarian Cancer:160 *For DM Other Cancer paper	N		469
W32	Coding diagnosis text on Form 125-Hospitalization	Dropped	OS/CT	N		448
W33	4DFR and DM breast cancer	Complete	DM Breast Cancer:1800 *For DM Breast Cancer paper	N		

Table 11.1 (continued)  
Approved and Proposed Core Studies<sup>1</sup>

Ref #	Title	Status	Study Population	Blood	Analytes/Data	Used in Approved Publications
W34	Extension of WHI stroke genome-wide association study (W-7)	Funded	OS/CT Stroke:2096 Controls:2096	Y	DNA 2ug; SNPs 5.4K	
W35	Full CMS data on all CT and OS participants aged 65 or over	Funded	OS/CT	N		889, 1217
W37	EDRN WHI Phase 2: identification of circulating colon cancer biomarkers in pre-clinical and clinical specimens	Seeking Approval	OS/CT Colon cancer:100 Controls:100 *Cases within 2 years of blood draw, either baseline, AV1 (CT), or AV3 (OS)	Y	EDTA .55ml: ANG; APP; ARMET; C8G; CATHB; CATHD; CFH; CST6; CULLIN; DJ1; F5; HP; HPR; IGFBP-2; KNG1; LOC442043; LRG1; MAPRE1; PDIA3; PKM2; PPBP; RAB; RANBP1; SPARC; TF; TNC	
W38	WHI-CACs and lipids and inflammation	Dropped	HRT *Cases: 422 CAC Score > 10; controls: 422 CAC score=0	Y	EDTA .55ml: NMR lipids, CRP, E-selectin, homocysteine, MMP-9, glucose, insulin, osteoprotegerin, CTx	
W39	27-hydroxycholesterol in CVD biomarkers (W-6)	Funded	HRT CHD:359 Controls:820 *CHD cases from W6-HT CVD Biomarkers	Y	Serum .55ml: Chol, 27-OH	
W40	Validation of E-alone proteins in W19-HT proteomics	Funded	HRT Controls:100 *100 E-Alone ppts in active treatment arm	Y	Serum .4ml: AHSG; CLL16; CP; FIX; FX; ICAM-1; IGF-1; IGFBP-1; IGFBP-2; IGFBP-3; IGFBP-4; IGFBP-6; KNG1; MCAM; MMP-2; NOV; Protein Z; Proteomics; SHBG; TFF3; VTN; VitD Binding	
W41	Medications inventory on WHI Extension participants	Funded	OS/CT	N		
W42	SEER code WHI and ES non-primary cancers	Funded	OS/CT	N		
W43	Gene sequencing of selected genes in breast cancer and stroke SNP studies (W7 and W34)	Funded	HRT E+P Breast Cancer:60 Controls:60 *60 active treatment. 60 placebo	Y	DNA 0ug: Gene seq; Use samples from W7 and W34.	

Table 11.1 (continued)  
Approved and Proposed Core Studies<sup>1</sup>

Ref #	Title	Status	Study Population	Blood	Analytes/Data	Used in Approved Publications
W44	Biological validation of E+P effects on the serum proteome and comparison of E+P and E-Along effects (see W19 and W40)	Funded	HRT Controls:50 *50 E+P ppts at baseline,AV1	Y	Serum .55ml: ACE; AGTASE; ANG; Apo D; Apo F; B2M; CAPPT; CCL18; CP; CSF1; FX; ICAM-1; IGF-1; IGFBP-1; IGFBP-2; IGFBP-4; KNG1; LCN2; LGALS3BP; LYVE1; MCAM; MCSF1; MMP-2; NOV; PARCq; RNASE4; TFF3; THBS1; TNC; VTN; XLKDI	921
W45	Proteomic Colon Cancer Study	Funded	OS Colon cancer:100 Controls:100	Y	Citrate .15ml: ADAMTS13; APP; CEA; ENO1; IGFBP-1; IGFBP-2; IGFBP-6; LGALS3BP; LRGI; LTF; MAPRE1; MMP-2; NID1; PKM2; PPBP; PPIA; SPARC	
W46	HT Proteomics: CHD, stroke and breast cancer	Seeking Approval	HRT CHD:100	Y	Serum .14ml: Proteomics	
W47	Breast Tumor Tissue Pilot	Funded	OS/CT	N		
W48	Estradiol and hot flashes in DM	Dropped	DM	Y		
W49	Assessing Recurrent Breast Cancer	Dropped	OS/CT	N		
W50	Biomarkers in Minorities	Dropped	OS/CT	Y		
W51	Transfer of AS62-WHISE blood samples to WHI repository	Complete	OS/CT	N		
W52	SHARe data clean-up	Funded	OS/CT	N		
W53	HT CHD Proteomics Coronary Heart Disease Pathogenesis and Postmenopausal Hormones	Seeking Approval	HRT	Y		
W54	CVD Biomarkers for 2010-2015 (SHARe cohort only)	Funded	OS/CT Controls:12008 *SHARe ppts (12,008)	Y	Serum .25ml: CREA; hsCRP; Cholesterol; Glucose; HDL; Insulin; LDL; Trig; Lipid panel, creatinine	
W55	Biomarkers for M13 "Fill in the Gaps"	Seeking Approval	OS/CT	Y		
W56	Validity and reproducibility of RT-PCR assays as a measure of telomere length	Dropped	OS/CT	Y		

Table 11.1 (continued)  
Approved and Proposed Core Studies<sup>1</sup>

Ref #	Title	Status	Study Population	Blood	Analytes/Data	Used in Approved Publications
W57	Proposal to Extend CVD Biomarker Study using HT Proteomics Study	Funded	OS/CT CHD:356 Stroke:348 Controls: 704 *B+Yr 1	Y	Citrate .15ml: B2M  Citrate .15ml: IGFBP-4	
W58	CVD Biomarkers on non-SHARE participants	Funded	OS/CT	Y	Serum .25ml: CREA; hsCRP; Cholesterol; Glucose; HDL; Insulin; LDL; Trig; Lipid panel, creatinine	
W59	Collaborative telomere studies pilot study	Funded	OS/CT	Y	DNA .0625ug: Leukocyte Telomere	
W60	Proteomic Risk Factors for CHD, Stroke, and Breast Cancer	Seeking Approval	OS/CT	Y		
W61	DNA Extraction of Medical Records Cohort Participants	Approved	OS/CT Controls:12000 *~12,000 Med Records Cohort ppts who need to be extracted.	Y		
W62	Full Telomere Project - follow up to W59 Telomere Pilot	Approved	HRT	Y		
W63	GWAS on the 80+ Year Old Women	Approved	OS/CT	Y		
W64	CCC Scanning of Outcome Charts	Seeking Approval	OS/CT	N		
286 <sup>2</sup>	Objective physical activity and cardiovascular health in women aged 80 and older	Approved	CT *6500 E+P women, 2500 E - alone women, 1000 SHARE participants	N		
M3 <sup>2</sup>	NCI Cancer Genetic Markers of Susceptibility (CGEMS) Initiative: Replication Phase	Analysis	OS Breast Cancer:2956 Controls:2956 *Caucasians only.	Y	DNA 4ug: SNPs 30K	874, 906, 907, 908, 1104, 1109
M4 <sup>2</sup>	Whole genome scan for pancreatic cancer risk in the pancreatic cancer cohort consortium (PANSCAN)	Analysis	OS/CT Pancreatic Cancer:283 Controls:283	Y	DNA 4ug: GWAS	875, 930, 931, 932, 933, 934, 936, 1075, 1085, 1201

Table 11.1 (continued)  
Approved and Proposed Core Studies<sup>1</sup>

Ref #	Title	Status	Study Population	Blood	Analytes/Data	Used in Approved Publications
M5 <sup>2</sup>	SHARe (SNP Health Association Resource) GWAS	Analysis	OS/CT Controls:12500 *Blacks, Hispanics who signed Supplemental Consent	Y	DNA 2ug: GWAS	981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 993, 994, 995, 996, 997, 998, 999, 1001, 1002, 1003, 1004, 1006, 1007, 1008, 1009, 1010, 1013, 1014, 1015, 1016, 1018, 1019, 1020, 1022, 1024, 1050, 1082, 1089, 1092, 1108, 1112, 1119, 1144, 1157, 1160, 1167, 1176, 1180, 1199, 1204, 1219, 1256, 1258, 1268, 1286
M6 <sup>2</sup>	PAGE: Population Architecture of Genes and Environment (formally Epidemiologic investigation of putative causal genetic variants: The Women's Health Initiative)	Funded	OS/CT Colorectal Cancer:1436 Endometrial Cancer:1103 CHD:4274 Type 2 Diabetes:4000 Stroke:3455 Ovarian Cancer:703 Lung Cancer:1751 Melanoma - Skin:1102 Lymphoma, Non Hodgkins:843 Breast Cancer - Invasive:1961 Controls:80000 *~20,000 ppts (cases & controls) every year for 4 years (new set of outcomes each year); Yr 01 Outcomes: CVD, Stroke, T2D	Y	DNA 1ug: Metabochip  DNA 2ug: SNPs 96  DNA 2ug: SNPs 384; year 2  DNA 2ug: SNPs 384 ekg  DNA 2ug: AIMS	1072, 1073, 1170, 1171, 1172, 1192, 1193, 1194, 1221, 1235, 1236, 1237, 1238, 1239, 1240, 1241, 1242, 1243, 1244, 1245, 1246, 1247, 1248, 1249, 1250
M13 <sup>2</sup>	HT CVD/Diabetes GWAS of treatment response in randomized clinical trials	Funded	OS/CT CHD:615 Type 2 Diabetes:1184 Stroke:438 VTE:373 Controls:2610	Y	DNA 2ug: Illumina 1M Omni  DNA 2ug: Phase II Validation	

Table 11.1 (continued)  
Approved and Proposed Core Studies<sup>1</sup>

Ref #	Title	Status	Study Population	Blood	Analytes/Data	Used in Approved Publications
M15 <sup>2</sup>	Beyond GWAS: Study of Type 2 Diabetes Genes in Multiethnic Populations.	Seeking Approval	OS/CT Controls:5350	Y	DNA 1ug: Fine Mapping DNA 5ug: TBD	
M21 <sup>2</sup>	WHI Share-CARe minority cohort post-GWAS	Dropped	OS/CT CHD:8515	Y	Citrate .55ml: D-dimers; Fibrinogen DNA 2ug: GWAS EDTA .15ml: LipoSubfract. EDTA .4ml: Apo A1; Apo B; CRP; Cystatin-C RBC .15ml: HGA1c Serum 1.05ml: CREA; Cholesterol; E-Selectin; GGTP; Glucose; HDL; ICAM-1; Insulin; Lp-PLA2; Trig; Vit D 25-OH	
M24 <sup>2</sup>	WHI Sequencing Project (WHISP)	Funded	OS/CT *Phase I: BMI/T2D, Early MI. Phase II: Stroke, Blood Pressure, Deeply Phenotyped Reference Group (DPR)	Y	DNA 5ug: DNA 5ug: Exomic Sequencing; large-scale genetic sequencing DNA 5ug:	

<sup>1</sup> Core studies are conducted using internal WHI Funds included in the Clinical Coordinating Center budget. Studies are developed and monitored by a study-wide Core Resources Working Group. NHLBI conducts additional peer review of proposed uses beyond those specified in the study protocol (certain subsamples) and pilot projects.

<sup>2</sup> Core initiative studies that are not funded through WHI funds (they are externally funded)

**Table 11.2  
Broad Agency Announcement Activities**

BAA	Title	PI	Institution	Used in Approved Publications
1	Ancestry Association Analyses of WHI Traits	Dr. Michael Seldin	University of California, Davis	964, 1158, 1185, 1253
2	High-Dimensional Genotype in Relation to Breast Cancer and WHI Clinical Trial Interventions	Dr. Ross Prentice	Fred Hutchinson Cancer Research Center	846, 1045, 1055, 1070, 1104
3	Genome-wide Association Study to Identify Genetic Components of Hip Fracture	Dr. Rebecca Jackson	Ohio State University Research Foundation	
4	Proteomics and the Health Effects of Postmenopausal Hormone Therapy	Dr. Ross Prentice	Fred Hutchinson Cancer Research Center	843, 921, 1064, 1065
5	Identification and Validation of Circulating Biomarkers for the Early Detection of Breast Cancer in Pre-Clinical Specimens	Dr. Christopher Li	Fred Hutchinson Cancer Research Center	1127
6	Interaction Effects of Genes in the Inflammatory Pathway and Dietary, Supplement, and Medication Exposures on General Cancer Risk	Dr. Jianfeng Xu	Wake Forest University	1068, 1069
7	Endogenous Estradiol and the Effects of Estrogen Therapy on Major Outcomes of WHI	Dr. Steve Cummings	California Pacific Medical Center	1033, 1123, 1140, 1141
8	Predictive Value of Nutrient Biomarkers for CHD Death	Dr. Alice Lichtenstein	Tufts University	1151
9	Biochemical Antecedents of Fracture in Minority Women	Dr. Jane Cauley	University of Pittsburgh	841, 863, 945, 1158
10	Adipokines and Risk of Obesity-Related Diseases	Dr. Gloria Ho	Albert Einstein College of Medicine	893, 894, 922, 1025, 1029, 1061, 1083
11	Physical Activity, Obesity, Inflammation and CHD in a Multi-Ethnic Cohort of Women	Dr. J-Min Lee	Brigham and Women's Hospital	895
12	Hormone Therapy, Estrogen Metabolism and Risk of Breast Cancer or Hip Fracture in the WHI Hormone Trial	Dr. Lewis Kuller	University of Pittsburgh	916, 917
13	Markers of B-cell stimulation as potential predictors of Non-Hodgkins lymphoma	Dr. Anne DeRoos	Fred Hutchinson Cancer Research Center	



Table 11.2 (continued)  
Broad Agency Announcement Activities

14	Inflammation and thrombosis gene pathways and cardiovascular disease	Dr. Alex Reiner	Fred Hutchinson Cancer Research Center	1186, 1215, 1216, 1251, 1252
15	Discovery and confirmation of cancer specific serum protein markers for ovarian cancer early detection	Dr. Martin McIntosh	Fred Hutchinson Cancer Research Center	
16	Identifying biomarkers for pancreatic cancer	Dr. Sunil Hingorani	Fred Hutchinson Cancer Research Center	
17	Proteomics based discovery of blood based biomarkers and risk factors for lung cancer among women smokers and never smokers	Dr. Sam Hanash	Fred Hutchinson Cancer Research Center	
18	Follow-up studies of genetically determined risk factors	Dr. Rebecca Jackson	Ohio State University	
19	Omega-3 fatty acid biomarkers and cognitive decline in WHIMS	Dr. William Harris	Sanford Research/University of South Dakota	1058, 1259, 1260
20	Evaluation of specific markers of rheumatoid arthritis, Inflammation, thrombogenesis and risk of cardiovascular disease and total mortality	Dr. Larry Mooreland	University of Pittsburgh	1078
21	Understanding the role of sex hormones in colorectal cancer	Dr. Marc Gunter	Albert Einstein College of Medicine	
22	Predictive modeling for CVD in a multiethnic cohort in women	Dr. Nancy Cook	Brigham and Women's Hospital and Harvard Medical School	

**Table 11.3**  
**Summary of Ancillary Studies**

Data as of Sept. 30, 2010

Current Status	Number of Studies	Led by WHI Investigator	
		Yes	No
Dropped	143	54	89
Seeking approval	30	1	29
Approved	27	4	23
Funded	32	9	23
Data analysis in progress	43	14	29
Complete	60	25	35
<b>Total</b>	<b>335</b>	<b>107</b>	<b>228</b>

Table 11.4  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
319	Nutritional Genomics Consortium	Anc: Hazra WHI: Neuhouser	No	Approved		OS/CT	N	
318	Is salt a risk factor for osteoporosis? For the WHI	Anc: Carbone WHI: Johnson	No	Approved	07/01/11- 06/30/13	OS	Y	
317	Built environment and cancer	Anc: Allison WHI:	No	Seeking Approval		OS/CT	N	
316	Validation of promising breast cancer early detection biomarkers	Anc: Li WHI: Prentice	No	Seeking Approval	09/01/10- 08/31/15	OS/CT Breast cancer – invasive: 450 Controls: 450	Y	
315	Particulate matter air pollution, DNA methylation, and cardiovascular measures	Anc: Whitel WHI: Van Horn	No	Seeking Approval	07/01/11- 06/30/15	CT 4,300 ppts from 6% CT subsample	Y	
314	Vitamin D, inflammation and depression in older women	Anc: Bertone-Johnson WHI: Manson	No	Seeking Approval	07/01/11- 06/30/16	OS Depression: 1,000 Controls: 1,000	Y	
313	MUC1 and MUC16 antigens, antibodies, and immune complexes as ovarian cancer biomarkers	Anc: Cramer WHI: Manson	No	Seeking Approval	06/01/11- 06/30/16	OS/CT Ovarian cancer: 802 Controls: 802	Y	
312	Adverse pregnancy outcomes and CVD among mothers and their daughters from the Rhode Island WHI	Anc: Parker WHI: Eaton	No	Seeking Approval	01/01/11- 06/30/12	OS	N	
311	Global DNA methylation measured in prospectively collected blood samples and risk of bladder cancer among post-menopausal women	Anc: Bhatti WHI: Anderson	No	Seeking Approval	05/01/11- 05/01/13	OS/CT Cancer of Bladder:504 Controls:1008	Y	
310	Thyroid stimulating hormone and risk of thyroid cancer among post-menopausal women	Anc: Bhatti WHI: Anderson	No	Seeking Approval	05/01/11- 05/01/13	OS/CT Cancer of Thyroid:265 Controls:530	Y	
309	Environmental arsenic exposure, inflammation and osteoporosis in postmenopausal women	Anc: Chen WHI: Thomson	No	Seeking Approval	07/01/11- 06/30/14	OS/CT All 11,000 BDM ppts	Y	
308	Heavy metals and renal cell cancer risk	Anc: Wilson WHI: Wallace	No	Seeking Approval	01/01/11- 12/31/15	OS/CT Renal cell cancer: 361 Controls: 722	Y	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
307	Epigenetic analysis of blood markers in relation to CHD risk	Anc: Krushkal WHI: Johnson	No	Seeking Approval	07/01/11- 06/30/16	CT SHARE CHD: 559 SHARE controls: 1677	Y	
306	Gene Modification of the Alcohol-Breast Cancer Association	Anc: Dorgan WHI: Lasser	No	Approved	04/01/11- 03/31/15	OS Breast Cancer - Invasive:3945 Controls: 3945	Y	
305	A pooled study of relationships between Vit D and retinal diseases of aging among postmenopausal women	Anc: Millen WHI: Wactawski- Wende	No	Seeking Approval	11/01/11- 11/30/13	OS/CT 491 CAREDS 4288 WHISE	Y	
304	Vitamin D status and periodontal disease	Anc: Millen WHI: Wactawski- Wende	No	Funded	05/05/10- 04/30/12	OS/CT	N	
303	Saliva and serum inflammatory biomarkers in periodontitis: A study in older women	Anc: Wactawski- Wende WHI: Wactawski- Wende	Yes	Funded	09/22/09- 08/31/11	OS/CT	N	
302	Sex hormones and ischemic stroke	Anc: Rajpathak WHI: Wassertheil- Smoller	No	Seeking Approval	10/01/10- 09/30/13	OS Stroke:821 Controls:821 *From ASI26	Y	
301	GWAS of NonHodgkins Lymphoma	Anc: Berndt WHI: Jackson	No	Funded	09/15/10- 09/14/11	OS/CT Lymphoma, Non Hodgkins:846	Y	
300	Accuracy of self-reported non-melanoma skin cancer	Anc: Tang WHI: Stefanick	No	Seeking Approval	04/01/10- 04/30/11	OS/CT	N	
299	Plasma phospholipid omega 3 fatty acids and risk of heart failure in post-menopausal women	Anc: Djouisse WHI: Van Horn	No	Seeking Approval	04/01/11- 03/31/16	CT CHF: 700 Controls: 1400	Y	
298	Genes, the environment and breast cancer risk	Anc: Dorgan WHI: Lasser	No	Seeking Approval	12/01/10- 11/30/15	OS/CT Breast cancer - invasive: 5949 Controls: 5949	Y	
297	Associations of estrogens, estrogen metabolites, and androgens with risks of endometrial and ovarian cancers in a prospective case-cohort study	Anc: Brinton WHI: Anderson	No	Funded	06/01/10- 06/30/11	OS Endometrial Cancer:430 Ovarian Cancer:240 Controls:540	Y	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
296	Cohort consortium study of etiology of hepatocellular carcinoma in the United States	Anc: McGlynn WHI: Wactawski-Wende	No	Funded	05/10/10- 05/01/12	OS/CT Cancer of Liver:96 Controls:192 *hepatocellular carcinoma cases	Y	
295	A study to determine obesity-related risk factors of cognitive decline in an older cohort: Follow-up of the cognitive change in women study (CCW)	Anc: Kerwin WHI: Van Horn	No	Approved	03/01/10- 06/05/15	OS/CT	N	
294	Investigation of one-carbon metabolism pathway and lung cancer with the cohort consortium	Anc: Johansson WHI: Prentice	No	Approved	12/01/10- 11/30/14	OS/CT Cancer of Lung:790	Y	
293	Parity, microchimerism, and multiple sclerosis	Anc: Mueller WHI: LaCroix	No	Seeking Approval	08/01/10- 07/31/12	OS MS: 1947 Controls: 6372	Y	
292	Advanced glycation end products and colorectal cancer risk in women	Anc: Jiao WHI: Sangi-Hagpaykar	No	Approved	09/01/10- 09/30/12	OS Colorectal Cancer:425 Controls:791	Y	
291	Abnormal glucose metabolism and hormonal factors in the etiology of head and neck squamous cell carcinoma (HNSCC) in women	Anc: Chen WHI: Prentice	No	Approved	01/01/11- 12/31/12	OS/CT Cancer Unknown Primary:143 Controls:286 *Head and neck squamous cell carcinoma: subjects with cancer of the mouth, palate, tongue or larynx	Y	
290	Urine cadmium levels and risk of invasive breast cancer in the WHI	Anc: Newcomb WHI: LaCroix	No	Approved	12/01/10- 05/31/13	OS/CT Breast Cancer - Invasive:481 Controls:722	Y	
289	Pooling validation studies with recovery biomarkers	Anc: Prentice WHI: Prentice	Yes	Funded	11/01/10- 06/01/12	DM	N	
288	Diet and activity methods study and evaluation of longitudinal (DAMSEL) effects in WHI women	Anc: Prentice WHI: Prentice	Yes	Approved	07/01/10- 06/30/13	DM	N	
287	Metabolic syndrome, lifestyle factors and risk of periodontitis in older women	Anc: Lamonte WHI: Wactawski-Wende	No	Approved		OS	N	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
285	SNP-energy interaction and the risk of breast cancer	Anc: Sun WHI: Vitolins	No	Approved	07/01/10- 06/30/13	OS/CT Breast Cancer:2700 Controls:1000	Y	
284	Obesity-related pathways and risk of benign proliferative breast disease	Anc: Gunter WHI: Smoller	No	Approved	12/01/10- 11/30/12	CT Benign Breast Disease:700 Controls:1400	Y	
283	Association between a LPA gene variant and CHD according to aspirin use in the WHI	Anc: Shiffman WHI: Kuller	No	Seeking Approval	05/01/09- 05/31/10	OS/CT 31,496 ppis	Y	
282	Evaluation of serum markers for use in multi-stage ovarian cancer screening	Anc: Urban WHI: Anderson	No	Funded	08/16/10- 06/30/15	OS/CT Ovarian Cancer:166 Controls:664	Y	
281	Epigenomics of obesity and nutrition in the WHI	Anc: Rajkovic WHI: Rajkovic	Yes	Dropped	09/30/09- 09/29/11	DM	Y	
280	Phenotyping estrogen effects on pericardial fat, coronary calcified plaque, hepatic steatosis, BMD and associated biomarkers in the WHI-CACS substudy	Anc: Carr WHI: Shumaker	No	Dropped	09/01/09- 08/30/11	CT	Y	
279	Vitamin D, serotonin and loss of skeletal muscle mass in relationship to bone strength and bone metabolism in multiethnic older women	Anc: Chen WHI: Thomson	No	Seeking Approval	07/01/10- 06/30/15	OS/CT 1981 BMD	Y	
278	Hemostatic and inflammatory biomarkers as risk factors for hemorrhagic stroke	Anc: Greenland WHI: Van Horn	Yes	Approved	09/30/09- 09/29/11	OS/CT Stroke:537 Controls:1074 *HT-495 (165 hemo.stroke/330 control) OS-1116 (372 hemo. stroke/744 controls)	Y	
277	The role of adiponectin and its receptors in breast cancer risk in the WHI	Anc: Kaktamani WHI: Chlebowski	No	Approved	07/01/10- 06/30/12	OS Breast Cancer:835 Controls:816 *controls from AS129	Y	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
276	Genetic variants of habitual physical activity	Anc: Nguyen WHI: LaCroix	No	Approved	04/01/10- 03/31/14	OS Controls:6000 *8000 cases/controls Caucasians only (4000 highly active cases/4000 sedentary cases)	Y	
275	Urinary levels of melatonin and risk of breast cancer	Anc: Strueger WHI: Ockene	No	Funded	08/01/10- 07/31/12	OS Breast Cancer - Invasive:284 Controls:568	Y	
274	Cellular aging in postmenopausal women with depression	Anc: Simon WHI: Smoller	No	Dropped	09/30/09- 09/30/11	OS Controls:250 *250 cases with depression	Y	
273	Evaluation of angiogenic factors as possible biological markers of breast cancer	Anc: Reeves WHI: Ockene	No	Seeking Approval	04/01/11- 03/31/13	OS Breast Cancer:267 Controls:267	Y	
272	WHI Nutrition and Physical Activity Assessment Study (NPAAS) (Competitive Renewal)	Anc: Prentice WHI: Beresford	Yes	Funded	07/01/10- 04/30/14	OS/CT	N	
271	Omega-3 and omega-6 fatty acids as a biomarker of hip fracture risk	Anc: Jackson WHI: Jackson	Yes	Analysis	08/01/09- 07/31/10	OS/CT Fracture - Hip:400 Controls:400 *half BMD, half non-BMD	Y	
270	Sodium intake and osteoporosis: Findings from the WHI.	Anc: Carbone WHI: Johnson	No	Dropped	04/01/10- 03/31/13	OS Fracture (general):1248 Controls:1248 *the number of samples for AV3 should be reduced by 15%.	Y	
269	An association study of mitochondrial DNA variation and breast cancer risk	Anc: Rohan WHI: Smoller	No	Approved	12/01/10- 11/30/13	OS/CT Breast Cancer:5679 Controls:5679	Y	
268	Hepatic nuclear factor-4 alpha-a potential candidate for lower triglycerides in individuals of African ancestry	Anc: Mackey WHI: Kuller	No	Dropped	01/09/09- 06/30/09	OS CHD:144 Controls:1172 *Same case/controls as AS189	Y	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
267	Genetic variants of habitual physical activity	Anc: Nguyen WHI: LaCroix	No	Dropped	11/01/09- 08/31/13	OS Controls:1000 *500 with physical activity	Y	
266	Serum levels of EGFR-signaling-network activators/inhibitor and risk of lung cancer	Anc: Ho WHI: Smoller	No	Funded	09/01/10- 08/31/13	OS/CT Cancer of Lung:1384 Controls:1601	Y	
265	Urinary levels of endocrine disruptors (bisphenol A and phthalates) and risk of diabetes, CHD, and breast cancer in a case-cohort study	Anc: Ho WHI: Smoller	No	Seeking Approval	07/01/09- 06/30/11	OS Breast Cancer:350 CHD:500 Type 2 Diabetes:490 Controls:1000	Y	
264	Modification of PM-Mediated Arrhythmogenesis in Populations (MOPMAP)	Anc: Whitsel WHI: Heiss	No	Funded	08/01/10- 05/31/13	OS/CT Controls:3000 *5 geographical locations; ppts with ECG readings	Y	1157, 1160, 1199
263	Gene-hormone therapy interaction and the risk of breast cancer	Anc: Sun WHI: Vitolins	No	Approved	07/01/10- 06/30/13	OS/CT Breast Cancer - Invasive:2690 Controls:1800 *583 E+P invasive breast cancer, 307 E-alone Inv. Breast Cancer, 1800 OS Inv. Breast cancer, 1800 OS controls	Y	
262	Women's Health Initiative memory study of younger women (WHIMS-Y)	Anc: Shumaker WHI: Shumaker	Yes	Analysis	10/01/08- 06/30/11	HRT 13 Ppts@2 clinics	N	
261	Genetic variants of serum lipid concentrations in different ethnic groups	Anc: Wang WHI: Smoller	No	Seeking Approval	01/01/09- 12/31/12	OS/CT Controls:3800 *1500 Blacks, 1500 Whites, 800 Hispanics with lipid measurements	Y	
260	Anti-anticyclic citrullinated peptide (anti-CCP) antibody as a test for rheumatoid arthritis (RA)	Anc: Kuller WHI: Kuller	Yes	Dropped	07/01/08- 12/31/08	OS Controls:95 *622 RA cases (245 in AS217)	Y	
259	Telomere length and breast cancer in women	Anc: Liu WHI: Nathan	Yes	Seeking Approval	07/01/08- 06/30/10	OS Breast Cancer:2100 Controls:2100	Y	



Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
258	Genetic variation in Wnt pathway and breast cancer risks	Anc: Agalliu WHI: Smoller	No	Dropped	07/01/10- 06/30/13	OS/CT Breast Cancer - Invasive:3933 Controls:3933 *OS invasive (3933)	Y	
257	Lifestyle factors reducing risk for age-related eye disease	Anc: Mares WHI: Sarto	No	Approved	12/01/10- 11/30/12	OS Eye:361 Controls:1426	Y	
256	Long term effects of hormonal interventions on change in levels of inflammatory markers and adipokines	Anc: Rajpathak WHI: Smoller	No	Seeking Approval	06/01/09- 05/31/10	CT Controls:1024 *From CT 6% blood subsample	Y	
255	Androgens and CHD in women with type 2 diabetes	Anc: Rajpathak WHI: Smoller	No	Seeking Approval	01/01/08- 08/31/10	OS CHD:500 Controls:1000 *CHD cases with diabetes	Y	
254	Telomere and its biochemical and genetic regulators as predictors for clinical diabetes in women	Anc: Liu WHI: Nathan	Yes	Funded	06/01/09- 05/31/11	OS Type 2 Diabetes:1800 Controls:2620	Y	1224
253	Serum selenium and pancreatic cancer risk	Anc: Stolzenberg WHI: LaCroix	No	Dropped		OS/CT Pancreatic Cancer:300 Controls:300	Y	
252	Environmental determinants of cognitive aging in WHIMS	Anc: Chen WHI: Heiss	No	Approved	07/01/08- 06/30/13	HRT	N	
251	Acute cardiovascular events and air pollution	Anc: Wellenius WHI: Eaton	No	Approved	07/01/08- 06/30/11	OS/CT	N	
250	Genetic contributions to cognitive decline in normal and pathological aging in older post-menopausal women and modification by hormone therapy	Anc: Driscoll WHI: Shumaker	No	Analysis	03/01/09- 09/03/10	HRT Controls:7479 *All 7479 WHIMS ppts	Y	
249	Epidemiology of alcohol metabolism genes, alcohol and Women's Health outcomes	Anc: Freiberg WHI: Kuller	No	Approved	05/01/09- 04/30/14	OS/CT Breast Cancer:4500 MI:1900 Stroke:1800 Controls:10942 *CVD: 1117; Alcohol related cancer: 3390	Y	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
248	Hormone therapy, changes in subpopulations of triglyceride-rich lipoproteins and HDL, and development of CHD in women.	Anc: Lamon-Fava WHI: Wassertheil-Smoller	No	Seeking Approval	07/01/08-06/30/12	OS/CT CHD:444 Controls:444	Y	
247	Genetic factors associated with the risk of Parkinson Disease in the multiethnic cohort of the WHI	Anc: Saunders-Pullman WHI: Wassertheil-Smoller	No	Seeking Approval	01/01/08-12/31/10	OS/CT Death - other cause:1376 Controls:450	Y	
246	Prospective study of hormones, autoantibodies and biomarkers and risk of systemic lupus erythematosus in women	Anc: Costenbader WHI: Manson	No	Seeking Approval	07/01/08-06/01/13	OS/CT Death - other cause:547 Controls:1641	Y	
245	Ghrelin, adiposity-derived hormones, and colorectal cancer	Anc: Lin WHI: Manson	No	Seeking Approval	01/01/09-12/31/11	OS Colorectal Cancer:700 Controls:700	Y	
244	Women's Health Initiative memory study epidemiology of cognitive health (WHIMS-ECOH)	Anc: Shumaker WHI: Vitolins	Yes	Approved	10/01/07-12/31/10	HRT	N	
243	Validation of direct measures of physical activity: an ancillary study to the Women's Health Initiative (WHI) Nutrition and Physical Activity Assessment Study (NPAAS; AS218)	Anc: Sternfeld WHI: Caan	No	Analysis	04/15/07-12/31/08	OS	N	
242	DNA repair, telomere length and cutaneous malignant melanoma risk	Anc: Han WHI: Manson	No	Analysis	05/01/08-04/30/11	OS Melanoma - Skin:259 Controls:259 *Malignant melanoma: 264	Y	1163
241	Dietary relationships to inflammatory bowel disease (IBD) in older women	Anc: Tamboli WHI: Wallace	No	Dropped	04/01/07-04/01/08	OS	N	
240	Microalbuminuria and cardiovascular risk in the WHI	Anc: Hsia WHI: Hsia	Yes	Dropped	02/01/07-01/31/08	OS/CT CHD:5500 Controls	Y	
239	Biomarkers related to energy balance and renal cell cancer	Anc: Cho WHI: Manson	No	Dropped	03/01/08-02/28/12	OS/CT Renal Cancer:182 Controls:546	Y	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
238	Biochemical predictors of type 2 DM in women	Anc: Liu WHI: Nathan	Yes	Analysis	03/01/10- 05/31/10	OS Type 2 Diabetes:700 Controls:1400 *minorities only from ASI32	Y	
237	The hypothalamic-pituitary-adrenal (HPA) axis and postmenopausal breast cancer risk	Anc: Dorgan WHI: Lasser	No	Dropped	12/01/09- 11/30/13	OS Breast Cancer:4738 Controls:4738 *Caucasian only	Y	
236	Choline/betaine habitual intake and chronic disease endpoints	Anc: Siega-Riz WHI: Heiss	No	Analysis	10/01/07- 09/01/08	OS/CT	N	
235	Pilot study to explore assoc between task performance on fMRI w/ cog functioning and vascular, genetic & inflam. risk factors in WHISCA ppt characterized by differing body weight & waist-hip ratios	Anc: Kerwin WHI: Kotchen	No	Analysis	11/01/06- 06/30/09	CT	N	
234	Adipokines, inflammation and energy balance in postmenopausal women	Anc: Neuhouser WHI: Prentice	Yes	Dropped	11/01/07- 10/31/10	DM	N	
233	WHIMS (AS39) extension	Anc: Shumaker WHI: Shumaker	Yes	Analysis	12/13/03- 07/31/08	HRT 3074 Ppts@32 clinics	N	
232	Carotenoids and incidence and progression of age-related eye disease in women	Anc: Mares-Perlman WHI: Sarto	No	Dropped	02/01/09- 12/31/09	OS Eye:650 Controls:1250	Y	
231	Relationship between circulating nutrient biomarkers and death from coronary heart disease or myocardial infarct	Anc: Lichtenstein WHI: Van Horn	No	Dropped	09/01/07- 08/31/09	OS CHD:1200 Controls:1200	Y	
230	Markers of inflammation and renal function and the risk of coronary heart disease and mortality in women with diabetes	Anc: Rajpathak WHI: Smoller	No	Dropped	10/20/08- 10/20/10	OS CHD:764 Controls:1736 *764 CHD+500 death cases (382+250 baseline diabetes)	Y	
229	Genome wide, case-control analysis of SNP associations with cardiovascular disease in African American women	Anc: Carlson WHI: LaCroix	No	Dropped	09/20/06- 09/20/09	OS CHD:1825 Controls:1825	Y	
228	Obesity, diet, physical activity and Medicare costs	Anc: Yan WHI: Van Horn	No	Dropped	01/01/07- 12/31/11	OS/CT	N	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
227	Risk factors and biomarkers for Parkinson's disease	Anc: Ascherio WHI: Manson	No	Approved	07/01/10- 06/30/15	OS/CT Controls:1191 *OS and HT Parkinson's disease: 397 cases + 794 controls for DNA; 308 cases + 616 controls for serum	Y	
226	Ambient air pollution and sleep disturbance in postmenopausal women	Anc: Chen WHI: Heiss	No	Funded	09/01/07- 08/31/12	OS/CT	N	884
225	Potential gene-environment interaction on the association between chronic air pollution exposure and incident MI in the WHI OS	Anc: Sullivan WHI: Beresford	No	Dropped		OS	N	
224	GWAS for nonsynonymous SNPs in colon cancer	Anc: Peters WHI: Prentice	No	Funded	07/02/07- 06/30/13	OS/CT Colon cancer:1930 Controls:1930 *Stage I: 700/700 OS Caucasian; Stage II: 330/330 OS non- Caucasians; Stage III: 900/900 CT. Shares controls and genotyping data with BA03 where possible.	Y	962, 1059, 1060, 1131
223	Women's Health Initiative cancer survivor cohort: biological, psychosocial, and behavioral predictors of survival: pilot study	Anc: Paskett WHI: Jackson	Yes	Funded	10/01/05- 09/30/10	OS/CT	N	
222	Developmental research of air pollution as a cause of common cancers	Anc: DeRoos WHI: LaCroix	No	Dropped		OS/CT	N	
221	Dietary modification, calcium/vitamin D supplementation, and change in breast density	Anc: Rohan WHI: Smoller	No	Dropped	04/15/05- 04/14/10	ppts in DM & CaD	N	
220	Neighborhoods, women, and coronary heart disease: a prospective study	Anc: Bird WHI: Margolis	No	Funded	07/01/07- 04/30/11	OS/CT	N	703, 704, 705, 726, 824, 854, 1088, 1096, 1149, 1159
219	Diet and eye health in the WHI: end of trial study: pilot study	Anc: Mares WHI: Sarto	No	Complete	01/01/06- 12/31/06	DM 400 Ppts@Madison	N	577
218	WHI nutrition and physical activity assessment study (NPAAS)	Anc: Prentice WHI: Prentice	Yes	Analysis	07/12/06- 06/30/10	OS	N	1178

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
217	Validation of the self-report of rheumatoid arthritis and systemic lupus erythematosus: The Women's Health Initiative	Anc: Wallitt WHI: Howard	No	Complete	07/01/04- 06/01/06	CT	N	635
216	Decision-making about cancer screening among older women	Anc: Messina WHI: Lane	No	Analysis	07/01/06- 06/30/09	OS/CT 1300 Ppts@Stonybrook	N	
215	UGTs, NSAIDs, and breast cancer risk in the WHI observational study	Anc: Lampe WHI: Prentice	No	Dropped	12/01/05- 11/30/09	OS Breast Cancer:3398 Controls:3398	Y	
214	Prospective cohort collaborative in pancreatic cancer epidemiology and pathogenesis (AS146 extension)	Anc: Fuchs WHI: Manson	No	Funded	09/01/07- 08/31/13	OS Pancreatic Cancer:118 Controls:234	Y	1175, 1182
213	Assays for early detection of cancer	Anc: Hendrix WHI: Hendrix	Yes	Dropped		OS Ovarian Cancer:200 Controls:200	Y	
212	Biochemical antecedents of fracture in minority women (funded as BA09)	Anc: Cauley WHI: Kuller	Yes	Dropped	07/01/07- 06/30/11	OS Fracture (general):1320 Controls:1320	Y	
211	Homocysteine levels, B vitamins and bone health in women	Anc: LeBoff WHI: Manson	No	Dropped	12/01/07- 11/30/10	OS Fracture (general):2500 Controls:2500	Y	
210	The effect of a low fat diet on lipid profiles and adipokines in post-menopausal women: potential modulation by select genetic variants	Anc: Thomson WHI: Bassford	No	Dropped		DM	Y	
209	Red blood cell omega-3 and trans fatty levels and the risk of coronary heart disease death	Anc: Robinson WHI: Wallace	No	Dropped	04/01/06- 03/31/08	OS CHD:800 Controls:800	Y	
208	Pro and anti-inflammatory cytokines and colorectal cancer	Anc: Ho WHI: Smoller	No	Funded	04/25/08- 03/31/11	OS Colorectal Cancer:500 Controls:900 *same cases/controls as AS 129	Y	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
207	IGF and multiple myeloma	Anc: Colditz WHI: Manson	No	Funded	08/01/07- 05/31/11	OS/CT Multiple Myeloma:197 Controls:394 *EDTA: 639 (213 cases/ 426 controls)	Y	1164, 1165
206	Selenium, genetic variation in selenoenzymes and colorectal cancer	Anc: Peters WHI: Prentice	No	Analysis	07/01/06- 06/30/10	OS Colorectal Cancer:805 Controls:805 *Same cases/controls as AS195; controls include 100 Y3 samples	Y	814, 815, 828, 1026
205	Genome-wide scan of cardiovascular disease and breast cancer and combined postmenopausal hormone therapy	Anc: Prentice WHI: Grimm	No	Dropped		OS/CT Breast Cancer	Y	
204	Genetic susceptibility of chronic kidney disease	Anc: Vupputuri WHI: Heiss	No	Dropped		OS Kidney Disease:2278 Controls:6834	Y	
203	Infection of helicobacter pylori, other helicobacter species and the risk of pancreatic cancer among postmenopausal women	Anc: Ye WHI: Margolis	No	Dropped		OS/CT Pancreatic Cancer:310 Controls:620	Y	
202	Insulin/IGF and risk of benign breast disease (BBD): a cohort study	Anc: Rohan WHI: Smoller	No	Dropped		CT Benign Breast Disease:1000 Controls:1700	Y	
201	Effect of hormone therapy on angiotensin II and microalbuminuria among postmenopausal women	Anc: Agarwal WHI: Bonds	Yes o	Dropped		HRT Microalbuminuria:820 Controls:820 *120 samples for blood measurements	Y	
200	Women's Health Initiative cancer survivor cohort: biological, psychosocial, and behavioral predictors of survival	Anc: Paskett WHI: Jackson	No	Dropped		OS	Y	
199	Genetic factors of muscle loss (added to AS191)	Anc: Chen WHI: Bassford	Yes	Funded		OS Sarcopenia:800 Controls:2000 *Combined with AS191	Y	
198	Women's thoughts and feelings about participating in a clinical trial	Anc: Furniss WHI: Lasser	Yes	Dropped		HRT	N	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
197	Validity of self-reported diabetes mellitus in the Women's Health Initiative	Anc: Margolis WHI: Margolis	No	Analysis	07/01/07- 02/28/11	CT 738 Ppts@4 clinics	N	1100, 1217
196	Heart failure evaluation in post-menopausal women: the Women's Health Initiative study	Anc: Klein WHI: Van Horn	No	Analysis	09/30/07- 08/31/10	HRT	N	364, 935
195	Candidate pathways in colorectal carcinogenesis: one-carbon metabolism and inflammation	Anc: Ulrich WHI: Prentice	No	Funded	05/01/08- 01/31/13	OS Colorectal Cancer:988 Controls:988 *Same cases/controls as AS206 where possible	Y	1181, 1226, 1227
194	Genetic epidemiology of hip fracture in WHI & SOF	Anc: Zmuda WHI: Kuller	No	Dropped		OS Fracture - Hip:700 Controls:1400	Y	
193	Immune dysregulation in the pathogenesis of non Hodgkin's lymphoma	Anc: DeRoos WHI: LaCroix	No	Dropped		OS Lymphoma, Non Hodgkins:500 Controls:1000	Y	
192	Estrogen and progesterone-related genes and colorectal cancer risk	Anc: Zhang WHI: Manson	No	Analysis	09/01/06- 07/31/11	OS Colorectal Cancer:644 Controls:1288 *Requests 10% blind duplicates (96 pairs)	Y	1126
191	Biomarkers and genetic factors related to sarcopenia in older women (includes AS199)	Anc: Chen WHI: Bassford	Yes	Funded	09/15/07- 06/30/12	OS Sarcopenia:2800 *2800 for DNA, subset of 1400 for EDTA	Y	
190	Insulin resistance and vitamin D	Anc: Hsia WHI: Hsia	No	Dropped		CaD Insulin Resistance	Y	
189	Biochemical and anthropometric heterogeneity among morbid obese women in the Women's Health Initiative observational study	Anc: Mackey WHI: Kuller	No	Analysis	05/01/06- 04/30/10	OS CHD:144 Controls:1172	Y	698, 699

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
188	Inflammation and the risk of hormonally-linked cancer	Anc: Modugno WHI: Kuller	No	Dropped	07/01/07- 06/30/10	OS Breast Cancer:500 Endometrial Cancer:500 Ovarian Cancer:350 Controls:1250 *Maximize case/control overlap with AS129. Extra 750 breast cancer cases for DNA analyses	Y	
187	Serum fatty acids and incidence of ischemic stroke in women	Anc: He WHI: Van Horn	No	Funded	04/01/08- 03/31/11	OS Stroke:971 Controls:971 *shares cases and controls with AS126	Y	944
186	Plasma fatty acids and risk of non-Hodgkin's lymphoma in the Women's Health Initiative observational study: a nested case-control study	Anc: Chiu WHI: Van Horn	Yes	Dropped		OS Lymphoma, Non Hodgkins:290 Controls:870	Y	
185	An assessment of symptoms and symptom self-management for women abruptly stopping hormone replacement study pills (extension of AS160)	Anc: Ritenbaugh WHI: Ritenbaugh	No	Dropped	03/19/04- 09/30/04	HRT E alone	N	
184	Measures for changes in skeletal muscle mass	Anc: Chen WHI: Bassford	Yes	Dropped		OS/CT	N	
183	Effects of hormone therapy on subclinical neurological pathology: WHIMS-MRI	Anc: Shumaker WHI: Shumaker	No	Funded	07/01/04- 12/31/10	HRT E+P	N	542, 625, 626, 680, 683, 696, 727, 794, 883, 909, 937, 979, 1047, 1058, 1115, 1150, 1214
182	Genetic and epigenetic markers of lung cancer risk in post-menopausal women	Anc: Schlecht WHI: Smoller	Yes	Dropped	04/01/07- 03/30/10	OS Cancer of Lung:720 Controls:1440	Y	
181	Estradiol, cytokines, and bone turnover: effects on hip fracture	Anc: Cauley WHI: Kuller	No	Analysis	07/01/05- 06/30/10	OS Fracture - Hip:400 Controls:400 *same as AS90	Y	634, 681, 714, 861, 878, 910



Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
180	Macrovascular complications of diabetes in postmenopausal women	Anc: Li WHI: Johnson	Yes	Dropped	12/01/05- 11/30/09	OS Type 2 Diabetes:3164	Y	
179	Frailty in WHI: drugs, inflammatory and genetic markers	Anc: LaCroix WHI: LaCroix	No	Analysis	09/15/05- 07/31/10	OS Frailty-disability:900 Controls:900	Y	301, 302, 303, 662, 831
178	Mammographic density and invasive breast cancer	Anc: Pisano WHI: Heiss	No	Analysis	03/12/04- 08/31/08	CT 793 Ppts@34 clinics Breast Cancer	N	640
177	Relative risk differences between FFQs and food records	Anc: Subar WHI: Patterson	No	Complete	09/30/03- 09/30/04	DM	N	
176	Long term breast and colorectal cancer survivors in the OS	Anc: Rahmani WHI: Smoller	No	Dropped		OS	N	
175	Physical function determinants in minority women	Anc: Nicholas WHI: Bassford	No	Funded	12/01/03- 12/01/10	OS	N	
174	Proinflammatory markers and colorectal cancer	Anc: Ho WHI: Smoller	No	Dropped		OS Colorectal Cancer:500 Controls:900	Y	
173	Relationship of biomarkers and genetic markers to risk of congestive heart failure	Anc: Chae WHI: Manson	No	Dropped		OS CHF:656 Controls:1312	Y	
172	Estrogen receptor polymorphisms and cardiovascular effects of HRT	Anc: Herrington WHI: Burke	Yes	Dropped		CT	N	
171	Analysis of heart rate variability from ultra-short records: the WHI study	Anc: Michael WHI: Ritenbaugh	Yes	Complete	01/01/03- 06/01/03	CT	N	
170	WHI nutrition and diabetes study (WHINDS)	Anc: Margolis WHI: Margolis	No	Dropped	01/01/04- 12/31/06	DM	N	
169	Risk factors for hemorrhagic stroke among postmenopausal women	Anc: Kaplan WHI: Smoller	No	Dropped	04/01/06- 07/30/10	OS Stroke:357 Controls:757	Y	
168	Plasma inflammatory markers and colorectal cancer	Anc: Ho WHI: Smoller	Yes	Dropped		OS	Y	
167	Sex hormones, risk factors, and risk of ER+ and ER- breast cancer	Anc: Cummings WHI:	No	Complete	01/01/05- 05/30/08	OS Breast Cancer:311 Controls:592	Y	622
166	Estrogen replacement therapy and autoantibodies	Anc: Mackay WHI: Smoller	No	Dropped		OS	Y	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
165	Subclinical thyroid dysfunction and risk of myocardial infarction and stroke	Anc: Lorenz WHI: Heiss	No	Analysis	09/01/04- 07/31/08	OS CHD:800 Stroke:591 Controls:3136	Y	402, 403
164	The IGF system and coronary heart disease	Anc: Kaplan WHI: Smoller	Yes	Dropped	01/01/06- 12/31/06	OS CHD:350 Controls:350	Y	
163	Hormone use following the WHI E+P trial termination: a pilot study	Anc: Hays WHI: Hays	Yes	Complete	01/01/03- 12/01/04	HRT E+P	N	
162	Interactive telephone strategy to maintain diet change	Anc: Beresford WHI: Beresford	Yes	Dropped	07/01/03- 06/30/08	CT	N	
161	Bone mass response to termination of estrogen + progestin	Anc: Cauley WHI: Kuller	Yes	Analysis	07/10/02- 10/01/02	HRT E+P	N	
160	An assessment of symptoms and symptom self-management for women abruptly stopping hormone replacement study pills	Anc: Valanis WHI: Ritenbaugh	No	Complete	07/01/02- 08/17/02	HRT E+P	N	
159	The insulin-like growth factor (IGF) system and coronary heart disease	Anc: Kaplan WHI: Smoller	Yes	Dropped		OS	Y	
158	Potential mediators of the association of depression with CVD	Anc: Wylie-Rosett WHI: Smoller	Yes	Dropped		OS	Y	
157	Prediction of CHD among postmenopausal women using NMR spectroscopy lipoproteins	Anc: Kuller WHI: Kuller	Yes	Dropped		OS	Y	
156	The effect of domestic violence on health care costs and utilization	Anc: Mouton WHI: Schenken	No	Approved	11/01/02- 09/30/05	OS	N	
155	Carotenoids, transforming growth factors, and breast cancer risk	Anc: Rohan WHI: Smoller	Yes	Dropped		OS Breast Cancer:350 Controls:350	Y	
154	Serum and DNA precursors of colon cancer	Anc: Garland WHI: Langer	Yes	Dropped	09/01/02- 08/30/03	OS Colon cancer:400 Controls:400	Y	
153	Longitudinal changes in hip geometry and skeletal muscle	Anc: Chen WHI: Bassford	No	Analysis	08/15/03- 06/30/10	OS 47 Ppts@Tucson Fracture - Hip	N	340, 456, 487, 489, 547, 566, 569, 633, 658, 687, 690, 691, 712, 888, 960, 964

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
152	Growth factor genes and female breast, colorectal, and endometrial cancers	Anc: Ho WHI: Smoller	No	Analysis	08/01/03- 07/31/08	OS Breast Cancer:900 Colorectal Cancer:500 Endometrial Cancer:300 Controls:900 *Same as AS129	Y	559, 689, 776, 789, 790, 791
151	Behavioral management of urinary incontinence in african-american women	Anc: Ruff WHI: Howard	No	Dropped		OS	N	
150	Effect of airborne particulate matter and other air pollutants on the incidence of cardiovascular events in the Women's Health Initiative observational study	Anc: Kaufman WHI: Anderson	No	Analysis	05/01/02- 05/31/06	OS/CT CHD	N	363, 725, 1159
149	Gene-environment interactions and human breast cancer risk	Anc: Hu WHI: Paskett	No	Dropped	06/01/04- 05/31/06	OS Breast Cancer:800 Controls:800	Y	
148	Relationship between monoclonal hemopoiesis and other molecular abnormalities and the development of leukemia in older women	Anc: Preisler WHI: Black	No	Dropped		OS Leukemia:59 Controls:177	Y	
147	Gene-gene and gene-environment interactions and breast cancer risk	Anc: Eng WHI: Jackson	No	Dropped		OS	Y	
146	A prospective study of pancreatic cancer pathogenesis	Anc: Fuchs WHI: Manson	No	Complete	03/01/03- 12/31/04	OS Pancreatic Cancer:104 Controls:312	Y	482, 483, 484, 576
145	Pancreatic cancer	Anc: Whitcomb WHI: Kuller	No	Dropped		OS	Y	
144	Interactions of polymorphisms in selected genes of thrombogenic & thrombolytic systems with hormone replacement therapy as risk factors for atherothrombotic events in postmenopausal women	Anc: Lju WHI:	No	Dropped		OS	Y	163
143	Treatment of elevated cholesterol among US postmenopausal women	Anc: Kaplan WHI: Smoller	No	Dropped		OS	Y	
142	Thrombosis-related genes in population subgroups narrowly defined by race, ethnicity, and place of birth	Anc: Kaplan WHI: Smoller	No	Dropped		OS	Y	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
141	Periodontal disease and subclinical cardiovascular disease in post-menopausal women	Anc: Dorn WHI: Trevisan	No	Complete	06/01/01- 03/16/05	OS	N	
140	Air pollution and electrocardiographic abnormalities (Environmental Epidemiology of Arrhythmogenesis in WHI)	Anc: Whitsel WHI: Heiss	Yes	Analysis	09/01/03- 05/31/10	CT	N	388, 389, 415, 430, 528, 529, 608, 609, 710, 850, 854, 1159
139	Follow-up of healthy breast cancer survivors in the WHI observational study	Anc: Paskett WHI: Burke	Yes	Complete	02/01/02- 01/31/03	OS	N	
138	The study of tamoxifen, raloxifene, and cognition (Co-STAR)	Anc: Shumaker WHI: Shumaker	Yes	Dropped		HRT	N	
137	Postmenopausal CHD risk: platelet genes and hormone therapy	Anc: Bray WHI: Hays	No	Complete	09/27/03- 08/31/07	OS CHD:1060 Controls:2120	Y	593
136	The natural history of female pelvic organ prolapse	Anc: Handa WHI: Robbins	No	Dropped		HRT	N	
135	Natural history of pelvic organ prolapse in WHI women	Anc: Nygaard WHI: Wallace	No	Complete	02/01/02- 06/30/07	HRT	N	317, 323, 331, 495, 592
134	Serum estrogen hormone metabolites, hormone replacement therapy and the risk of breast cancer	Anc: Modugno WHI: Kuller	No	Complete	07/01/02- 05/31/04	OS Breast Cancer:200 Controls:200	Y	209
133	Biochemical and genetic predictors of incident hypertension in white and black women	Anc: Sesso WHI: Manson	No	Analysis	08/01/04- 07/31/10	OS Hypertension:800 Controls:800	Y	654, 655
132	A prospective study of genetic and biochemical predictors of type 2 diabetes mellitus	Anc: Liu WHI: Manson	No	Analysis	08/01/02- 07/31/10	OS Type 2 Diabetes:1800 Controls:2500	Y	369, 376, 486, 550, 554, 555, 572, 573, 582, 594, 660, 664, 668, 688, 709, 719, 1050, 1148
131	Sex steroid hormones, inflammatory cytokines and the risk of rheumatoid arthritis: a nested case control study	Anc: Shadick WHI: Manson	No	Dropped		OS	Y	
130	Randomized controlled trial of fat reduction, calcium/Vitamin D supplementation, hormone replacement therapy, and risk of proliferative forms of benign breast disease	Anc: Rohan WHI: Smoller	No	Complete	07/01/01- 07/31/08	CT 3901 Ppts@49 clinics Benign Breast Disease	N	508, 509, 544, 584, 585, 586, 587

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
129	Association of diabetes and insulin-like growth factor-1 (IGF-I) with risks of colorectal, breast, and endometrial cancer	Anc: Strickler WHI: Smoller	No	Analysis	01/15/02- 04/30/11	OS Breast Cancer:900 Colorectal Cancer:500 Endometrial Cancer:300 Controls:900 *same as AS152	Y	459, 460, 461, 959, 1061
128	Mismatch repair gene associated malignancies in women	Anc: Weber WHI: Smoller	No	Dropped	04/01/04- 03/31/08	OS Colorectal Cancer:1025 Endometrial Cancer:710 Ovarian Cancer:405 Controls:1000 *sharing ovarian cases with AS97	Y	
127	CHD risk perception study	Anc: Barnhart WHI: Smoller	Yes	Analysis	05/15/02- 04/30/07	OS	N	659
126	Stroke risk factors and molecular markers in postmenopausal women	Anc: Smoller WHI: Smoller	No	Analysis	08/01/03- 07/31/06	OS Stroke:972 Controls:972	Y	601, 602, 603, 604, 672, 679, 829, 869, 872, 1061
125	Osteoporosis in caribbean hispanic women	Anc: Cohen WHI: Smoller	No	Dropped		OS/CT	N	
124	Sociocultural influences on motivation for and maintenance of health-related dietary change among women	Anc: Namie WHI: Langer	No	Complete	06/01/00- 12/01/00	DM	N	
123	Genetic and ethnic determinants of nicotine addiction in postmenopausal women	Anc: David WHI: Assaf	No	Dropped		OS/CT	N	
122	Feasibility study of computerized tailored dietary feedback	Anc: Glanz WHI: Curb	No	Complete	03/10/00- 09/01/00	DM	N	
121	Hyperinsulinemia and ovarian cancer	Anc: Modugno WHI: Kuller	No	Complete	09/01/02- 08/31/04	OS Ovarian Cancer:225 Controls:225 *originally a subset of AS97	Y	
120	Epidemiology of cervical and lumbar stenosis	Anc: Vogt WHI: Kuller	Yes	Dropped		OS	N	
119	The longevity consortium	Anc: Langer WHI: Langer	No	Dropped		OS/CT	N	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
118	Accuracy of food portion estimation among postmenopausal women	Anc: Coy WHI: Hubble	No	Complete	12/01/99- 04/01/00	DM	N	312
117	Risk factors for dry eye syndrome in postmenopausal women	Anc: Nichols WHI: Jackson	Yes	Analysis	02/01/01- 04/30/12	OS 217 Ppts@Columbus	N	
116	National validation and quality assurance of vitamin D absorption from CaD tablets	Anc: Garland WHI: Langer	Yes	Dropped		CaD	N	
115	Diabetes in postmenopausal women	Anc: Howard WHI: Howard	Yes	Dropped		OS/CT Type 2 Diabetes	N	
114	Effects of hormone replacement therapy on cardiac function and ischemia	Anc: Haan WHI: Robbins	No	Dropped		HRT	N	
113	Some aspects of mediterranean diet in relation to risk of chronic diseases among postmenopausal women	Anc: Hakim WHI: Bassford	Yes	Complete	08/01/99- 07/31/02	OS	N	
112	Motivators and barriers to exercise in older women	Anc: Haan WHI:	Yes	Dropped		OS	N	
111	Glycemic index/glycemic load and blood lipids in the WHI	Anc: Shikany WHI: Lewis	No	Complete	07/01/03- 06/30/05	OS/CT	N	172, 385, 463, 574
110	Sex steroid hormones and risk of coronary heart disease: a nested case control study	Anc: Rexrode WHI: Manson	Yes	Analysis	09/01/00- 07/31/05	OS CHD:385 Controls:385 *79 matched cases-controls and 92 cases (but not controls) overlap with AS83.	Y	159, 266, 305
109	Proteomics initiative	Anc: Hsia WHI: Hsia	No	Dropped	10/01/02- 09/30/05	HRT CHD:100 Controls:100	Y	
108	Gene-environment effects and colorectal cancer	Anc: Lin WHI: Chlebowski	No	Complete	04/01/03- 07/31/07	OS Colorectal Cancer:50 Controls:150	Y	507
107	Hashimoto's thyroiditis in postmenopausal women	Anc: Zakarja WHI: O'Sullivan	No	Dropped	12/01/02- 11/30/05	OS Controls:2900	Y	
106	Gene-diet interactions in human breast cancer risk	Anc: Hu WHI: Paskett	No	Dropped		OS/CT	N	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
105	Carotenoids in age-related eye disease study (also see M1)	Anc: Mares-Perlman WHI: Sarto	No	Complete	06/01/00- 08/31/10	OS 2007 Ppts@4 clinics Eye:1000 Controls:1000	Y	307, 308, 371, 444, 452, 835, 903, 904, 915, 950
104	Tamoxifen prevention: Is it acceptable to women at risk?	Anc: Melnikow WHI: Robbins	Yes	Complete	07/01/99- 06/30/02	OS	N	
103	Effects of hormone replacement therapy on cognitive aging: Women's Health Initiative study of cognitive aging (WHISCA)	Anc: Shumaker WHI: Shumaker	Yes	Analysis	04/01/99- 06/30/10	HRT 2266 Ppts@15 clinics	N	216, 237, 325, 579, 598, 695, 899, 914, 980, 1038, 1121
102	Quality of life improvements and willingness to pay: an investigation of selective estrogen receptor modulators	Anc: Fouad WHI: Oberman	Yes	Complete	09/01/98- 10/01/98	OS	N	
101	Women's Health oral history project	Anc: Allen WHI: Allen	Yes	Dropped			N	
100	Genetic, biochemical and behavioral determinants of obesity	Anc: Hays WHI: Hays	Yes	Complete	01/01/99- 04/30/04	OS 797 Ppts@3 clinics	N	
99	Genetics of non-insulin dependent diabetes (GENNID)	Anc: Chlebowski WHI: Chlebowski	Yes	Complete	12/01/98- 03/31/00	OS/CT	N	
98	Bone mineral density as a predictor for periodontitis	Anc: Wactawski- Wende WHI: Trevisan	Yes	Analysis	04/01/02- 03/30/07	OS 969 Ppts@Buffalo	N	271, 326, 527, 632, 652, 813, 928, 1162
97	Modeling serum markers for cost-effective ovarian cancer screening	Anc: Anderson WHI: Anderson	No	Analysis	09/30/01- 06/30/09	OS Ovarian Cancer:280 Controls:558	Y	381
96	Longitudinal insulin sensitivity and postmenopausal HRT	Anc: Cottrell WHI:	Yes	Dropped		OS/CT	N	
95	Work organization, psychological distress, and health among minority older women	Anc: Rodriguez WHI: Curb	Yes	Complete	12/01/97- 12/01/97	OS	N	
94	The effect of lowfat dietary modification on markers of bone turnover and bone mineral density	Anc: Jackson WHI: Jackson	Yes	Dropped		OS/CT	N	
93	The epidemiology of venous disease	Anc: Criqui WHI: Langer	Yes	Complete	03/11/98- 06/30/99	OS	N	
92	Fasting glucose in baseline plasma from all CT participants	Anc: Howard WHI: Howard	No	Dropped		CT	N	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
91	Alterations in calcium and calcitropic hormone levels in 4 ethnic groups in response to CaD supplementation: possible effect modulation by VDR phenotype	Anc: Lester WHI:	Yes	Dropped		CT	N	
90	WHI sex hormone and genetic risk factors for hip fracture	Anc: Cummings WHI:	Yes	Analysis	04/01/03- 03/31/07	OS Fracture - Hip:400 Controls:400 *same as AS181	Y	479, 480, 481, 543, 563
89	Effect of HRT on plasma homocysteine concentration	Anc: Manson WHI: Manson	Yes	Dropped		HRT	N	
88	Cholesterol distribution in lipoprotein particles in WHI DM intervention participants consuming a low-fat dietary pattern compared to comparison participants consuming their usual fat intake	Anc: Tinker WHI: Grimm	No	Dropped		DM	N	
87	The effect of dietary change on blood flavonoid and F2-isoprostane levels	Anc: Simon WHI: Hendrix	No	Dropped		DM	N	
86	A pilot study to determine the sensitivity of form 39 to impaired executive control function (ECF) as measured by the CLOX: an executive clock-drawing task	Anc: Polk WHI: Schenken	No	Complete		HRT	N	
85	Brain imaging with fluorometatyrosine in post-menopausal women on or off hormonal replacement therapy - implications for schizophrenia	Anc: Nordahl WHI:	Yes	Dropped			N	
84	Cognitive change in women	Anc: Dunn WHI: Van Horn	No	Analysis	09/01/01- 02/28/10	OS/CT 546 Ppis@2 clinics	N	421, 600, 616, 621, 940
83	Thrombotic, inflammatory and genetic markers for coronary heart disease in postmenopausal women: a WHI umbrella study	Anc: Ridker WHI: Manson	Yes	Complete	09/01/99- 08/31/03	OS CHD:650 Controls:650	Y	127, 128, 129
82	Extension of bone mineral density assessment in WHI Native American women	Anc: Chen WHI: Ritenbaugh	No	Complete	07/01/97- 06/30/01	OS	N	
81	Androgenic hair growth in postmenopausal women	Anc: Freeman WHI: Smoller	Yes	Dropped		OS	N	



Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
80	Combine effect of HRT and heritable prothrombotic mutations on the risk of deep venous thrombosis (DVT) and pulmonary embolus (PE)	Anc: Psaty WHI:	Yes	Dropped		HRT	N	
79	How a low fat diet is related to adiposity and body fat distribution: cross-sectional and longitudinal evaluation	Anc: Wylie-Rosett WHI: Smoller	Yes	Dropped		OS/CT	N	
78	Community strategy to retain women enrolled in research	Anc: Fouad WHI: Oberman	No	Complete	07/01/97- 09/30/97	CT	N	
77	HRT decision project	Anc: Kerner WHI: Langer	Yes	Dropped		OS/CT	N	
76	Tailored messages to enhance adherence of older women to dietary programs for breast cancer control	Anc: Chlebowski WHI: Chlebowski	Yes	Complete	09/01/97- 08/13/98	DM	N	
75	Adherence to dietary modification in the WHI	Anc: Rosal WHI: Ockene	No	Analysis	09/01/97- 08/30/02	DM	N	126, 267
74	The effectiveness of individual versus group behavioral strategies to increase participants adherence	Anc: Wodarski WHI: Trevisan	Yes	Complete	07/01/97- 09/30/97	DM	N	
73	Psychosocial and cultural determinants of NIDDM in Latinas	Anc: Ritenbaugh WHI: Langer	Yes	Complete	05/01/97- 04/30/98	OS	N	
72	Ethnicity, body composition, bone density and breast cancer	Anc: Chen WHI: Ritenbaugh	No	Dropped	09/01/97- 08/30/02	OS	N	
71	Assessing stages of change in postmenopausal women enrolled in the dietary modification arm of the WHI	Anc: Brewer WHI: Applegate	Yes	Dropped		DM	N	
70	The prevalence and prognostic importance of myocardial ischemia during daily life, and its relationship to migraine status: WHI	Anc: Sheps WHI: Heiss	Yes	Complete	09/01/97- 08/31/00	OS	N	171, 183, 716
69	Birth place and CVD risk in women	Anc: Wylie-Rosett WHI: Smoller	Yes	Dropped		OS/CT	N	
68	Coronary artery calcification detected with ultrafast CT as an indication of CAD in OS participants	Anc: Hsia WHI: Hsia	No	Complete	01/01/97- 12/31/05	OS 735 Ppts@2 clinics	N	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
67	Prevalence and natural history of autoimmune thyroid disease in postmenopausal women	Anc: Zakarija WHI: O'Sullivan	No	Dropped	03/31/97- 02/28/10	OS	N	
66	Quantitative, patient-specific serially comparable (QPS) mammography	Anc: Morrisett WHI: Foreyt	No	Dropped		OS/CT	N	
65	Benign breast disease	Anc: Rohan WHI:	Yes	Complete	07/01/98- 08/30/00	DM 101 Ppts@12 clinics	N	
64	Examine mammography sensitivity in WHI women	Anc: Foreyt WHI: Foreyt	No	Dropped		CT	N	
63	Development and evaluation of eating style index	Anc: Haines WHI: Heiss	Yes	Complete	10/01/96- 06/30/99	OS	N	
62	Prevention of age-related maculopathy in the WHI HRT CT: WHI-SE	Anc: Haan WHI: Robbins	No	Analysis	01/01/99- 01/01/07	HRT 4430 Ppts@21 clinics	N	250, 251, 253, 476, 819, 1150
61	Longitudinal assessment of memory functioning in the WHI clinical trial	Anc: Ober WHI: Robbins	Yes	Analysis	09/01/96- 08/31/09	HRT	N	
60	Fat intake in husbands of WHI dietary arm participants	Anc: Shikany WHI: Oberman	No	Complete	12/01/96- 12/01/96	DM	N	
59	Prevalence and natural history of autoimmune thyroid disease (AITD) in postmenopausal women	Anc: Zakarija WHI: Greenland	No	Dropped		OS/CT	N	
58	Enrollment of hispanic women in prevention trials	Anc: Trapido WHI: Baum	Yes	Dropped		OS/CT	N	
57	Hispanic women's advocacy and retention strategies	Anc: Ritenbaugh WHI: Ritenbaugh	No	Complete	09/01/96- 08/31/98	OS	N	
56	Behavioral and psychosocial predictors of dietary change in postmenopausal women	Anc: Pleuss WHI: Burke	Yes	Complete	09/01/96- 08/31/98	DM	N	
55	Predictors of participation among latin@s in clinical trials	Anc: Talavera WHI:	Yes	Dropped		OS/CT	N	
54	Women and minority recruitment / retention: a community-based intervention	Anc: Fouad WHI: Oberman	No	Dropped		DM	N	
53	A prospective study of diet and hormones in the development of prostate cancer	Anc: Kabat WHI: Smoller	Yes	Dropped		OS/CT	N	
52	Genetic polymorphisms in the hormonal etiology of breast cancer	Anc: McTiernan WHI:	No	Dropped		OS Breast Cancer	N	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
51	Cross-sectional and longitudinal evaluation of bone quality	Anc: LeBlanc WHI: Foreyt	Yes	Dropped		OS/CT	N	
50	Nutrition practice guidelines for maintaining low-fat dietary change in postmenopausal women	Anc: Burrows WHI: Grimm	Yes	Complete	10/01/96- 09/30/97	DM	N	
49	Applying creative self-monitoring in the WHI	Anc: Rahmani WHI: Rahmani	Yes	Dropped		DM	N	
48	Prostate cancer survey of spouses of WHI screened women	Anc: Smoller WHI: Smoller	Yes	Complete	02/01/96- 06/30/96	OS/CT	N	
47	Effect of diet intervention on motivation to make other health-related changes	Anc: WHI: Langer	Yes	Complete	05/01/96- 04/30/97	DM	N	
46	Prostate and colorectal cancer in WHI dietary arm husbands	Anc: Oberman WHI: Oberman	Yes	Dropped		DM	N	
45	Response set biases in dietary self-report in the WHI DM	Anc: Herbert WHI:	No	Dropped		DM	N	
44	Estrogen and vaginal pH	Anc: Schaeffer WHI: Greenland	No	Dropped		HRT	N	
43	Decrease of bone mass in older women	Anc: Goodman WHI: Judd	Yes	Dropped		CT	N	
42	Impact of insurance status on health outcomes and health services utilization in the WHI	Anc: Hsia WHI: Miller	No	Dropped	11/01/96- 10/31/99	OS	N	
41	Metabolism of lipoprotein and HRT	Anc: Morrisett WHI: Foreyt	Yes	Dropped		OS	N	
40	Ethnic and age differences in use of mammography	Anc: Smoller WHI: Smoller	Yes	Complete		OS	N	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
39	The effects of HRT on the development and progression of dementia (WHIMS)	Anc: Shumaker WHI: Shumaker	No	Complete	06/01/96- 05/31/05	HRT 7528 Ppts@48 clinics	N	60, 138, 173, 225, 226, 274, 276, 332, 336, 360, 370, 390, 397, 399, 427, 546, 558, 595, 597, 612, 639, 665, 670, 683, 727, 750, 881, 883, 884, 919, 938, 1038, 1042, 1053, 1095, 1121, 1150, 1156, 1214
38	Hemostatic/thrombotic and genetic markers for coronary disease in postmenopausal women	Anc: Ridker WHI: Manson	Yes	Dropped		OS	Y	
37	Lipid markers of atherosclerotic disease in post menopausal women	Anc: Manson WHI: Manson	Yes	Dropped		OS	Y	
36	HRT and changes in mammographic density	Anc: Hulka WHI: Heiss	No	Complete	01/31/98- 12/31/02	HRT 857 Ppts@19 clinics Breast Cancer	N	285, 358, 694
35	Risk factors for fatigue in women ages 50 to 75	Anc: Hartz WHI: Kotchen	No	Dropped		CT	N	
34	Ethnic differences in hip bone geometry by DXA and QCT	Anc: Nelson WHI: Hendrix	No	Complete	12/01/96- 12/31/02	HRT 311 Ppts@Detroit	N	
33	The association of HRT with abdominal and total body fat in postmenopausal women	Anc: Mayo WHI: Oberman	No	Complete	07/31/95- 03/31/96	OS	N	
32	Recruitment techniques in getting minority women to participate in breast cancer clinical trials	Anc: Boe WHI: Langer	No	Dropped		OS/CT	N	
31	Eye care use	Anc: Kleinstein WHI: Oberman	No	Complete		OS	N	
30	The role of endocrine factors in the etiology of lung cancer in women	Anc: Kabat WHI: Smoller	No	Dropped		OS	N	
29	HRT and cardiovascular biomarkers related to oxidation status and platelet function	Anc: Gaziano WHI: Manson	Yes	Dropped		HRT	N	
28	Perspectives on aging	Anc: Smoller WHI: Smoller	Yes	Dropped		OS/CT	N	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Mis #(s)
27	Vitamin D, calcium, and breast cancer	Anc: Hulka WHI: Sheps	No	Dropped		OS/CT	Y	
26	HRT and knee/hip osteoarthritis	Anc: Cerhan WHI: Wallace	No	Dropped		HRT	N	
25	Ankle-arm blood pressure index measurement	Anc: Masaki WHI: Curb	No	Complete	02/01/96- 01/01/98	OS	N	
24	Cross-ethnic comparisons of skeletal health of postmenopausal women in San Diego county	Anc: Schneider WHI: Langer	No	Complete	01/03/95- 01/02/97	OS	N	
23	Non-steroidal anti-inflammatory drugs and cancers of the breast and colon	Anc: Harris WHI: Jackson	No	Dropped		OS/CT	N	
22	Vascular compliance as a predictor of cardiovascular disease in postmenopausal women	Anc: Robinson WHI: Grimm	No	Dropped		CT	N	
21	Effect of DM, HRT and CaD admin on progression of coronary atherosclerosis assessed by EBCT	Anc: Detrano WHI: Chlebowski	No	Dropped		CT	N	
20	Coronary screening of postmenopausal women using EBCT	Anc: Detrano WHI: Chlebowski	No	Dropped		OS	N	
19	Coagulation proteins, antidiolipin antibodies and stroke in women	Anc: Orenca WHI: Greenland	No	Dropped		OS/CT	N	
18	WHT:FSMP DM follow-up	Anc: Grizzle WHI:	Yes	Dropped		DM	N	
17	Domestic violence in older women	Anc: Mouton WHI: Lasser	No	Complete	10/25/94- 10/24/96	OS	N	
16	Lower extremity atherosclerotic disease	Anc: McDermott WHI: Greenland	Yes	Dropped		OS	N	
15	The relationship between osteopenia and periodontitis	Anc: Wactawski-Wende WHI: Trevisan	No	Complete	09/16/96- 09/15/01	OS 1468 Ppts@Buffalo	N	553
14	High density lipoprotein metabolism	Anc: Going WHI: Moon	No	Complete	07/01/94- 06/30/96	OS	N	
13	Prevalence and correlates of lumbar spinal stenosis	Anc: Vogt WHI: Kuller	Yes	Complete		CT	N	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
12	Empowerment/nutritional counseling	Anc: Mouton WHI: Lasser	Yes	Dropped		DM	N	
11	Validation and exploration of sleep and mood predictors	Anc: Kripke WHI: Langer	No	Complete	08/01/95- 07/31/99	OS	N	43, 749, 1113, 1205, 1206, 1207, 1208, 1209, 1210
10	Urinary estrogen metabolites and breast cancer risk	Anc: Meilahn WHI: Kuller	No	Dropped		DM	N	
9	Oral bone loss	Anc: Jeffcoat WHI: Lewis	Yes	Complete	05/29/95- 11/30/04	OS 450 Ppts@Birmingham	N	72
8	Partner's health study	Anc: Langer WHI: Langer	Yes	Dropped			N	
7	Effect of HRT on cardiovascular morbidity and mortality in postmenopausal women with a low ankle/arm BPI	Anc: Kuller WHI: Kuller	No	Dropped		HRT	N	
6	Incidence and impact of arthritis in older women	Anc: Hughes WHI: Greenland	No	Dropped		OS/CT	N	
5	Explanations for the development of fat distaste	Anc: Green WHI: Bowen	Yes	Complete	04/01/95- 09/30/96	DM	N	
4	Dietary modification and prostate cancer in WHI husbands	Anc: Shikany WHI: Oberman	No	Dropped		DM	N	
3	PLCO offer to WHI-partners (PLCO-Partners)	Anc: Weissfeld WHI: Kuller	No	Dropped		OS/CT	N	
2	Prostate, lung, colorectal, and ovarian cancer screening trial (PLCO-OS)	Anc: Weissfeld WHI: Kuller	No	Dropped		OS/CT	N	
1	Arterial disease atherosclerosis prevention trial (ADAPT)	Anc: Crouse WHI: Burke	No	Dropped		DM	N	
M26	Screen for rare alleles by deep resequencing of colorectal cancer cases	Anc: Peters WHI: Kooperberg	No	Seeking Approval	09/01/09- 08/31/11	OS/CT	Y	
M25	GWAS of chronic periodontitis	Anc: Wactawski-Wende WHI: Wactawski-Wende	Yes	Funded	09/30/09- 09/29/11	OS	N	
M23	A prospective study of telomere length in lung cancer	Anc: Han WHI: Manson	No	Approved	04/01/11- 03/31/16	OS Cancer of Lung:980 Controls:980	Y	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
M20	A collaborative GWAS of breast cancer outcomes	Anc: Caan WHI: Caan	Yes	Approved	07/01/11- 06/30/15	OS/CT Breast Cancer - Invasive:911 Controls:1223	Y	
M18	Breast cancer post GWAS	Anc: Hunter WHI: Prentice	No	Funded		OS/CT Breast Cancer:4500 Controls:4500	Y	
M17	Urine BPA -FDA Study	Anc: WHI:	No	Dropped		OS/CT	Y	
M16	Stroke GWAS	Anc: Smoller WHI: Smoller	Yes	Funded	07/01/10- 06/30/14	OS/CT Stroke:680 Controls:680 *680 cases and 680 control - stroke cases from ASI26 that signed the supplemental consent (dbGAP)	Y	
M14	Cohort-based GWAS of Glioma	Anc: Rajaraman WHI: Thomson	No	Approved	08/01/10- 10/30/11	OS/CT Cancer of Brain:192 Controls:192 *Glioma	Y	
M12	Use of Urinary Sugars Biomarker to Assess Measurement Error Structure of Self Reported Intake in NPAAS	Anc: Tasevska WHI: Prentice	No	Funded	06/21/10- 03/31/11	DM Controls:450 *450 NPAAS pts	Y	
M11	NCI - Upper GI cancer GWAS and telomere length evaluation	Anc: Taylor WHI: Anderson	No	Funded	08/01/09- 07/31/10	OS/CT Cancer of Stomach:119 Controls:238	Y	
M10	NCI GWAS in upper gastrointestinal (UGI) cancers	Anc: Taylor WHI: Jackson	No	Dropped		OS/CT Cancer of Esophagus:80 Cancer of Stomach:119 Controls:199	Y	
M9	NCI GWAS in renal cell carcinoma (RCC): expansion of a primary scan	Anc: Purdie WHI: Kuller	No	Funded	09/15/09- 09/14/10	OS/CT Cancer of Kidney:299 Controls:299 *Non-Hispanic caucasians - ALL. Non dbGaP pts will only go for Taqman. Rest for GWAS	Y	

Table 11.4 (continued)  
All Ancillary Studies

AS #	Title	PIs	WHI Investigator	Status	Study dates	Case controls	Blood study	Ms #(s)
M8	NCI GWAS in bladder cancer	Anc: Chanock WHI: Rajkovic	No	Funded	09/15/09- 12/31/10	OS/CT Cancer of Bladder:427 Controls:427 *ALL non-hispanic Caucasians; Non-dbGaP cases only for Taqman, with rest for GWAS	Y	
M7	Caucasian GWAS	Anc: WHI:	No	Dropped		OS/CT	Y	
M2	Anemia and its relationship with sarcopenia, physical function and mortality (Paper)	Anc: Chen WHI:	No	Analysis	05/15/07- 02/28/10	OS/CT	N	562, 836, 868
M1	Diet and lifestyle factors reducing risk for age-related eye disease (AS105 extension)	Anc: Mares WHI: Sarto	No	Analysis	09/01/07- 08/31/09	OS	N	

\*Number of Field Centers includes number of satellite sites.



**Table 11.5**  
**Recruitment to Ancillary Studies Requiring Separate Consents by Field Centers**  
 Data as of Sept. 17, 2010

	9	15	34	36	39	62	65	68	84	98	100	103	105	117
	Oral Bone Loss	The Relationship Between Osteopenia and Periodontitis	Ethnic Differences in Hip Bone Geometry by DXA and QCT	HRT and Changes in Mammographic Density	The Effects of HRT on the Development and Progression of Dementia (WHIMS)	Prevention of Age-Related Maculopathy in the WHI HRT CT: WHI-SE	Benign Breast Disease	Coronary Artery Calcification Detected with Ultrafast CT as an Indication of CAD in OS	Estrogen, Vitamin E and Cognitive Change in Women	Bone Mineral Density as a Predictor for Periodontitis	Genetic, Biochemical and Behav Determinants of Obesity	Effects of HRT on Cognitive Aging: WHI Study of Cognitive Aging (WHISCA)	Carotenoids in Age-Related Eye Disease Study	Risk Factors for Dry Eye Syndrome in Postmenopausal Women
<b>Total</b>	450	1468	311	857	7528	4430	101	735	546	969	797	2266	2007	217

**Table 11.5 (continued)**  
**Recruitment to Ancillary Studies Requiring Separate Consents by Field Centers**  
 Data as of Sept. 17, 2010

	130	153	178	197	216	218	219	233	262	W25	W30	W47	Total
	Randomized Controlled Trial of Fat Reduction, Calcium/Vitamin D Supplementation, HRT, and Risk of Proliferative Forms of Benign Breast Disease	Longitudinal Changes in Hip Geometry and Skeletal Muscle	Mammographic Density and Invasive Breast Cancer	Validity of self-reported diabetes mellitus in the WHI	Decision-making About Cancer Screening Among Older Women	WHI Nutrition and Physical Activity Assessment Study (NPAAS)	Diet and Eye Health in the WHI: End of Trial Study	WHIMS Extension	Memory Study of Younger Women (WHIMS-Y)	WHI Coronary Artery Calcification Study in E-Along	Dietary Assessment Study	Breast Tumor Tissue Pilot	
<b>Total</b>	<b>3901</b>	<b>47</b>	<b>793</b>	<b>738</b>	<b>1300</b>	<b>450</b>	<b>400</b>	<b>2880</b>	<b>1008</b>	<b>1141</b>	<b>134</b>	<b>294</b>	<b>35768</b>

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**Table 11.6**  
**Participant Enrollment in WHI Ancillary Studies**  
**Requiring Separate Consents**

Data as of Sept. 17, 2010

<b>CT+OS</b>			
	<b>Ppts</b>	<b>%</b>	
CT+OS	161808		
Not Enrolled in Ancillary Studies	137311	84.86	
Enrolled in Ancillary Studies	24497	15.14	
<b>Number of Studies</b>	<b>Ppts</b>	<b>%</b>	<b>Enrollments</b>
1	17628	10.89	17628
2	4456	2.75	8912
3	1785	1.10	5355
4	554	0.34	2216
5	71	0.04	355
6	3	0.00	18
<b>Total</b>	<b>24497</b>	<b>15.14</b>	<b>34484</b>

<b>Extension</b>			
	<b>Ppts</b>	<b>%</b>	
Consented to Extension	115407		
Not Enrolled in Ancillary Studies	95126	82.43	
Enrolled in Ancillary Studies	20281	17.57	
<b>Number of Studies</b>	<b>Ppts</b>	<b>%</b>	<b>Enrollments</b>
1	14123	12.24	14123
2	3859	3.34	7718
3	1679	1.45	5037
4	547	0.47	2188
5	70	0.06	350
6	3	0.00	18
<b>Total</b>	<b>20281</b>	<b>17.57</b>	<b>29434</b>

**Table 11.7**  
**Funded BAA and Ancillary Studies PI List**

Last Name	First Name	WHI Investigator	PI for Study #	Sponsoring WHI PI for Study #	Supporting CCC PI for Study #
Anderson	Garnet	Yes	97	97, 150, 282, 297, M11	97, 121, 129, 140, 150, 282, 297, BA6, BA11, BA15, BA21, M8, M9, M11
Barnhart	Janice	No	127		
Bassford	Tamsen	Former		113, 153, 175, 191, 199,	
Beresford	Shirley	Yes		272	
Berndt	Sonja	No	301		
Bird	Cloe	No	220		
Bowen	Deborah	Former		5	39
Bray	Paul	Yes	137		
Brinton	Louise	No	297		
Burke	Greg	Former		56, 139	
Burrows	Beth	Yes	50		
Caan	Bette	Yes		243	
Cauley	Jane	Yes	161, 181, BA9		
Chanock	Stephen	No	M3, M4, M8		
Chen	Jiu-Chiuan	No	226		
Chen	Zhao	Yes	82, 153, 191, 199, M2		
Chlebowski	Rowan	Yes	99, 76	76, 99, 108	
Cochrane	Barbara	Yes			110, 133, 134, 146, 167, 192, 196, 214, 242, 250, 262
Colditz	Graham	No	207		
Cook	Nancy	No	BA22		
Coy	Christine	No	118		
Criqui	Michael	Former	93		
Cummings	Steve	Former	90, 167, BA7		
Curb	David	Yes		25, 95, 122	
DeRoos	Anneclaire	No	BA13		
Dorn	Joan	No	141		
Driscoll	Ira	No	250		
Dunn	Julie	Former	84		
Fouad	Mona	Former	78, 102		
Fuchs	Charles	No	146, 214		
Glanz	Karen	No	122		
Going	Scott	No	14		
Green	Pamela	No	5		

**Table 11.7 (continued)**  
**Funded BAA and Ancillary Studies PI List**

Last Name	First Name	WHI Investigator	PI for Study #	Sponsoring WHI PI for Study #	Supporting CCC PI for Study #
Grimm	Richard	Former		50	
Gunter	Marc	No	BA21		
Haan	Mary	Former	62		
Haines	Pam	No	63		
Hakim	Iman	No	113		
Han	Jiali	No	242		
Hanash	Sam	Yes	BA17		
Harris	William S.	No	BA19		
Hays	Jennifer	Former	100, 163	100, 137, 163	
He	Ka	No	187		
Heiss	Gerardo	Yes		36, 63, 70, 140, 165, 178, 226, 236, 264	
Hendrix	Susan	Former		34	
Hingorani	Sunil	No	BA16		
Ho	Gloria	No	152, 208, 266, BA10		
Howard	Barbara	Yes		217	
Hsia	Judith	Former	68	68	
Hubble	Allan	Yes		118	
Hulka	Barbara	Former	36		
Hunt	Julie	Yes			220, 223, 226
Hunter	David	No	M18		
Jackson	Rebecca	Yes	271, BA3, BA18, M24	117, 223, 271, 301, BA3, M24	
Jeffcoat	Marjorie	No	9		
Kaufman	Joel	No	150		
Kerwin	Diana	No	235		
Kipnis	Victor	No	289		
Klein	Liviu	No	196		
Kleinstein	Robert	No	31		
Kooperberg	Charles	Yes	M6	M6, M13	90, 126, BA10, BA12, BA18, BA19, BA20
Kotchen	Jane	Yes		235	
Kripke	Daniel	No	11		
Kuller	Lew	Yes	BA12	13, 121, 134, 161, 181, 189, M9	
LaCroix	Andrea	Yes	179	179, M4	83, 137, 153, 165, 179, 181, 191, 199, BA7, BA3, BA9, BA13, BA14, BA22, M2

**Table 11.7 (continued)**  
**Funded BAA and Ancillary Studies PI List**

Last Name	First Name	WHI Investigator	PI for Study #	Sponsoring WHI PI for Study #	Supporting CCC PI for Study #
Lane	Dorothy	Yes		216	
Langer	Robert	Former		11, 24, 47, 73, 93, 124	
Lasser	Norm	Yes		17	
Lee	I-Minn	No	BA11		
Lewis	Beth	Yes		9, 111	
Li	Rongling	No	BA5		
Lichtenstein	Alice	No	BA8		
Lin	Henry	No	108		
Liu	Simin	Yes	132, 238, 254		
Lorenz	Carol	No	165		
Lund	Bernedine	Yes			206, 224
Mackey	Rachel	No	189		
Manson	JoAnn	Yes		83, 110, 132, 133, 146, 192, 207, 214, 242, BA11,	
Mares-Perlman	Julie	Yes	105, 219, M1		
Margolis	Karen	Yes	197	197, 220	
Masaki	Kamal	Former	25		
Mayo	Charlotte	No	33		
McGlynn	Katherine	No	296		
McIntosh	Martin	Former	BA15		
McTiernan	Anne	Former			36, 178
Melnikow	Joy	No	104		
Messina	Catherine	No	216		
Michael	Yvonne	Yes	171		
Millen	Amy	No	304		
Modugno	Francesmary	No	121, 134		
Moon	Tom	Former		14	
Moreland	Larry W.	No	BA20		
Mouton	Charles	Former	17		
Namie	Joylin	No	124		
Nathan	Lauren	Yes		238, 254	
Nelson	Dorothy	No	34		
Neuhouser	Marian	Yes			130, 195, 207, 236, 275, BA8
Nicholas	J. Skye	No	175		
Nichols	Kelley	No	117		
Nygaard	Ingrid	No	135		

**Table 11.7 (continued)**  
**Funded BAA and Ancillary Studies PI List**

Last Name	First Name	WHI Investigator	PI for Study #	Sponsoring WHI PI for Study #	Supporting CCC PI for Study #
Ober	Beth	No	61		
Oberman	Albert	Yes		31, 33, 60, 78, 102	
Ockene	Judith	Yes		75, 275	
Paskett	Electra	Yes	139, 223		
Patterson	Ruth	Former		177	65, 108
Peters	Ulrike	No	206, 224		
Pisano	Etta	No	178		
Pleuss	Joan	Former	56		
Polk	M.J.	No	86		
Prentice	Ross	Yes	218, 272, BA2, BA4	195, 206, 218, 244, 289, M3, M12, M18	84, BA1, BA2, BA4, BA5, BA16, BA17
Purdue	Mark	No	M9		
Rajkovic	Aleksandar	Former		M8	
Reiner	Alexander	Yes	BA14, M13		
Rexrode	Kathryn	Yes	110		
Ridker	Paul	No	83		
Ritenbaugh	Cheryl	Former	73, 57	57, 82, 160, 171	
Robbins	John	Yes		61, 62, 104, BA1	
Rodriguez	Beatriz	No	95		
Rohan	Tom	Yes	65, 130		
Rosal	Milagros	No	75		
Sarto	Gloria	Yes		105, 219, M1	
Schenken	Robert	Former		86	
Schneider	Diane	No	24		
Seldin	Michael	No	BA1		
Sesso	Howard	No	133		
Sheps	David	Former	70		
Shikany	James	Yes	60, 111		
Shumaker	Sally	Yes	39, 103, 183, 233, 262	39, 103, 183, 233, 250, 262	
Siega-Riz	Anna Maria	No	236		
Smoller	Sylvia	Yes	40, 48, 126, M16	40, 48, 126, 127, 129, 130, 152, 208, 266, BA10, M16	
Sternfeld	Barbara	No	243		
Strickler	Howard	No	129		
Sturgeon	Susan	No	275		
Subar	Amy	No	177		

**Table 11.7 (continued)**  
**Funded BAA and Ancillary Studies PI List**

Last Name	First Name	WHI Investigator	PI for Study #	Sponsoring WHI PI for Study #	Supporting CCC PI for Study #
Tasevska	Natasa	No	M12		
Taylor	Phil	No	M11		
Tinker	Lesley	Yes			105, 111, 132, 152, 187, 189, 208, 218, 219, 238, 254, 264, 266, 271, 296, 301, M1, M12
Trevisan	Maurizio	Yes		15, 74, 98, 141,	
Ulrich	Cornelia	No	195		
Urban	Nicole	Yes	282		
Valanis	Barbara	Former	160		
Van Horn	Linda	Yes		84, 187, 196	
Vogt	Molly	No	13		
Wactawski-Wende	Jean	Yes	15, 98, 303, M25	296, 303, 304, M25	
Wallace	Robert	Yes		135	
Wallitt	Brian	No	217		
Whitsel	Eric	Yes	140, 264		
Wodarski	Lois	No	74		
Xu	Jianfeng	No	BA6		
Zhang	Shumin	No	192		



**Table 12.1**  
**WHI Manuscript Stages**

Stage #	Definition	Number
12	Published	516
11	In press / accepted by journal	13
10	Submitted to journal	38
9	Final manuscript approved by P&P Committee	67
8	Final manuscript submitted to P&P Committee	19
7	Draft manuscript	26
6	Analysis completed	19
5	Analysis in progress	41
4	Analysis proposed	8
3	Manuscript proposal and writing group approved	255
2*	Approved/Writing group nominations open	35
<b>Total</b>		<b>1037</b>

\*Stage 2 papers not included in Table 12.2

**Table 12.1**  
**WHI Manuscript Stages**

<b>Stage #</b>	<b>Definition</b>	<b>Number</b>
12	Published	516
11	In press / accepted by journal	13
10	Submitted to journal	38
9	Final manuscript approved by P&P Committee	67
8	Final manuscript submitted to P&P Committee	19
7	Draft manuscript	26
6	Analysis completed	19
5	Analysis in progress	41
4	Analysis proposed	8
3	Manuscript proposal and writing group approved	255
2*	Approved/Writing group nominations open	35
<b>Total</b>		<b>1037</b>

\*Stage 2 papers not included in Table 12.2

Table 12.2  
Manuscripts - Stages 3 through 12

MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1	Informed consent in the Women's Health Initiative Clinical Trial and Observational Study	McTiernan, Rossouw, Manson, Franzi, Taylor, Carleton, Johnson, Nevitt	12	Gen	J Womens Health. 1995;4(5):519-29	
4	The Women's Health Initiative: Overview of the nutrition components	Tinker, Burrows, Henry, Patterson, VanHorn, Rupp	12	Gen	In: Krummel DA, Kris-Etherton PM, eds. Nutrition and women's health. Gaithersburg, MD: Aspen Publishers, 1996:510-42	
5	Women's Health Initiative: Why now? What is it? What's new?	Matthews, Shumaker, Bowen, Langer, Hunt, Kaplan, Klesges, Ritenbaugh	12	Gen	Am Psychol. 1997 Feb;52(2):101-16	
6	Low-fat diet practices of older women: Prevalence and implications for dietary assessment	Patterson, Kristal, Coates, Tyllavsky, Ritenbaugh, VanHorn, Caggiula, Shetselaar	12	Gen	J Am Diet Assoc. 1996 Jul;96(7):670-9	
7	The evolution of the Women's Health Initiative: Perspectives from the NIH	Rossouw, Finnegan, Harlan, Pinn, Clifford, McGowan	12	Gen	J Am Med Womens Assoc. 1995 Mar-Apr;50(2):50-5	
8	Design of the Women's Health Initiative clinical trial and observational study	The Women's Health Initiative Study Group	12	Gen	Control Clin Trials. 1998 Feb;19(1):61-109	
9	Approaches to monitoring the results of long-term disease prevention trials: Examples from the Women's Health Initiative	Freedman, Anderson, Kipnis, Prentice, Wang, Rossouw, Wittes, DeMets	12	CT	Control Clin Trials. 1996;Dec 17(6):509-525	
11	The role of randomized controlled trials in assessing the benefits and risks of long-term hormone replacement therapy: Example of the Women's Health Initiative	Prentice, Rossouw, Johnson, Freedman, McTiernan	12	CT	Menopause. 1996;3(2):71-76	
12	Is insurance a more important determinant of healthcare access than perceived health? Evidence from the Women's Health Initiative	Hsia, Kemper, Sofaer, Bowen, Kiefe, Zapka, Mason, Lillington, Limacher	12	Gen	J Womens Health Gend Based Med. 2000 Oct;9(8):881-9	
13	Depression and cardiovascular sequelae in postmenopausal women. The Women's Health Initiative (WHI)	Wassertheil-Smoller, Shumaker, Ockene, Talavera, Greenland, Cochrane, Robbins, Aragaki, Dunbar	12	Gen	Arch Intern Med. 2004 Feb 9;164(3):289-98	
16	Differences between estimated caloric requirements and self-reported caloric intake in the Women's Health Initiative	Hebert, Patterson, Gorfine, Ebbeling, St. Jeor, Chlebowski	12	Gen	Ann Epidemiol. 2003 Oct;13(9):629-37	

Table 12.2  
Manuscripts - Stages 3 through 12

MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
17	Sexual orientation and health: Comparisons in the Women's Health Initiative sample	Valanis, Bowen, Bassford, Whitlock, Charney, Carter	12	CT	Arch Fam Med. 2000 Sep-Oct;9(9):843-53	
19	Ethnic, socioeconomic, and lifestyle correlates of obesity in U.S. women: The Women's Health Initiative	Manson, Lewis, Kotchen, Allen, Johnson, Stefanick, Foreyt, Klesges, Tinker, Noonan, Perri, Hall	12	Gen	Clin J Womens Health. 2001;Dec 1(5):225-34	
20	Relation of demographic factors, menstrual history, reproduction and medication use to sex hormones in postmenopausal women	McTiernan, Wu, Barnabei, Chen, Hendrix, Modugno, Rohan, Stanczyk, Wang	12	CT	Breast Cancer Res Treat. 2008 Mar;108(2):217-231. Epub 2007 May 22	W5
21	Hypertension and its treatment in postmenopausal women: Baseline data from the Women's Health Initiative	Wassertheil-Smoller, Anderson, Psaty, Black, Manson, Wong, Francis, Grimm, Kotchen, Langer, Lasser	12	OS	Hypertension. 2000 Nov;36(5):780-9	
22	Pelvic organ prolapse in the Women's Health Initiative: Gravity and gravidity	Hendrix, Clark, Nygaard, Aragaki, Barnabei, McTiernan	12	CT	Am J Obstet Gynecol. 2002 Jun;186(6):1160-6	
24	Estimation of the correlation between nutrient intake measures under restricted sampling	Wang, Anderson, Prentice	12	Gen	Biometrics. 1999 Sep;55(3):711-7	
25	Estrogen and progestin use and the QT interval in postmenopausal women	Kadish, Greenland, Limacher, Frishman, Daugherty, Schwartz	12	CT	Ann Noninvasive Electrocardiol. 2004 Oct;9(4):366-74	
26	Special populations recruitment for the Women's Health Initiative: Successes and limitations	Fouad, Corbie-Smith, Curb, Howard, Mouton, Simon, Talavera, Thompson, Wang, White, Young	12	Gen	Control Clin Trials. 2004 Aug;25(4):335-52	
27	The effects of insurance coverage and ethnicity on mammography utilization in a postmenopausal population	Bush, Langer	12	Gen	West J Med. 1998 Apr;168(4):236-40	
35	Measurement characteristics of the Women's Health Initiative food frequency questionnaire	Patterson, Kristal, Tinker, Carter, Bolton, Agurs-Collins	12	Gen	Ann Epidemiol. 1999 Apr;9(3):178-87	W30
40	The associations between health and domestic violence in older women: Results of a pilot study	Mouton, Rovi, Furniss, Lasser	12	OS	J Womens Health Gend Based Med. 1999 Nov;8(9):1173-9	

Table 12.2  
Manuscripts - Stages 3 through 12

MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
41	Cross-sectional correlates of fasting hyperinsulinaemia in post-menopausal women of different ethnic origin	Pradhan, Manson, Hendrix, Johnson, Wagenknecht, Haan, Weidner, LaCroix, Cook	12	Gen	Diabet Med. 2006 Jan;23(1):77-85	AS11
43	Sleep complaints of postmenopausal women	Kripke, Brunner, Freeman, Hendrix, Jackson, Masaki, Carter	12	CT	Clin J Womens Health. 2001;1(5):244-52	AS11
51	Relationship of social support and social burden to repeated breast cancer screening in the Women's Health Initiative	Messina, Lane, Glanz, West, Taylor, Frishman, Powell	12	Gen	Health Psychol. 2004 Nov;23(6):582-94	
55	Factor structure and measurement invariance of the Women's Health Initiative Insomnia Rating Scale	Levine, Kaplan, Kripke, Bowen, Naughton, Shumaker	12	Gen	Psychol Assess. 2003 Jun;15(2):123-36	
59	Risk factors for kidney stones in postmenopausal women in the southern United States	Hall, Pettinger, Oberman, Watts, Johnson, Paskett, Limacher, Hays-Grudo	12	Gen	Am J Med Sci. 2001 Jul;322(1):12-8	
60	The Women's Health Initiative Memory Study (WHIMS): A trial of the effect of estrogen therapy in preventing and slowing the progression of dementia	Shumaker, Reboussin, Espeland, Rapp, McBee, Dailey, Bowen, Terrell, Jones	12	WHIMS	Control Clin Trials. 1998 Dec;19(6):604-21	AS39
62	Self-reported urogenital symptoms in postmenopausal women: Women's Health Initiative	Pastore, Carter, Hulka, Wells	12	Gen	Maturnitas. 2004 Dec 10;49(4):292-303	
63	The importance of health insurance as a determinant of cancer screening: Evidence from the Women's Health Initiative	Hsia, Kemper, Kiefe, Zapka, Sofaer, Pettinger, Bowen, Limacher, Lilington, Mason	12	OS	Prev Med. 2000 Sep;31(3):261-70	
66	Walking compared with vigorous exercise for the prevention of cardiovascular events in women	Manson, Greenland, LaCroix, Stefanick, Mouton, Oberman, Perri, Sheps, Pettinger, Siscovick	12	OS	N Engl J Med. 2002 Sep 5;347(10):716-25	
67	Yogurt consumption is associated with healthy behavior in postmenopausal women	Mossavar-Rahmani, Garland, Caan, Herbert, Wodarski, Vitolins, Himes, Parker	12	OS	Clin J Womens Health. 2002;2(3):128-134	
69	Correlates of serum lycopene in older women	Casso, White, Patterson, Agurs-Collins, Kooperberg, Haines	12	CT	Nutr Cancer. 2000;36:163-69	

Table 12.2  
Manuscripts - Stages 3 through 12

MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
70	Correlates of serum alpha- and gamma-tocopherol in the Women's Health Initiative	White, Kristal, Shikany, Wilson, Chen, Mares-Perlman, Masaki, Caan	12	CT	Ann Epidemiol. 2001 Feb;11(2):136-44	
71	The Women's Health Initiative: Goals, rationale, and current status	Liu	12	Gen	Menopausal Medicine. 1998;6(2):1-4	
72	Postmenopausal bone loss and its relationship to oral bone loss	Jeffcoat, Lewis, Reddy, Wang, Redford	12	Gen	Periodontol. 2000; June23(1):94-102	AS9
74	Breast cancer survivors' health-related quality of life: Racial differences and comparisons with noncancer controls	Paskett, Alfano, Davidson, Andersen, Naughton, Sherman, McDonald, Hays-Grudo	12	OS	Cancer. 2008 Dec 1;113(11):3222-30. Epub 2008 Oct 30	
76	Differences in eating pattern labels between maintainers and nonmaintainers in the Women's Health Initiative	Hopkins, Burrows, Bowen, Tinker	12	CT	J Nutr Educ. 2001 Sep-Oct;33(5):278-83	
78	Lack of a relation between vitamin and mineral antioxidants and bone mineral density: Results from the Women's Health Initiative	Wolf, Cauley, Pettinger, Jackson, LaCroix, LeBoff, Lewis, Nevitt, Simon, Stone, Wactawski-Wende	12	Gen	Am J Clin Nutr. 2005 Sep;82(3):581-8	
80	Insulin resistance and weight gain in postmenopausal women of diverse ethnic groups	Howard, Adams-Campbell, Allen, Black, Pasaro, Rodabough, Rodriguez, Safford, Stevens, Wagenknecht	12	Gen	Int J Obes Relat Metab Disord. 2004 Aug;28(8):1039-47	
83	Recreational physical activity and the risk of breast cancer in postmenopausal women: The Women's Health Initiative Cohort Study	McTiernan, Kooperberg, White, Wilcox, Coates, Adams-Campbell, Woods, Ockene	12	Gen	JAMA. 2003 Sep 10;290(10):1331-6	
84	Research staff turnover and participant adherence in the Women's Health Initiative	Jackson, Berman, Huber, Snetselaar, Granek, Boe, Milas, Spivak, Chlebowski	12	CT	Control Clin Trials. 2003 Aug;24(4):422-35	
85	The Women's Health Initiative: Rationale, design and progress report	Johnson, Anderson, Barad, Stefanick	12	CT	J Br Menopause Soc. 1999;5:155-9	
86	The effects of physical and emotional status on adherence to a low-fat dietary pattern in the Women's Health Initiative	Tinker, Perri, Patterson, Bowen, McIntosh, Parker, Sevvick, Wodarski	12	CT	J Am Diet Assoc. 2002 Jun;102(6):789-800, 888	
88	Estimating normal hemogram values for postmenopausal women	Assaf, Carleton, Miller, Coccio	12	Gen	Clin J Womens Health. 2000;1(1):23-28	

Table 12.2  
Manuscripts - Stages 3 through 12

MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
91	Compliance with National Cholesterol Education Program dietary and lifestyle guidelines among older women with self-reported hypercholesterolemia. The Women's Health Initiative	Hsia, Rodabough, Rosal, Cochrane, Howard, Snetseelaar, Frishman, Stefanick	12	OS	Am J Med. 2002 Oct 1;113(5):384-92	
92	Comparison of self-report, hospital discharge codes, and adjudication of cardiovascular events in the Women's Health Initiative	Heckbert, Kooperberg, Safford, Psaty, Hsia, McTiernan, Gaziano, Frishman, Curb	12	Gen	Am J Epidemiol. 2004 Dec 15;160(12):1152-8	
93	Fat intake in husbands of participants in the dietary modification component of the Women's Health Initiative	Shikany	12	Gen	Nutr Res. 2002;22:577-586	
95	The effects of widowhood on physical and mental health, health behaviors, and health outcomes: The Women's Health Initiative	Wilcox, Evenson, Aragaki, Wassertheil-Smoller, Mouton, Loevinger	12	OS	Health Psychol. 2003 Sep;22(5):513-22	
98	Antioxidant supplement use in Women's Health Initiative participants	Shikany, Patterson, Agurs-Collins, Anderson	12	Gen	Prev Med. 2003 Mar;36(3):379-87	
99	Risk factor clustering in the insulin resistance syndrome and its relationship to cardiovascular disease in postmenopausal white, black, hispanic, and Asian/Pacific Islander women	Howard, Criqui, Curb, Rodabough, Safford, Santoro, Wilson, Wylie-Rosette	12	OS	Metabolism. 2003 Mar;52(3):362-71	
100	Frequency and predictive value of a mammographic recommendation for short-interval follow-up	Yasmeen, Romano, Pettinger, Chlebowski, Robbins, Lane, Hendrix	12	Gen	J Natl Cancer Inst. 2003 Mar 19;95(6):429-36	
102	Association between cardiovascular outcomes and antihypertensive drug treatment in older women	Wassertheil-Smoller, Psaty, Greenland, Oberman, Kotchen, Mouton, Black, Aragaki, Trevisan	12	OS	JAMA. 2004 Dec 15;292(23):2849-59	
103	The Women's Health Initiative: Recruitment complete--looking back and looking forward	Rossouw, Hurd	12	CT	J Womens Health. 1999 Jan-Feb;8(1):3-5	
104	Promoting adherence and retention to clinical trials in special populations: A Women's Health Initiative workshop	Wilcox, Shumaker, Bowen, Naughton, Rosal, Ludlam, Dugan, Hunt, Stevens	12	Gen	Control Clin Trials. 2001 Jun;22(3):279-89	
105	Retention of under-served women in clinical trials: A focus group study	Johnson, Williams, Nagy, Fouad	12	CT	Ethn Dis. 2003 Spring;13(2):268-78	

Table 12.2  
Manuscripts - Stages 3 through 12

MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
107	Vigorous leisure activity through women's adult life: The Women's Health Initiative Observational Cohort Study	Evenson, Wilcox, Pettinger, Brunner, King, McTiernan	12	OS	Am J Epidemiol. 2002 Nov 15;156(10):945-53	
108	Cross-sectional geometry, bone strength, and bone mass in the proximal femur in black and white postmenopausal women	Nelson, Barondess, Hendrix, Beck	12	CT	J Bone Miner Res. 2000 Oct;15(10):1992-7	
111	Effects of fat content on fat hedonics: Cognition or taste?	Bowen, Green, Vizenor, Vu, Kreuter, Rolls	12	OS	Physiol Behav. 2003 Feb;78(2):247-53	
112	Results of an adjunct dietary intervention program in the Women's Health Initiative	Bowen, Ehret, Pedersen, Snetselaar, Johnson, Tinker, Hollinger, Lichty, Bland, Sivertsen, Ocken, Staats, Beedoe	12	OS	J Am Diet Assoc. 2002 Nov;102(11):1631-7	
113	Prior oral contraception and postmenopausal fracture: A Women's Health Initiative observational cohort study	Barad, Kooperberg, Wactawski-Wende, Liu, Hendrix, Watts	12	Gen	Fertil Steril. 2005 Aug;84(2):374-83	
115	Prevalence and 3-year incidence of abuse among postmenopausal women	Mouton, Rodabough, Rovi, Hunt, Talamantes, Brzycki, Burge	12	OS	Am J Public Health. 2004 Apr;94(4):605-12	
120	Obesity, body size, and risk of postmenopausal breast cancer: the Women's Health Initiative (United States)	Morimoto, White, Chen, Chlebowski, Hays-Grudo, Kuller, Lopez, Manson, Margolis, Muti, Stefanick, McTiernan	12	OS	Cancer Causes Control. 2002 Oct;13(8):741-51	
122	Statin use, clinical fracture, and bone density in postmenopausal women: Results from the Women's Health Initiative Observational Study	LaCroix, Cauley, Pettinger, Hsia, Bauer, McGowan, Chen, Lewis, McNeeley, Pasaro, Jackson	12	OS	Ann Intern Med. 2003 Jul 15;139(2):97-104	
126	Influences on older women's adherence to a low-fat diet in the Women's Health Initiative	Kearney, Rosal, Ockene, Churchill	12	CT	Psychosom Med. 2002 May-Jun;64(3):450-7	AS75
128	Inflammatory biomarkers, hormone replacement therapy, and incident coronary heart disease: Prospective analysis from the Women's Health Initiative observational study	Pradhan, Manson, Rossouw, Siscovick, Mouton, Rifai, Wallace, Jackson, Pettinger, Ridker	12	OS	JAMA. 2002 Aug 28;288(8):980-7	AS83
129	Tissue plasminogen activator antigen and D-dimer as markers for atherothrombotic risk among healthy postmenopausal women	Pradhan, LaCroix, Langer, Trevisan, Lewis, Hsia, Oberman, Kotchen, Ridker	12	OS	Circulation. 2004 Jul 20;110(3):292-300. Epub 2004 Jul 6	AS83



Table 12.2  
Manuscripts - Stages 3 through 12

MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
130	Baseline associations between post and inflammatory, haemostatic, and lipid biomarkers of coronary heart disease. The Women's Health Initiative Observational Study	Langer, Pradhan, Lewis, Manson, Rossouw, Hendrix, LaCroix, Ridker	12	OS	Thromb Haemost. 2005 Jun;93(6):1108-16	
132	Association of nonmelanoma skin cancer with second malignancy	Rosenberg, Greenland, Khandekar, Loar, Ascensao, Lopez	12	Gen	Cancer. 2004 Jan 1;100(1):130-8	
134	Additional self-monitoring tools in the dietary modification component of the Women's Health Initiative	Mossavar-Rahmani, Henry, Rodabough, Bragg, Brewer, Freed, Kinzel, Pedersen, Soule, Vosburg	12	CT	J Am Diet Assoc. 2004 Jan;104(1):76-85	
135	Radiographic measurements, bone mineral density, and the Singh Index in the proximal femur of white and black postmenopausal women	Barondess, Singh, Hendrix, Nelson	12	Gen	Dis Mon. 2002 Oct;48(10):637-46	
137	Recruitment of hispanic women to the Women's Health Initiative: The case of Embajadoras in Arizona	Larkey, Staten, Ritenbaugh, Hall, Buller, Bassford, Altmani	12	Gen	Control Clin Trials. 2002 Jun;23(3):289-98	
138	Baseline experience with Modified Mini Mental State Exam: The Women's Health Initiative Memory Study (WHIMS)	Rapp, Espeland, Hogan, Jones, Dugan, The WHIMS Investigators	12	WHIMS	Aging Ment Health. 2003 May;7(3):217-23	AS39
139	Cholesteryl ester transfer protein and lecithin:cholesterol acyltransferase activities in hispanic and anglo postmenopausal women: Associations with total and regional body fat	Greaves, Going, Fernandez, Milliken, Lohman, Bassford, McNamara	12	OS	Metabolism. 2003 Mar;52(3):282-9	
140	Usefulness of prior hysterectomy as an independent predictor of Framingham risk score (The Women's Health Initiative)	Hsia, Barad, Margolis, Rodabough, McGovern, Limacher, Oberman, Wassertheil-Smolter, Women's Health Initiative Research Group	12	Gen	Am J Cardiol. 2003 Aug 1;92(3):264-9	
142	Coronary artery calcification in black women and white women	Khurana, Rosenbaum, Howard, Adams-Campbell, Detrano, Klouj, Hsia	12	OS	Am Heart J. 2003 Apr;145(4):724-9	
144	Risk of cardiovascular disease by hysterectomy status, with and without oophorectomy: The Women's Health Initiative Observational Study	Howard, Kuller, Langer, Manson, Allen, Assaf, Cochrane, Larson, Lasser, Rainford, VanHorn, Stefanick, Trevisan	12	OS	Circulation. 2005 Mar 29;111(12):1462-70. Epub 2005 Mar 21	

Table 12.2  
Manuscripts - Stages 3 through 12

MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
145	Breast cancer and nonsteroidal anti-inflammatory drugs: Prospective results from the Women's Health Initiative	Harris, Chlebowski, Jackson, Frid, Ascensao, Anderson, Loar, Rodabough, White, McTiernan	12	OS	Cancer Res. 2003 Sep 15;63(18):6096-101	
148	Incidence of cervical cytological abnormalities with aging in the Women's Health Initiative: A randomized controlled trial	Yasmeen, Romano, Pettinger, Johnson, Hubbell, Lane, Hendrix	12	CT	Obstet Gynecol. 2006 Aug;108(2):410-9	
149	A community-based study of postmenopausal white women with back and leg pain: Health status and limitations in physical activity	Vogt, Laueran, Chirumbole, Kuller	12	OS	J Gerontol A Biol Sci Med Sci. 2002 Aug;57(8):M544-50	
155	Changes in food sources of dietary fat in response to an intensive low-fat dietary intervention: Early results from the Women's Health Initiative	Patterson, Kristal, Rodabough, Caan, Lillington, Mossavar-Rahmani, Simon, Snetselaar, VanHorn	12	CT	J Am Diet Assoc. 2003 Apr;103(4):454-60	
163	Ethnicity and breast cancer: Factors influencing differences in incidence and outcome	Chlebowski, Chen, Anderson, Rohan, Aragaki, Lane, Dolan, Paskett, McTiernan, Hubbell, Adams-Campbell, Prentice	12	OS	J Natl Cancer Inst. 2005 Mar 16;97(6):439-48	AS144
164	Leukocyte count as a predictor of cardiovascular events and mortality in postmenopausal women: The Women's Health Initiative Observational Study	Margolis, Manson, Greenland, Rodabough, Bray, Safford, Grimm, Howard, Assaf, Prentice, Women's Health Initiative Research Group	12	OS	Arch Intern Med. 2005 Mar 14;165(5):500-8	
166	Habitual tea consumption and risk of osteoporosis: A prospective study in the Women's Health Initiative observational cohort	Chen, Pettinger, Ritenbaugh, LaCroix, Robbins, Caan, Barad, Hakim	12	OS	Am J Epidemiol. 2003 Oct 15;158(8):772-81	
169	Reliability and validity of the Women's Health Initiative Insomnia Rating Scale	Levine, Kripke, Kaplan, Lewis, Naughton, Bowen, Shumaker	12	Gen	Psychol Assess. 2003 Jun;15(2):137-48	
171	Prevalence and correlates of panic attacks in postmenopausal women: Results from an ancillary study to the Women's Health Initiative	Smoller, Pollack, Wassertheil-Smoller, Barton, Hendrix, Jackson, Dicken, Oberman, Sheps, Women's Health Initiative Investigators	12	Gen	Arch Intern Med. 2003 Sep 22;163(17):2041-50	AS70
172	Association of glycemic load with cardiovascular disease risk factors: The Women's Health Initiative Observational Study	Shikany, Tinker, Neuhouser, Ma, Patterson, Phillips, Liu, Redden	12	Gen	Nutrition. 2010 Jun;26(6):641-7. Epub 2010 Jan 6	AS111

Table 12.2  
Manuscripts - Stages 3 through 12

MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
173	A prospective study of the effect of hypertension and baseline blood pressure on cognitive decline and dementia in postmenopausal women: The Women's Health Initiative Memory Study	Johnson, Margolis, Espeland, Colenda, Fillit, Manson, Masaki, Mouton, Prineas, Robinson, Wassertheil-Smolter, for the Women's Health Initiative Memory Study and Women's Health Initiative Investigators	12	WHIMS	J Am Geriatr Soc. 2008 Aug;56(8):1449-58. Epub 2008 Jul 15	AS39
174	Statin use and breast cancer: Prospective results from the Women's Health Initiative	Cauley, McTiernan, Rodabough, LaCroix, Bauer, Margolis, Paskett, Vitolins, Furberg, Chlebowski, Women's Health Initiative Research Group	12	OS	J Natl Cancer Inst. 2006 May 17;98(10):700-7	
176	Predicting risk of breast cancer in postmenopausal women by hormone receptor status	Chlebowski, Anderson, Lane, Aragaki, Rohan, Yasmeen, Sarto, Rosenberg, Hubbell, Women's Health Initiative Investigators	12	Gen	J Natl Cancer Inst. 2007 Nov 21;99(22):1695-705. Epub 2007 Nov 13	
177	Validity of self-report for fractures among a multiethnic cohort of postmenopausal women: Results from the Women's Health Initiative observational study and clinical trials	Chen, Kooperberg, Pettinger, Bassford, Cauley, LaCroix, Lewis, Kipersztok, Borne, Jackson	12	Gen	Menopause. 2004 May-Jun;11(3):264-74	
179	Progression and remission of pelvic organ prolapse: A longitudinal study of menopausal women	Handa, Garret, Hendrix, Gold, Robbins	12	CT	Am J Obstet Gynecol. 2004 Jan;190(1):27-32	
181	Alcohol and folate intake and breast cancer risk in the WHI Observational Study	Duffy, Assaf, Cyr, Burkholder, Coccio, Rohan, McTiernan, Paskett, Lane, Chetty	12	OS	Breast Cancer Res Treat. 2009 Aug;116(3):551-62. Epub 2008 Sep 11	
183	Panic attacks, daily life ischemia, and chest pain in postmenopausal women	Smoller, Pollack, Wassertheil-Smolter, Brunner, Curb, Torner, Oberman, Hendrix, Hsia, Sheps	12	Gen	Psychosom Med. 2006 Nov-Dec;68(6):824-32. Epub 2006 Nov 13	AS70
186	Physical activity and diabetes risk in postmenopausal women	Hsia, Wu, Allen, Oberman, Lawson, Torrens, Safford, Limacher, Howard, Women's Health Initiative Research Group	12	Gen	Am J Prev Med. 2005 Jan;28(1):19-25	

Table 12.2  
Manuscripts - Stages 3 through 12

MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
187	Postmenopausal hormone therapy and cardiovascular disease	Rossouw	12	OS	In: Yusuf S, ed. Evidence based cardiology. 2nd ed. London: BMJ Books,2002:244-58	
188	Electrocardiographic abnormalities that predict coronary heart disease events and mortality in postmenopausal women: The Women's Health Initiative	Rautaharju, Kooperberg, Larson, LaCroix	12	CT	Circulation. 2006 Jan 31;113(4):473-80	
189	Dietary adherence in the Women's Health Initiative Dietary Modification Trial	The Women's Health Initiative Study Group	12	CT	J Am Diet Assoc. 2004 Apr;104(4):654-8	
190	Prevalence and determinants of electrocardiographic left ventricular hypertrophy among a multiethnic population of postmenopausal women (The Women's Health Initiative)	Oberman, Prineas, Larson, LaCroix, Lasser	12	CT	Am J Cardiol. 2006 Feb 15;97(4):512-9. Epub 2006 Jan 4	
192	Bone mineral density of American Indian and Alaska Native women compared with non-Hispanic white women: Results from the Women's Health Initiative Study	Wampler, Chen, Jacobsen, Henderson, Howard, Rossouw	12	Gen	Menopause. 2005 Sep-Oct;12(5):536-44. Epub 2005 Sep 1	
195	Predictors of adherence in the Women's Health Initiative Calcium and Vitamin D Trial	Brunner, Dunbar-Jacob, LeBoff, Granek, Bowen, Snetselaar, Shumaker, Ockene, Rosal, Wactawski-Wende, Cauley, Cochrane, Tinker, Jackson, Wang, Wu, et al.	12	CT	Behav Med. 2009 Winter;34(4):145-55	
196	Predictors of dietary change and maintenance in the Women's Health Initiative Dietary Modification Trial	Tinker, Rosal, Young, Perri, Patterson, VanHorn, Assaf, Bowen, Ockene, Hays-Grudo, Wu	12	CT	J Am Diet Assoc. 2007 Jul;107(7):1155-65	
197	Predictors of angina pectoris versus myocardial infarction from the Women's Health Initiative Observational Study	Hsia, Aragaki, Bloch, LaCroix, Wallace, Women's Health Initiative Investigators	12	OS	Am J Cardiol. 2004 Mar 15;93(6):673-8	

Table 12.2  
Manuscripts - Stages 3 through 12

MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
198	The Women's Health Initiative: Aspects of the management and coordination	Cochrane, Lund, Anderson, Prentice	12	Gen	In: Hawkins JW, Haggerty LA, eds. Diversity in health care research: strategies for multisite, multidisciplinary, and multi-ethnic projects. New York: Springer, 2003:181-207	
200	Expression and ambivalence over expression of negative emotion: Psychometric analysis in the Women's Health Initiative	Michael, Perin, Bowen, Cochrane, Wisdom, Brzycki, Ritenbaugh	12	Gen	J Women Aging. 2005;17(1-2):5-18	
201	Normal standards for QT and QT subintervals derived from a large ethnically diverse population of women aged 50 to 79 years (the Women's Health Initiative [WHI])	Rautaharju, Prineas, Kadish, Larson, Hsia, Lund	12	Gen	Am J Cardiol. 2006 Mar 1;97(5):730-7. Epub 2006 Jan 11	
202	Depressive symptoms and heart rate variability in postmenopausal women	Kim, McGorray, Bartholomew, Marsh, Dicken, Wassertheil-Smoller, Curb, Oberman, Barton, McMahon, Hsia, Gardin, Wong, Barton, McMahon, et al.	12	Gen	Arch Intern Med. 2005 Jun 13;165(11):1239-44	
203	Influence of estrogen plus progestin on breast cancer and mammography in healthy postmenopausal women: The Women's Health Initiative Randomized Trial	Chlebowski, Hendrix, Langer, Stefanick, Gass, Lane, Rodabough, Gilligan, Cyr, Thomson, Khandekar, Petrovich, McTierman, Women's Health Initiative Investigators	12	CT	JAMA. 2003 Jun 25;289(24):3243-53	
204	Effect of estrogen plus progestin on stroke in postmenopausal women: the Women's Health Initiative: A randomized trial	Wassertheil-Smoller, Hendrix, Limacher, Heiss, Kooperberg, Baird, Kotchen, Curb, Black, Rossouw, Aragaki, Safford, Stein, Laowattana, Mysiw, Women's Health Initiative Investigators, et al.	12	CT	JAMA. 2003 May 28;289(20):2673-84	W1, W6
206	Fracture risk among breast cancer survivors: Results from the Women's Health Initiative Observational Study	Chen, Maricic, Bassford, Pettinger, Ritenbaugh, Lopez, Barad, Gass, LeBoff	12	Gen	Arch Intern Med. 2005 Mar 14;165(5):552-8	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
208	Effects of estrogen plus progestin on risk of fracture and bone mineral density: The Women's Health Initiative randomized trial	Cauley, Robbins, Chen, Cummings, Jackson, LaCroix, LeBoff, Lewis, McGowan, Neuner, Pettinger, Stefanick, Wactawski-Wende, Watts, Women's Health Initiative Investigators	12	CT	JAMA. 2003 Oct 1;290(13):1729-38	AS134
209	Obesity, hormone therapy, estrogen metabolism and risk of postmenopausal breast cancer	Modugno, Kip, Cochrane, Kuller, Klug, Rohan, Chlebowski, Lasser, Stefanick	12	OS	Int J Cancer. 2006 Mar 1;118(5):1292-301	AS134
210	Estrogen plus progestin and the risk of coronary heart disease	Manson, Hsia, Johnson, Rossouw, Assaf, Lasser, Trevisan, Black, Heckbert, Detrano, Strickland, Wong, Crouse, Stein, Cushman, Women's Health Initiative Investigators, et al.	12	CT	N Engl J Med. 2003 Aug 7;349(6):523-34	WI, W6
211	Effects of estrogen plus progestin on health-related quality of life	Hays-Grudo, Ockene, Brunner, Kotchen, Manson, Patterson, Aragaki, Shumaker, Brzyski, LaCroix, Granek, Valanis, Women's Health Initiative Investigators	12	CT	N Engl J Med. 2003 May 8;348(19):1839-54. Epub 2003 Mar 17	
212	Effect of oestrogen plus progestin on the incidence of diabetes in postmenopausal women: Results from the Women's Health Initiative Hormone Trial	Margolis, Bonds, Rodabough, Tinker, Phillips, Allen, Bassford, Burke, Torrens, Howard, Women's Health Initiative Investigators	12	CT	Diabetologia. 2004 Jul;47(7):1175-87. Epub 2004 Jul 14	
215	Influence of stressors on breast cancer incidence in the Women's Health Initiative	Michael, Carlson, Chlebowski, Aickin, Weihs, Ockene, Bowen, Ritenbaugh	12	OS	Health Psychol. 2009 Mar;28(2):137-146	
216	Effects of combination estrogen plus progestin hormone treatment on cognition and affect	Resnick, Maki, Rapp, Espeland, Brunner, Coker, Granek, Hogan, Ockene, Shumaker, Women's Health Initiative Study of Cognitive Aging Investigators	12	CT	J Clin Endocrinol Metab. 2006 May;91(5):1802-10. Epub 2006 Mar 7	AS103
218	Psychosocial effects of physical and verbal abuse in postmenopausal women	Mouton, Rodabough, Rovi, Brzyski, Katerndahl	12	OS	Ann Fam Med. 2010 May-Jun;8(3):206-13	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
220	The Women's Health Initiative: Implications for practice	Furniss	12	CT	Adv Nurse Pract. 2002 Nov;10(11):53-5	
221	Effects of estrogen plus progestin on gynecologic cancers and associated diagnostic procedures: The Women's Health Initiative randomized trial	Anderson, Judd, Kaunitz, Barad, Beresford, Pettinger, Liu, McNealey, Lopez, Women's Health Initiative Investigators	12	CT	JAMA. 2003 Oct 1;290(13):1739-48	
222	Estrogen plus progestin and risk of venous thrombosis	Cushman, Kuller, Prentice, Rodabough, Psaty, Stafford, Sidney, Rosendaal, Women's Health Initiative Investigators	12	CT	JAMA. 2004 Oct 6;292(13):1573-80	W1, W6
224	Estimation of dependence between paired correlated failure times in the presence of covariate measurement error	Gorfine, Hsu, Prentice	12	OS	J R Stat Soc [Ser B]. 2003;65(3):633-61	
225	Estrogen plus progestin and the incidence of dementia and mild cognitive impairment in postmenopausal women: the Women's Health Initiative Memory Study: A randomized controlled trial	Shumaker, Legault, Rapp, Thal, Wallace, Ockene, Hendrix, Jones, Assaf, Jackson, Kotchen, Wassertheil-Smoller, Wactawski-Wende, The WHIMS Investigators	12	CT	JAMA. 2003 May 28;289(20):2651-62	AS39
226	Effect of estrogen plus progestin on global cognitive function in postmenopausal women: the Women's Health Initiative Memory Study: A randomized controlled trial	Rapp, Espeland, Shumaker, Henderson, Brunner, Manson, Gass, Stefanick, Lane, Hays-Grudo, Johnson, Coker, Dailey, Bowen, The WHIMS Investigators	12	CT	JAMA. 2003 May 28;289(20):2663-72	AS39
229	Menopausal symptoms and treatment-related effects of estrogen and progestin in the Women's Health Initiative	Barnabei, Cochrane, Aragaki, Nygaard, Williams, McGovern, Young, Wells, O'Sullivan, Chen, Schenken, Johnson, Women's Health Initiative Investigators	12	CT	Obstet Gynecol. 2005 May;105(5 Pt 1):1063-73	
230	Use of electric blankets and association with prevalence of endometrial cancer	Abel, Hendrix, McNealey, O'Leary, Mossavar-Rahmani, Johnson, Kruger	12	OS	Eur J Cancer Prev. 2007 Jun;16(3):243-50	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
232	Women's Health Initiative: Statistical aspects and selected early results	Prentice, Anderson	12	Gen	In: Armitage P, Colton T, eds. Encyclopedia of biostatistics. 2nd ed. Wiley, 2005	
233	Estrogen plus progestin and colorectal cancer in postmenopausal women	Chlebowski, Wactawski-Wende, Ritenbaugh, Hubbell, Ascensao, Rodabough, Rosenberg, Taylor, Harris, Chen, Adams-Campbell, White, Women's Health Initiative Investigators	12	CT	N Engl J Med. 2004 Mar 4;350(10):991-1004	
234	Postmenopausal hormone therapy and body composition: A substudy of the estrogen plus progestin trial of the Women's Health Initiative	Chen, Bassford, Green, Cauley, Jackson, LaCroix, LeBoff, Stefanick, Margolis	12	CT	Am J Clin Nutr. 2005 Sep;82(3):651-6	
235	Hormone replacement therapy and risk of cardiovascular disease: Implications of the results of the Women's Health Initiative	Kuller	12	CT	Arterioscler Thromb Vasc Biol. 2003 Jan 1;23(1):11-6	
237	The Women's Health Initiative Study of Cognitive Aging (WHISCA): A randomized clinical trial of the effects of hormone therapy on age-associated cognitive decline	Resnick, Coker, Maki, Rapp, Espeland, Shumaker	12	CT	Clin Trials. 2004;1(5):440-50	ASI03
240	Risks and benefits of estrogen plus progestin in healthy postmenopausal women: Principal results From the Women's Health Initiative randomized controlled trial	Rossouw, Anderson, Prentice, LaCroix, Kooperberg, Stefanick, Jackson, Beresford, Howard, Johnson, Kotchen, Ockene, The Writing Group for the Women's Health Initiative Investigators	12	CT	JAMA. 2002 Jul 17;288(3):321-33	W1
242	Estrogen deficiency symptom management in breast cancer survivors in the changing context of menopausal hormone therapy	Chlebowski, Kim, Col	12	CT	Semin Oncol. 2003 Dec;30(6):776-88	



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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
243	Combined postmenopausal hormone therapy and cardiovascular disease: Toward resolving the discrepancy between observational studies and the Women's Health Initiative clinical trial	Prentice, Langer, Stefanick, Howard, Pettinger, Anderson, Barad, Curb, Kotchen, Kuller, Limacher, Wactawski-Wende, Women's Health Initiative Investigators	12	CT	Am J Epidemiol. 2005 Sep 1;162(S):404-14. Epub 2005 Jul 20	
246	WHI response to Goodman, Goldzieher and Ayala's critique of the Women's Health Initiative report on the risks and benefits of estrogen plus progestin	Hendrix, Prentice	12	CT	Menopausal Medicine. 2003;11:1-4	
248	Progression of coronary calcification in healthy postmenopausal women	Hsia, Klouj, Prasad, Burt, Adams-Campbell, Howard	12	OS	BMC Cardiovasc Disord. 2004 Dec 1;4:21	
249	Effects of estrogen with and without progestin on urinary incontinence	Hendrix, Cochrane, Nygaard, Handa, Barnabei, Iglesia, Aragaki, Naughton, Wallace, McNeeley	12	CT	JAMA. 2005 Feb 23;293(8):935-48	
250	Hormone therapy and age-related macular degeneration: The Women's Health Initiative Sight Exam Study	Haan, Klein, Klein, Deng, Blythe, Seddon, Musch, Kuller, Hyman, Wallace	12	CT	Arch Ophthalmol. 2006 Jul;124(7):988-92	AS62
253	Cardiovascular disease, its risk factors and treatment, and age-related macular degeneration: Women's Health Initiative Sight Exam ancillary study	Klein, Deng, Klein, Hyman, Seddon, Frank, Wallace, Hendrix, Kuppermann, Langer, Kuller, Brunner, Johnson, Thomas, Haan	12	CT	Am J Ophthalmol. 2007 Mar;143(3):473-83. Epub 2007 Jan 10	AS62
265	Comparing SF-36 scores across three groups of women with different health profiles	Yost, Haan, Levine, Gold	12	Gen	Qual Life Res. 2005 Jun;14(5):1251-61	
271	Factors associated with treatment initiation after osteoporosis screening	Brennan, Wactawski-Wende, Crespo, Dmochowski	12	CT	Am J Epidemiol. 2004 Sep 1;160(5):475-83	AS98
272	Effect of estrogen therapy on gallbladder disease	Cirillo, Wallace, Rodabough, Greenland, LaCroix, Limacher, Larson	12	CT	JAMA. 2005 Jan 19;293(3):330-9	
273	Effects of conjugated equine estrogen in postmenopausal women with hysterectomy. The Women's Health Initiative randomized controlled trial	Anderson, Limacher, Assaf, Bassford, Beresford, Black, Bonds, Brunner, Brzyski, Caan, Chlebowski, Curb, Gass, Hays-Grudo, et al	12	CT	JAMA. 2004 Apr 14;291(14):1701-12	W1, W6

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
274	Association between reported alcohol intake and cognition: Results from the Women's Health Initiative Memory Study	Espeland, Gu, Masaki, Langer, Coker, Stefanick, Ockene, Rapp	12	CT	Am J Epidemiol. 2005 Feb 1;161(3):228-38	AS39
277	Estrogen plus progestin and the risk of peripheral arterial disease: The Women's Health Initiative	Hsia, Criqui, Rodabough, Langer, Resnick, Phillips, Allison, Bonds, Masaki, Caralis, Kotchen, Women's Health Initiative Investigators	12	CT	Circulation. 2004 Feb 10;109(5):620-6	
279	Symptom experience after discontinuing use of estrogen plus progestin	Ockene, Barad, Cochrane, Larson, Gass, Wassertheil-Smoller, Manson, Barnabei, Lane, Brzyski, Rosal, Wylie-Rosette, Hays-Grudo	12	CT	JAMA. 2005 Jul 13;294(2):183-93	
280	Relation of BMI and physical activity to sex hormones in postmenopausal women	McTiernan, Wu, Chen, Chlebowski, Mossavar-Rahmani, Modugno, Perri, Stanczyk, VanHorn, Wang, Women's Health Initiative Investigators	12	CT	Obesity (Silver Spring). 2006 Sep;14(9):1662-77	W5
282	Improving dietary self-monitoring and adherence with hand-held computers: A pilot study	Glanz, Murphy, Moylan, Evensen, Curb	12	CT	Am J Health Promot. 2006 Jan-Feb;20(3):165-70	
285	Estrogen-plus-progestin use and mammographic density in postmenopausal women: Women's Health Initiative randomized trial	McTiernan, Martin, Peck, Aragaki, Chlebowski, Pisano, Wang, Brunner, Johnson, Manson, Lewis, Kotchen, Hulka, Women's Health Initiative Mammogram Density Study Investigators	12	CT	J Natl Cancer Inst. 2005 Sep 21;97(18):1366-76	AS36
287	Prior hormone therapy and breast cancer risk in the Women's Health Initiative randomized trial of estrogen plus progestin	Anderson, Chlebowski, Rossouw, Rodabough, McTiernan, Margolis, Aggerwal, Curb, Hendrix, Hubbell, Khandekar, Lane, Lasser, Lopez, Potter, Ritenbaugh, et al.	12	CT	Maturitas. 2006 Sep 20;55(2):103-15. Epub 2006 Jul 11	
288	Insulin, physical activity, and caloric intake in postmenopausal women: Breast cancer implications	Chlebowski, Pettinger, Stefanick, Howard, Mossavar-Rahmani, McTiernan	12	Gen	J Clin Oncol. 2004 Nov 15;22(22):4507-13	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
289	Cutaneous melanoma in postmenopausal women following nonmelanoma skin carcinoma: The Women's Health Initiative Observational Study	Rosenberg, Khandekar, Greenland, Rodabough, McTiernan	12	OS	Cancer. 2006 Feb 1;106(3):654-63	
292	Menopausal hormone therapy informed consent	Hendrix	12	Gen	Am J Obstet Gynecol. 2003 Oct;189(4 Suppl):S31-2; discussion S32-6	
294	Weighted estimators for proportional hazards regression with missing covariates	Qi, Wang, Prentice	12	OS	J Am Stat Assoc. 2005;100:1250-1263	
298	The association between aspirin use and the incidence of colorectal cancer in women	Allison, Garland, Chlebowski, Criqui, Langer, Wu, Roy, McTiernan, Kuller, Women's Health Initiative Investigators	12	OS	Am J Epidemiol. 2006 Sep 15;164(6):567-75. Epub 2006 Jul 17	
301	Angiotensin-converting enzyme inhibitor use and incident frailty in women aged 65 and older: prospective findings from the Women's Health Initiative Observational Study	Gray, LaCroix, Aragaki, McDermott, Cochrane, Kooperberg, Murray, Rodriguez, Black, Woods	12	Gen	J Am Geriatr Soc. 2009 Feb;57(2):297-303	AS179
302	Frailty: Emergence and consequences in women aged 65 and older in the Women's Health Initiative Observational Study	Woods, LaCroix, Gray, Aragaki, Cochrane, Brunner, Masaki, Murray, Newman	12	Gen	J Am Geriatr Soc. 2005 Aug;53(8):1321-30	AS179
303	Statin use and incident frailty in women aged 65 years or older: Prospective findings from the Women's Health Initiative Observational Study	LaCroix, Gray, Aragaki, Cochrane, Newman, Kooperberg, Black, Curb, Greenland, Woods	12	Gen	J Gerontol A Biol Sci Med Sci. 2008 Apr;63(4):369-75	AS179
307	Predictors of optical density of lutein and zeaxanthin in retinas of older women in the Carotenoids in Age-Related Eye Disease Study, an ancillary study of the Women's Health Initiative	Mares-Perlman, LaRowe, Snodderly, Moeller, Gruber, Klein, Wooten, Johnson, Chappel, CAREDS Macular Pigment Study Group and Investigators	12	OS	Am J Clin Nutr. 2006 Nov;84(5):1107-22	AS105
308	Association between dietary fat intake and age-related macular degeneration in the Carotenoids in Age-Related Eye Disease Study (CAREDS): an ancillary study of the Women's Health Initiative	Parekh, Voland, Moeller, Blodi, Ritenbaugh, Chappel, Wallace, Mares, CAREDS Research Study Group	12	OS	Arch Ophthalmol. 2009;127(11):1483-1493	AS105

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
314	Aspirin use, dose, and clinical outcomes in postmenopausal women with stable cardiovascular disease: The Women's Health Initiative Observational Study	Berger, Brown, Burke, Oberman, Kostis, Langer, Wong, Wassertheil-Smoller	12	OS	Circ Cardiovasc Qual Outcomes. 2009 Mar;2(2):78-87. Epub 2009 Mar 5	
316	Daily coffee consumption and prevalence of nonmelanoma skin cancer in Caucasian women	Abel, Hendrix, McNeeley, Johnson, Rosenberg, Mossavar-Rahmani, Vitolins, Kruger	12	OS	Eur J Cancer Prev. 2007 Oct;16(5):446-452	
317	Pelvic organ prolapse in older women: Prevalence and risk factors	Nygaard, Bradley, Brandt, Women's Health Initiative	12	CT	Obstet Gynecol. 2004 Sep;104(3):489-97	AS135
318	Depressive symptoms, bone loss, and fractures in postmenopausal women	Spangler, Scholes, Brunner, Robbins, Reed, Newton, Melville, LaCroix	12	OS	J Gen Intern Med. 2008 May;23(5):567-74. Epub 2008 Feb 20	
319	The relationship between religion and cardiovascular outcomes and all-cause mortality in the Women's Health Initiative Observational Study	Schnall, Wassertheil-Smoller, Swencionis, Zemon, Tinker, O'Sullivan, VanHorn, Goodwin	12	OS	Psychol Health. 2010 Feb;25(2):249-63. Epub 2008 Nov 17	
322	Postmenopausal hormone therapy and risk of cardiovascular disease by age and years since menopause	Rossouw, Prentice, Manson, Wu, Barad, Barnabei, Ko, LaCroix, Margolis, Stefanick	12	CT	JAMA. 2007 Apr 4;297(13):1465-77	
323	Vaginal wall descensus and pelvic floor symptoms in older women	Bradley, Nygaard	12	OS	Obstet Gynecol. 2005 Oct;106(4):759-66	AS135
324	Mortality and cardiac and vascular outcomes in extremely obese women	McTigue, Larson, Valoski, Burke, Kotchen, Lewis, Stefanick, VanHorn, Kuller	12	OS	JAMA. 2006 Jul 5;296(1):79-86	
325	Association between alcohol intake and domain-specific cognitive function in older women	Espeland, Coker, Wallace, Rapp, Resnick, Limacher, Powell, Messina, Women's Health Initiative Study of Cognitive Aging	12	CT	Neuroepidemiology. 2006;27(1):1-12. Epub 2006 May 24	AS103
326	The association between osteoporosis and alveolar crestal height in postmenopausal women	Wactawski-Wende, Hausmann, Hovey, Trevisan, Grossi, Genco	12	CT	J Periodontol. 2005 Nov;76(11 Suppl):2116-24	AS98

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
327	Low-fat dietary pattern and weight change over 7 years: The Women's Health Initiative Dietary Modification Trial	Howard, Manson, Stefanick, Beresford, Frank, Jones, Rodabough, Sneltselaar, Thomson, Tinker, Vitolins, Prentice	12	CT	JAMA. 2006 Jan 4;295(1):39-49	
328	Prospective study of leukocyte count as a predictor of incident breast, colorectal, endometrial, and lung cancer and mortality in postmenopausal women	Margolis, Rodabough, Thomson, Lopez, McTiernan, for the Women's Health Initiative Research Group	12	OS	Arch Intern Med. 2007 Sep 24;167(17):1837-44	
330	Effects of estrogen with and without progesterin and obesity on symptomatic gastroesophageal reflux	Zheng, Margolis, Liu, Tinker, Ye, Women's Health Initiative Investigators	12	CT	Gastroenterology. 2008 Jul;135(1):72-81. Epub 2008 Mar 25	
331	Pelvic floor symptoms and lifestyle factors in older women	Bradley, Kennedy, Nygaard	12	CT	J Womens Health (Larchmt). 2005 Mar;14(2):128-36	AS135
332	Conjugated equine estrogens and global cognitive function in postmenopausal women: Women's Health Initiative Memory Study	Espeland, Rapp, Shumaker, Brunner, Manson, Sherwin, Hsia, Margolis, Hogan, Wallace, Dailey, Freeman, Hays-Grudo	12	WHIMS	JAMA. 2004 Jun 23;291(24):2959-68	AS39
336	Conjugated equine estrogens and incidence of probable dementia and mild cognitive impairment in postmenopausal women: Women's Health Initiative Memory Study	Shumaker, Legault, Kuller, Rapp, Thal, Lane, Fillit, Stefanick, Hendrix, Lewis, Masaki, Coker	12	WHIMS	JAMA. 2004 Jun 23;291(24):2947-58	AS39
337	Estrogen plus progesterin therapy and breast cancer in recently postmenopausal women	Prentice, Chlebowski, Stefanick, Manson, Pettinger, Hendrix, Kooperberg, Kuller, Lane, McTiernan, O'Sullivan, Rossouw, Anderson	12	Gen	Am J Epidemiol. 2008 May 15;167(10):1207-16. Epub 2008 Mar 27	
339	Validity of diabetes self-reports in the Women's Health Initiative: comparison with medication inventories and fasting glucose measurements	Margolis, Qi, Brzyski, Bonds, Howard, Kempainen, Liu, Robinson, Safford, Tinker, Phillips	12	Gen	Clin Trials. 2008;5(3):240-7	
340	Hormone therapy improves femur geometry among ethnically diverse postmenopausal participants in the Women's Health Initiative Hormone Intervention Trials	Chen, Beck, Cauley, Lewis, LaCroix, Bassford, Wu, Sherrill, Going	12	CT	J Bone Miner Res. 2008 Dec;23(12):1935-45. Epub 2008 Jul 29	AS153

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
341	Race/ethnicity, socioeconomic status, and lifetime morbidity burden in the Women's Health Initiative: A cross-sectional analysis	Gold, Michael, Whitlock, Hubbell, Mason, Rodriguez, Safford, Sarto	12	Gen	J Womens Health (Larchmt). 2006 Dec;15(10):1161-73	
342	Body mass index is not a good predictor of bone density: Results from WHI, CHS, and EPIDOS	Robbins, Schott, Azari, Kronmal	12	OS	J Clin Densitom. 2006 Jul-Sep;9(3):329-34	
343	Effects of conjugated equine estrogens on breast cancer and mammography screening in postmenopausal women with hysterectomy	Stefanick, Anderson, Margolis, Hendrix, Rodabough, Paskett, Lane, Hubbell, Assaf, Sarto, Schenken, Yasmeen, Lessin, Chlebowski, Women's Health Initiative Investigators	12	CT	JAMA. 2006 Apr 12;295(14):1647-57	
344	Elderly women diagnosed with nonspecific chest pain may be at increased cardiovascular risk	Robinson, Wallace, Limacher, Sato, Cochrane, Wasserheil-Smoller, Ockene, Blanchette, Ko	12	Gen	J Womens Health (Larchmt). 2006 Dec;15(10):1151-60	
345	Conjugated equine estrogens and coronary heart disease: The Women's Health Initiative	Hsia, Langer, Manson, Kuller, Johnson, Hendrix, Pettinger, Heckbert, Greep, Crawford, Eaton, Kostis, Caralis, Prentice, Women's Health Initiative Investigators	12	CT	Arch Intern Med. 2006 Feb 13;166(3):357-65	W1, W6
346	Estrogen plus progestin and breast cancer detection by means of mammography and breast biopsy	Chlebowski, Anderson, Pettinger, Lane, Langer, Gilligan, Walsh, Chen, McTiernan	12	CT	Arch Intern Med. 2008 Feb 25;168(4):370-377	
347	Effects of conjugated equine estrogen on stroke in the Women's Health Initiative	Hendrix, Wasserheil-Smoller, Johnson, Howard, Kooperberg, Rossouw, Trevisan, Aragaki, Baird, Bray, Buring, Ciriqui, Herrington, Lynch, Rapp, Torner, et al.	12	CT	Circulation. 2006 May 23;113(20):2425-34. Epub 2006 May 15	W1, W6
348	Effects of conjugated equine estrogen on health-related quality of life in postmenopausal women with hysterectomy: Results from the Women's Health Initiative randomized clinical trial	Brunner, Gass, Aragaki, Hays-Grudo, Granek, Woods, Mason, Brzyski, Ockene, Assaf, LaCroix, Matthews, Wallace, Women's Health Initiative Investigators	12	CT	Arch Intern Med. 2005 Sep 26;165(17):1976-86	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
350	Venous thrombosis and conjugated equine estrogen in women without a uterus	Curb, Prentice, Bray, Langer, VanHorn, Barnabei, Bloch, Cyr, Gass, Lepine, Rodabough, Sidney, Uwaifo, Rosendaal	12	CT	Arch Intern Med. 2006 Apr 10;166(7):772-80	W1, W6
352	Body size, weight cycling, and risk of renal cell carcinoma among postmenopausal women: The Women's Health Initiative (United States)	Luo, Margolis, Adami, Lopez, Lessin, Ye, Women's Health Initiative Investigators	12	Gen	Am J Epidemiol. 2007 Oct 1;166(7):752-9. Epub 2007 Jul 5	
353	Conjugated equine estrogens and colorectal cancer incidence and survival: The Women's Health Initiative Randomized Clinical Trial	Ritenbaugh, Stanford, Ascensao, Chlebowski, Frank, Garland, Lane, Mason, McNeeley, Shikany, Stefanick, Taylor, Wu	12	CT	Cancer Epidemiol Biomarkers Prev. 2008 Oct;17(10):2609-2618. Epub 2008 Sep 30	
354	Effects of conjugated equine estrogen on risk of fractures and BMD in postmenopausal women with hysterectomy: Results from the women's health initiative randomized trial	Jackson, Wactawski-Wende, LaCroix, Pettinger, Yood, Watts, Robbins, Lewis, Beresford, Ko, Naughton, Satterfield, Bassford, Women's Health Initiative Investigators	12	CT	J Bone Miner Res. 2006 Jun;21(6):817-28	
356	The cross-sectional relationship between body mass index, waist-hip ratio, and cognitive performance in postmenopausal women enrolled in the Women's Health Initiative	Kerwin, Zhang, Kotchen, Espeland, VanHorn, McTigue, Robinson, Powell, Kooperberg, Coker, Hoffman	12	CT	J Am Geriatr Soc. 2010 Jul 14. [Epub ahead of print]	
357	The effect of conjugated equine oestrogen on diabetes incidence: The Women's Health Initiative randomised trial	Bonds, Lasser, Qi, Brzycki, Caan, Heiss, Limacher, Liu, Mason, Oberman, O'Sullivan, Phillips, Prineas, Tinker	12	CT	Diabetologia. 2006 Mar;49(3):459-68. Epub 2006 Jan 27	
358	Conjugated equine estrogen influence on mammographic density in postmenopausal women in a substudy of the Women's Health Initiative Randomized Trial	McTiernan, Chlebowski, Martin, Peck, Aragaki, Pisano, Wang, Johnson, Manson, Wallace, Vitolins, Heiss	12	CT	J Clin Oncol. 2009 Dec 20;27(36):6135-43. Epub 2009 Nov 9	AS36
359	Risk of fracture in women with type 2 diabetes: The Women's Health Initiative Observational Study	Bonds, Larson, Schwartz, Strotmeyer, Robbins, Rodriguez, Johnson, Margolis	12	OS	J Clin Endocrinol Metab. 2006 Sep;91(9):3404-10. Epub 2006 Jun 27	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
361	Effect of hormone therapy on risk of hip and knee joint replacement in the Women's Health Initiative	Cirillo, Wallace, Wu, Yood	12	CT	Arthritis Rheum. 2006 Oct;54(10):3194-204	AS150
362	Effects of postmenopausal hormone therapy on rheumatoid arthritis: The Women's Health Initiative randomized controlled trials	Walitt, Pettinger, Weinstein, Katz, Torner, Wasko, Howard, Women's Health Initiative Investigators	12	CT	Arthritis Rheum. 2008 Mar 15;59(3):302-10. Epub 2008 Feb 28	AS150
363	Long-term exposure to air pollution and incidence of cardiovascular events in women	Miller, Siscovick, Sheppard, Shepherd, Sullivan, Anderson, Kaufman	12	CT	N Engl J Med. 2007 Feb 1;356(5):447-58	AS150
367	The Women's Health Initiative: A potential resource for future studies of autoimmune diseases	Howard	12	Gen	Autoimmunity. 2004 Jun;37(4):265-8	AS150
368	Postmenopausal hormone therapy in relation to cardiovascular disease and cognition	Prentice	12	CT	Proceedings of the Forty Seventh Study Group of the Royal College of Obstetricians and Gynecologists. 2004	AS132
369	A prospective study of inflammatory cytokines and diabetes mellitus in a multiethnic cohort of postmenopausal women	Liu, Tinker, Song, Rifai, Bonds, Cook, Heiss, Howard, Hotamisligil, Hu, Kuller, Manson	12	OS	Arch Intern Med. 2007 Aug 13-27;167(15):1676-85	AS132
370	Benchmarks for designing two-stage studies using modified mini-mental state examinations: Experience from the Women's Health Initiative Memory Study	Espeland, Rapp, Robertson, Granek, Murphy, Albert, Bassford	12	CT	Clin Trials. 2006;3(2):99-106	AS39
371	Associations between intermediate age-related macular degeneration and lutein and zeaxanthin in the Carotenoids in Age-related Eye Disease Study (CAREDS): Ancillary study of the Women's Health Initiative	Moeller, Parekh, Tinker, Ritenbaugh, Blodi, Wallace, Marcs-Perlman	12	OS	Arch Ophthalmol. 2006 Aug;124(8):1151-62	AS105
372	Factors associated with 5-year risk of hip fracture in postmenopausal women	Robbins, Aragaki, Kooperberg, Watts, Wactawski-Wende, Jackson, LeBoff, Lewis, Chen, Stefanick, Cauley	12	OS	JAMA. 2007 Nov 28;298(20):2389-98	AS105



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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
373	Conjugated equine estrogens and peripheral arterial disease risk: The Women's Health Initiative	Hsia, Cricqui, Herrington, Manson, Wu, Heckbert, Allison, McDermott, Robinson, Masaki, Women's Health Initiative Research Group	12	CT	Am Heart J. 2006 Jul;152(1):170-6	
375	Intentional weight loss and risk of lymphohematopoietic cancers	De Roos, Ulrich, Ray, Mossavar-Rahmani, Rosenberg, Caan, Thomson, McTiernan, LaCroix	12	OS	Cancer Causes Control. 2010 Feb;21(2):223-36. Epub 2009 Oct 23	
376	Circulating levels of endothelial adhesion molecules and risk of diabetes in an ethnically diverse cohort of women	Song, Manson, Tinker, Rifai, Cook, Hu, Hotamisligil, Ridker, Rodriguez, Margolis, Oberman, Liu	12	OS	Diabetes. 2007 Jul;56(7):1898-904. Epub 2007 Mar 27	AS132
377	Another treatment gap: Restarting secondary prevention medications: The Women's Health Initiative	Robinson, Wallace, Safford, Pettinger, Cochrane, Ko, O'Sullivan, Masaki, Petrovich	12	Gen	J Clin Lipidol. 2010 Jan;4(1):36-45	
378	Expression and ambivalence over expression of negative emotion: Cross-sectional associations with psychosocial factors and health-related quality of life in postmenopausal women	Michael, Wisdom, Perrin, Bowen, Cochrane, Brzycki, Ritenbaugh	12	Gen	J Women Aging. 2006;18(2):25-40	
385	Development of a glycemic index database for food frequency questionnaires used in epidemiologic studies	Neuhouser, Tinker, Thomson, Caan, VanHorn, Snetelaar, Parker, Patterson, Robinson, Beresford, Shikany	12	CT	J Nutr. 2006 Jun;136(6):1604-9	AS111
386	The role of antioxidants and vitamin A in ovarian cancer: Results from the Women's Health Initiative	Thomson, Neuhouser, Shikany, Caan, Monk, Mossavar-Rahmani, Sarto, Parker, Modugno, Anderson	12	Gen	Nutr Cancer. 2008;60(6):710-9	
387	Major and minor ECG abnormalities in asymptomatic women and risk of cardiovascular events and mortality	Denes, Larson, Lloyd-Jones, Prineas, Greenland	12	CT	JAMA. 2007 Mar 7;297(9):978-85	
388	Accuracy of commercial geocoding: Assessment and implications	Whitise, Quibrera, Smith, Catellier, Liao, Henley, Heiss	12	CT	Epidemiol Perspect Innov. 2006 Jul 20;3:8	AS140

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
390	Identifying risk factors for cognitive change in the Women's Health Initiative Memory Study: a neural networks approach	Bandelow, Espeland, Henderson, Resnick, Wallace, Coker, Hogervorst	12	WHIMS	In: Hogervorst E, Henderson VW, Gibbs RB, Brinton RD, eds. Hormones, Cognition and Dementia. New York, NY: Cambridge University Press, 2009:11-24	AS39
392	Family history of myocardial infarction predicts incident coronary heart disease in postmenopausal women with diabetes: The Women's Health Initiative Observational Study	Li, O'Sullivan, Robinson, Safford, Curb, Johnson	12	OS	Diabetes Metab Res Rev. 2009 Nov;25(8):725-32. Epub 2009 Sep 24	
394	Association between cigarette smoking and colorectal cancer in the Women's Health Initiative	Paskett, Reeves, Rohan, Allison, Williams, Messina, Whitlock, Sato, Hunt	12	Gen	J Natl Cancer Inst. 2007 Nov 21;99(22):1729-35. Epub 2007 Nov 13	
395	Effect of hormone therapy on lean body mass, falls, and fractures: 6-year results from the Women's Health Initiative hormone trials	Bea, Zhao, Cauley, LaCroix, Bassford, Lewis, Jackson, Tyllavsky, Chen	12	CT	Menopause. 2010 Aug 3. [Epub ahead of print]	
398	Osteoporosis and rate of bone loss among postmenopausal survivors of breast cancer	Chen, Maricic, Pettinger, Ritenbaugh, Lopez, Barad, Gass, LeBoff, Bassford	12	OS	Cancer. 2005 Oct 1;104(7):1520-30	
399	Subtypes of mild cognitive impairment in older postmenopausal women: The Women's Health Initiative Memory Study	Rapp, Legault, Henderson, Brunner, Masaki, Jones, Absher, Thal	12	WHIMS	Alzheimer Dis Assoc Disord. 2010 May 13. [Epub ahead of print]	AS39
401	Are depressive symptoms associated with cancer screening and cancer stage at diagnosis among postmenopausal women? The Women's Health Initiative Observational Cohort	Aggarwal, Freund, Sato, Adams-Campbell, Lopez, Lessin, Ockene, Wallace, Williams, Bonds	12	OS	J Womens Health (Larchmt). 2008 Oct;17(8):1353-61. Epub 2008 Sep 14	
404	Fracture risk increases after diagnosis of breast or other cancers in postmenopausal women: Results from the Women's Health Initiative	Chen, Maricic, Aragaki, Mouton, Arendell, Lopez, Bassford, Chlebowski	12	Gen	Osteoporos Int. 2009 Apr;20(4):527-36. Epub 2008 Sep 3	
409	Clinical risk factors for fractures in multi-ethnic women: The Women's Health Initiative	Cauley, Wu, Wampler, Barnhart, Allison, Chen, Jackson, Robbins	12	OS	J Bone Miner Res. 2007 Nov;22(11):1816-26	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
414	Prehypertension and cardiovascular disease risk in the Women's Health Initiative	Hsia, Margolis, Eaton, Wenger, Allison, Wu, LaCroix, Black, Women's Health Initiative Investigators	12	CT	Circulation. 2007 Feb 20;115(7):855-60	AS140
415	GIS approaches for the estimation of residential-level ambient PM concentrations	Liao, Pequet, Duan, Whitsel, Dou, Smith, Lin, Chen, Heiss	12	CT	Environ Health Perspect. 2006 Sep;114(9):1374-80	AS140
416	Influence of estrogen plus testosterone supplementation on breast cancer	Ness, Albano, McTiernan, Cauley	12	OS	Arch Intern Med. 2009 Jan 12;169(1):41-6	
417	Impact of cyclooxygenase inhibitors in the Women's Health Initiative Hormone Trials: Secondary analysis of a randomized trial	Hsia, Manson, Kuller, Pettinger, Choe, Langer, Limacher, Oberman, Ockene, O'Sullivan, Robinson	12	CT	PLoS Clin Trials. 2006 Sep 29;1(5):e26	
418	Linear measurement error models with restricted sampling	Gorfine, Lipshtat, Freedman, Prentice	12	CT	Biometrics. 2007 Mar;63(1):137-42	
420	Postmenopausal hormone use and the risk of nephrolithiasis: Results from the Women's Health Initiative hormone therapy trials	Maalouf, Sato, Welch, Howard, Cochrane, Sakhaee, Robbins	12	CT	Arch Intern Med. 2010;170(18):1678-1685	
421	Serum alpha-tocopherol, concurrent and past vitamin E intake, and mild cognitive impairment	Dunn, Weintraub, Stoddard, Banks	12	Gen	Neurology. 2007 Feb 27;68(9):670-6	AS84
423	Combined analysis of Women's Health Initiative observational and clinical trial data on postmenopausal hormone treatment and cardiovascular disease	Prentice, Langer, Stefanick, Howard, Pettinger, Anderson, Barad, Curb, Kotchen, Kuller, Limacher, Wactawski-Wende, Women's Health Initiative Investigators	12	Gen	Am J Epidemiol. 2006 Apr 1;163(7):589-99. Epub 2006 Feb 16	
426	Incident invasive breast cancer, geographic location of residence, and reported average time spent outside	Millen, Pettinger, Freudenheim, Langer, Rosenberg, Mossavar-Rahmani, Duffy, Lane, McTiernan, Kuller, Lopez, Wactawski-Wende	12	OS	Cancer Epidemiol Biomarkers Prev. 2009 Feb;18(2):495-507. Epub 2009 Feb 3	
428	Association of pelvic organ prolapse and fractures in postmenopausal women: Analysis of baseline data from the Women's Health Initiative Estrogen plus Progestin Trial	Pal, Hailpern, Santoro, Freeman, Barad, Kiperszok, Barnabei, Wassertheil-Smoller	12	Gen	Menopause. 2008 Jan-Feb;15(1):59-66; 2007 Aug 9 [Epub ahead of print]	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
429	Can biomarkers identify women at increased stroke risk? The Women's Health Initiative Hormone Trials	Kooperberg, Cushman, Hsia, Robinson, Aragaki, Lynch, Baird, Johnson, Kuller, Beresford, Rodriguez	12	Gen	PLoS Clin Trials. 2007 Jun 15;2(6):e28	W6
430	Sleep duration and risk of ischemic stroke in postmenopausal women	Chen, Brunner, Ren, Wassertheil-Smolter, Larson, Levine, Allison, Naughton, Stefanick	12	Gen	Stroke. 2008 Dec;39(12):3185-92. Epub 2008 Jul 17	AS140
433	Baseline serum estradiol and fracture reduction during treatment with hormone therapy: The Women's Health Initiative randomized trial	Cauley, LaCroix, Robbins, Larson, Wallace, Wactawski-Wende, Chen, Bauer, Cummings, Jackson	12	CT	Osteoporos Int. 2010 Jan;21(1):167-77. Epub 2009 May 13	W9
436	Health characteristics of postmenopausal women with breast implants	Rubin, Song Landfair, Shestak, Lane, Valoski, Chang, Tindle, Kuller	12	Gen	Plast Reconstr Surg. 2010 Mar;125(3):799-810	
438	Walking speed and risk of incident ischemic stroke among postmenopausal women	McGinn, Kaplan, Verghese, Rosenbaum, Psaty, Baird, Lynch, Wolf, Kooperberg, Larson, Wassertheil-Smolter	12	Gen	Stroke. 2008 Apr;39(4):1233-9. Epub 2008 Feb 21	
440	Monitoring and reporting of the Women's Health Initiative randomized hormone therapy trials	Anderson, Kooperberg, Gellar, Rossouw, Pettinger, Prentice	12	CT	Clin Trials. 2007;4(3):207-17	
441	Calcium plus vitamin D supplementation and the risk of postmenopausal weight gain	Caan, Neuhouser, Aragaki, Lewis, Jackson, LeBoff, Margolis, Powell, Uwaifo, Whitlock, Wylie-Rosette, LaCroix	12	CT	Arch Intern Med. 2007 May 14;167(9):893-902	
442	Test-retest reliability of the Women's Health Initiative Physical Activity Questionnaire	Meyer, Evenson, Morimoto, Siscovick, White	12	OS	Med Sci Sports Exerc. 2009 Mar;41(3):530-8. Epub 2009 Feb 6	W2
444	Associations between age-related nuclear cataract and lutein and zeaxanthin in the diet and serum in the Carotenoids in the Age-Related Eye Disease Study, an Ancillary Study of the Women's Health Initiative	Moeller, Voland, Tinker, Blodi, Klein, Gehr, Johnson, Snodderly, Wallace, Chappell, Parekh, Ritenbaugh, Mares	12	OS	Arch Ophthalmol. 2008 Mar;126(3):354-364	AS105
445	Usefulness of baseline lipids and C-reactive protein in women receiving menopausal hormone therapy as predictors of treatment-related coronary events	Bray, Larson, LaCroix, Manson, Limacher, Rossouw, Lasser, Lawson, Stefanick, Langer, Margolis	12	Gen	Am J Cardiol. 2008 Jun 1;101(11):1599-1605. Epub 2008 Apr 2	W6

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
447	Low-fat dietary pattern and risk of cardiovascular disease: The Women's Health Initiative Randomized Controlled Dietary Modification Trial	Howard, VanHorn, Hsia, Manson, Stefanick, Wassertheil-Smoller, Kuller, LaCroix, Langer, Lasser, Lewis, Limacher, Margolis, Mysiw, et al	12	CT	JAMA. 2006 Feb 8;295(6):655-66	W1
448	Low-fat dietary pattern and risk of invasive breast cancer: The Women's Health Initiative Randomized Controlled Dietary Modification Trial	Prentice, Caan, Chlebowski, Patterson, Kuller, Ockene, Margolis, Limacher, Manson, Parker, Paskett, Phillips, Robbins, Rossouw, et al	12	CT	JAMA. 2006 Feb 8;295(6):629-42	W1, W33
449	Low-fat dietary pattern and risk of colorectal cancer: The Women's Health Initiative Randomized Controlled Dietary Modification Trial	Beresford, Johnson, Ritenbaugh, Lasser, Snetelaar, Black, Anderson, Assaf, Bassford, Bowen, Brunner, Brzycki, Caan, Chlebowski, et al	12	CT	JAMA. 2006 Feb 8;295(6):643-54	W1
450	Calcium plus vitamin D supplementation and the risk for fractures	Jackson, LaCroix, Gass, Wallace, Robbins, Lewis, Bassford, Beresford, Black, Blanchette, Bonds, Brunner, Brzycki, Caan, et al	12	CT	N Engl J Med. 2006 Feb 16;354(7):669-83	W15
451	Calcium plus vitamin D supplementation and the risk of colorectal cancer	Wactawski-Wende, Kotchen, Anderson, Assaf, Brunner, O'Sullivan, Margolis, Ockene, Phillips, Pottern, Prentice, Robbins, Rohan, Sarto, et al	12	CT	N Engl J Med. 2006 Feb 16;354(7):684-96	W15
452	Macular pigment density and age-related maculopathy in the Carotenoids in Age-Related Eye Disease Study. An ancillary study of the Women's Health Initiative	LaRowe, Mares-Peñalman, Snodderly, Klein, Wooten, Chappell, CAREDS Macular Pigment Study Group	12	CT	Ophthalmology. 2008 May;115(5):876-883.e1. Epub 2007 Sep 14	AS105
453	Excess weight and physical health-related quality of life in postmenopausal women of diverse racial/ethnic backgrounds	Lynch, McTigue, Bost, Tinker, Vitolins, Adams-Campbell, Sarto, Hays-Grudo, Manson, Kuller	12	Gen	J Womens Health (Larchmt). 2010 Jul 14. [Epub ahead of print]	
456	Dual-energy X-ray absorptiometry is a valid tool for assessing skeletal muscle mass in older women	Chen, Wang, Lohman, Heymsfield, Outwater, Nicholas, Bassford, LaCroix, Sherrill, Punyaniya, Wu, Going	12	Gen	J Nutr. 2007 Dec;137(12):2775-80	AS153

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
459	A prospective evaluation of insulin and insulin-like growth factor-I as risk factors for endometrial cancer	Gunter, Hoover, Yu, Wassertheil-Smoller, Manson, Li, Harris, Rohan, Xue, Ho, Einstein, Kaplan, Burk, Wylie-Rosette, Pollak, Anderson, et al.	12	OS	Cancer Epidemiol Biomarkers Prev. 2008 Apr;17(4):921-9	AS129
460	Insulin, insulin-like growth factor-I, endogenous estradiol, and risk of colorectal cancer in postmenopausal women	Gunter, Hoover, Yu, Wassertheil-Smoller, Rohan, Manson, Howard, Wylie-Rosette, Anderson, Ho, Kaplan, Li, Xue, Harris, Burk, Strickler, et al.	12	OS	Cancer Res. 2008 Jan 1;68(1):329-37	AS129
461	Insulin, insulin-like growth factor-I, and risk of breast cancer in postmenopausal women	Gunter, Hoover, Yu, Wassertheil-Smoller, Rohan, Manson, Li, Ho, Xue, Anderson, Kaplan, Harris, Howard, Wylie-Rosette, Burk, Strickler, et al.	12	OS	J Natl Cancer Inst. 2009 Jan 7;101(1):48-60. Epub 2008 Dec 30	AS129
464	Use of recovery biomarkers to calibrate nutrient consumption self-reports in the Women's Health Initiative	Neuhouser, Tinker, Shaw, Schoeller, Bingham, VanHorn, Beresford, Caan, Thomson, Satterfield, Kuller, Heiss, Smit, Sarto, Ockene, Stefanick, et al.	12	CT	Am J Epidemiol. 2008 May 15;167(10):1247-59. Epub 2008 Mar 15	W8
467	Low-fat, increased fruit, vegetable, and grain dietary pattern, fractures, and bone mineral density: the Women's Health Initiative Dietary Modification Trial	McTiernan, Wactawski-Wende, Wu, Rodabough, Watts, Tyllavsky, Freeman, Hendrix, Jackson	12	CT	Am J Clin Nutr. 2009 Jun;89(6):1864-76. Epub 2009 Apr 29	
468	Effect of calcium and vitamin D supplementation on blood pressure: The Women's Health Initiative Randomized Trial	Margolis, Ray, VanHorn, Manson, Allison, Black, Beresford, Connelly, Curb, Grimm, Kotchen, Kuller, Wassertheil-Smoller, Thomson, Torner	12	CT	Hypertension. 2008 Nov;52(5):847-55. Epub 2008 Sep 29	
469	Low-fat dietary pattern and cancer incidence in the Women's Health Initiative Dietary Modification Randomized Controlled Trial	Prentice, Thomson, Caan, Hubbell, Anderson, Beresford, Pettinger, Lane, Lessin, Yasmeen, Singh, Khandekar, Shikany, Satterfield, Chlebowski	12	CT	J Natl Cancer Inst. 2007 Oct 17;99(20):1534-43. Epub 2007 Oct 9	W31
471	Calcium/vitamin D supplementation and cardiovascular events	Hsia, Heiss, Ren, Allison, Dolan, Greenland, Heckbert, Johnson, Manson, Sidney, Trevisan, Women's Health Initiative Investigators	12	CT	Circulation. 2007 Feb 20;115(7):846-54	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
472	Calcium plus Vitamin D supplementation and mortality in postmenopausal women: The Women's Health Initiative Calcium-Vitamin D Randomized Controlled Trial	LaCroix, Kotchen, Anderson, Brzyski, Cauley, Cummings, Gass, Johnson, Ko, Larson, Manson, Stefanick, Wactawski-Wende	12	CT	J Gerontol A Biol Sci Med Sci. 2009 May;64(5):559-67. Epub 2009 Feb 16	
475	Calcium, vitamin D supplementation, and physical function in the Women's Health Initiative	Brunner, Cochrane, Jackson, Larson, Lewis, Limacher, Rosal, Shumaker, Wallace, Women's Health Initiative Investigators	12	CT	J Am Diet Assoc. 2008 Sep;108(9):1472-9	
479	Homocysteine levels and risk of hip fracture in postmenopausal women	LeBoff, Narweker, LaCroix, Wu, Jackson, Lee, Bauer, Cauley, Kooperberg, Lewis, Thomas, Cummings	12	OS	J Clin Endocrinol Metab. 2009 Apr;94(4):1207-13. Epub 2009 Jan 27	AS90
481	Associations of serum sex hormone-binding globulin and sex hormone concentrations with hip fracture risk in postmenopausal women	Lee, LaCroix, Wu, Cauley, Jackson, Kooperberg, LeBoff, Robbins, Lewis, Bauer, Cummings	12	OS	J Clin Endocrinol Metab. 2008 May;93(5):1796-803. Epub 2008 Mar 11	AS90
482	Plasma folate, vitamin B6, vitamin B12, and homocysteine and pancreatic cancer risk in four large cohorts	Schernhammer, Wolpin, Rifai, Cochrane, Manson, Ma, Giovannucci, Thomson, Stampfer, Fuchs	12	OS	Cancer Res. 2007 Jun 1;67(11):5553-60	AS146
483	Prediagnostic plasma C-peptide and pancreatic cancer risk in men and women	Michaud, Wolpin, Giovannucci, Liu, Cochrane, Manson, Pollak, Ma, Fuchs	12	OS	Cancer Epidemiol Biomarkers Prev. 2007 Oct;16(10):2101-9. Epub 2007 Sep 28	AS146
484	Circulating insulin-like growth factor axis and the risk of pancreatic cancer in four prospective cohorts	Wolpin, Michaud, Giovannucci, Schernhammer, Stampfer, Manson, Cochrane, Rohan, Ma, Pollak, Fuchs	12	OS	Br J Cancer. 2007 Jul 2;97(1):98-104. Epub 2007 May 29	AS146
486	Insulin sensitivity and insulin secretion determined by homeostasis model assessment and risk of diabetes in a multiethnic cohort of women: The Women's Health Initiative Observational Study	Song, Manson, Tinker, Howard, Kuller, Nathan, Rifai, Liu	12	OS	Diabetes Care. 2007 Jul;30(7):1747-52. Epub 2007 Apr 27	AS132
489	Does obesity really make the femur stronger? Bone Mineral Density, geometry and fracture incidence in the Women's Health Initiative - Observational Study	Beck, Pettit, Wu, LeBoff, Cauley, Chen	12	OS	J Bone Miner Res. 2009 Aug;24(8):1369-79. Epub 2009 Mar 17	AS153

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
492	Cardiovascular risk in women with non-specific chest pain (from the Women's Health Initiative Hormone Trials)	Robinson, Wallace, Limacher, Ren, Cochrane, Wassertheil-Smoller, Ockene, Blanchette, Ko	12	CT	Am J Cardiol. 2008 Sep 15;102(6):693-9. Epub 2008 Jul 2	
493	Panic attacks and risk of Incident cardiovascular events among postmenopausal women in the Women's Health Initiative observational study	Smoller, Pollack, Wassertheil-Smoller, Jackson, Oberman, Wong, Sheps	12	OS	Arch Gen Psychiatry. 2007 Oct;64(10):1153-60	
495	Natural history of pelvic organ prolapse in postmenopausal women	Bradley, Zimmerman, Qi, Nygaard	12	CT	Obstet Gynecol. 2007 Apr;109(4):848-54	AS135
496	Hip bone density predicts breast cancer risk independently of Gail score: Results from the Women's Health Initiative	Chen, Arendell, Aickin, Cauley, Lewis, Chlebowski	12	Gen	Cancer. 2008 Sep 1;113(5):907-15. Epub 2008 Jul 29	
501	Health risks and benefits 3 years after stopping randomized treatment with estrogen and progestin	Heiss, Wallace, Anderson, Aragaki, Beresford, Brzyski, Chlebowski, Gass, LaCroix, Manson, Prentice, Rossouw, Stefanick, Women's Health Initiative Investigators	12	CT	JAMA. 2008 Mar 5;299(9):1036-45	
503	Oophorectomy, hormone therapy, and subclinical coronary artery disease in women with hysterectomy: the Women's Health Initiative coronary artery calcium study	Allison, Manson, Langer, Carr, Rossouw, Pettinger, Phillips, Cochrane, Eaton, Greenland, Hendrix, Hsia, Hunt, Jackson, Johnson, Kuller, et al.	12	CT	Menopause. 2008 Jul-Aug;15(4 Pt 1):639-47. Epub 2008 May 2	W25
504	A comparison of two dietary instruments for evaluating the fat-breast cancer relationship	Freedman, Potischman, Kipnis, Midthune, Schatzkin, Thompson, Troiano, Prentice, Patterson, Carroll, Subar	12	CT	Int J Epidemiol. 2006 Aug;35(4):1011-21. Epub 2006 May 3	
506	Estrogen therapy and coronary-artery calcification	Manson, Allison, Rossouw, Carr, Langer, Hsia, Kuller, Cochrane, Hunt, Ludlam, Pettinger, Gass, Margolis, Nathan, et al, Ockene, et al.	12	CT	N Engl J Med. 2007 Jun 21;356(25):2591-602	W25
508	Alcohol and folate consumption and risk of benign proliferative epithelial disorders of the breast	Cui, Page, Chlebowski, Beresford, Hendrix, Lane, Rohan	12	CT	Int J Cancer. 2007 Sep 15;121(6):1346-51	AS130



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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
509	Cigarette smoking and risk of benign proliferative epithelial disorders of the breast in the Women's Health Initiative	Cui, Page, Chlebowski, Hsia, Hubbell, Johnson, Rohan	12	CT	Cancer Causes Control. 2007 May;18(4):431-8. Epub 2007 Feb 24	AS130
510	Alcohol consumption and the risk of coronary heart disease in women with diabetes: Women's Health Initiative Observational Study	Rajpathak, Freiberg, Wang, Wylie-Rosette, Wildman, Rohan, Robinson, Liu, Wassertheil-Smoller	12	OS	Eur J Nutr. 2010 Jun;49(4):211-8. Epub 2009 Oct 13	
514	Selected antioxidants and risk of hormone receptor-defined invasive breast cancers among postmenopausal women in the Women's Health Initiative Observational Study	Cui, Shikany, Liu, Yasmeen, Rohan	12	OS	Am J Clin Nutr. 2008 Apr;87(4):1009-18	
518	Baseline monograph - foreword	Rossouw, Anderson, Oberman	12	Gen	Ann Epidemiol. 2003 Oct;13:S1-S4	
519	Implementation of the Women's Health Initiative study design	Anderson, Manson, Wallace, Lund, Hall, Davis, Shumaker, Wang, Stein, Prentice	12	Gen	Ann Epidemiol. 2003 Oct;13(9 Suppl):S5-17	
520	The Women's Health Initiative recruitment methods and results	Hays-Grudo, Hunt, Hubbell, Anderson, Limacher, Allen, Rossouw	12	OS	Ann Epidemiol. 2003 Oct;13(9 Suppl):S18-77	W1
521	The Women's Health Initiative postmenopausal hormone trials: Overview and baseline characteristics of participants	Stefanick, Cochrane, Hsia, Barad, Liu, Johnson	12	Gen	Ann Epidemiol. 2003 Oct;13(9 Suppl):S78-86	W1
522	The Women's Health Initiative Dietary Modification trial: Overview and baseline characteristics of participants	Ritenbaugh, Patterson, Chlebowski, Caan, Tinker, Howard, Ockene	12	Gen	Ann Epidemiol. 2003 Oct;13(9 Suppl):S87-97	
523	The Women's Health Initiative calcium-vitamin D trial: Overview and baseline characteristics of participants	Jackson, LaCroix, Cauley, McGowan	12	Gen	Ann Epidemiol. 2003 Oct;13(9 Suppl):S98-106	
524	The Women's Health Initiative Observational Study: Baseline characteristics of participants and reliability of baseline measures	Langer, White, Lewis, Kotchen, Hendrix, Trevisan	12	OS	Ann Epidemiol. 2003 Oct;13(9 Suppl):S107-21	W1, W2

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
525	Outcomes ascertainment and adjudication methods in the Women's Health Initiative	Curb, McTiernan, Heckbert, Kooperberg, Stanford, Nevitt, Johnson, Proulx-Burns, Pastore, Criqui, Daugherty, WHI Morbidity and Mortality Committee	12	Gen	Ann Epidemiol. 2003 Oct;13(9 Suppl):S122-8	
526	Inflammatory, lipid, thrombotic, and genetic markers of coronary heart disease risk in the Women's Health Initiative trials of hormone therapy	Rossouw, Cushman, Greenland, Lloyd-Jones, Bray, Kooperberg, Pettinger, Robinson, Hendrix, Hsia	12	CT	Arch Intern Med. 2008 Nov 10;168(20):2245-53	W6
527	Predictors of change in calcium intake in postmenopausal women after osteoporosis screening	McLeod, McCann, Horvath, Wactawski-Wende	12	OS	J Nutr. 2007 Aug;137(8):1968-73	AS98
529	Ambient fine particulate matter exposure and myocardial ischemia in the Environmental Epidemiology of Arrhythmogenesis in the Women's Health Initiative (EEAWHI)	Zhang, Whitsel, Quibrera, Smith, Liao, Anderson, Prineas	12	CT	Environ Health Perspect. 2009 May;117(5):751-6. Epub 2009 Jan 23	AS140
534	Menopausal symptom experience before and after stopping estrogen therapy in the Women's Health Initiative randomized placebo-controlled trial	Brunner, Aragaki, Barnabei, Cochrane, Gass, Hendrix, Lane, Ockene, Woods, Yasmeen, Stefanick	12	CT	Menopause. 2010 May 24. [Epub ahead of print]	
535	Lipoprotein particle concentrations may explain the absence of coronary protection in the Women's Health Initiative Hormone Trials	Hsia, Otvos, Rossouw, Wu, Wassertheil-Smoller, Hendrix, Robinson, Lund, Kuller, for the Women's Health Initiative Research Group	12	CT	Arterioscler Thromb Vasc Biol. 2008 Sep;28(9):1666-71. Epub 2008 Jul 3	
536	Sexual satisfaction and cardiovascular disease: The Women's Health Initiative	McCall-Hosenfeld, Freund, Legault, (Jaramillo) Gaussoin, Cochrane, Manson, Wenger, Eaton, McNeeley, Rodriguez, Bonds	12	OS	Am J Med. 2008 Apr;121(4):295-301	
538	Electrocardiographic predictors of incident congestive heart failure and all-cause mortality in postmenopausal women: The Women's Health Initiative	Rautaharju, Kooperberg, Larson, LaCroix	12	CT	Circulation. 2006 Jan 31;113(4):481-9	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
541	Low-fat dietary pattern and risk of treated diabetes mellitus in postmenopausal women: the Women's Health Initiative randomized controlled dietary modification trial	Tinker, Bonds, Margolis, Manson, Howard, Larson, Perri, Beresford, Robinson, Rodriguez, Safford, Wenger, Stevens, Parker	12	CT	Arch Intern Med. 2008 Jul 28;168(14):1500-11	
542	Enrollment in a brain magnetic resonance study: Results from the Women's Health Initiative Memory Study Magnetic Resonance Imaging Study (WHIMS-MRI)	(Jaramillo) Gaussoin, Felton, Andrews, Desiderio, Hallam, Jackson, Coker, Robinson, Ockene, Espeland, Women's Health Initiative Memory Study Research Group	12	WHIMS	Acad Radiol. 2007 May;14(5):603-12	AS183
544	Menstrual and reproductive history, postmenopausal hormone use, and risk of benign proliferative epithelial disorders of the breast: A cohort study	Cui, Page, Lane, Rohan	12	CT	Breast Cancer Res Treat. 2009 Mar;114(1):113-20. Epub 2008 Mar 22	AS130
549	Semiparametric estimation exploiting covariate independence in two-phase randomized trials	Dai, LeBlanc, Kooperberg	12	Gen	Biometrics. 2009 Mar;65(1):178-87. Epub 2008 May 13	
550	Common genetic variation in calpain-10 gene (CAPN10) and diabetes risk in a multi-ethnic cohort of American postmenopausal women	Song, You, Hsu, Sul, Wang, Tinker, Eaton, Liu	12	OS	Hum Mol Genet. 2007 Dec 1;16(23):2960-71. Epub 2007 Sep 12	AS132
551	Antidepressant use and risk of incident cardiovascular morbidity and mortality among postmenopausal women in the Women's Health Initiative Study	Smoller, Allison, Cochrane, Curb, Perlis, Robinson, Rosal, Wang, Wassertheil-Smoller	12	OS	Arch Intern Med. 2009;169(22):2128-2139.	
554	Genetic variants in the UCP2-UCP3 gene cluster and risk of diabetes in the Women's Health Initiative Observational Study	Hsu, Niu, Song, Tinker, Kuller, Liu	12	OS	Diabetes. 2008 Apr;57(4):1101-7. Epub 2008 Jan 25	AS132
558	The relationship between cognitive function and physical performance in older women: Results from the Women's Health Initiative Memory Study	Atkinson, Rapp, Williamson, Lovato, Absher, Gass, Henderson, Johnson, Kostis, Sink, Mouton, Ockene, Stefanick, Lane, Espeland	12	WHIMS	J Gerontol A Biol Sci Med Sci. 2010 Mar;65(3):300-6. Epub 2009 Sep 29.	AS39
560	Loop diuretic use and fracture in postmenopausal women: Findings from the Women's Health Initiative	Carbone, Johnson, Bush, Robbins, Larson, Thomas, LaCroix	12	CT	Arch Intern Med. 2009 Jan 26;169(2):132-40	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
563	Cystatin-C, renal function, and incidence of hip fracture in postmenopausal women	LaCroix, Lee, Wu, Cauley, Shlipak, Ott, Robbins, Curb, LeBoff, Bauer, Jackson, Kooperberg, Cummings	12	OS	J Am Geriatr Soc. 2008 Aug;56(8):1434-41. Epub 2008 Jul 24	AS90
565	Self-reported osteoarthritis, ethnicity, body mass index, and other associated risk factors in postmenopausal women: Results from the Women's Health Initiative	Wright, Kershner Riggs, Lisse, Chen	12	Gen	J Am Geriatr Soc. 2008 Sep;56(9):1736-43. Epub 2008 Jul 17	
566	Ethnic differences in femur geometry in the Women's Health Initiative Observational Study	Nelson, Beck, Wu, Lewis, Bassford, Cauley, LeBoff, Going, Chen	12	Gen	Osteoporos Int. 2010 Aug 25. [Epub ahead of print]	AS153
567	New-onset breast tenderness after initiation of estrogen plus progestin therapy and breast cancer risk	Crandall, Aragaki, Chlebowski, McTiernan, Anderson, Hendrix, Cochrane, Kuller, Cauley	12	CT	Arch Intern Med. 2009 Oct 12;169(18):1684-91	
569	Hip structural geometry and incidence of hip fracture in postmenopausal women: What does it add to conventional bone mineral density?	LaCroix, Beck, Cauley, Lewis, Bassford, Jackson, Wu, Chen	12	CT	Osteoporos Int. 2010 Jun;21(6):919-29. Epub 2009 Sep 15	AS153
570	Calcium/vitamin D supplementation and coronary artery calcification in the Women's Health Initiative	Manson, Allison, Carr, Langer, Cochrane, Hendrix, Hsia, Hunt, Lewis, Margolis, Robinson, Rodabough, Thomas	12	CT	Menopause. 2010 Jun 14. [Epub ahead of print]	W25
572	Common genetic variants in Fatty Acid-Binding Protein-4 (FABP4) and clinical diabetes risk in the Women's Health Initiative Observational Study	Chan, Song, Hsu, You, Tinker, Liu	12	OS	Obesity (Silver Spring). 2010 Jan 28. [Epub ahead of print]	AS132
575	Hormone therapy and physical function change among older women in the Women's Health Initiative: a randomized controlled trial	Michael, Gold, Manson, Keast, Cochrane, Woods, Brzyski, McNeeley, Wallace	12	CT	Menopause. 2010 Mar;17(2):235-6. Epub 2009 Oct 23	
576	Circulating insulin-like growth factor binding protein-1 and the risk of pancreatic cancer	Wolpin, Michaud, Giovannucci, Schernhammer, Stampfer, Manson, Cochrane, Rohan, Ma, Pollak, Fuchs	12	OS	Cancer Res. 2007 Aug 15;67(16):7923-8	AS146
577	Women's Health Initiative Diet Intervention did not increase macular pigment optical density in an Ancillary Study of a subsample of the Women's Health Initiative	Moeller, Voland, Sarto, Gobel, Streicher, Mares-Pertman	12	CT	J Nutr. 2009 Sep;139(9):1692-9. Epub 2009 Jul 8	AS219

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
579	Relative effects of tamoxifen, raloxifene, and conjugated equine estrogens on cognition	Espelund, Shumaker, Limacher, Rapp, Bevers, Barad, Coker, Gaussoin, Stefanick, Lane, Maki, Resnick	12	WHIMS	J Womens Health (Larchmt). 2010 Mar;19(3):371-9. Epub 2010 Feb 7	AS103
581	Predictors of serum 25-hydroxyvitamin D concentrations among postmenopausal women: the Women's Health Initiative Calcium plus Vitamin D Clinical Trial	Millen, Wactawski-Wende, Pettinger, Melamed, Tyllavsky, Liu, Robbins, LaCroix, LeBoff, Jackson	12	CT	Am J Clin Nutr. 2010 May;91(5):1324-35. Epub 2010 Mar 10	W15
582	The utility of circulating biomarkers of inflammation and endothelial dysfunction for risk prediction and stratification of clinical diabetes in postmenopausal women -- The Women's Health Initiative Observational Study	Chao, Song, Cook, Tseng, Manson, Eaton, Margolis, Rodriguez, Phillips, Tinker, Liu	12	OS	Arch Intern Med. 2010 Sep 27;170(17):1557-65	AS132
583	Multivitamin use and risk of cancer and cardiovascular disease in the Women's Health Initiative cohorts	Neuhouser, Wassertheil-Smoller, Thomson, Aragaki, Anderson, Manson, Patterson, Rohan, VanHorn, Shikany, Thomas, LaCroix, Prentice	12	CT	Arch Intern Med. 2009 Feb 9;169(3):294-304	
584	A randomized controlled trial of calcium plus vitamin D supplementation and risk of benign proliferative breast disease	Rohan, Negassa, Chlebowski, Ceria-Ulep, Cochrane, Lane, Ginsberg, Wassertheil-Smoller, Page	12	CT	Breast Cancer Res Treat. 2009 Jul;116(2):339-50. Epub 2008 Oct 14	AS130
585	Low-fat dietary pattern and risk of benign proliferative breast disease: A randomized, controlled dietary modification trial	Rohan, Negassa, Caan, Chlebowski, Curb, Ginsberg, Lane, Neuhouser, Shikany, Wassertheil-Smoller, Page	12	CT	Cancer Prev Res (Phila Pa). 2008 Sep;1(4):275-84. Epub 2008 Jul 9	AS130
586	Conjugated equine estrogen and risk of benign proliferative breast disease: A randomized controlled trial	Rohan, Negassa, Chlebowski, Habel, McTiernan, Ginsberg, Wassertheil-Smoller, Page	12	CT	J Natl Cancer Inst. 2008 Apr 16;100(8):563-71. Epub 2008 Apr 8	AS130
587	Estrogen plus progestin and risk of benign proliferative breast disease	Rohan, Negassa, Chlebowski, Lasser, McTiernan, Schenken, Ginsberg, Wassertheil-Smoller, Page	12	CT	Cancer Epidemiol Biomarkers Prev. 2008 Sep;17(9):2337-43. Epub 2008 Aug 25	AS130
590	Duration of lactation and risk factors for maternal cardiovascular disease	Schwarz, Ray, Stuebe, Allison, Ness, Freiberg, Cauley	12	Gen	Obstet Gynecol. 2009 May;113(5):974-982	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
591	Association between different measures of blood pressure and coronary artery calcium in postmenopausal women	Allison, Manson, Langer, Aragaki, Wassertheil-Smoller, Lewis, Thomas, Lawson, Cochrane, Hsia, Hunt, Robinson	12	CT	Hypertension. 2008 Nov;52(5):833-40. Epub 2008 Sep 15	W25
592	Vaginal descent and pelvic floor symptoms in postmenopausal women: A longitudinal study	Bradley, Zimmerman, Wang, Nygaard	12	CT	Obstet Gynecol. 2008 May;111(5):1148-53	AS135
594	Association between dietary fiber and markers of systemic inflammation in the Women's Health Initiative Observational Study	Ma, Hebert, Li, Bertone-Johnson, Olendzki, Pagoto, Tinker, Rosal, Ockene, Ockene, Griffith, Liu	12	OS	Nutrition. 2008 Oct;24(10):941-9. Epub 2008 Jun 18	AS132
596	Family history of later-onset breast cancer, breast healthy behavior and invasive breast cancer among postmenopausal women: a cohort study	Gramling, Lash, Rothman, Cabral, Silliman, Roberts, Stefanick, Harrigan, Bertoia, Eaton	12	OS	Breast Cancer Res. 2010 Oct 12;12(5):R82. [Epub ahead of print]	
598	Effects of conjugated equine estrogens on cognition and affect in postmenopausal women with prior hysterectomy	Resnick, Espeland, An, Maki, Coker, Jackson, Stefanick, Wallace, Rapp, Women's Health Initiative Study of Cognitive Aging Investigators	12	CT	J Clin Endocrinol Metab. 2009 Nov;94(11):4152-61. Epub 2009 Oct 22	AS103
602	Inflammation and hemostasis biomarkers for predicting stroke in postmenopausal women: the Women's Health Initiative Observational Study	Kaplan, McGinn, Baird, Hendrix, Kooperberg, Lynch, Rosenbaum, Johnson, Strickler, Wassertheil-Smoller	12	OS	J Stroke Cerebrovasc Dis. 2008 Nov-Dec;17(6):344-55	AS126
603	Lipoprotein-associated phospholipase A2, hormone use, and the risk of ischemic stroke in postmenopausal women	Wassertheil-Smoller, Kooperberg, McGinn, Kaplan, Hsia, Hendrix, Manson, Berger, Kuller, Allison, Baird	12	OS	Hypertension. 2008 Apr;51(4):1115-22. Epub 2008 Feb 7	AS126
605	Glycemic index, glycemic load, and the risk of pancreatic cancer among postmenopausal women in the women's health initiative observational study and clinical trial	Simon, Shikany, Neuhouser, Rohan, Nirmal, Cui, Abrams	12	Gen	Cancer Causes Control. 2010 Aug 15. [Epub ahead of print]	
609	Ambient particulate air pollution and ectopy: The environmental epidemiology of arrhythmogenesis in Women's Health Initiative Study, 1999-2004	Liao, Whitsel, Duan, Lin, Quibrel, Smith, Pequet, Prineas, Zhang, Anderson	12	CT	J Toxicol Environ Health A. 2009;72(1):30-8	AS140
613	Obesity and risk of pancreatic cancer among postmenopausal women: the Women's Health Initiative (United States)	Luo, Margolis, Adami, LaCroix, Ye, Women's Health Initiative Investigators	12	Gen	Br J Cancer. 2008 Aug 5;99(3):527-31. Epub 2008 Jul 15	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
614	Incidence of fractures compared to cardiovascular disease and breast cancer: The Women's Health Initiative Observational Study	Cauley, Wampler, Barnhart, Wu, Allison, Chen, Hendrix, Robbins, Jackson	12	OS	Osteoporos Int. 2008 Dec;19(12):1717-23. Epub 2008 Jul 16	
618	Dietary carbohydrate, glycemic index, and glycemic load in relation to colorectal cancer risk in the Women's Health Initiative	Kabat, Shikany, Beresford, Caan, Neuhouser, Tinker, Rohan	12	CT	Cancer Causes Control. 2008 Dec;19(10):1291-8. Epub 2008 Jul 10	
619	Dietary fish intake and incident atrial fibrillation (from the Women's Health Initiative)	Berry, Prineas, VanHorn, Passman, Larson, Goldberger, Snettselaar, Tinker, Liu, Lloyd-Jones	12	CT	Am J Cardiol. 2010 Feb 8. [Epub ahead of print]	
620	Calcium plus vitamin D supplementation and the risk of incident diabetes in the Women's Health Initiative	de Boer, Tinker, Connelly, Curb, Howard, Kestenbaum, Larson, Manson, Margolis, Siscovick, Weiss, Women's Health Initiative Investigators	12	CT	Diabetes Care. 2008 Apr;31(4):701-7. Epub 2008 Jan 30	
624	Biomarker-calibrated energy and protein consumption and increased cancer risk among postmenopausal women	Prentice, Shaw, Bingham, Beresford, Caan, Neuhouser, Patterson, Stefanick, Satterfield, Thomas, Snettselaar, Thomson, Tinker	12	Gen	Am J Epidemiol. 2009 Apr 15;169(8):977-89. Epub 2009 Mar 3	W8
625	Postmenopausal hormone therapy and subclinical cerebrovascular disease: The WHIMS-MRI Study	Coker, Hogan, Bryan, Kuller, Margolis, Betterman, Wallace, Lao, Freeman, Stefanick, Shumaker	12	WHIMS	Neurology. 2009 Jan 13;72(2):125-34	AS183
626	Postmenopausal hormone therapy and regional brain volumes: The WHIMS-MRI Study	Resnick, Espeland, (Jaramillo) Gaussoin, Hirsch, Stefanick, Murray, Ockene, Davatzikos	12	WHIMS	Neurology. 2009 Jan 13;72(2):135-42	AS183
628	Benefits and risks of postmenopausal hormone therapy when it is initiated soon after menopause	Prentice, Manson, Langer, Anderson, Pettinger, Jackson, Johnson, Kuller, Lane, Wactawski-Wende, Brzyski, Allison, Ockene, Sarto, Rossouw	12	Gen	Am J Epidemiol. 2009 Jul 1;170(1):12-23. Epub 2009 May 25	
630	Colorectal cancer in relation to postmenopausal estrogen and estrogen plus progestin in the Women's Health Initiative Clinical Trial and Observational Study	Prentice, Pettinger, Beresford, Wactawski-Wende, Hubbell, Stefanick, Chlebowski	12	Gen	Cancer Epidemiol Biomarkers Prev. 2009 May;18(5):1531-7	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
631	Body mass index and waist circumference in relation to lung cancer risk in the Women's Health Initiative	Kabat, Kim, Hunt, Chlebowski, Rohan	12	Gen	Am J Epidemiol. 2008 Jul 15;168(2):158-69. Epub 2008 May 15	AS98
632	Clinical attachment loss, systemic bone density, and subgingival calculus in postmenopausal women	Brennan, Genco, Hovey, Trevisan, Wactawski-Wende	12	OS	J Periodontol. 2007 Nov;78(11):2104-11	AS153
633	Vitamin A and retinol intakes and the risk of fractures among participants of the Women's Health Initiative Observational Study	Caire-Juvera, Ritenbaugh, Wactawski-Wende, Snetselaar, Chen	12	OS	Am J Clin Nutr. 2009 Jan;89(1):323-30. Epub 2008 Dec 3	AS181
634	Serum 25 hydroxyvitamin D concentrations and the risk of hip fractures: The Women's Health Initiative	Cauley, LaCroix, Wu, Horwitz, Danielson, Bauer, Lee, Jackson, Robbins, Stanczyk, LeBoff, Wactawski-Wende, Sarto, Ockene, Cummings	12	OS	Ann Intern Med. 2008 Aug 19;149(4):242-50	AS217
635	Validation of self-report of rheumatoid arthritis and systemic lupus erythematosus: The Women's Health Initiative	Walitt, Constantinescu, Katz, Weinstein, Wang, Hernandez, Hsia, Howard	12	OS	J Rheumatol. 2008 May;35(5):811-8. Epub 2008 Apr 1	AS39
636	Effect of weight change on natural history of pelvic organ prolapse	Kudish, Iglesia, Sokol, Cochrane, Richter, Larson, Hendrix, Howard	12	CT	Obstet Gynecol. 2009 Jan;113(1):81-88	
639	Psychiatric disorders and cognitive dysfunction among older, postmenopausal women: Results from the Women's Health Initiative Memory Study	Colenda, Legault, Rapp, DeBon, Hogan, Wallace, Hershey, Ockene, Whitmer, Phillips, Sarto	12	WHIMS	Am J Geriatr Psychiatry. 2010 Feb;18(2):177-186	
641	Resting heart rate as a low tech predictor of coronary events in women: prospective cohort study	Hsia, Larson, Ockene, Sarto, Allison, Hendrix, Robinson, LaCroix, Manson, Women's Health Initiative Research Group	12	Gen	BMJ. 2009 Feb 3;338:b219. doi: 10.1136/bmj.b219	
645	Abdominal aortic aneurysm events in the Women's Health Initiative: cohort study	Lederle, Larson, Margolis, Allison, Freiberg, Cochrane, Graettinger, Curb	12	Gen	BMJ. 2008 Oct 14;337:a1724	
647	Evaluation of the American Heart Association cardiovascular disease prevention guideline for women	Hsia, Rodabough, Manson, Liu, Freiberg, Graettinger, Rosal, Cochrane, Lloyd-Jones, Robinson, Howard, for the Women's Health Initiative Research Group	12	Gen	Circ Cardiovasc Qual Outcomes. 2010 Mar;3(2):128-34. Epub 2010 Feb 16.	



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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
650	Proton pump inhibitor use, hip fracture, and change in bone mineral density in postmenopausal women: Results from the Women's Health Initiative	Gray, LaCroix, Larson, Cauley, Robbins, Manson, Chen	12	Gen	Arch Intern Med. 2010;170(9):765-771	
651	Alcohol consumption, hypertension, and total mortality among women	Freiberg, Chang, Kraemer, Robinson, Adams-Campbell, Kuller	12	OS	Am J Hypertens. 2009 Nov;22(11):1212-8. Epub 2009 Sep 3	
652	Osteoporosis and oral infection: Independent risk factors for oral bone loss	Brennan-Calanan, Genco, Wilding, Hovey, Trevisan, Wactawski-Wende	12	OS	J Dent Res. 2008 Apr;87(4):323-7	AS98
656	Multimarker prediction of coronary heart disease risk: The Women's Health Initiative	Kim, Greenland, Rossouw, Manson, Cochrane, Lasser, Limacher, Lloyd-Jones, Margolis, Robinson	12	OS	J Am Coll Cardiol. 2010 May 11;55(19):2080-91	
657	Correlates of sexual satisfaction among sexually active postmenopausal women in the Women's Health Initiative-Observational Study	McCall-Hosenfeld, (Jaramillo) Gaussoin, Legault, Freund, Cochrane, Manson, Wenger, Eaton, Rodriguez, McNeeley, Bonds	12	OS	J Gen Intern Med. 2008 Dec;23(12):2000-9. Epub 2008 Oct 7	
660	Relation of genetic variation in the gene coding for c-reactive protein with its plasma protein levels: Findings from the Women's Health Initiative observational cohort	Lee, You, Song, Hsu, Manson, Nathan, Tinker, Liu	12	OS	Clin Chem. 2009 Feb;55(2):351-60. Epub 2008 Dec 18	AS132
662	Inflammation and thrombosis biomarkers and incident frailty in postmenopausal women	Reiner, Aragaki, Gray, Wactawski-Wende, Cauley, Cochrane, Kooperberg, Woods, LaCroix	12	OS	Am J Med. 2009 Oct;122(10):947-54. Epub 2009 Aug 13	AS179
664	FTO polymorphisms are associated with obesity but not diabetes risk in postmenopausal women	Song, You, Hsu, Howard, Langer, Manson, Nathan, Niu, Tinker, Liu	12	OS	Obesity (Silver Spring). 2008 Nov;16(11):2472-80. Epub 2008 Sep 11	AS132
673	Mortality risk associated with physical and verbal abuse in women aged 50 to 79	Baker, LaCroix, Wu, Cochrane, Wallace, Woods	12	Gen	J Am Geriatr Soc. 2009 Oct;57(10):1799-809. Epub 2009 Aug 13	
676	Vasomotor symptoms, adoption of a low-fat dietary pattern, and risk of invasive breast cancer: A secondary analysis of the Women's Health Initiative Randomized Controlled Dietary Modification Trial	Caan, Aragaki, Thomson, Stefanick, Chlebowski, Hubbell, Tinker, Vitolins, Rajkovic, Bueche, Ockene	12	CT	J Clin Oncol. 2009 Sep 20;27(27):4500-7. Epub 2009 Aug 17	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
677	Calcium plus vitamin D supplementation and the risk of breast cancer	Chlebowski, Johnson, Kooperberg, Pettinger, Wactawski-Wende, Rohan, Lane, O'Sullivan, Yasmeen, Hiatt, Shikany, Vitolins, Khandekar, Hubbell, Rossouw	12	CT	J Natl Cancer Inst. 2008 Nov 19;100(22):1581-1591. Epub 2008 Nov 11	
680	A uniform approach to modeling risk factors relationships for ischemic lesion prevalence and extent: The Women's Health Initiative Magnetic Resonance Imaging Study (WHIMS-MRI)	Tooze, Gaussoin, Resnick, Fischbein, Robinson, Bryan, An, Espeland	12	WHIMS	Neuroepidemiology. 2010;34:55-62. Epub 2009 Nov 21.	AS183
688	Relations of dietary magnesium intake to biomarkers of inflammation and endothelial dysfunction in an ethnically diverse cohort of postmenopausal women	Chacko, Song, Nathan, Tinker, de Boer, Tylavsky, Wallace, Liu	12	OS	Diabetes Care. 2010 Feb;33(2):304-10. Epub 2009 Nov 10	AS132
689	A partial least-square approach for modeling gene-gene and gene-environment interactions when multiple markers are genotyped	Wang, Ho, Ye, Strickler, Elston	12	OS	Genet Epidemiol. 2008 Jul 9;33(1):6-15	AS152
694	Dietary vitamin D and calcium intake and mammographic density in postmenopausal women	Bertone-Johnson, Chlebowski, Manson, Wactawski-Wende, Aragaki, Tamimi, Rexrode, Thomson, Rohan, Peck, Pisano, Martin, Sarto, McTiernan	12	CT	Menopause. 2010 Jul 7. [Epub ahead of print]	AS36
696	Relationship of hypertension, blood pressure, and blood pressure control with white matter abnormalities in the Women's Health Initiative Memory Study (WHIMS)—MRI Trial	Kuller, Margolis, Gaussoin, Bryan, Kerwin, Limacher, Wassertheil-Smoller, Williamson, Robinson, for the Women's Health Initiative Memory Study	12	CT	J Clin Hypertens (Greenwich). 2010 Mar;12(3):203-12. Epub 2009 Dec 16.	AS183
697	Optimism, cynical hostility, and incident coronary heart disease and mortality in the Women's Health Initiative	Tindle, Chang, Kuller, Manson, Robinson, Rosal, Siegle, Matthews	12	Gen	Circulation. 2009 Aug 25;120(8):656-62. Epub 2009 Aug 10	
700	Women's Health Initiative dietary modification randomized controlled trial	Mossavar-Rahmani, Tinker	12	CT	In: D'Agostino RB et al, eds. Wiley encyclopedia of clinical trials. New York: Wiley-Interscience, 2008	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
701	Statistical issues arising in the Women's Health Initiative	Prentice, Pettinger, Anderson	12	Gen	Biometrics. 2005 Dec;61(4):899-911; discussion 911-41	
715	Projecting individualized absolute invasive breast cancer risk in African American women	Gail, Costantino, Pee, Bondy, Newman, Selvan, Anderson, Malone, Marchbanks, McCaskill-Stevens, Norman, Simon, Spirtas, Ursin, Bernstein	12	Gen	J Natl Cancer Inst. 2007 Dec 5;99(23):1782-92. Epub 2007 Nov 27	
718	Antiepileptic drug use, falls, fractures and BMD in postmenopausal women: Findings from the Women's Health Initiative (WHI)	Carbone, Johnson, Robbins, Larson, Curb, Watson, Gass, LaCroix	12	Gen	J Bone Miner Res. 2010. 25(4):873-881. Epub 2009 Oct 19	
722	Oral bisphosphonate use and breast cancer incidence in postmenopausal women	Chlebowski, Chen, Cauley, Anderson, Rodabough, McTiernan, Lane, Manson, Snetseelaar, Yasmeen, O'Sullivan, Safford, Hendrix, Wallace	12	Gen	J Clin Oncol. 2010 Jun 21. [Epub ahead of print]	
723	Breast cancer after use of estrogen plus progestin in postmenopausal women	Chlebowski, Kuller, Prentice, Stefanick, Manson, Gass, Aragaki, Ockene, Lane, Sarto, Rajkovic, Schenken, Hendrix, Ravdin, Rohan, Yasmeen, et al.	12	CT	N Engl J Med. 2009 Feb 5;360(6):573-87	
724	Low-fat dietary pattern and lipoprotein risk factors: the Women's Health Initiative Randomized Controlled Dietary Modification Trial	Howard, Curb, Eaton, Kooperberg, Ockene, Kostis, Pettinger, Rajkovic, Robinson, Rossouw, Sarto, Shikany, VanHorn	12	CT	Am J Clin Nutr. 2010 Apr;91(4):860-74. Epub 2010 Feb 17.	
727	Women's Health Initiative Memory Study (WHIMS) Program: Emerging findings	Espeland, Shumaker, Hogan, Resnick	12	CT	In: Hogervorst E, Henderson VW, Gibbs RB, Brinton RD, eds. Hormones, Cognition and Dementia. New York, NY: Cambridge University Press, 2009:1-10	AS183, AS39

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
728	Estrogen alone in postmenopausal women and breast cancer detection by means of mammography and breast biopsy	Chlebowski, Anderson, Manson, Pettinger, Yasmeen, Lane, Langer, Hubbell, McTiernan, Hendrix, Schenken, Stefanick	12	CT	J Clin Oncol. 2010 Jun 1;28(16):2690-7. Epub 2010 May 3	
731	Postmenopausal hormone therapy for disease prevention: Have we learned any lessons from the past?	Rossouw	12	Gen	Clin Pharmacol Ther. 2008 Jan;83(1):14-6	
732	The Women's Health Initiative: Be part of the answer!	Tinker	12	Gen	J Am Diet Assoc. 1995 Dec;95(12):1375	
733	The Women's Health Initiative Clinical Trial and Observational Study: history and overview	Assaf, Carleton	12	Gen	R I Med. 1994 Dec;77(12):424-7	
734	Barriers to black women's participation in cancer clinical trials	Mouton, Harris, Rovi, Solorzano, Johnson	12	Gen	J Natl Med Assoc. 1997 Nov;89(11):721-7.	
735	Evaluation of a simplified vitamin supplement inventory developed for the Women's Health Initiative	Patterson, Levy, Tinker, Kristal	12	Gen	Public Health Nutr. 1999 Sep;2(3):273-6	
736	Meeting the challenges of recruiting and retaining participants in clinical trials	Vozenilek	12	CT	J Am Diet Assoc. 1999 Oct;99(10):1190, 1192	
737	Commentary on the Women's Health Initiative	McGowan, Pottern	12	Gen	Manuritas. 2000 Feb 15;34(2):109-12	
738	Individually randomized intervention trials for disease prevention and control	Anderson, Prentice	12	CT	Stat Methods Med Res. 1999 Dec;8(4):287-309	
739	Effect of postmenopausal hormone therapy on cardiovascular risk	Rossouw	12	CT	J Hypertens Suppl. 2002 May;20(2):S62-5	
740	Hormone replacement therapy: Applying the results of the Women's Health Initiative	Johnson	12	CT	Cleve Clin J Med. 2002 Sep;69(9):682, 685	
741	Participant characteristics associated with errors in self-reported energy intake from the Women's Health Initiative food-frequency questionnaire	Horner, Patterson, Neuhouser, Lampe, Beresford, Prentice	12	Gen	Am J Clin Nutr. 2002 Oct;76(4):766-73	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
742	Risks, fears and choices: Unexpected lessons from the Women's Health Initiative	Jeffcoat	12	Gen	J Am Dent Assoc. 2002 Oct;133(10):1314, 1316, 1318	
743	The Women's Health Initiative estrogen plus progestin trial: The study and how it changes our practice	Hendrix	12	CT	J Am Osteopath Assoc. 2003 Feb;103(2 Suppl 2):S3-5	
744	Treatment of menopause: Recommendations for hormonal and non-hormonal therapy	Johnson	12	Gen	J Okla State Med Assoc. 2003 Mar;96(3):140-2	
745	Hormone therapy: Evolving concepts	Hendrix	12	CT	Curr Opin Rheumatol. 2003 Jul;15(4):464-8	
746	Impact of WHI conclusions and ACOG guidelines on clinical practice	Gass	12	Gen	Int J Fertil Womens Med. 2003 May-Jun;48(3):106-10; discussion 137-8	
747	HT and breast cancer risk	Geller, Chlebowski	12	Gen	Fertil Steril. 2003 Oct;80 Suppl 4:5-9; quiz 54-5	
748	Estrogen with and without progestin: Benefits and risks of short-term use	LaCroix	12	Gen	Am J Med. 2005 Dec 19;118 Suppl 12B:79-87	
749	Ethnicity, sleep, mood, and illumination in postmenopausal women	Kripke, Jean-Louis, Elliott, Klauber, Rex, Tuunainen, Langer	12	CT	BMC Psychiatry. 2004 Apr 7;4:8	AS11
750	Women's cognitive health: Postmenopausal dementia and the Women's Health Initiative Memory Study	Klein, Rapp	12	CT	Women's Health Issues. 2004 May-Jun;14(3):71-4	AS39
751	Concerns about published data from the estrogen-progestin (HT) arm of the WHI	Gass, Anderson, Barad	12	CT	Am J Obstet Gynecol. 2005 Jan;192(1):333; author reply 334	
752	Validation of the Women's Health Initiative Insomnia Rating Scale in a multicenter controlled clinical trial	Levine, Dailey, Rockhill, Tipping, Naughton, Shumaker	12	CT	Psychosom Med. 2005 Jan-Feb;67(1):98-104	
753	Menopausal hormone therapy: Currently no evidence for cardiac protection	Wenger	12	Gen	Pediatr Blood Cancer. 2005 Jun 15;44(7):625-9	

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MS ID	Title	Authors	Stage	Data Focus	Reference.	Study #
754	Postmenopausal hormone therapy: Critical reappraisal and a unified hypothesis	Phillips, Langer	12	CT	Fertil Steril. 2005 Mar;83(3):558-66	
755	Reanalysis of the Women's Health Initiative oral contraceptive data reveals no evidence of delayed cardiovascular benefit	Stefanick, Prentice, Anderson, Gass, Manson, Hendrix, Vista-Deck, McNeeley, Women's Health Initiative Steering Committee	12	Gen	Fertil Steril. 2005 Apr;83(4):853-4	
756	Abnormal mammographic findings with short-interval follow-up recommendation	Chlebowski, Khalkhali	12	Gen	Clin Breast Cancer. 2005 Aug;6(3):235-9	
757	Estrogens and progestins: Background and history, trends in use, and guidelines and regimens approved by the US Food and Drug Administration	Stefanick	12	Gen	Am J Med. 2005 Dec 19;118 Suppl 12B:64-73	
758	Aspects of the design and analysis of high-dimensional SNP studies for disease risk estimation	Prentice, Qi	12	Gen	Biostatistics. 2006 Jul;7(3):339-54. Epub 2006 Jan 27	
759	Observational studies and clinical trials of menopausal hormone therapy: Can they both be right?	Allison, Manson	12	Gen	Menopause. 2006 Jan-Feb;13(1):1-3	
760	Postmenopausal hormone therapy: New questions and the case for new clinical trials	Manson, Bassuk, Harman, Brinton, Cedars, Lobo, Merriam, Miller, Naftolin, Santoro	12	Gen	Menopause. 2006 Jan-Feb;13(1):139-47	
761	Re: "combined postmenopausal hormone therapy and cardiovascular disease: toward resolving the discrepancy between observational studies and the women's health initiative clinical trial"	Willett, Manson, Grodstein, Stampfer, Colditz	12	Gen	Am J Epidemiol. 2006 Jun 1;163(11):1067-8; author reply 1068-9. Epub 2006 Apr 26	
762	Is estrogen for you?	Manson, Bassuk	12	Gen	Newsweek. 2006 Apr 24;147(17):72-3	
763	The Women's Health Initiative	Nabel	12	Gen	Science. 2006 Sep 22;313(5794):1703	
764	Hot flashes and hormones	Manson, Bassuk	12	Gen	Newsweek. 2007 Jan 15;149(3):56-7	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
765	Implications of recent clinical trials of postmenopausal hormone therapy for management of cardiovascular disease	Rossouw	12	CT	Ann N Y Acad Sci. 2006 Nov;1089:444-53	
766	Prevalence, clinical significance, and management of peripheral arterial disease in women. Is there a role for postmenopausal hormone therapy?	Mazhari, Hsia	12	Gen	Vasc Health Risk Manag. 2005;1(2):111-7	
767	Dietary fat and cardiovascular disease: Putting the Women's Health Initiative in perspective	Howard	12	Gen	Nutr Metab Cardiovasc Dis. 2007 Mar;17(3):171-4. Epub 2007 Feb 21	
768	The decrease in breast-cancer incidence in 2003 in the United States	Ravdin, Cronin, Howlader, Berg, Chlebowski, Feuer, Edwards, Berry	12	Gen	N Engl J Med. 2007 Apr 19;356(16):1670-4	
769	How the Women's Health Initiative (WHI) influenced physicians' practice and attitudes	Bush, Bonomi, Nekhlyudov, Ludlam, Reed, Connelly, Grothaus, LaCroix, Newton	12	Gen	J Gen Intern Med. 2007 Sep;22(9):1311-6. Epub 2007 Jul 18	
770	Invited commentary: Hormone therapy and risk of coronary heart disease - why renew the focus on the early years of menopause?	Manson, Bassuk	12	Gen	Am J Epidemiol. 2007 Sep 1;166(5):511-7. Epub 2007 Jul 23	
771	The Women's Health Initiative and hormone therapy, 5 years later	Johnson	12	Gen	Cleve Clin J Med. 2007 Oct;74(10):755-6	
772	Observational studies, clinical trials, and the Women's Health Initiative	Prentice	12	Gen	Lifetime Data Anal. 2007 Dec;13(4):449-62. Epub 2007 Oct 18	
773	Do diet, folic acid, and vitamins matter? What did we learn from the Women's Health Initiative, the Women's Health Study, the Women's Antioxidant and Folic Acid Cardiovascular Study, and other clinical trials?	Wenger	12	Gen	Cardiol Rev. 2007 Nov-Dec;15(6):288-90	
774	BMI and headache among women: Results from 11 epidemiologic datasets	Keith, Wang, Fontaine, Cowan, Allison	12	Gen	Obesity (Silver Spring). 2008 Feb;16(2):377-83	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
775	Risks and benefits of therapy with menopausal hormones versus selective estrogen-receptor modulators in peri- and postmenopausal women at increased breast cancer risk	Col, Chlebowski	12	CT	Menopause. 2008 Jul-Aug;15(4 Suppl):804-9	
777	Coronary heart disease and stroke with aromatase inhibitor, tamoxifen and menopausal hormone therapy use	Chlebowski, Anderson, Geller, Col	12	CT	Clin Breast Cancer. 2006;6(suppl 2):S58-64	
778	Menopausal hormone therapy and breast cancer: Where we are after the WHI	Chlebowski	12	Gen	ASBD Advisor. 2003;2:7-10	
779	The Women's Health Initiative: Implications for clinicians	VanHorn, Manson	12	Gen	Cleve Clin J Med. 2008 May;75(5):385-90	
780	Risks and benefits of estrogen plus progestin in healthy postmenopausal women: The Women's Health Initiative	Manson, Bassuk	12	Gen	In: Braunwald E et al, eds. Harrison's principles of internal medicine online: Clinical trial update. McGraw-Hill,2002	
781	Clinical practice. Postmenopausal hormone-replacement therapy	Manson, Martin	12	Gen	N Engl J Med. 2001 Jul 5;345(1):34-40	
782	Understanding the divergent data on postmenopausal hormone therapy	Grodstein, Clarkson, Manson	12	Gen	N Engl J Med. 2003 Feb 13;348(7):645-50	
783	Postmenopausal hormone therapy. A reversal of fortune	Michels, Manson	12	Gen	Circulation. 2003 Apr 15;107(14):1830-3	
784	The menopause transition and postmenopausal hormone therapy	Manson, Bassuk	12	Gen	In: Kasper DL et al, eds. Harrison's principles of internal medicine. 16th ed. New York: McGraw-Hill,2004:2209-13	
785	Is age at initiation of hormone therapy a key determinant of coronary heart disease outcomes?	Allison, Manson	12	Gen	Johns Hopkins Adv Stud in Med. 2006;6(7):329-30	



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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
786	Postmenopausal hormone therapy: Observational studies to clinical trials	Bassuk, Manson	12	Gen	In: Liu JH, Gass MLS, eds. Management of the perimenopause (Practical pathways in obstetrics and gynecology). New York: McGraw Hill, 2006:377-408	
787	Menopausal hormone therapy and the risk of coronary heart disease. Does the relation vary by age or time since menopause? The investigator's perspective	Manson, Bassuk	12	Gen	The Monitor. 2007 Oct.17-22	
788	Hormone replacement therapy	Allison, Manson	12	Gen	In: Encyclopedia of Epidemiology. Thousand Oaks, CA: Sage Publications, 2007:503-10	
792	Evaluation and comparison of the Minnesota code and novacode for electrocardiographic Q-ST wave abnormalities for the independent prediction of incident coronary heart disease and total mortality (from the Women's Health Initiative)	Zhang, Prineas, Eaton	12	CT	Am J Cardiol. 2010;106(1):18-25	
793	Patient level pooled analysis of 68,500 patients from seven major vitamin D fracture trials in US and Europe	Abrahamsen, Masud, Avenell, Anderson, Meyer, Cooper, Smith, LaCroix, Torgerson, Johansen, Jackson, Rejnmark, Wactawski-Wende, Brixen, Mosekilde, Robbins, et al.	12	CT	BMJ. 2010 Jan 12;340:b5463. doi: 10.1136/bmj.b5463	
794	Brain volumes, cognitive impairment, and conjugated equine estrogens	Espeland, Tindle, Bushnell, (Jaramillo) Gaussoin, Kuller, Margolis, Mysiw, Maldjian, Melman, Resnick, for the Women's Health Initiative Memory Study	12	CT	J Gerontol A Biol Sci Med Sci. 2009 Dec;64(12):1243-50. Epub 2009 Sep 3	AS183

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
795	The effects of postmenopausal hormone therapy on serum estrogen, progesterone, and sex hormone-binding globulin levels in healthy postmenopausal women	Edlfsen, Jackson, Prentice, Janssen, Rajkovic, O'Sullivan, Anderson	12	CT	Menopause. 2010 May-Jun;17(3):622-9. Epub 2010 Mar 3	W18
799	Women's Ischemic Syndrome Evaluation: current status and future research directions: Report of the National Heart, Lung and Blood Institute workshop: October 2-4, 2002 : Section 4: lessons from hormone replacement trials	Waters, Gordon, Rossouw, Cannon, Collins, Herrington, Hsia, Langer, Mosca, Ouyang, Sopko, Stefanick	12	Gen	Circulation. 2004 Feb 17;109(6):e53-5	
800	The rise and fall of menopausal hormone therapy	Barrett-Connor, Grady, Stefanick	12	Gen	Annu Rev Public Health. 2005;26:115-40	
801	Estrogen therapy: Prevention and treatment of osteoporosis	McGowan, Stefanick	12	Gen	In: Marcus R et al, eds. Osteoporosis. 3rd ed. San Diego, CA: Elsevier Academic Press,2008:1687-704	
802	Reply: Reanalysis of the data--science at its best and always informative	Barad, Stefanick, Manson, Gass, Anderson	12	CT	Fertil Steril. 2006 June;85(6): author reply e14. Epub 2006 May 4	
803	Risk-benefit profiles of raloxifene for women	Stefanick	12	CT	N Engl J Med. 2006 Jul 13;355(2):190-2	
807	Repeated measures of serum glucose and insulin in relation to postmenopausal breast cancer	Kabat, Kim, Caan, Chlebowski, Gunter, Ho, Rodriguez, Shikany, Strickler, Vitolins, Rohan	12	CT	Int J Cancer. 2009 Dec 1;125(11):2704-10. Epub 2009 Jun 2	
808	Longitudinal study of serum carotenoid, retinol, and tocopherol concentrations in relation to breast cancer risk among postmenopausal women	Kabat, Kim, Adams-Campbell, Caan, Chlebowski, Neuhouser, Shikany, Rohan	12	CT	Am J Clin Nutr. 2009 Jul;90(1):162-9. Epub 2009 May 27	
810	The Women's Health Initiative: Lessons learned	Prentice, Anderson	12	Gen	Annu Rev Public Health. 2008;29:131-50	
813	Bacterial species in subgingival plaque and oral bone loss in postmenopausal women	Brennan, Genco, Wilding, Hovey, Trevisan, Wactawski-Wende	12	OS	J Periodontol. 2007 Jun;78(6):1051-61	AS98

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
816	Vasomotor symptoms and coronary artery calcium in postmenopausal women	Allison, Manson, Aragaki, Langer, Rossouw, Curb, Martin, Phillips, Stefanick, Cochrane, Sarto, Barnhart, O'Sullivan, Johnson, Gass, Trevisan, et al.	12	CT	Menopause. 2010 Jul 21. [Epub ahead of print]	W25
821	Insecticide use and risk of rheumatoid arthritis and systemic lupus erythematosus in the Women's Health Initiative observational study	Parks, Walitt, Pettinger, Chen, De Roos, Hunt, Sarto, Howard	12	OS	Arthritis Care Res (Hoboken). 2010 Aug 25. [Epub ahead of print]	
825	Conjugated equine estrogens and breast cancer risk in the Women's Health Initiative clinical trial and observational study	Prentice, Chlebowski, Stefanick, Manson, Langer, Pettinger, Hendrix, Hubbell, Kooperberg, Kuller, Lane, McTiernan, O'Sullivan, Rossouw, Anderson	12	Gen	Am J Epidemiol. 2008 Jun 15;167(12):1407-15. Epub 2008 Apr 29	
826	The role of hormone therapy and calcium plus vitamin D for reduction of bone loss and risk for fractures: Lessons learned from the Women's Health Initiative	Jackson, Shidham	12	Gen	Curr Osteoporos Rep. 2007 Dec;5(4):153-9	
831	Protein intake and incident frailty in the Women's Health Initiative Observational Study	Beasley, LaCroix, Neuhouser, Huang, Tinker, Woods, Michael, Curb, Prentice	12	OS	J Am Geriatr Soc. 2010 May 7 [Epub ahead of print]	AS179, W8
832	Effect of 5 y of calcium plus vitamin D supplementation on change in circulating lipids: results from the Women's Health Initiative	Rajpathak, Xue, Wassertheil-Smoller, VanHorn, Robinson, Liu, Allison, Martin, Ho, Rohan	12	CT	Am J Clin Nutr. 2010 Apr;91(4):894-9. Epub 2010 Feb 24.	
833	Effect of long term low-fat dietary intervention on change in hemostatic factors: Results from the Women's Health Initiative	Rajpathak, Xue, Wassertheil-Smoller, VanHorn, Snetselaar, Martin, Rohan	12	CT	Nutr Metab Cardiovasc Dis. 2010 Sep 28. [Epub ahead of print]	
837	Women's Health Initiative studies of postmenopausal breast cancer	Prentice	12	Gen	Adv Exp Med Biol. 2008;617:151-60	
840	Migraine history and breast cancer risk among postmenopausal women	Li, Mathes, Bluhm, Caan, Cavanagh, Chlebowski, Michael, O'Sullivan, Stefanick, Prentice	12	OS	J Clin Oncol. 2010 Jan 25. [Epub ahead of print]	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
843	Application of serum proteomics to the Women's Health Initiative conjugated equine estrogens trial reveals a multitude of effects relevant to clinical findings	Katayama, Pacesny, Prentice, Aragaki, Faca, Pitteri, Zhang, Wang, Silva, Kennedy, Rossouw, Jackson, Hsia, Chlebowski, Manson, Hanash, et al.	12	OS	Genome Med. 2009 Apr 29;1(4):47	W19
845	Colorectal cancer in women after stopping postmenopausal hormone therapy—reply	Chlebowski	12	CT	JAMA. 2008; 299(23):2744-5	
846	Variation in the FGFR2 gene and the effects of postmenopausal hormone therapy on invasive breast cancer	Prentice, Huang, Hinds, Peters, Pettinger, Cox, Beilarz, Chlebowski, Rossouw, Caan, Ballinger	12	CT	Cancer Epidemiol Biomarkers Prev. 2009 Nov;18(11):3079-85. Epub 2009 Oct 27	BAA2
848	Oestrogen plus progestin and lung cancer in postmenopausal women (Women's Health Initiative trial): a post-hoc analysis of a randomised controlled trial	Chlebowski, Schwartz, Wakelee, Anderson, Stefanick, Manson, Rodabough, Chien, Wactawski-Wende, Gass, Kotchen, Johnson, O'Sullivan, Ockene, Chen, Hubbell, et al.	12	CT	Lancet. 2009 Oct 10;374(9697):1243-51. Epub 2009 Sep 18	
850	Heart rate variability, ambient particulate matter air pollution, and glucose homeostasis: The Environmental Epidemiology of Arrhythmogenesis in the Women's Health Initiative	Whitsetl, Quibrera, Christ, Liao, Anderson, Prineas, Heiss	12	CT	Am J Epidemiol. 2009 Mar 15;169(6):693-703. Epub 2009 Feb 10	ASI40
865	Menopausal hormone therapy in BRCA1 mutation carriers: Uncertainty and caution	Chlebowski, Prentice	12	Gen	J Natl Cancer Inst. 2008 Oct 1;100(19):1341-3. Epub 2008 Sep 23	
869	High-molecular-weight adiponectin and incident ischemic stroke in postmenopausal women. A Women's Health Initiative Study	Ogorodnikova, Wildman, Mancuso, Sowers, Rajpathak, Allison, Baird, Rodriguez, Wassertheil-Smoller	12	OS	Stroke. 2010 May 27. [Epub ahead of print]	ASI26
871	Data analysis methods and the reliability of analytic epidemiologic research	Prentice	12	Gen	Epidemiology. 2008 Nov;19(6):785-8; discussion 789-93	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
874	A multistage genome-wide association study in breast cancer identifies two new risk alleles at 1p11.2 and 14q24.1 (RAD51L1)	Thomas, Jacobs, Kraft, Yeager, Wacholder, Cox, Hankinson, Hutchinson, Wang, Yu, Chatterjee, Garcia-Closas, Gonzalez-Bosquet, Prokumina-Olsson, Orr	12	Gen	Nat Genet. 2009 May;41(5):579-84. Epub 2009 Mar 29	M3
875	Cigarette smoking and pancreatic cancer: A pooled analysis from the Pancreatic Cancer Cohort Consortium (PanScan)	Lynch, Vrieling, Lubin, Kraft, Mendelsohn, Hartge, Canzian, Stepilowski, Arslan, Gross, Helzlsouer, Jacobs, LaCroix, Petersen, Zheng	12	Gen	Am J Epidemiol. 2009 Aug 15;170(4):403-13. Epub 2009 Jun 26	M4
879	Epidemiology of fracture risk in the Women's Health Initiative	Jackson, Donepudi, Mysiw	12	Gen	Curr Osteoporos Rep. 2008 Dec;6(4):155-61	
882	A longitudinal study of the metabolic syndrome and risk of postmenopausal breast cancer	Kabat, Kim, Chlebowski, Khandekar, Ko, McTiernan, Neuhouser, Parker, Shikany, Stefanick, Thomson, Rohan	12	CT	Cancer Epidemiol Biomarkers Prev. 2009 Jul;18(7):2046-53. Epub 2009 Jun 30	
883	Postmenopausal hormone therapy and cognitive outcomes: the Women's Health Initiative Memory Study	Coker, Espeland, Rapp, Legault, Resnick, Hogan, Gaussoin, Dailey, Shumaker	12	CT	J Steroid Biochem Mol Biol. 2010 Feb 28;118(4-5):304-310. Epub 2009 Nov 22	AS183, AS39
888	Confounders in the association between exercise and femur bone in postmenopausal women	Beck, Kohlmeier-Nisco, Petit, Wu, LeBoff, Cauley, Nicholas, Chen	12	OS	Med Sci Sports Exerc. 2010 May 13. [Epub ahead of print]	AS153
894	Hepatocyte growth factor and the risk of ischemic stroke developing among postmenopausal women. Results from the Women's Health Initiative	Rajpathak, Wang, Wassertheil-Smolter, Strickler, Kaplan, McGinn, Wildman, Rosenbaum, Rohan, Scherer, Cushman, Ho	12	OS	Stroke. 2010 May;41(5):857-62. Epub 2010 Mar 4	BAA10
898	Coronary heart disease in postmenopausal recipients of estrogen plus progestin therapy: does the increased risk ever disappear?	Toh, Hernandez-Diaz, Logan, Rossouw, Hernan	12	CT	Ann Intern Med. 2010 Feb 16;152(4):211-7	
899	Long-term effects of conjugated equine estrogen therapies on domain-specific cognitive function: results from the Women's Health Initiative Study of Cognitive Aging Extension	Espeland, Brunner, Hogan, Rapp, Coker, Legault, Granek, Resnick, for the Women's Health Initiative Study of Cognitive Aging	12	CT	J Am Geriatr Soc. 2010 Jul;58(7):1263-1271. Epub 2010 Jul 2	AS103

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905	Estrogen plus progestin and breast cancer incidence and mortality in postmenopausal women	Chlebowski, Anderson, Gass, Lane, Aragaki, Kuller, Manson, Stefanick, Ockene, Sarto, Johnson, Wactawski-Wende, Ravdin, Schenken, Rajkovic	12	CT	JAMA. 2010 Oct 20;304(15):1684-92	M3
906	Performance of common genetic variants in breast-cancer risk models	Wacholder, Harte, Prentice, Garcia-Closas, Feigelson, Diver, Thun, Cox, Hankinson, Kraft, Rosner, Berg, Brinton, Lissowska, Sherman, Chlebowski, et al.	12	OS	N Engl J Med. 2010 Mar 18;362(11):986-993	M3
907	Newly discovered breast cancer susceptibility loci on 3p24 and 17q23.2	Ahmed, Thomas, Ghousaini, Healey, Humphreys, Platte, Morrison, Maranian, Pooley, Luben, Eccles, Evans, Fletcher, Johnson, Silva	12	Gen	Nat Genet. 2009 May;41(5):585-90. Epub 2009 Mar 29	M3
915	Healthy diets and the subsequent prevalence of nuclear cataract in women	Mares, Voland, Adler, Tinker, Millen, Moeller, Blodi, Gehrs, Wallace, Chappell, Neuhouser, Sarto, CAREDS Research Study Group	12	OS	Arch Ophthalmol. 2010;128(6):738-749	AS105
921	Postmenopausal estrogen and progestin effects on the serum proteome	Pitteri, Hanash, Aragaki, Amon, Chen, Buson, Paczesny, Katayama, Wang, Johnson, Zhang, McIntosh, Wang, Kooperberg, Rossouw, Jackson, et al.	12	CT	Genome Med. 2009 Dec 24;1(12):121. [Epub ahead of print]	W19, W44
927	The Women's Health Initiative: Lessons for preventive nutrition	Thomson, Beresford, Ritenbaugh	12	CT	In: Bendich A, Deckerbaum RJ, eds. Preventive nutrition: The comprehensive guide for health professionals. 4th ed. New York: Humana Press, 2009:337-70	
928	Clinical and community risk models of incident tooth loss in postmenopausal women from the Buffalo Osteo Perio Study	Bole, Wactawski-Wende, Hovey, Genco, Hausmann	12	OS	Community Dent Oral Epidemiol. 2010 Jul 15. [Epub ahead of print]	AS98
929	Reassessing benefits and risks of hormone therapy	Gass, Bassuk, Manson	12	CT	Am J Lifestyle Med. 2009 Jan;3(1):29-43	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
930	Pancreatic cancer risk and ABO blood group alleles: Results from the Pancreatic Cancer Cohort Consortium	Wolpin, Kraft, Gross, Helzlsouer, Bueno-de-Mesquita, Stepilowski, Stolzenberg-Solomon, Arslan, Jacobs, LaCroix, Petersen, Zheng, Albanes, Allen, Amundadottir, Anderson, et al.	12	Gen	Cancer Res. 2010 Feb 1;70(3):1015-23. Epub 2010 Jan 26	M4
931	Alcohol intake and pancreatic cancer: a pooled analysis from the pancreatic cancer cohort consortium (PanScan)	Michaud, Vrieling, Jiao, Mendelsohn, Stepilowski, Lynch, Wactawski-Wende, Arslan, Bueno-de-Mesquita, Fuchs, Gross, Helzlsouer, Jacobs, LaCroix, Petersen	12	Gen	Cancer Causes Control. 2010 Apr 7. [Epub ahead of print]	M4
932	Anthropometric measures, body mass index and pancreatic cancer: A pooled analysis from the Pancreatic Cancer Cohort Consortium (PanScan)	Arslan, Helzlsouer, Kooperberg, Shu, Stepilowski, Bueno-de-Mesquita, Fuchs, Gross, Jacobs, LaCroix, Petersen, Stolzenberg-Solomon, Zheng, Albanes, Amundadottir	12	Gen	Arch Intern Med. 2010;170(9):791-802	M4
933	Family history of cancer and risk of pancreatic cancer: A pooled analysis from the pancreatic cancer cohort consortium (PANSCAN)	Jacobs, Chanock, Fuchs, LaCroix, McWilliams, Stepilowski, Stolzenberg-Solomon, Arslan, Bueno-de-Mesquita, Gross, Helzlsouer, Petersen, Zheng, Agalliu, Allen	12	Gen	Int J Cancer. 2010 Jan 4. [Epub ahead of print]	M4
936	Genome-wide association study identifies variants in the ABO locus associated with susceptibility to pancreatic cancer	Amundadottir, Kraft, Stolzenberg-Solomon, Fuchs, Petersen, Arslan, Bueno-de-Mesquita, Gross, Helzlsouer, Jacobs, LaCroix, Zheng, Albanes, Bamlet, Berg	12	Gen	Nat Genet. 2009 Sep;41(9):986-90. Epub 2009 Aug 2	M4
950	Gains in statistical power from using a dietary biomarker in combination with self-reported intake to strengthen the analysis of a diet-disease relationship: an example from CAREDS	Freedman, Tasevska, Kipnis, Schatzkin, Mares, Tinker, Potischman	12	OS	Am J Epidemiol. 2010 Aug 17. [Epub ahead of print]	AS105
951	Alcohol consumption and risk of postmenopausal breast cancer by subtype: the Women's Health Initiative Observational Study	Li, Chlebowski, Freiberg, Johnson, Kuller, Lane, Lessin, O'Sullivan, Wactawski-Wende, Yasmeen, Prentice	12	OS	J Natl Cancer Inst. 2010 Aug 23. [Epub ahead of print]	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
962	Insights into colon cancer etiology via a regularized approach to gene set analysis of GWAS data	Chen, Hutter, Potter, Liu, Prentice, Peters, Hsu	12	OS	Am J Hum Genet. 2010 Jun 11;86(6):860-71	AS224
971	Statistical aspects of the use of biomarkers in nutritional epidemiology research	Prentice, Huang, Tinker, Beresford, Lampe, Neuhouser	12	OS	Stat Biosci. 2009 May 1;1(1):112-123. Epub 2009 Apr 29	
1036	Recreational physical activity, anthropometric factors, and risk of ductal carcinoma in situ of the breast in a cohort of postmenopausal women	Kabat, Kim, Wactawski-Wende, Lane, Adams-Campbell, Gaudet, Stefanick, Vitolins, Chlebowski, Wassertheil-Smoller, Rohan	12	Gen	Cancer Causes Control. 2010 Sep 4. [Epub ahead of print]	
1037	Cigarette smoking in relation to risk of ductal carcinoma in situ of the breast in a cohort of postmenopausal women	Kabat, Kim, Kakani, Tindle, Wactawski-Wende, Ockene, Luo, Wassertheil-Smoller, Rohan	12	Gen	Am J Epidemiol. 2010 Aug 1. [Epub ahead of print]	
1045	Variation in the FGFR2 gene and the effect of a low-fat dietary pattern on invasive breast cancer	Prentice, Huang, Hinds, Peters, Cox, Beilartz, Chlebowski, Rossouw, Caan, Ballinger	12	CT	Cancer Epidemiol Biomarkers Prev. 2010 Jan;19(1):74-9.	BAA2
1052	Subthreshold depression and successful aging in older women	Vahia, Meeks, Thompson, Depp, Zisook, Allison, Judd, Jeste	12	CT	Am J Geriatr Psychiatry. 2010 Mar;18(3):212-220	
1055	Assessment of clinical validity of a breast cancer risk model combining genetic and clinical information	Mealiffe, Stokowski, Rhees, Prentice, Pettinger, Hinds	12	CT	J Natl Cancer Inst. 2010 Oct 18. [Epub ahead of print]	BAA2
1065	Novel proteins associated with risk for coronary heart disease or stroke among postmenopausal women identified by in-depth plasma proteome profiling	Prentice, Paczesny, Aragaki, Amon, Chen, Pitteri, McIntosh, Wang, Buson, Hsia, Jackson, Rossouw, Manson, Johnson, Eaton, Hanash, et al.	12	OS	Genome Med. 2010 Jul 28;2(7):48. [Epub ahead of print]	BAA4
1066	Lung cancer among postmenopausal women treated with estrogen alone in the Women's Health Initiative Randomized Trial	Chlebowski, Anderson, Manson, Schwartz, Wakelee, Gass, Rodabough, Johnson, Wactawski-Wende, Kotchen, Ockene, O'Sullivan, Hubbell, Chien, Chen, Stefanick, et al.	12	CT	J Natl Cancer I. 2010 Aug 13. [Epub ahead of print]	
1071	WHI hormone trials: A window to the future, a view from the past	Stefanick	12		Sex Repr Menopause. 2009 Aug;7(3):9-14	



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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1075	A genome-wide association study identifies pancreatic cancer susceptibility loci on chromosomes 13q22.1, 1q32.1 and 5p15.33	Petersen, Amundadottir, Fuchs, Kraft, Stolzenberg-Solomon, Jacobs, Arslan, Bueno-de-Mesquita, Gallinger, Gross, Helzlsouer, Holly, Jacobs, Klein, LaCroix	12	Gen	Nat Genet. 2010 Mar;42(3):224-8. Epub 2010 Jan 24.	M4
1077	Alcohol consumption and risk of ductal carcinoma in situ of the breast in a cohort of postmenopausal women	Kabat, Kim, Shikany, Rodgers, Wactawski-Wende, Lane, Powell, Stefanick, Freiberg, Kaziauskaitė, Chlebowski, Wassertheil-Smoller, Rohan	12	Gen	Cancer Epidemiol Biomarkers Prev. 2010 Aug;19(8):2066-72. Epub 2010 Jul 20	
1083	Hepatocyte growth factor and clinical diabetes in postmenopausal women	Rajpathak, Wassertheil-Smoller, Crandall, Liu, Ho	12	OS	Diabetes Care. 2010 June 2. [Epub ahead of print]	BAA10
1090	Prospective evaluation of two recruitment strategies for a randomized controlled cancer prevention trial	Chlebowski, Menon, Chaisanguanthum, Jackson	12		Clin Trials. 2010 Sep 10. [Epub ahead of print]	
1104	Pooled versus individual genotyping in a breast cancer genome-wide association study	Huang, Hinds, Qi, Prentice	12	Gen	Genet Epidemiol. 2010 Sep;34(6):603-12	BAA2, M3, W7
1113	Mortality related to actigraphic long and short sleep	Kripke, Langer, Elliott, Klauber, Rex	12	OS	Sleep Med. 2010 Sep 24. [Epub ahead of print]	AS11
1124	Prescribing postmenopausal hormone therapy to women in their 50s in the post-Women's Health Initiative era	Rossouw	12	Gen	Maturitas. 2010 Mar;65(3):179-80. Epub 2009 Dec 9	
1128	Menopausal hormone therapy, hormone receptor status, and lung cancer in women	Chlebowski	12	Gen	Semin Oncol. 2009 Dec;36(6):566-71	
1142	Correlates of spirituality in older women	Vahia, Depp, Palmer, Capuano, Golshan, Thompson, Allison, Jeste	12	OS	Aging Ment Health. 2010 Oct 4:1-6. [Epub ahead of print]	
1161	Postmenopausal hormone therapy and cardiovascular disease in women	Stefanick	12	Gen	Nutr Metab Cardiovasc Dis. 2010 May 27. [Epub ahead of print]	
1162	Salivary biomarkers associated with alveolar bone loss	Scannapieco, Ng, Hovey, Hausmann, Hutson, Wactawski-Wende	12	OS	Ann N Y Acad Sci. 2007 Mar;1098:496-7	AS98

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1191	Depression and cardiovascular disease	Wassertheil-Smoller	12	N/A	Menopause Manag. 2010 Mar;19(2):9-14.	
1205	Relationships among dietary nutrients and subjective sleep, objective sleep, and napping in women	Grandner, Kripke, Naidoo, Langer	12	CT	Sleep Med. 2010 Feb;11(2):180-4. Epub 2009 Dec 14	AS11
1206	Light exposure is related to social and emotional functioning and to quality of life in older women	Grandner, Kripke, Langer	12	CT	Psychiatry Res. 2006 Jun 30;143(1):35-42. Epub 2006 May 24	AS11
1207	Circadian sleep, illumination, and activity patterns in women: influences of aging and time reference	Jean-Louis, Kripke, Ancoli-Israel, Klauber, Sepulveda, Mowen, Assmus, Langer	12	CT	Physiol Behav. 2000 Jan;68(3):347-52	AS11
1208	Short version of the CES-D (Burnam screen) for depression in reference to the structured psychiatric interview	Tuunainen, Langer, Klauber, Kripke	12	CT	Psychiatry Res. 2001 Sep 20;103(2-3):261-70	AS11
1209	Evening light exposure: implications for sleep and depression	Wallace-Guy, Kripke, Jean-Louis, Langer, Elliott, Tuunainen	12	CT	J Am Geriatr Soc. 2002 Apr;50(4):738-9	AS11
1210	Association of morning illumination and window covering with mood and sleep among postmenopausal women	Youngstedt, Leung, Kripke, Langer	12	CT	Sleep and Biological Rhythms. 2004;2:174-183	AS11
153	Cynicism: incident diabetes and worsening of metabolic syndrome in postmenopausal women	Wylie-Rosette, Aragaki, Cochrane, Perri, Rosal, Rapp	11	CT	In press, Diabetes Metab Syndr	
360	Body mass index and body fat distribution effects on incident cognitive impairment: Results from the Women's Health Initiative Memory Study (WHIMS)	Kerwin, (Jaramillo) Gaussoin, Chlebowski, Kuller, Vitolins, Coker, Kotchen, Nicklas, Wassertheil-Smoller, Hoffman, Espeland	11	WHIMS	In press, J Am Geriatr Soc	AS39
562	The relationship between incidence of fractures and anemia in older multiethnic women	Chen, Thomson, Aickin, Nicholas, Van Wyck, Lewis, Cauley, Bassford	11	Gen	In press, J Am Geriatr Soc	M2
622	Sex hormones and risk of estrogen receptor-negative and estrogen receptor-positive breast cancer	Farhat, Cummings, Chlebowski, Parimi, Cauley, Rohan, Huang, Vitolins, Hubbell, Manson, Lee, Lane, Cochrane	11	OS	In press, J Natl Cancer Inst	AS167

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
667	Vasomotor symptoms and incident cardiovascular events in postmenopausal women	Szmulowicz, Manson, Rossouw, Howard, Margolis, Greep, Brzyski, Stefanick, O'Sullivan, Allison, Grobbee, Johnson, Ockene, Rodriguez, Sarto, Vitolins, et al.	11	OS	In press, Menopause	
702	The cost effectiveness of a low-fat diet in the prevention of breast and ovarian cancer: The Women's Health Initiative Randomized Controlled Dietary Modification Trial	Bos, Howard, Beresford, Urban, Ennis, Tinker, Waters, Bos, Messina, Chlebowski	11	CT	In press, J Am Diet Assoc	
717	Dietary n-3 and n-6 fatty acids and fracture in the Women's Health Initiative	Orchard, Cauley, Frank, Neuhouser, Robinson, Snetselaar, Tykavsky, Wactawski-Wende, Young, Lu, Jackson	11	Gen	In press, Am J Clin Nutr	
873	Understanding the effects of menopausal hormone therapy: Using the Women's Health Initiative randomized trials and observational study to improve inference	Anderson, Prentice	11	Gen	In press, Proceedings of American Psychopathological Association	
904	Healthy lifestyles related to subsequent prevalence of age-related macular degeneration	Mares, Voland, Sondel, Millen, LaRowe, Moeller, Klein, Blodi, Chappell, Tinker, Ritenbaugh, Gehrs, Sarto, Johnson, Snodderly, Wallace, et al.	11	OS	In press, Arch Ophthalmol	AS105
919	Depressive symptoms and incidence of mild cognitive impairment and probable dementia in elderly women: The Women's Health Initiative Memory Study	Goveas, Tarima, Woods, Wassertheil-Smoller, Kotchen, Espeland	11	CT	In press, J Am Geriatric Soc	AS39
1000	Reproductive history and oral contraceptive use in relation to risk of triple-negative breast cancer	Li, Phipps, Chlebowski, Prentice, Adams-Campbell, Kuller, Lane, McTiernan, Stefanick, Wactawski-Wende, Vitolins, Kabat, Rohan	11	OS	In press, JNCI	
1127	Detection of elevated plasma levels of EGF receptor prior to breast cancer diagnosis among hormone therapy users	Pitteri, Amon, Buson, Zhang, Johnson, Chin, Kennedy, Wong, Zhang, Wang, Lampe, Prentice, McIntosh, Hanash, Li	11	OS	In press, Cancer Res	BAA5

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1285	Bisphosphonates for Breast Cancer Therapy and Prevention?	Chlebowski	11		In press, IBMS BoneKEy	
245	Constipation and risk of cardiovascular disease among post-menopausal women: Prospective analysis from the Women's Health Initiative Observational Study	Salmerigo-Blotcher, Jackson, Crawford, Ockene, Ockene	10	OS	Submitted, J Gen Intern Med	
312	Accuracy of food portion estimation among postmenopausal women	Coy, Frank, Lee, Meyskens	10	CT	Submitted, Am J Clin Nutr	AS118
389	Hierarchical models for the effect of spatial interpolation error on the inferred relationship between ambient particulate matter exposure and cardiovascular health	Crooks, Whitsel, Catellier, Liao, Quibrera, Smith	10	CT	Submitted, Biostatistics	AS140
458	Obesity in relation to endometrial cancer risk and disease characteristics in the Women's Health Initiative	Reeves, Cunyun, Rodabough, Lane, McNeeley, Stefanick, Paskett	10	Gen	Submitted, Gynecol Oncol	
462	Estrogen receptor polymorphisms and the vascular effects of hormone therapy	Rossouw, Bray, Liu, Kooperberg, Hsia, Lewis, Cushman, Bonds, Hendrix, Papanicolaou, Howard, Herrington	10	CT	Submitted, Arterioscler Thromb Vasc Biol	W11, W6
470	Calcium plus vitamin D and exogenous estrogen influence on joint symptoms	Chlebowski, Johnson, Wactawski-Wende, Cummings, Kooperberg, Hubbell, Hiatt, Vitolins, Lane, Yasmeen, Shikany, Khandekar, O'Sullivan, Rohan	10	CT	Submitted, J Clin Oncol	W24
473	Self-reported urinary tract stone occurrence in the Women's Health Initiative Calcium-Vitamin D Trial	Wallace, Wactawski-Wende, O'Sullivan, Wu, Cochrane, Gass, Masaki, Nelson, Whitlock	10	CT	Submitted, Am J Clin Nutr	
499	Prospective analysis of association between use of statins or other lipid lowering agents and colorectal cancer risk	Simon, Rosenberg, Rodabough, Greenland, Ockene, Roy, Lane, Cauley, Khandekar	10	Gen	Submitted, J Natl Cancer Inst	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
507	Hematopoietic prostaglandin D synthase variant (Val187Ile) in African Americans: enzyme characterization, urine PGD2 metabolites, and case-control analyses of colorectal neoplasia in four studies	Tipplin, Levine, Materi, Park, Song, Keku, Dai, Huang, Zhou, Frankl, Hardy, Patterson, Chlebowski, Henderson, Kolonel, Lin, et al.	10	OS	Submitted, J Biol Chem	AS108
646	Biomarker-calibrated energy and protein consumption and cardiovascular disease risk among postmenopausal women	Johnson, Huang, Kuller, Tinker, VanHorn, Stefanick, Sarto, Ockene, Prentice	10	OS		W8
649	Effects of low-fat dairy products and yogurt on diabetes incidence in post-menopausal women	Margolis, de Boer, Howard, Liu, Manson, Mossavar-Rahmani, Phillips, Safford, Shikany, Tinker, Wei	10	OS	Submitted, Diabetologia	
670	Sleep duration, cognitive function, and neurocognitive impairment in older women	Chen, Espeland, Brunner, Lovato, Wallace, Phillips, Robinson, Kotchen, Johnson, Manson, Stefanick, Sarto, Mysiw	10	WHIMS	Submitted, Arch Gen Psychiatry	AS39
672	Body size phenotypes and inflammation in the Women's Health Initiative	Wildman, Kaplan, Manson, Rajkovic, Connelly, Mackey, Tinker, Curb, Eaton, Wassertheil-Smoller	10	OS	Submitted, Obesity	AS126
683	Education, neuropathology, and cognitive performance in older, postmenopausal women	Rapp, Espeland, Manson, Resnick, Wassertheil-Smoller, Coker, Phillips, Stefanick, Sarto, Bryan, Women's Health Initiative Memory Study Research Group	10	WHIMS	Submitted, J Am Geriatrics As	AS183, AS39
685	Diet and the risk of cardiovascular disease: the Women's Health Initiative	Belin, Greenland, Allison, Martin, Shukany, Larson, Tinker, Howard, Lloyd-Jones, VanHorn	10	OS	Submitted, JAMA	
710	Longitudinal profile of insomnia and risk of major vascular disease in postmenopausal women	Chen, Brunner, Levine, Larson, Wassertheil-Smoller, Naughton, Allison, Ren, Stefanick, Kotchen, Sarto, Mellman	10	Gen	Submitted, Circulation	AS140

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
726	The local food environment, neighborhood socioeconomic status, body mass index and blood pressure in the Women's Health Initiative	Dubowitz, Ghosh-Datsidar, Eibner, Slaughter, Fernandes, Whitsel, Bird, Jewell, Margolis, Li, Michael, Shih, Manson, Escarcé	10	CT	Submitted, Obesity	AS220
815	Genetic variation at chromosome 8q24 and risk of colon cancer	Hutter, Slattery, Duggan, Muehling, Curtin, Hsu, Beresford, Rajkovic, Sarto, Marshall, Hammad, Wallace, Makar, Prentice, Caan, Potter, et al.	10	OS	Submitted, Cancer Epidemiol Biomarkers Prev	AS206
851	Active and passive smoking and the risk of developing breast cancer among postmenopausal women	Luo, Margolis, Wactawski-Wende, Horn, Messina, Stefanick, Tindle, Tong, Rohan	10	OS	Submitted, Br Med J	
857	Religion and healthy lifestyle behaviors among postmenopausal women: the Women's Health Initiative	Salmorigo-Blotcher, Fitchett, Ockene, Schnall, Crawford, Granek, Manson, Ockene, O'Sullivan, Powell, Rapp	10	OS	Submitted, Arch Int Med	
858	Risk factor stratification for pelvic organ prolapse among racial groups	Kudish, Iglesia, Gutman, Sokol, Rodgers, Gass, O'Sullivan, Larson, Abu-Sitta, Howard	10	CT	Submitted, Am J Obstet Gynecol	
876	A prospective study of serum 25-hydroxyvitamin D levels, blood pressure, and incident hypertension in postmenopausal women	Margolis, Martin, Ray, Kerby, Allison, Curb, Kotchen, Liu, Wassertheil-Smoller, Manson	10	CT	Submitted, Hypertension	W15, W24
886	Oophorectomy versus ovarian conservation with hysterectomy: cardiovascular disease, hip fracture, and cancer in the Women's Health Initiative Observational Study	Jacoby, Stefanick, Grady, Sarto, Wactawski-Wende, Manson, Robbins, Phillips, Martin, O'Sullivan, Allison, Kuppermann, Jackson	10	Gen	Submitted, Arch Intern Med	
910	25(OH)D Levels and incident type 2 diabetes in older women: the Women's Health Initiative	Robinson, Manson, Larson, Liu, Song, Howard, Phillips, Shikary, Allison, Curb, Johnson, VanHorn, Stefanick, Watts	10	Gen	Submitted, Diabetes Care	AS181, W15, W24
924	Placebo adherence, clinical outcomes and mortality in the Women's Health Initiative Randomized Hormone Therapy Trials	Curtis, Larson, Dezell, Brookhart, Cadarette, Chlebowski, Judd, Safford, Solomon, LaCroix	10	CT	Submitted	

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
940	Monounsaturated, trans & saturated fatty acids and cognitive decline in women	Naqvi, Harty, Mukamal, Stoddard, Vitolins, Dunn	10	Gen	Submitted, Brain	AS84
955	Resting heart rate and coronary artery calcium in post-menopausal women	Allison, Manson, Aragaki, Eaton, Hsia, Phillips, Kuller, Trevisan	10	CT	Submitted, J Am Coll Cardiol	W25
965	Lifetime risks for fatal and non-fatal cardiovascular events in different race/ethnic groups: Cardiovascular Lifetime Risk Pooling Project	Lloyd-Jones, Berry, Thomas, Garside, Cai, VanHorn, Tracy, Dyer	10	OS	Submitted, Circulation	
966	Remaining lifetime risks for cardiovascular disease by risk factor burden in middle-aged and older black and white adults: The Cardiovascular Lifetime Risk Pooling Project	Berry, Cai, Garside, Greenland, Thomas, Tracy, Dyer, Lloyd-Jones	10	OS	Submitted, N Engl J Med	
979	Late-life depression and cerebrovascular changes in postmenopausal women: The Women's Health Initiative MRI Study	Goveas, Espeland, Hogan, Dotson, Tarima, Coker, Ockene, Brunner, Woods, Wassertheil-Smolter, Kotchen, Resnick	10	WHIMS	Submitted, J Psychiatry Neurosci	AS183
980	The utility of variability in domain-specific cognitive function in predicting incident dementia: Evidence from the Women's Health Initiative Study of Cognitive Aging	Espeland, Dagenbach, Jennings, Brunner, Resnick, Beavers, Simpson, Coker, Gaussoin, Sink, Rapp, for the Women's Health Initiative Study of Cognitive Aging	10	WHIMS	Submitted, Am J Epidemiol	AS103
1047	Application of machine learning methods to describe the effects of conjugated equine estrogens therapy on region-specific brain volumes: The Women's Health Initiative Magnetic Resonance Imaging Study (WHIMS-MRI)	Casanova, Espeland, Goveas, Davatzikos, Gaussoin, Maldjian, Brunner, Kuller, Johnson, Mysiw, Wagner, Resnick, for the Women's Health Initiative Memory Study	10	WHIMS	Submitted, J Geront Med Sci	AS183
1054	A regularized Hotelling's T2 test for pathway analysis in proteomics studies	Chen, Prentice, Wang	10	CT		
1070	Genotypes associated with the risk of invasive breast cancer and their interactions with hormonal and dietary interventions	Huang, Ballinger, Peters, Hinds, Cox, Beilartz, Prentice, Rossouw, Caan, Chlebowski, McTiernan, Rohan	10	CT		BAA2
1091	Hazard ratio estimation for biomarker calibrated dietary intake exposures	Shaw, Prentice	10	CT		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1149	Neighborhood socioeconomic status and cognitive function in women	Shih, Ghosh-Dattidar, Margolis, Slaughter, Jewell, Bird, Eibner, Denburg, Ockene, Messina, Espeland	10	CT	Submitted, Am J Public Health	AS220
1163	Telomere length and risk of incident cutaneous melanoma	Nan, De Vivo, Manson, Liu, McTiernan, Curb, Lessin, Bonner, Guo, Du, Qureshi, Hunter, Han	10	OS	Submitted, JAMA	AS242
1169	Priorities and challenges for cohort studies and consortia in cancer research	Boffetta, Colditz, Potter, Kolonel, Robson, Malekzadeh, Seminara, Goode, Yoo, Demers, Gallagher, Prentice, Yasui, O'Doherty, Petersen	10	N/A	Submitted, Cancer Epidemiol Biomarkers Prev	
127	Homocysteine and incident coronary heart disease: Prospective analysis from the Women's Health Initiative observational study	Siscovick, Manson, Trevisan, Wallace, Howard, Burke, Ridker	9	OS		AS83
334	Patterns and predictors of sexual activity among women in the Hormone Therapy Trials of the Women's Health Initiative	Gass, Cochrane, Barad, Barnabei, Brzycki, Lane, LaValleur, Manson, Mouton, Ockene	9	CT		
432	The role of extreme obesity in heart disease and death in diverse older women	McTigue, Chang, Eaton, Garcia, Johnson, Lewis, Liu, Mackey, Robinson, Rosal, Sneitselaar, Valoski, Kuller	9	Gen		
439	The effect of intentional and unintentional weight loss on stroke risk in the Women's Health Initiative observational study	Ostfeld, Bobra, Kaplan, Kooperberg, Lo, Myrskylä, Herold, Rosenbaum, Wassertheil-Smoller	9	OS		
466	Low-fat dietary pattern and health-related quality of life: The WHI randomized controlled DM trial	Assaf, Beresford, Ristica, Aragaki, Brunner, Bowen, Naughton, Rosal, Snetselaar, Wenger	9	CT		
476	Associations between dietary fat intake and Age Related Macular Degeneration (ARM) for the Women's Health Initiative-Sight Exam (WHI-SE) Study participants	Kannan, Haan, Blythe, Moore, Hazzouri, Deng, Tong	9	CT		AS62



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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
532	Incidence of urinary incontinence in postmenopausal women with diabetes: The Women's Health Initiative Observational Study	Bonds, Hogan, Cochrane, Hendrix, Masaki, Sarto	9	OS		
547	Calcium plus vitamin D supplementation has limited effects on femur geometric strength in older postmenopausal women: The Women's Health Initiative	Jackson, Beck, Wright, Sherrill, Cauley, Lewis, LaCroix, LeBoff, Going, Bassford, Chen	9	Gen		AS153
553	Association of dopamine genotypes with physical activity and body habitus in post-menopausal women	Leddy, Hovey, Salis, Brennan, Epstein, Wactawski-Wende	9	OS		AS15
564	Arthritis increases the risk for fractures---Results from the Women's Health Initiative	Wright, Lisse, Walitt, Eaton, Chen	9	OS		
574	Dietary glycemic index and glycemic load are not associated with breast cancer risk in the Women's Health Initiative	Shikany, Redden, Neuhauser, Chlebowski, Rohan, Simon, Liu, Lane, Tinker	9	OS		AS111
600	Reading ability influences race-ethnic differences in cognitive testing: The Cognitive Change in Women ancillary study to the Women's Health Initiative	Dunn, Harty, Stoddard, Gavett, Weintraub	9	OS		AS84
616	The cognitive change in Women Study (CCW): informant ratings of cognitive change predict neuropsychological performance over three years	Gavett, Dunn, Stoddard, Harty, Weintraub	9	OS		AS84
655	Circulating markers of inflammation and endothelial activation with the risk of hypertension in white and black postmenopausal women	Wang, Manson, Gaziano, Liu, Cochrane, Cook, Ridker, Rifai, Sesso	9	OS		AS133
658	Rheumatoid Arthritis is associated with less optimal hip structural geometry	Wright, Lisse, Beck, Sherrill, Mohler, Bassford, Cauley, LaCroix, Lewis, Chen	9	Gen		AS153
665	Ascertaining dementia related outcomes for deceased or proxy-dependent participants: An overview of WHIMS supplemental case ascertainment protocol (WHIMS-SCAP)	(Jaramillo) Gaussoin, Espeland, Absher, Howard, Jones, Rapp, for the Women's Health Initiative Memory Study	9	WHIMS		AS39
669	Depressive symptoms and smoking among middle-aged and older women	Holahan, Holahan, Ockene	9	OS		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
703	The relationship between urban sprawl and CHD in women	Eibner, Griffin, Bird, Jewell, Margolis, Shih, Slaughter, Whitsel, Allison, Escarce	9	Gen		AS220
704	A longitudinal analysis of the impact of neighborhood SES on coronary heart disease among women	Bird, Shih, Eibner, Griffin, Slaughter, Whitsel, Margolis, Escarce, Jewell, Mouton, Lurie	9	OS		AS220
708	Comparison of methods used to correct reported dietary intake using biologic measures	Schoeller, Neuhouser, Bingham, Tyllavsky, Tinker, Parker, Snetselaar, Vitolins, Beresford, Liu, LaRowe, Alvig	9	Gen		W8
716	Migraines, ST depression and risk for cardiac events: Results from the MIMS Study	York-Ward, Li, Hassan, Ephross, Brunner, Limacher, Wassertheil-Smolter, Sheps	9	OS		AS70
809	Physical activity and survival in postmenopausal women with breast cancer: Results from the Women's Health Initiative	Irwin, McTieman, Manson, Thomson, Sternfeld, Stefanick, Wactawski-Wende, Craft, Lane, Martin, Chlebowski	9	Gen		
811	The effect of calcium plus vitamin D on risk for invasive cancer: Results of the Women's Health Initiative calcium plus vitamin D randomized clinical trial	Brunner, Wactawski-Wende, Caan, Cochrane, Chlebowski, Gass, Jacobs, LaCroix, Lane, Larson, Margolis, Millen, Sarto, Vitolins, Wallace	9	CT		
824	Neighborhood racial composition and risk of coronary heart disease: artifact of neighborhood socioeconomic status?	Shih, Eibner, Griffin, Bird, Slaughter, Lurie, Dubowitz, Allison, Gold, Manson, Masaki, Michael, Rosal, Safford, Sarto, Escarce, et al.	9	Gen		AS220
829	Lipid biomarkers and the risk of ischemic stroke in postmenopausal women	Berger, McGinn, Howard, Kuller, Manson, Orvos, Curb, Eaton, Kaplan, Lynch, Rosenbaum, Wassertheil-Smolter	9	OS		AS126
835	Duration of physical activity and serum 25-hydroxyvitamin D status of postmenopausal women	Kluczynski, LaMonte, Mares, Wactawski-Wende, Smith, Engelman, Andrews, Snetselaar, Sarto, Millen	9	OS		AS105

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836	Anemia risk and nutrient intake in the WHI Observational Study	Thomson, Stanaway, Neuhouser, Snetselaar, Stefanick, Aickin, Arendell, Chen	9	OS		M2
841	Serum 25 hydroxyvitamin (OH)D and fracture risk in a multiethnic cohort of women: The Women's Health Initiative (WHI)	Cauley, Danielson, Boudreau, Barbour, Horwitz, Bauer, Ensrud, Manson, Wactawski-Wende, Shikany, Jackson	9	OS		BAA9
849	Effect of a low-fat dietary pattern on glucose, insulin, and insulin resistance in the Women's Health Initiative Dietary Modification Trial	Shikany, Margolis, Beresford, Brzyski, Jackson, Limacher, Liu, Phillips, Tinker	9	CT		
854	Ambient particulate matter air pollution and venous thromboembolism in the Women's Health Initiative Hormone Therapy Trials	Shih, Griffin, Salkowski, Jewell, Eibner, Bird, Liao, Cushman, Eaton, Margolis, Whitsetl	9	CT		AS140, AS220, W6
862	Use of hundreds of electrocardiographic biomarkers for prediction of mortality in post-menopausal women: The Women's Health Initiative	Gorodeski, Ishwaran, Kogalur, Blackstone, Hsich, Zhang, Vitolins, Manson, Curb, Martin, Prineas, Lauer	9	CT		
893	Resistin, but not adiponectin and leptin, is associated with the risk of ischemic stroke among postmenopausal women	Rajpathak, Kaplan, Wassertheil-Smolter, Cushman, Rohan, McGinn, Wang, Strickler, Scherer, Mackey, Curb, Ho	9	OS		BAA10
903	Relationships between vitamin D status and age-related macular degeneration in postmenopausal women: the Carotenoids in Age-Related Eye Disease Study (CAREDS)	Millen, Voland, Sarto, Sondel, Parekh, Horst, Hageman, Wallace, Klein, Blodi, Gehrs, Chapell, Mares	9	OS		AS105
914	Weight change and domain-specific cognitive function: Results from the Women's Health Initiative Study of Cognitive Aging	Driscoll, Espeland, Wassertheil-Smolter, Gaussoin, Ding, Granek, Ockene, Phillips, Yaffe, Resnick, for the Women's Health Initiative Study of Cognitive Aging	9	CT		AS103

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
941	Biomarker-calibrated dietary energy and protein intake associations with diabetes risk among postmenopausal women	Tinker, Sarto, Howard, Huang, Neuhouser, Mossavar-Rahmani, Beasley, Margolis, Eaton, Phillips, Prentice	9	Gen		W8
942	Physical activity and age-related changes in body weight, body mass index, and fat distribution of postmenopausal women: The Women's Health Initiative Study	Sims, LaMonte, Michael, Larson, Martin, Johnson, Sarto, Stefanick	9	CT		
945	Renal function and biomarker-calibrated protein intake in the Women's Health Initiative	Beasley, Aragaki, LaCroix, Neuhouser, Tinker, Cauley, Ensrud, Jackson, Prentice	9	OS		BAA9, W8
948	The relationship of hemoglobin levels to functional outcomes in women with osteoarthritis: Results from the Women's Health Initiative	Eaton, Hochberg, Assaf, Cryer, Lu, Sands, Rodriguez, LaCroix, Manson, Lessin, Limacher, O'Sullivan, Woods, Connelly, Chen	9	Gen		
957	Antidepressant use, depressive symptoms, and incident frailty in women aged 65 and older from the Women's Health Initiative Observational Study	Lakey, LaCroix, Gray, Borson, Williams, Calhoun, Goveas, Smoller, Ockene, Masaki, Coday, Rosal, Woods	9	OS		
963	Racial differences in colorectal cancer incidence and mortality in the Women's Health Initiative	Simon, Thomson, Pettijohn, Kato, Rodabough, Lane, Hubbell, O'Sullivan, Adams-Campbell, Mouton, Abrams, Chlebowski	9	Gen		
964	Increased bone strength correlates with African admixture in African American women	Chen, Seldin, Robbins, Qi, Beck, Lewis, Cauley, Wright	9	OS		AS153, BAA1
1026	Characterization of 9p24 risk locus and colorectal adenoma and cancer: a pooled analysis of four observational studies	Kocarnik, Hutter, Slattery, Berndt, Hsu, Duggan, Marshall, Caan, Beresford, Rajkovic, Sarto, Hammad, Wallace, Makar, Prentice, Potter, et al.	9	OS		AS206
1027	Health utilities associated with hemoglobin levels and the loss of hemoglobin in postmenopausal women: The Women's Health Initiative	Harrow, Eaton, Assaf, Sands, Manson, Chen, Roberts	9	Gen		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1029	A prospective study of inflammation markers and endometrial cancer risk in postmenopausal women	Wang, Ho, Gunter, Kaplan, Rajpathak, Rohan, Scherer, Strickler, Wactawski-Wende, Wassertheil-Smolter, Xue, Cushman	9	OS		BAA10
1039	Combined impact of geriatric syndromes and cardiometabolic diseases on measures of functional impairment	Rosso, Eaton, Wallace, Gold, Curb, Stefanick, Ockene, Michael	9	CT		
1041	Interaction between smoking and obesity and the risk of developing breast cancer among postmenopausal women	Luo, Margolis, Tong, Ockene, Horn, Stefanick, Simon	9	Gen		
1044	Benefit/risk assessment for breast cancer chemoprevention with raloxifene or tamoxifen for women age 50 years and older	Freedman, Yu, Gail, Costantino, Graubard, Vogel, McCaskill-Stevens, Anderson	9	Gen		
1057	Low-fat dietary pattern and change in body composition traits: the Women's Health Initiative Dietary Modification Trial	Carty, Peters, Prentice, Beresford, Howard, Tinker, Wactawski-Wende, Kooperberg, Vitolins, Allison, Neuhouser, Snetselaar, Budrys	9	CT		
1074	Do social desirability concerns confound self-reports in aging health research?: A study of older women	Dawes, Palmer, Allison, Ganiats, Jeste	9	OS		
1076	Correlates of attitude toward own aging in postmenopausal women	Kavirajan, Vahia, Thompson, Depp, Allison, Jeste	9	OS		
1096	A longitudinal analysis of the relationships between neighborhood SES, neighborhood residential stability, and mortality among women in the U.S.	Eibner, Griffin, Shih, Escarce, Slaughter, Margolis, Whitsel, LaCroix, Howard, Mouton, Bird	9	Gen		AS220
1109	A genome-wide association scan for breast cancer markers that interact with FGFR2	Yen, Jacobs, Chatterjee, Spencer, Feigelson, Garcia-Closas, Hankinson, Hartge, Rajkovic, Lissowska, Prentice, Thun, Thomas, Hoover, Chanock, Hunter, Kraft, et al.	9	OS		M3

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1116	Exercise and healthy aging in older women: Does the "dose" of physical activity matter?	Lanouette, Depp, Rosenberg, Kerr, Fellows, Thompson, Golshan, Allison, Jeste	9	OS		
1118	The major impact of smoking on risk of cardiovascular disease and mortality in postmenopausal women	Tindle, Chang, Kuller, Shiffman, Schmidhofer, Liu, Howard, Womack, Curb, Johnson, Martin, Eaton, Safford, Li, Freiberg	9	Gen		
1120	Health risks and benefits 5 years after stopping randomized treatment with conjugated equine estrogens in postmenopausal women with prior hysterectomy: Results from the Women's Health Initiative Trial of estrogen-alone	LaCroix, Chlebowski, Manson, Johnson, Martin, Margolis, Stefanick, Brzyski, Curb, Howard, Lewis, Wactawski-Wende	9	CT		
1148	Common variations in the genes coding for c-reactive protein (CRP), tumor necrosis factor alpha (TNF- $\alpha$ ), and interleukin-6 (IL-6) and risk of clinical diabetes in the Women's Health Initiative Observational Study (WHI-OS)	Chan, Brennan, You, Lu, Song, Hsu, Chaudhuri, Nathan, Tinker, Liu	9	OS		AS132
1185	Relationship between obesity, diabetes and admixture in African American and Hispanic American Women	Nassir, Qi, Kosoy, Garcia, Allison, Ochs-Balcom, Tylavsky, Manson, Shigeta, Robbins, Seldin	9	Gen		BAA1
1186	Meta-analysis of gene-centric association studies identifies new genes for adult height	Lanktree, Guo, Murtaza, Lettre, Bailey, Kumari, Glessner, Ongen, Johnson, Rajagopalan, Shen, Baumert, Taylor, Nelson, Barnard	9	Gen		BAA14
1196	Body size, physical activity, and risk of triple-negative breast cancer in postmenopausal women	Phipps, Chlebowski, Prentice, McTernan, Wactawski-Wende, Kuller, Adams-Campbell, Lane, Stefanick, Vitolins, Kabat, Rohan, Li	9	OS		
1198	On two-stage hypothesis testing procedures via asymptotically independent statistics	Dai, LeBlanc, Kooperberg	9	CT		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1221	The next PAGE in understanding complex traits: study design for analysis of Population Architecture using Genetics and Epidemiology	Matisse, Ambite, Buyske, Cole, Crawford, Haiman, Heiss, Kooperberg, LeMarchand, Manolio, North, Peters, Ritchie, Hindorf, Haines	9	Gen		M6
1225	Emotional and cognitive health correlates of leisure activities in older Latino and Caucasian women	Herrera, Meeks, Dawes, Hernandez, Thompson, Sommerfeld, Allison, Jeste	9	OS		
1257	Increased incident hip fractures in postmenopausal women with moderate-to-severe pelvic organ prolapse	Pal, Hailpern, Santoro, Freeman, Barad, Kipersztok, Barnabei, Wassertheil-Smoller	9	Gen		
1265	Sexual activity, satisfaction, and dysfunction in older post-menopausal women	Charo, Thompson, Vahia, Depp, Allison, Jeste	9	OS		
1268	Admixture mapping identifies a blood pressure genetic locus on 5p13: contributions from the CARE consortium		9			M5
1280	The impact of blood pressure change during middle age on the remaining lifetime risk for stroke by gender and race: the Cardiovascular Lifetime Risk Pooling Project	Allen, Berry, Ning, VanHorn, Dyer, Lloyd-Jones	9	OS		
1286	Association of genetic variation with systolic and diastolic blood pressure among African Americans: the Candidate Gene Association Resource (CARE) Study		9	CT		M5
380	Hemostasis factors, postmenopausal hormone therapy and the risk of venous thrombosis: the WHI clinical trials of postmenopausal hormone therapy	Cushman, Larson, Rosendaal, Heckbert, Curb, Phillips, Baird, Eaton, Stafford	8	CT		W6
686	Baked/boiled versus fried fish intake and the risk for incident heart failure in the Women's Health Initiative Observational Study	Belin, Greenland, Martin, Oberman, Tinker, Robinson, Larson, VanHorn, Lloyd-Jones	8	OS		
804	Physical activity patterns and their determinants in the Women's Health Initiative (WHI)	Nguyen, Herting, Perry, Kohen, LaCroix, Adams-Campbell, Beresford, Eaton, Tinker	8	Gen		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
860	Hormonal factors and risk of esophageal cancer among postmenopausal women	Bodelon, Anderson, Rossing, Chlebowski, Ochs-Balcom, Vaughan	8	Gen		
866	Serum 25(OH)D concentrations in relation to cardiometabolic risk factors among postmenopausal women	Chacko, Song, Manson, VanHorn, Eaton, Martin, McTiernan, Curb, Wylie-Rosette, Phillips, Flodkowski, Liu	8	CT		W1, W14, W6
868	Co-occurrence of anemia with other morbidities in the Women's Health Initiative Cohort at baseline and 3-year follow-up	Chen, Aickin, Thomson, Lewis, Cauley, Lessin, Eaton, Woods, Rodriguez	8	Gen		M2
889	Effects of postmenopausal hormone therapy on incident atrial fibrillation: The Women's Health Initiative Randomized Controlled Trials	Perez, Wang, Cochrane, Curb, Klein, Larson, Manson, Martin, Robinson, Wassertheil-Smoller, Stefanick	8	CT		W35
923	Clinical factors leading to weight loss in older women after hospitalization: an analysis of the Women's Health Initiative Study	Yukawa, Larson, VanHorn, Woods, Vitolins, Wassertheil-Smoller, LaCroix	8	CT		
961	P wave indices contribution towards mortality and cardiovascular risk in healthy post-menopausal women: The Women's Health Initiative	Gorodeski, Magnani, Prineas, Vitolins, O'Sullivan, Soliman, Martin, Limacher, Curb, Cochrane, Blackstone, Lauer	8	CT	Submitted, Am Heart J	
1021	Serum hydroxyvitamin D and physical performance in postmenopausal women	Michael, Smit, Seguin, Curb, Phillips, Manson	8	CT		
1023	Vitamin D intake from foods and supplements and depression in a diverse population of older women	Johnson, Powers, Spangler, Brunner, Michael, Larson, Millen, Bueche, Salmoirago-Blotcher, Liu, Wassertheil-Smoller, Ockene, Ockene, Manson	8	OS		
1060	Genome-wide scan for colorectal cancer risk highlights additional signals in the 20p12.3/BMP2 locus and the multi-cancer locus TERT-CLPTMIL	Peters, Hsu, Hutter, Prentice, Jackson, Kooperberg, LaCroix	8	OS		AS224
1111	Calcium plus vitamin D supplementation and the risk of nonmelanoma and melanoma skin cancer	Tang, Fu, LeBlanc, Manson, Feldman, Larson, Linos, Vitolins, Zeitouni, Stefanick	8	CT		
1126	Estrogen and progesterone-related gene variants and colorectal cancer risk in women	Lin, Manson, Kraft, Cochrane, Gunter, Chlebowski, Zhang	8	OS		AS192



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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1151	Dietary patterns and coronary heart disease in postmenopausal women: a case-control analysis of The Women's Health Initiative Observational Study Cohort	VanHorn, Tian, Mathan, Neuhouser, Howard, Eaton, Snetelaar, Lichtenstein	8			BAA8
1168	Smoking and alcohol consumption in relation to risk of triple-negative breast cancer in a cohort of postmenopausal women	Kabat, Kim, Phipps, Li, Messina, Wactawski-Wende, Kuller, Simon, Yasmeen, Wassertheil-Smoller, Rohan	8	Gen		
1182	Plasma 25-Hydroxyvitamin D and risk of pancreatic cancer	Wolpin, Ng, Bao, Kraft, Stampfer, Michaud, Ma, Buring, Sesso, Lee, Rifai, Cochrane, Wactawski-Wende, Chlebowski, Willett, Manson, et al.	8	OS		AS214
1229	Domain-specific cognitive function and fine motor speed in women 65 years and older with type 2 diabetes mellitus: Results from the Women's Health Initiative Study of Cognitive Aging	Espeland, Miller, Goveas, Hogan, Coker, Williamson, Naughton, Resnick	8	CT		AS103
1253	Relationship between hypertension and admixture in post-menopausal African American and Hispanic American Women	Kosoy, Qi, Nassir, Garcia, Allison, Shigeta, Robbins, Seldin	8			BAA1
152	The impact of magnesium intake on bone mass and risk of fracture in the Women's Health Initiative observational study	Jackson, LaCroix, Lewis, Wactawski-Wende, Cauley, Chen, Bassford	7	OS		
159	Endogenous sex steroid hormone and risk of coronary heart disease in postmenopausal women	Rexrode, Manson, Kuller, McTiernan, Stefanick, Heckbert, White	7	OS		AS110
194	Predictors of adherence to the hormone replacement therapy clinical trial in the Women's Health Initiative	Cochrane, Stefanick, Wallace, Graneck, Lillington, Anderson, Woods, Naughton	7	CT		
205	Risk factors for sarcopenia among a multiethnic cohort of postmenopausal women	Chen, Cauley, Lewis, Phillips, VanHorn, Wallace	7	Gen		
223	Physical activity and fracture in the Women's Health Initiative observational study	Wactawski-Wende, Cauley, Jackson, LeBoff, Chen, Robbins, Ockene, Rodriguez, LaCroix	7	OS		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
251	Reproductive history and age-related maculopathy in the Women's Health Initiative Sight Exam Study	Haan, Wallace, Hendrix, Seddon, Klein, Klein, Musch, Langer, Brunner, Wactawski-Wende	7	CT		AS62
276	Social support and cognitive functioning in post-menopausal women	Messina, Espeland, (Jaramillo) Gaussoin, Coker, Lane, Masaki, Phillips, Powell, Rosal, Shumaker	7	WHIMS		AS39
374	Tamoxifen and coronary heart disease (CHD) risk	Chlebowski, Allison, Brzyski, Greep, Kooperberg, O'Sullivan, Robinson	7	Gen		
406	Effect of estrogen and estrogen plus progestin replacement therapy on the incidence of stroke in older women with atrial fibrillation	Perez, Robinson, Wallace, Black, Frishman, Oberman, Sarto, Williams, Wassertheil-Smoller	7	CT		
528	Ambient air pollution and ventricular repolarization: Environmental epidemiology of arrhythmogenesis in WHI, 1999-2001	Whitsel, Anderson, Catellier, Chen, Crooks, Liao, Pequet, Prineas, Quibrera, Smith	7	CT		AS140
543	Insulin-like growth hormone-1, risk factors, and risk for hip fracture in postmenopausal women	Jackson, Lee, Cummings	7	OS		AS90
546	Predictors of incident dementia in postmenopausal women enrolled in a trial of hormone therapy: The Women's Health Initiative Memory Study	Coker, Legault, Colenda, Greep, Limacher, Murray, Rainford, Vitolins, Wallace	7	WHIMS		AS39
595	Quality assurance and training in a low event long-term clinical trial	Dailey, Felton, Summerville, Coker, Nance, Kidd	7	WHIMS		AS39
597	Prevalence of anticholinergic drug use and impact on cognition and function in older women	Sink, Espeland, Gass, Goff, Rapp, Sherwin, Thomas	7	WHIMS		AS39
654	Plasma adiponectin on the adiponectin gene, and risk of hypertension in White and Black women	Sesso, Manson, Wang, Brunner, Cochrane, Cook, Kwiatkowski, Liu, Miller	7	OS		AS133
709	Diet-gene interaction and the risk of diabetes in postmenopausal women	Ma, Ockene, Liu, Ockene, Olendzki, Pagoto, Li, Niu, Song, Eaton, Rajkovic, Phillips, Tinker, Plodkowski, Wallace	7	OS		AS132

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
730	Changes in dietary intake associated with the WHI dietary modification intervention and colorectal cancer incidence	Vitolins, Beresford, Caan, Shikany, Kotchen, Hunt, Parker, Adams-Campbell, Perri	7	CT		
822	Low-fat dietary pattern and risk of metabolic syndrome	Neuhouser, Thomson, Stefanick, Howard, Tinker, Rohan, Caan, VanHorn	7	CT		
878	25(OH)Vitamin D levels and all-cause mortality in the WHI	Eaton, Robinson, Martin, Kuller, Johnson, Curb, Allison, VanHorn, McTiernan, Liu, Manson, Ockene	7	Gen		AS181, W15, W24
885	Predictors of change in pain interference and functioning among postmenopausal women with persistent or recurrent pain conditions in the Women's Health Initiative Observational Cohort	Brennan Braden, Sullivan, LaCroix, Walitt, Martin	7	OS		
890	Risk factors for atrial fibrillation in postmenopausal women: The Women's Health Initiative Observational Study	Perez, Wang, Stefanick, Wassertheil-Smoller, Soliman, Manson, Martin, Klein, Limacher, Rodriguez, Prineas, Connelly	7	OS		
934	Diabetes and risk of pancreatic cancer: A pooled analysis from the Pancreatic Cancer Cohort Consortium	Gross	7	Gen		M4
938	Insomnia, snoring and sleepiness, and risk of cognitive impairments in older women	Chen, Espeland	7	WHIMS		AS39
972	Does metabolic syndrome modify CHD risk among postmenopausal women using oral estrogen plus progestin or estrogen-alone in the Women's Health Initiative Clinical Trials?	Wild, Manson, Martin, Phillips, Yasmeen, Trevisan, Stefanick, Curb	7	CT		W14, W6
1117	Breast tenderness and breast cancer risk in the WHI CEE-alone Clinical Trial	Crandall, Chlebowski, McTiernan, Anderson, Manson, Cauley, Aragaki	7	CT		
1135	Vitamin D and breast and colorectal cancer, including follow-up - analyses before and after consideration of lifestyle covariates	Neuhouser, Wactawski-Wende, Manson, Margolis, Adams-Campbell, Vitolins, LeBlanc, Shikany, Johnson, Liu, Jacobs, Millen	7	CT		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
45	Socio-demographic determinants of folic acid intake	Beresford, Kritchevsky, Vitolins, Wodarski	6	Gen		
266	Correlation of endogenous sex steroid hormones with fasting glucose and insulin levels, HOMA indices, and incident diabetes mellitus in postmenopausal women	Weinstein, Rexrode, Ridker, Manson, Kuller, Hankinson, Cochrane	6	OS		AS110
305	Serum sex hormone levels and risk of hypertension in postmenopausal women	Joffe, Rexrode, Cochrane, Allison, Kotchen, O'Sullivan, Safford	6	OS		AS110
410	Associations of psychosocial stress to cancer stage and grade among postmenopausal women diagnosed with breast, colorectal, and endometrial cancer: findings in the women's health initiative observational study	Yasmeen, Eaton, Hunt, Paskett, Woods, Moshesh, Franks, Robbins	6	OS		
412	Validation of WHO model for absolute risk of fracture	Cauley, Watts, Chen, Cummings, Jackson, LeBoff, McGowan, O'Sullivan, Robbins, Wactawski-Wende	6	Gen		
478	Correlates of medication utilization for the secondary prevention of coronary heart disease in older women	Robinson, Wallace, Cochrane, Johnson, Safford	6	CT		
608	Ambient air pollution, atrioventricular / ventricular conduction and their abnormalities: The environmental epidemiology of arrhythmogenesis in WHI, 1999-2003	Liao, Anderson, Duan, Lin, Peuquet, Prineas, Quibrera, Smith, Whitset	6	CT		AS140
611	Blood pressure response to dietary modification in postmenopausal women: Results from the Women's Health Initiative Clinical Trial	VanHorn, Margolis, Thomson, Kotchen, Allison, Beresford, Black, Cantey, Curb, Frank, Grimm, Kuller, O'Sullivan, Wassertheil-Smolter, Turner	6	CT		
621	Factors associated with 3-year change in cognitive function in older women	Dunn, Gavett, Hart, Stoddard, Weintraub	6	OS		AS84

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
640	Mammographic density in invasive breast cancer	Pisano, Wactawski-Wende, Manson, Yasmeen, Heiss, Peck, Ursin, Yaffe, Martin, Boyd, Cole, Byrne, McTierman	6	OS		AS178
668	Dietary antioxidants, inflammation and diabetes mellitus in a multi-ethnic cohort of postmenopausal women	Rodriguez, Liu, Manson, Song, Nathan, Phillips, Mouton, Li, Shikany, Curb, Yasmeen, Bonds, Tinker, Rosal	6	OS		AS132
720	Association between non-melanoma skin cancer and subsequent hematology malignancy by WHO diagnostic subtype, implications for subclinical immunosuppression and relationship to disease-specific and all-cause mortality	Edlefsen, De Roos, LaCroix, Cheria, Rosenberg, Kotchen	6	Gen		
861	25(OH)Vitamin D levels and incident cardiovascular events in the WHI	Manson, Margolis, VanHorn, Rossouw, O'Sullivan, Martin, Eaton, Allison, Chlebowski, Robinson, Stefanick, Curb, Howard, Ockene, Shikany, Lewis, et al.	6	Gen		AS181, W15, W24
870	Body image dissatisfaction in postmenopausal women	Ginsberg, Margolis, Hunt, Mossavar-Rahmani, Messina, Kudish, Kotchen, Adams-Campbell, Stefanick, Lynch, Manson, Gass, Gray	6	OS		
891	Self-rated health and medical outcomes in the Women's Health Initiative: The aging continuum, health, morbidity, mortality	Brunner, Hubbell, LaCroix, Lane, Stefanick, Safford, Woods, Watts, Beresford, Rapp	6	Gen		
920	Coffee and tea consumption in relation to risk of autoimmune rheumatic disease in the Women's Health Initiative (WHI)	Collins, Walitt, Pettinger, Parks, Howard, Hunt	6	OS		
939	Association between lactation history and breast cancer risk in WHI	Stendall-Hollis, Thompson, Thomson, O'Sullivan, Chlebowski, Yasmeen	6	Gen		
1129	The effect of calcium and vitamin D supplementation on the incidence of rheumatoid arthritis in the Women's Health Initiative (WHI) randomized study	Racovan, Collins, Walitt, Howard, Jackson, Wright, Moreland, Manson, Wactawski-Wende, Shikany, Parks	6	CT		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1137	E+P and E-alone mortality, including follow-up	Manson, Kooperberg, Chlebowski, Curb, Gass, Howard, Lane, Lewis, Kuller, Martin, Schenken, Wassertheil-Smolter	6	CT		
90	Passive smoke exposure in childhood and adulthood and prevalent coronary heart disease in women enrolled in the WHI	Frishman, Wagenknecht, Wong, Ockene	5	OS		
141	The association of food and nutrient intake with the incidence of stroke in the WHI observational study	Beresford, Shikany, St. Jeor, Torrens, Mossavar-Rahmani, Heiss, Patterson, VanHorn	5	Gen		
297	Racial/ethnic differences in menopausal symptoms in minority vs. White women in the observational study cohort of WHI at baseline	Potter, Cochrane, Brzyski, Schenken, Murphy, O'Sullivan, Mossavar-Rahmani, Kempainen	5	OS		
304	The effect of E+P discontinuation on risk for fracture: The WHI	Jackson, Watts, Lewis, Chen, Neuner, Cauley, Mouton, Robbins, Greep, LaCroix, Stefanick, Caralis, O'Sullivan	5	Gen		
381	Estimating ovarian cancer risk	Anderson, Chlebowski, Johnson, Kaunitz, Sato, Monk	5	Gen		AS97
384	Frailty in WHI clinical trials participants: Comparison of self-report and physical performance measures	Woods, LaCroix, Brunner, Cochrane, O'Sullivan, Wallace	5	CT		
422	The occurrence of postmenopausal breast cancer following nonmelanoma skin cancer - A prospective observational study from the Women's Health Initiative	Rosenberg, Greenland, Khandekar, McTiernan, Rodabough, Sharma	5	OS		
427	Statin use and cognition in postmenopausal women: The Women's Health Initiative Memory Study	Legault, Fillit, Hsia, Limacher, Manson, Ockene, Robinson, Sherwin, Sink	5	CT		AS39
463	Glycemic load and risk of coronary heart disease in the Women's Health Initiative observational study	Shikany, Tinker, Liu, Allison, Hsia, Ma, Neuhouser, Uwaifo, VanHorn	5	OS		AS111

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
480	Thyroid disease and risk for hip fracture in postmenopausal women	Cummings, Bauer, Cauley, Jackson, Kooperberg, LaCroix, LeBoff, Lee, Lewis, Thomas, Wu	5	OS		AS90
487	Body composition and physical function in a cohort of multiethnic older women: The WHI observational study and clinical trials	Chen, Bassford, Lohman, Nicholas, Wu, Wright, Wang, Going, LaCroix, Sherrill, Heymsfield	5	OS		AS153
491	Cause of death in women who die after hip fracture: WHI experience	Robbins, Pastore	5	OS		
494	The effect of lipid-lowering agents on the development of malignant melanoma: A prospective study from the Women's Health Initiative	Martin, Levy, Greenland, McTiernan, Rosenberg	5	Gen		
502	Menopausal hormone therapy and risk of ovarian cancer	Anderson, Barnabei, Brzyski, Chlebowski, Hendrix, Lane, Monk, Ockene, Rodriguez, Sarto	5	CT		
530	One-carbon nutrients and risk of incident colorectal cancer in the Women's Health Initiative observational cohort	Ulrich, Beresford, Neuhouser, Lane, Shikany, Song, Zheng	5	OS		
578	Depression and the risk of peripheral arterial disease: Results from the Women's Health Initiative observational study	Cherr, Wassertheil-Smoller, Trevisan, Wactawski-Wende, Allison, Johnson, Hsia, Hunt	5	OS		
623	Factors associated with life satisfaction and health in postmenopausal women	Ceballos, Beresford, Tinker, O'Sullivan, Brunner, Hunt, Manson	5	OS		
681	Bone turnover and the risk of hip fracture: The Women's Health Initiative	Bauer, Cauley, LeBoff, LaCroix, Robbins, Jackson, Greep	5	OS		AS181
693	The association of dietary fructose intake in older women with the risk of obesity and type 2 diabetes mellitus	Margolis, Tinker, Shikany, Manson, Howard, Ritenbaugh, Wei, Johnson, Snetselaar, VanHorn, Rosal, Liu, Plodkowsky, Kratz, Suazo, et al.	5	OS		
706	Vasomotor symptoms and cardiovascular risk markers in postmenopausal women	Szmulowicz, Seely, Manson, Vaidean, Rossouw, Vitolins, Stefanick, O'Sullivan, Greep	5	OS		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
714	Inflammatory markers and the risk of hip fracture: The Women's Health Initiative	Cauley, Jackson, LaCroix, Lee, Robbins, Allison, Greep, Cummings, Wallace	5	OS		AS181
806	The effect of treatment with conjugated equine estrogen on the presence and extent of subclinical atherosclerosis in the thoracic aorta of women 50 – 59 years of age at enrollment in the Women's Health Initiative	Carr, Allison, Manson, Lewis, Curb, Johnson, Kuller, Martin, Trevisan, Woods, O'Sullivan, Langer, Wallace, Terry, Cochrane	5	CT		W25
834	Reproductive history, menopausal hormone use and lung cancer risk in the Women's Health Initiative Clinical Trial and Observational Study	Schwartz, Simon, Hubbell, Kooperberg, Chen, Wakelee, Wactawski-Wende, Manson, Abrams, Stefanick, O'Sullivan, Cote, Sokol, Chlebowski, Hendrix, Rohan, et al.	5	Gen		
847	Evaluation of dietary fiber, whole grains, and dietary fat in relation to colorectal cancer using different dietary assessment methods: Food Frequency Questionnaire vs. 4-day food record	Park, Schatzkin, Prentice, Neuhauser, Tinker, Caan, Subar, Kipnis, Thompson	5	OS		
902	Reproductive life characteristics and risk of venous thromboembolism among postmenopausal women	Canonico, Scarabin, Carcaillon, Manson, O'Sullivan, Curb, Stefanick, Cochrane	5	CT		
912	Coronary artery calcium and body morphology in postmenopausal women	Langer, Manson, Allison, Cochrane, Hunt, Johnson, Phillips, Martin, Liu	5	CT		W25
925	Dietary intake and survival in women diagnosed with breast cancer: Results from the Women's Health Initiative	Sneiselaar, Wallace, Tinker, Caan, Chlebowski, Lanc, Lasser, Ockene, Prentice, VanHorn, Simon, Yasmeen, Vitolins, Thomson, Millen, Kato, et al.	5	Gen		
943	Effects of body composition and metabolic syndrome on weight change over time in postmenopausal women	Greco, Stefanick, Eaton, Phillips, Vitolins, Allison, Michael, Sims	5	Gen		



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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
991	Genome-wide association analysis of coronary heart disease in WHI minorities	Reiner, Franceschini, Hutter, Carlson, Eaton, Istrail, McCaffery, Taylor, Wilson, Assimes, Curb, Howard, Kuller, Manson, Rossouw, Liu, et al.	5	Gen		M5
993	Genetic variants associated with habitual physical activity	Nguyen, Kohen, Lange, LaCroix, Jackson	5	Gen		M5
995	Impact of genetic variants across the genome on Carotenoids, Tocopherol, and Retinol in the WHI minorities	Neuhouser, Peters, Hutter	5	Gen		M5
1018	Multi-study genome-wide association study of breast cancer in African Americans	Hutter, Kooperberg, Peters	5	Gen		M5
1034	Physical activity as a moderator of sleep duration in postmenopausal women: The Women's Health Initiative Study	Sims, Stefanick, Thomson, Phillips, Isasi, Hale	5	OS		
1051	Vitamin D and depression in the WHI CaD Trial	Johnson, Manson, Spangler, Brunner, Ockene, Ockene, Wassertheil-Smoller, Michael, Liu, Millen, Bucche, Salmoirago-Blotcher, Powers	5	CT		
1079	Development and measurement properties of a positive aging phenotype	Woods, Cochrane, LaCroix, Beasley, Seguin, Lane, Manson, Tinker, Mouton, Espeland, Robinson, Brunner	5	Gen		
1099	The effect of hysterectomy, with and without BSO, on urinary incontinence (UI)	Kudish, Shveiky, Gutman, Iglesias, Sokol, Howard, Blanchette, Jacoby	5	CT		
1132	Effects of menopausal hormone therapy on ductal carcinoma in situ breast cancer	Luo, Cochrane, Margolis, Wactawski-Wende, Hunt, Ockene	5	Gen		
1136	Estrogen alone and breast cancer risk 5 years after stopping the WHI randomized trial	Anderson, Kuller, Hubbell, Lane, Bluhm, Wactawski-Wende, Manson, Ockene, Martin, Gass, Schenken, Chlebowski, Connelly, Rohan	5	CT		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1143	Relationship between time spent in sedentary activities and physical function in older women: The Women's Health Initiative (WHI) Observational Study	Seguin, LaCroix, Bushnell, Tinker, LaMonte, Woods, Michael	5	OS		
1159	Air pollution and cancer incidence among women	Bhatti, Anderson, De Roos, Kaufman, Whitsel, Bird, Bonner, Mirabelli, Margolis, Lane	5	OS		AS140, AS150, AS220
1187	Hormone therapy and skin cancer risk in postmenopausal women in the Women's Health Initiative Study	Tang, Stefanick, Keiser, Linos, Anderson, Ockene, Zeitouni, Wactawski-Wende, Thomas, Chlebowski	5	CT		
267	Adherence to dietary modification: A theoretical framework	Rosal, Ockene, Fletcher, Lasser, Tinker	4	CT		AS75
434	The effect of physical activity frequency, duration, and intensity on cardiovascular outcomes in WHI observational study	Meyer, Evenson, Heiss, Manson	4	OS		
446	Hormone exposure and risk of Parkinson's disease among women with natural menopause	Saunders-Pullman, Bressman, Chiu, Derby, Lipton, Santoro, Wassertheil-Smoller	4	OS		
513	Alcohol consumption and the risk of cardiovascular disease among black and white women: The effects of current and lifetime patterns of alcohol consumption among participants from the Women's Health Initiative	Freiberg, Adams-Campbell, Allison, Beresford, Curb, Hunt, Kraemer, Kuller, Safford, Trevisan, Robinson	4	OS		
593	Effect of genetic polymorphisms on coronary cardiac events among women in the Women's Health Initiative (WHI) study	Bray, Afshar-Kharghan, Hays-Grudo, Hendrix, Herrington, Howard, Johnson, Kuller, LaCroix, Langer, Leal	4	OS		AS137
644	Association between reproductive history, adult weight stability and postmenopausal BMI and body composition	Rosal, Crawford, Bodenlos, Brzyski, Hardy, Hays-Grudo, Hunt, Liu, Masaki, McNeeley, Moore-Simas, Phillips, Thomson, VanHorn	4	Gen		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1138	Follow-up analysis of colorectal cancer risk and mortality among participants in the Estrogen plus Progestin and Estrogen alone randomized controlled trials	Simon, Prentice, Hubbell, Kato, Wactawski-Wende, Johnson, Chlebowski, Muscovitz	4	Gen		
1190	Hormone therapy and cataract surgery in the Women's Health Initiative Hormone Trials	Klein, Stefanick, Mares, Millen, Wactawski-Wende, Curb, Howard	4	CT		
157	Type 2 diabetes and change in cognitive functioning in WHIMS: The effects of diabetic risk factors and treatment for diabetes and hypertension	Coker, Hogan, Hall, Mount, Ockene, Wallace	3	WHIMS		AS39
364	Hormone replacement therapy and chronic heart failure incidence and outcomes in post-menopausal women	Greenland, Klein, Lloyd-Jones, LaCroix, Limacher, Robinson, Wong, Howard, Chae, Gulati, Sueta, Margolis, Kang, Ning	3	CT		AS196
397	Is there an association between baseline macronutrient intake and changes in cognition? Results from the Women's Health Initiative Memory Study	Vitolins, Espeland, Thomson, Mossavar-Rahmani, Lovato, Wassertheil-Smoller, Wallace, Masaki, Shikany	3	WHIMS		AS39
402	Subclinical thyroid dysfunction and risk of MI	Lorenz, Hartmann, Heiss, LeGrys, Garrett, Cooper, Schechtman, Manson, Jackson	3	OS		AS165
403	Sub-clinical thyroid dysfunction and risk of stroke	Lorenz, Hartmann, Heiss, LeGrys, Garrett, Cooper, Schechtman	3	OS		AS165
443	Statin use and lung cancer risk in non-smoking postmenopausal women	Schlecht, Wassertheil-Smoller, Johnson, Kamensky	3	OS		
457	Elevated blood pressure and kidney cancer	Kuller, Chang, Curb, Fried, Liu, Tevisan	3	OS		
485	Caffeine and risk of Parkinson's disease in women	Saunders-Pullman, Wassertheil-Smoller, Lipton, Santoro, Derby, Bressman, Chiu, Ravina	3	OS		
497	Extreme obesity and incident hypertension and diabetes: Racial and ethnic patterns in the WHI study	McTigue, Kuller, Valoski, Safford	3	Gen		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
500	Results from the long term stability, standardization and quality control for the core analytes at the central laboratory for the WHI program	Stein, Chen, LaCroix, Lund, Rossouw, Miller	3	Gen		
505	Body image satisfaction in postmenopausal women	Ginsberg, Margolis, Gray, Tinker, Rosal, Manson, Sangi-Hagheykar	3	OS		
540	Interaction between family history of cardiovascular disease and diabetes for the risk of coronary heart disease and stroke in postmenopausal women without diabetes at baseline: The WHI observational study	Li, Johnson, Curb, Robinson, Snetselaar, Allison, Safford, Liu	3	OS		
555	Genetic variation in the peroxisome proliferator-activated receptor $\gamma$ is associated with type 2 diabetes mellitus in the Women's Health Initiative observational study	Song, Manson, Tinker, Howard, Kuller, Nathan, Rifai, Liu	3	OS		AS132
557	Characteristics of the built environment in Seattle and weight change over time	Littman, Beresford	3	CT		
559	Tagging SNPs and haplotypes in 9 genes involved in insulin and IGF-I signaling and their associations with breast cancer risk	Ho	3	OS		AS152
571	Cause of death in women who die after hip fracture: WHI	Robbins, Pastore, Masaki, Stefanick, Gass, Carbone, LaCroix	3	Gen		
573	Common genetic variation in the endothelial nitric oxide synthase (NOS3) gene and type 2 diabetes in an ethnically diverse cohort of women	Liu, Hsu, Papps, Tinker	3	OS		AS132
599	Estrogen and progesterone and the risk of Parkinson's disease in the clinical trial	Saunders-Pullman, Lipton, Wassertheil-Smoller, Tanner, Derby, Santoro	3	CT		
601	Relationship between aspirin use, dose and inflammatory markers in postmenopausal women	Berger, Wassertheil-Smoller, Baird, Kaplan, Lynch, McGinn, Rosenbaum, Phillips, Wactawski-Wende, Johnson	3	OS		AS126

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
604	Metabolic syndrome and incident stroke	McGinn, Wassertheil-Smoller, Wolf, Allison, Baird, Berger, Hsia, Kaplan, Kooperberg, Kuller, Rexrode, Rosenbaum	3	OS		AS126
607	Race, psychosocial stress, and mammography: Prospective analysis in the Women's Health Initiative	Michael, Bowen, Carson, Chlebowski, Hubbell, Lane, Yasmeen, Ritenbaugh	3	OS		
612	Impact of prehypertension on cognitive function	Robinson, Espeland	3	WHIMS		AS39
627	Neighborhood environment and the risk of coronary heart disease in WHI participants	Li, Crawford, Ma, Ockene	3	Gen		
629	Dietary potassium intake and the risk of incident stroke and mortality	Rajpathak, Wassertheil-Smoller	3	OS		
642	Thiazolidinedione (TZD) use and fracture risk in postmenopausal women with diabetes	Schwartz, Bonds, Cummings, Liu, Margolis, Palermo, Phillips, Vittinghoff	3	Gen		
659	Coronary heart disease (CHD) risk perception and its relation to health behaviors in the Women's Health Initiative	Barnhart, Walker, Wassertheil-Smoller	3	OS		AS127
661	Racial differences in Vitamin D levels: Results from the WHI	Melamed, Cauley, Chlebowski, Jacobs, LaCroix, LeBoff, Liu, Millen, Robbins, Tykavsky, Wactawski-Wende, Wassertheil-Smoller, Wylie-Rosette	3	CT		
679	Physical activity, incident ischemic stroke and cardiovascular biomarkers	McGinn, Wassertheil-Smoller, Kaplan, Johnson, Phillips, Robinson, Lee, Beresford, Kooperberg, Stefanick	3	OS		AS126
682	Effect of migraine on stroke risk associated with hormone therapy in post-menopausal women in the Women's Health Initiative	Schumacher, Wassertheil-Smoller, Gass, Mysiw, Rossouw, O'Sullivan, Oberman, Manson	3	CT		
687	Associations between body composition and hip geometry in postmenopausal women in the Women's Health Initiative	Going, Chen	3	Gen		AS153

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
690	Hip geometric structure is weaker in anemic women: Results from the Women's Health Initiative Observational Study	Wu, Chen	3	OS		AS153
691	Changes in hip geometric structures with aging--- Longitudinal data analysis from the Women's Health Initiative Observational Study	Chen	3	OS		AS153
692	Change in dietary intake in response to the DM Intervention is associated with change in physical activity among postmenopausal women in the Women's Health Initiative	Russell, Beresford, Bowen, Shikany, Snetselaar, Curb, Limacher, Parker	3	CT		
695	Application of hidden Markov models to longitudinal measures of cognition collected by the Women's Health Initiative Study of Cognitive Aging	Ip, Rapp, Zhang, Legault, Snow-Jones	3	CT		AS103
698	Distribution and correlates of adiponectin, leptin, ghrelin and lipoprotein subclasses among black and white postmenopausal women across a range of BMI	Mackey, Kuller, Evans, Tinker, Howard, Barinas-Mitchell, Robinson, Manson, McTigue, Phillips, Stefanick, Allison, Rosal, Beresford, Liu	3	OS		AS189
699	Metabolically healthy obese phenotype among black and white postmenopausal women: Definition and risk of incident CHD	Mackey, Kuller, Evans, Tinker, Kulick, Howard, Lewis, Wildman, Phillips, Liu, Curb, Stefanick, Barnas-Mitchell, McTigue, Manson	3	OS		AS189
705	Clustering of mortality in the Women's Health Initiative observational study and clinical trials	Griffin, Whitsel, Escarce, Eibner, Bird, Hunt	3	Gen		AS220
707	Animal fat intake and ovarian cancer incidence	Freedman, Prentice, Lessin, VanHorn, Rajkovic, O'Sullivan, Chlebowski, Manson, Thomson, Smith, Tinker, Lubin, Chetrit, Oberman	3	CT		
712	Evidence that women with a history of fracture have reduced mechanosensitivity compared to those who have never fractured	Beck, Jackson, Going, Chen, LeBoff, Cauley, Wu, LaCroix, Khaled	3	OS		AS153

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
713	World Health Organization (WHO) absolute fracture risk score: How well does it predict fractures in minority women	Cauley, Robbins, LaCroix, Lewis, Wactawski-Wende, Masaki, Johnson, O'Sullivan, Jackson, Hendrix	3	Gen		
719	Depression and risk of type 2 diabetes in postmenopausal women	Ma, Pagoto, Schneider, Liu, Rodriguez, Ockene, Carnethon, Rosal, Safford, Culver, Sepavich, Tinker, Olendzki	3	OS		AS132
725	Air pollution components and cardiovascular disease in women	Miller, Vedal, Kaufman, Anderson, Siscovick, Sheppard, Larson, Eaton, Manson, Kuller	3	OS		AS150
776	Insulin-resistance associated TCF7L2 polymorphisms and risk of insulin-related cancers	Ho, Chen, Anderson, Chlebowski, Rajkovic	3	OS		AS152
789	Tagging SNPs and haplotypes in genes involved in insulin and IGF-I signaling and their associations with colorectal cancer risk	Ho, Adams-Campbell, Chlebowski, Peters	3	OS		AS152
790	Tagging SNPs and haplotypes in genes involved in insulin and IGF-I signaling and their associations with endometrial cancer risk	Ho, Chen, Rajkovic	3	OS		AS152
791	Polymorphisms of genes involved in insulin and IGF-I signaling and serum biomarkers in the IGF/insulin axis	Ho, Chen, Tinker	3	OS		AS152
805	B adrenergic inhibitors (&szlig; Blockers) and risk for melanoma, multiple myeloma and nasopharyngeal cancer	Glaser, Jackson, Saltz, Lemeshow, Benson, Hofmeister, Yang, Rajkovic, Simon	3	Gen		
814	Variation in the selenoenzyme genes and risk of colorectal cancer	Peters, Hutter, Hsu, Prentice, Rajkovic, Marshall, Beresford, Caan, Potter, Duggan, Slattery, Ulrich, Foster, Diamond, Davis	3	OS		AS206
819	Genetic and epidemiologic factors associated with AMD among women in the WHI-SE study	Seddon, Haan, Peter, Wactawski-Wende, Johnson, Hyman	3	Gen		AS62

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
827	Is social support related to cardiovascular disease in the Women's Health Initiative observational study cohort?	Freeborne, Katz, Simmens	3	OS		
828	Serum selenium concentration and risk of colorectal cancer in postmenopausal women	Peters, Takata, Hsu, Prentice, Langer, Petrovich, Shikany, Diamond, Foster, Davis, King, Song, Duggan	3	OS		AS206
830	The association of consumption of whole grains and fiber with incident diabetes	Parker, Margolis, Tinker, Eaton, VanHorn, Rodriguez, Shikany, Liu, Wei	3	OS		
838	Biomarker-calibrated protein intake and bone health in the Women's Health Initiative Clinical Trial (WHI-CT) and Observational Study (WHI-OS)	Beasley, LaCroix, Neuhouser, Snetselaar, Tinker, Johnson, Eaton, Jackson, Bingham, Prentice, Huang	3	Gen		
844	Environmental determinants of sleep disturbance in postmenopausal women	Chen, Levine, Cai, Kaufmann, Rudra, Rosal, Hunt, Brunner, Michael, O'Sullivan, Wassertheil-Smoller, Kravitz, Serre	3	CT		AS226
852	Reproductive factors, dietary phytoestrogens, and lung cancer risk among never smoking women	Chien, Prentice, Chlebowski, Tran, Koepsell	3	Gen		
859	Assessing the predictive value of the driver risk score for colorectal cancer among women participating in the Women's Health Initiative	Ling, Kuller, Beresford, Freiberg, Lane	3	Gen		
863	Renal function and fracture risk in multi-ethnic women: The Women's Health Initiative	Ensrud, Cauley, Danielson, Boudreau, Jackson, Bauer, Canales, LaCroix	3	OS		BAA9
864	Does neighborhood walkability moderate the effects of intrapersonal characteristics on amount of walking in post-menopause women?	Perry, Berke, Beresford, Ockene, Manson, Nguyen, Moudon, LaCroix	3	Gen		
867	Anemia and mortality in postmenopausal women	Chen, Thomson, Arendell, Beasley, Connelly, Kabat, Manson, Michael, Rohan, Stefanick, Verma, Limacher	3	Gen		M2
872	Stroke risk reclassification with lipoprotein-associated phospholipase a2 and c-reactive protein in the Women's Health Initiative	Wassertheil-Smoller, Wolf, McGinn, Kaplan, Hendrix, Allison, Xue, Eaton, Curb, Ko, Martin	3	OS		AS126



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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
877	Diabetes, Metformin use and breast cancer	Chlebowski, McTiernan, Strickler, Wactawski-Wende, Manson, Phillips, Vitolins, Gunter, Wallace, Liu, Rohan, Euhus, Kaklamani, Howard	3	Gen		
880	Defining the relationship between obesity and disability in postmenopausal women	Fowler-Brown, LaCroix, Mouton, Kotchen, Blanchette, Stefanick, Dugan, Leveille, Wee	3	CT		
881	Change in cognitive function in cancer patients among WHIMS participants	Resnick, Driscoll, Longo, Rapp, (Jaramillo) Gaussoin, Chlebowski, Masaki, Espeland, Stefanick, Lane	3	CT		AS39
884	Effects on dementia and cognitive functioning 3 years after stopping estrogen with and without progestin: the Women's Health Initiative Memory Study	Legault, Shumaker, Curb, Manson, Johnson, Stefanick	3	CT		AS39
887	Racial and ethnic differences in the incidence and etiology of heart failure in the WHI	Eaton, Abdulbaki, Howard, Curb, Robinson, Manson, Margolis, Martin, Klein, Limacher, Allison, Liu, Ko	3	Gen		
892	Racial differences in the efficacy of estrogen for menopausal vasomotor symptom relief: Results from the WHI	Lasser, Goldsmith, Harrigan, Safford, Gass, Ko, Iglesia, Kim	3	CT		
895	Physical activity and inflammatory markers in a multi-ethnic cohort of women	Lee, Manson, Sesso, Mouton, Stefanick	3	OS		BAA11
896	Hemostatic and inflammatory markers as risk factors for hemorrhagic stroke	Greenland, Kim, Eaton, Curb, Manson, Martin, Allison, Li, Wassertheil-Smoller	3	CT		
908	C-GEMS paper	Prentice, Kooperberg, Wactawski-Wende, Caan	3	Gen		M3
909	Spatial distribution of ischemic lesions in WHIMS-MRI and effects of postmenopausal hormone therapy	Davatzikos, Resnick, Bryan, Casanova, Espeland	3	CT		AS183
911	Impact of potential drug interactions on health outcomes in post menopausal women: Results from the Women's Health Initiative study	Suda, Johnson, Wan, Self, Phillips, O'Sullivan, Mouton	3	CT		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
916	Hormone therapy, estrogen metabolism and risk of breast cancer in the WHI HT Trial	Mackey, Kuller, Modugno, Chlebowski, Manson, Curb, Cauley, Klug	3	CT		BAA12
917	Hormone therapy, estrogen metabolism and risk of hip fracture in the WHI HT Trial	Mackey, Kuller, Modugno, Cauley, Klug	3	CT		BAA12
922	Adipokines and risk of colorectal cancer in postmenopausal women	Ho, Chlebowski, Vitolins	3	OS		BAA10
935	Association of socioeconomic status and incident heart failure in women	Shah, Lloyd-Jones, Klein, VanHorn, Phillips, Eaton, Martin, Rosal, Manson, Kang, Winkleby	3	CT		AS196
937	Psychological attitudes and neuroanatomy: the women's health initiative magnetic resonance imaging study	Tindle, Resnick, Espeland, Kuller, Brunner	3	CT		AS183
944	Dietary fat and ischemic stroke	Yaemsiri, He, Sen, Tinker, Rosamond, Wassertheil-Smoller, Heiss	3	OS		AS126, AS187
946	Dietary risk factors for nephrolithiasis in women	Stoller, Eisner, LaCroix, Wallace, Reiner, Shikany, Kahn, Jacobs, Wactawski-Wende, O'Sullivan, Jackson	3	Gen		
947	Weight cycling and cancer risk in postmenopausal women: The Women's Health Initiative (United States)	Sangi-Haghpeykar, Rajkovic, Aagaard-Tillery, Vitolins, Snetelaar, Johnson, Luo, Ockene, Lane, Anderson	3	Gen		
952	Psychological attitudes and incidence of cancer	Tindle, Kuller, Matthews, Scheier, Ockene, Rosal, Messina, Manson, Thomson, Woods, Taylor, Hunt	3	Gen		
953	Combined impact of healthy lifestyle factors on mortality among post-menopausal women: a WHI Study	Waring, Eaton, Brunner, Parker, Manson, Ockene, VanHorn, Powell, Vitolins, Stefanick, Li, Mossavar-Rahmani	3	Gen		
956	Psychological attitudes and important health outcomes in "healthy" vs. "unhealthy" populations	Tindle, Kuller, Matthews, Connelly, Brunner, Tinker, Wylie-Rosette, Rosal, Messina, Woods, White, Hunt	3	Gen		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
958	Psychological attitudes and important health outcomes: is it more important to be optimistic, or to not be pessimistic?	Tindle, Kuller, Matthews, Tinker, Codday, Rosal, Messina, Manson, Woods, Hunt	3	Gen		
959	Evaluation of differences in the association of insulin/IGF axis components with breast cancer risk by estrogen receptor status in a case-cohort investigation: a formal analysis	Cai, Kang, Gunter, Strickler, Xue, Wassertheil-Smoller, Vitolins, Chlebowski	3	OS		AS129
960	A comparison of BMI, waist circumference and body composition in predicting mortality among multiethnic older women	Chen, Thomson, Jackson	3	Gen		AS153
968	Calcium/ Vitamin D supplementation and the risk of peripheral artery disease: the Women's Health Initiative	Berger, Mohler, Wassertheil-Smoller, Manson, Allison, Connelly, Hiatt	3	CT		
973	Hormone exposure and risk of Parkinson's disease among women with surgical menopause	Saunders-Pullman, Derby, Santoro, Wassertheil-Smoller, Petrovich, Cochrane	3	OS		
974	Obesity, metabolic syndrome, insulin resistance, and risk of type 2 diabetes or cardiovascular disease in postmenopausal women	Greco, Stefanick, Howard, Phillips, Allison, Liu, Thomas, Rajpathak, Wildman, LaMonte	3	Gen		
975	Developing methods to determine health outcomes in the presence of competing risks for effectiveness research	Weiss, Segal, Varadhan, Wallace, Boyd, Wu, Lopez, Eaton	3	Gen		
976	Prevalence and incidence of hypertension by socioeconomic status (SES) among African American and Latino women	Zambrana, Dinwiddie, Gaskin, Wassertheil-Smoller, Trevisan, Phillips, Pokras	3	Gen		
977	Hypertension treatment and control among African American and Latino women	Dinwiddie, Zambrana, Gaskin, Wassertheil-Smoller, Phillips, Eaton, Pokras	3	Gen		
978	The associations between hypertension status, access/use indicators and geographic location among African American and Latino women	Gaskin, Dinwiddie, Zambrana, Wassertheil-Smoller, Phillips, Li, Pokras	3	Gen		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
981	Genomewide association study of clinical diabetes in Black and Hispanic women: with special emphasis on gene-gene and gene-environment interactions	Liu, You, Chen, Chan, Sobel, Carlson, Kooperberg, Reiner, Tinker, Howard, Kuller, Jackson, Manson, Curb, Phillips, Eaton, et al.	3	Gen		M5
982	Type 2 diabetes risk prediction methods using Genome-wide association study of Black and Hispanic postmenopausal women	Liu, Chen, You, Zhou, Horvath, Carlson, Kooperberg, Reiner, Tinker, Howard, Kuller, Jackson, Manson, Curb, Johnson	3	Gen		M5
983	Genome wide association study of alcohol consumption among African American and Hispanic women in the Women's Health Initiative	Kuller, Freiberg, Edenberg, Foroud, Kraemer, Ibrahim, Reiner	3	Gen		M5
984	Genome-wide association study of smoking behaviors in the Women's Health Initiative	David, Furberg Barnes, Bergen, Hawrot, Kittles, Kim, Wessel, Yu, Swan, Eaton, Franceschini, Smoller	3	Gen		M5
985	Genome-wide association of weight change among minority women: The WHI Study	Monda, North, Carlson, Wassertheil-Smoller, Neuhouser, Rampersaud, Kooperberg, Reiner, Liu, Howard, Manson, Kuller, Bradshaw	3	Gen		M5
986	Genome-wide association of adiposity traits among minority women: The WHI Study	Monda, North, Carlson, Wassertheil-Smoller, Neuhouser, Rampersaud, Kooperberg, Reiner, Liu, Howard, Manson, Kuller, Ochs-Balcom, Johnson, Sucheston, Vitolins, et al.	3	Gen		M5
987	Genome-wide association of age of menarche among minority women: the WHI study	Franceschini, Kooperberg, Heiss, North, Chen, Carlson, Rajkovic, Woods, Chen, Rhodes	3	Gen		M5
988	Genome-wide association of urinary incontinence in post-menopausal women	Franceschini, Loehr, Rajkovic, Quibrera, Heiss, Kooperberg, Hendrix	3	Gen		M5
989	Genome-wide association of blood pressure and hypertension: the WHI study	Franceschini, Eaton, Reiner, Carty, Quibrera, Heiss, North, Curb, Margolis, Martin	3	Gen		M5

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
990	Genome-wide association study of optimism and cynical hostility among minorities in the Women's Health Initiative (WHI)	Tindle, Kuller, Matthews, Feingold, Lin, Adams-Campbell, Rodriguez	3	Gen		M5
992	Psychological and social characteristics associated with religiosity in WHI women	Schnall, Wassertheil-Smoller, Fitchett, Tindle, Thomas, Ockene, Kalkstein, Hunt, Salmoirago-Blotcher	3	OS		
994	Associations of genetic variation with dietary intake in WHI Minorities	Neuhouser, Carlson, Peters, Hutter, Chen, Ambrosone, North, Kooperberg, Mossavar-Rahmani	3	Gen		M5
996	Association between vitamin D-associated genes, cancer incidence, and intermediate cancer phenotypes in African Americans	Lin, Manson, Liu, Zhang, Liu, Jackson, Millen, Ockene, Vitolins, Wallace, Taylor	3	Gen		M5
997	Genome-wide association study of inflammation biomarkers and novel multivariate inflammation-related endo-phenotypes in minority women in WHI	Reiner, Chen, Thomson, LaCroix, Manson, Liu, Eaton, Chen, Curb, Manson, Ho, Austin	3	Gen		M5
998	The role of adiponectin pathway polymorphisms in breast cancer risk	Kaklamani, Mantzoros, Hayes, VanHorn, Chlebowski, Curb, Rademaker	3	Gen		M5
999	Does genetic variance explain differences in anemia rates in minority women enrolled in WHI? Findings from the Genome Wide Association Study	Chen, Reiner, Thomson, Lewis, LaCroix, Wright, Carlson, Chen, Kooperberg, Robbins, Rodriguez	3	Gen		M5
1001	Examining gene-gene and gene-environment interactions in obesity risk factors among minority women: The Women's Health Initiative	Edwards, Velez, Naj, Rampersaud, North, Neuhouser, Monda, O'Sullivan, Manson, Vitolins, Magvanjiv, Kusimo	3	Gen		M5
1002	Physical activity and the role of common obesity gene variants in FTO with body mass index and obesity in postmenopausal women: The Women's Health Initiative Study	Naj, Velez, Edwards, Monda, North, Carlson, Wassertheil-Smoller, Neuhouser, Crawford, O'Sullivan, Rampersaud, Liu	3	Gen		M5
1003	Ancestry and admixture in African American women from the Women's Health Initiative	Chen, Kooperberg, Hoffman, Zakcharia, Risch, Tang, Burchard, Thornton, Carlson, Reiner, Hutter	3	Gen		M5

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1004	Genome-wide association of age at menopause and reproductive lifespan among minority women: the WHI study	Chen, Franceschini, Kooperberg, Heiss, North, Carlson, Rajkovic, Brzyski, Woods, Rhodes	3	Gen		M5
1005	Development and evaluation of prediction rules for stroke in postmenopausal women	Cai, Lee-Jen, Smoller, Wassertheil-Smoller, Manson	3	OS		
1006	Genetic determinants of fracture in minority women	Taylor, North, Franceschini, Jackson, LaCroix, Robbins, Lewis, Stefanick, Cauley, Johnson, Wactawski-Wende, LeBlanc	3	Gen		M5
1007	Admixture mapping of BMI in Hispanic and African American women: the WHI SHARe study	Hutter, Carlson, Tang, Liu, Monda, North, Howard, Kuller, Manson, Reiner, Carty, Chen, Kooperberg, Risch, Villaseñor, Coronado, et al.	3	Gen		M5
1008	Genome-wide association of venous thromboembolism in African American populations	Avery, Reiner, Whitsetl, Curb, Lessin, Eaton	3	Gen		M5
1009	Genome-wide association study of electrocardiographic measures among minority women in the WHI clinical trials	Whitsetl, Avery, Heiss, Lin, North, Smith, Wilhelmsen, Liao, Tinker, Zhang, Limacher	3	Gen		M5
1010	GWAS analysis for genetic predictors of sarcopenia among WHI women enrolled in the DXA cohort	Chen, Carty, Thompson, Guerra, Lewis, LaCroix, Thomson, Wright, Sucheston, Wactawski-Wende, Curb, Liu, Hu, Ochs-Balcom	3	Gen		M5
1013	Sex hormone-related gene variants and cardiovascular disease in African American women	Wang, Lin, Liu, Rexrode, Sesso, Manson, Martin, Rossouw, Eaton	3	Gen		M5
1014	Genetic variants associated with body composition traits in Hispanic and African-American women	Carty, Peters, Neuhouser, Kooperberg, Kratz, Sucheston, Ochs-Balcom, Wactawski-Wende, Jackson, Kaplan, Manson, Chen	3	Gen		M5
1015	Genetic variants associated with height in African-American women in the Women's Health Initiative Study	Carty, Hutter, Peters, Kooperberg, Tang	3	Gen		M5

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1016	Genetic variants associated with stroke in Hispanic and African-American women of the Women's Health Initiative Study	Carty, Reiner, Hutter, Curb, Wassertheil-Smoller, Rexrode	3	Gen		M5
1019	Admixture mapping of DXA-derived fat mass in the WHI SHARE population	Ochs-Balcom, Sucheston, Thompson, Liu, Ambrosone, Carty, Peters, Neuhouser, Kooperberg, Hutter, Carlson, Chen, Wactawski-Wende, Kaplan	3	Gen		M5
1020	Genome-wide association study of obesity and insulin resistance-related traits in postmenopausal African-American and Hispanic women	Greco, Raiesdana, Assimes, Quertermous, Stefanick, Curb, Manson, Phillips, Liu, Howard	3	Gen		M5
1022	ESR1 copy number variation and breast cancer risk in African Americans	Ochs-Balcom, Wactawski-Wende, Sucheston, LaFramboise, Thompson, Chlebowski, Li	3	Gen		M5
1024	Genome-wide association study of multiple intermediate phenotypes for vascular disease in Black and Hispanic women: Utilizing an integrated approach with gene-set enrichment analysis	Chan, Zhou, Horvath, Liu, Kooperberg, Reiner, Kuller, Manson, Eaton, Curb	3	Gen		M5
1025	Serum levels of hepatocyte growth factor and risk of endometrial cancer in postmenopausal women	Wang, Ho	3	OS		BAA10
1028	Sleep characteristics and risk of mortality among older women: evidence from the Women's Health Initiative	Tom, LaCroix, Landis, Brunner, Ockene, Stefanick, Wactawski-Wende, Wassertheil-Smoller, Woods	3	Gen		
1030	Sarcopenia and falls and hip fractures	Cawthon, Chen, Thomson, Stefanick, Thomas	3	OS		
1032	Vitamin C supplementation and osteoporosis	Womack, Johnson, Carbone, Jackson, Snetselaar, O'Sullivan, Neuhouser	3	Gen		
1033	Effect of endogenous estradiol on the association of hormone therapy with breast cancer risk, the Women's Health Initiative Clinical Trials	Cummings, Farhat, Parimi, Vittinghoff, Lee, Huang, Grady, Jackson, Cauley, LaCroix, Lane, Phillips, Manson, Simon, Chlebowski	3	CT		BAA7, W10

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1038	The relation of folate intake and cognitive decline and dementia in the Women's Health Initiative Memory Study	Agnew-Blais, Smoller, Wassertheil-Smolter, Snetselaar, Hogan, Coker, Mysiw	3	WHIMS		AS103, AS39
1042	Relationships that cognitive function and changes in cognitive function have with incident cardiovascular disease: The Women's Health Initiative Memory Study (WHIMS)	Shumaker, Espeland, Curb, Lasser, Limacher, Manson, Ockene, Stefanick, Wallace, Wassertheil-Smolter, Phillips, Lovato	3	WHIMS		AS39
1043	VTE meta-analysis paper	Cushman	3	CT		
1046	Predictors of consent to extended follow-up in randomized prevention trials	Hunt, McNabb, Anderson, Granek	3	Gen		
1048	Vitamin D and risk of atrial fibrillation in the WHI	Soliman, Vitolins, Case, Shalash, Prineas, Goff, Curb, Limacher, Manson, Snetselaar, Wassertheil-Smolter, Allison, Martin	3	CT		
1049	Fish consumption, n-3 PUFA intake, and stroke	Yaemsiri, He, Heiss, Eaton, Kuller, Howard, Curb, Beresford, Tinker, Rosamond, Wassertheil-Smolter, Sen	3	OS		
1050	Common genetic variation in the ion channel transient receptor potential membrane melastatin 6 (TRPM6) in relation to type 2 diabetes, and systemic inflammation among postmenopausal women	Chacko, Liu, Song, Curb, Eaton	3	OS		AS132, M5
1053	Do social resources predict cognition in older women?	Denburg, Wallace, Zimmerman, Carnahan, Chrischilles, Capuano	3	CT		AS39
1058	Omega-3 fatty acid biomarkers and brain volumes	Pottala, Espeland, Wallace, Harris, Robinson, Shumaker, Jackson, Snetselaar	3	CT		AS183, BAA19
1059	Pathway analysis of genome-wide SNP data in relation to risk of colon cancer	Peters, Chen, Hutter, Prentice	3	OS		AS224



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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1061	A prospective evaluation of circulating adipokine levels and postmenopausal breast cancer risk	Gunter, Wassertheil-Smolter, Chlebowski, Manson, McTiernan, Snetelaar, Kakani	3	OS		AS126, AS129, BAA10
1062	Bone mineral density and risk of cardiovascular disease	Kim, Rhee, Greenland, Curb, Allison, Greep, Carbone, Martin, Womack	3	Gen		
1063	Vitamin D, calcium and mammographic density in the WHI CaD trial	Johnson, Jackson, Lane, Wactawski-Wende, Vitolins, Millen, Chlebowski, Thomson, Rexrode, Rohan, McTiernan, Sarto, Peck, Tamimi, Manson	3	CT		
1064	Proteomics and the health effects of postmenopausal hormone therapy: breast cancer	Prentice, Hanash, Pitteri, Chlebowski, Ockene, Wallace, Lopez, Rodgers	3	OS		BAA4
1067	Physical activity as a moderator of cardiovascular risk factors associated with sleep duration in postmenopausal women: The Women's Health Initiative Study	Sims, Stefanick, Ockene, Phillips, McGinn, Martin, Seguin, Hale	3	OS		
1068	Genetic variants in inflammatory genes influence the risk to multiple cancers	Kim, Vitolins, Xu, Chang, Kim, Li, Smith, Sun, Tooze, Turner, Zhang, Zheng, Zhu, Wallace	3	OS		BAA6
1069	Confirmation of cancer risk variants in African American women	Kim, Vitolins, Xu, Adams, Chang, Cheng, Kim, Li, Smith, Sun, Tooze, Turner, Zhang, Zheng, Zhu, Ochs-Balcom, et al.	3	OS		BAA6
1072	Genetic variants associated with obesity and anthropometry, The PAGE study	Chen, Peters, Kuller, Prentice, Kooperberg, Li, North, Carlson, Buyske, Ritchie, Unhee, Manson, Mackey	3	Gen		M6
1073	Association of SNP variants with total and ischemic stroke: gene-environment interactions and race-specific findings from the PAGE study	Carty, Kooperberg, Franceschini, Cole, Heiss, Fornage	3	Gen		M6

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1078	Prevalence of anti-CCP(+) antibodies among postmenopausal women who self-report RA within the WHI Observational Study and Hormone Trial	Moreland, Mackey, Kuller, Holers, Deane, Walitt, Eaton, Grillo, Bertoia	3	Gen		BAA20
1080	Ethnic and racial variation in colorectal cancer survival in the Women's Health Initiative	Simon, Chlebowski, Pettijohn, Hubbell, O'Sullivan, Mouton, Lane, Thomson, Adams-Campbell, Abrams, Kato	3	Gen		
1081	Individual data point meta-analysis on fracture efficacy of oral vitamin D supplementation	Jackson, Cauley	3	CT		
1082	Admixture mapping of DXA measured bone mineral density (BMD) in the WHI SHARE population	Sucheston, Ochs-Balcom, Thomson, Liu, Ambrosone, Carty, Peters, Neuhouser, Kooperberg, Hutter, Carlson, Chen, Wactawski-Wende, Jackson, Seldin, Robbins, et al.	3	Gen		M5
1084	Meta-analysis of APOE SNPs	Seddon, McKay, Haan, Peter	3	Gen		
1085	PanScan sonic hedgehog polymorphisms and survival	LaCroix, Kooperberg, Jackson, Agalliu, Rohan	3	Gen		M4
1086	Validation of the Gail Model for U.S. Hispanic women	Banegas, LaCroix, Wactawski-Wende, Yasmeen, Hubbell, Katk, Thompson, Gail, Martinez, John	3	Gen		
1087	Application of novel statistical methods to evaluate markers for electing treatment	Janes, Pepe, Anderson	3	CT		
1088	Neighborhood SES, diet, physical activity, smoking and alcohol consumption in women	Dubowitz, Bird, Ghosh-Datsidar, Jewell, Margolis, Beresford, Michael, Seguin	3	Gen		AS220
1089	Genetic variants associated with height in Hispanic women in the Women's Health Initiative Study	Zakharia, Risch, Kooperberg, Tang, Kaplan	3	Gen		M5
1092	Replication of association of bone mineral density measures with UGT2B17 and VPS13B copy number variation in the WHI SHARE population	Sucheston, Ochs-Balcom, Thompson, Jackson, Carty, Peters, Neuhouser, Kooperberg, Hutter, Carlson, Chen, Seldin, Wactawski-Wende, Preus	3	Gen		M5

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1095	Joint models for global cognitive function and the incidence of probable dementia and mild cognitive impairment	Morgan, Espeland, Curb, Manson, Shumaker, Mouton, Casanova, Leng	3	WHIMS		AS39
1097	The association between anemia and cardiovascular disease (CVD) in postmenopausal women: Results from the Women's Health Initiative Study	Wu, Chen, Howard, Thomson, Allison, Manson, Eaton, Rodriguez, Reiner, Shahar	3	Gen		
1098	The association of dietary fructose intake in older women with the risk of cardiovascular disease	Kratz, Prentice, Neuhouser, Tinkcr, Suazo, Margolis, Howard, Ritenbaugh, Wei, Shikany, Manson, Johnson, Snetselaar, VanHorn, Rosal, Plozkowski, et al.	3	OS		
1100	Validity of diabetes self-reports in the Women's Health Initiative	Margolis, Jackson, Kerby, Defor, Strayer, Wei, Lewis, Whitlock, Williams, Bonds, Vitolins, Rodabough	3	CT		AS197
1101	Dietary fat and antioxidant intake and risk of sudden coronary death in post-menopausal women	Bertoia, Eaton, Limacher, Shikany, Tinker, VanHorn, Neuhouser, Li, Martin, Najafi, Baylin, Triche	3	Gen		
1102	Beverage intake and risk of sudden coronary death in post-menopausal women	Bertoia, Eaton, Mossavar-Rahmani, Safford, Rosal, Neuhouser, Freiberg, Li, Baylin, Triche	3	Gen		
1103	Dietary pattern and risk of sudden coronary death in post-menopausal women	Bertoia, Eaton, Shikany, Tinker, VanHorn, Neuhouser, Li, Waring, Baylin, Triche	3	Gen		
1107	The effect of hysterectomy, with and without bilateral oophorectomy (BSO), on pelvic organ prolapse (POP)	Shveiky, Kudish, Iglesia, Sokol, Shara, Carter, Howard	3	CT		
1108	Necessity and admixture in Latino American women from the Women's Health Initiative	Thornton, Tang, Chen, Hoffman, Zakharia, Risch, Burchard, Carlson, Reiner, Hutter, Kooperberg, Kaplan, Liu	3	Gen		M5

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1110	The relation between atrial fibrillation and risk of incident breast and colorectal cancer	Wassertheil-Smoller, McGinn, Rodriguez, Stefanick, Martin, Kakani, Xu, Shen	3	Gen		
1112	Genome-wide association, admixture mapping and gene-environment interaction analysis of atrial fibrillation in the Women's Health Initiative	Risch, Perez, Stefanick, Kooperberg, Reiner, Caan, Iribarren, Hoffman, Thornton, Tang, Curb, Liu, Bock	3	Gen		M5
1114	Tissue factor pathway inhibitor and activated protein C and risk of stroke in the Women's Health Initiative trials of postmenopausal hormone therapy	Rossouw, Johnson, Rosendaal, Rosing, Sandset, Cushman, Kuller, Lakshminarayan, Lynch, Manson, Martin, Merino, Smoller	3	CT		W11, W14
1115	Obesity and brain volume in post-menopausal women: The Women's Health Initiative Magnetic Resonance Imaging Study (WHIMS-MRI)	Driscoll, Wassertheil-Smoller, Espeland, Limacher, Gaussoin, Resnick, Yaffe, Casanova	3	WHIMS		AS183
1119	Variation in vitamin D-associated genes, cardiovascular disease, and intermediate cardiovascular phenotypes in African Americans	Lin, Liu, Zhang, Liu, Jackson, Manson, Taylor, Limacher, Martin, Moreland, Johnson, Robinson, Rossouw, Curb	3	Gen		M5
1121	Calcium plus vitamin D supplementation and cognitive impairment in the WHI	Rossum, Margolis, Manson, Espeland, Johnson, Masaki, Ockene, Tylavsky, LeBlanc, Lane, Lederle, Dysken	3	CT		AS103, AS39, W15, W24
1123	Effect of endogenous estradiol on the association of hormone therapy with dementia and mild cognitive impairment	Yaffe, Cummings, Farhat, LaCroix, Grady, Lee, Parimi, Vittinghoff	3	CT		BAA7
1130	WHI observational study of postmenopausal hormone therapy and CVD outcomes: dose, formulation, and route of delivery	Manson, Shufelt, Merz, Aroda, Prentice, Martin, Phillips, Rossouw, Lakshminarayan	3	OS		
1131	Can mechanistic effects of low-risk, high-prevalence loci be gleaned from large-scale GWAS?	Jeon, Peters, Hsu, Luebeck	3	OS		AS224
1133	Low fat diet and risk of ductal carcinoma in situ (DCIS) of the breast: Results from the Women's Health Initiative Diet Modification Trial	Thomson, Tinker, VanHorn, Vitolins, Liu, Kaklamani	3	CT		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1134	The relationship of a composite measure of functional status to mortality, CVD, stroke and other outcomes in the WHI CT	Curb, Michael, Cochrane, Parker, Rosal, Woods, LaCroix	3	CT		BAA7
1140	Effect of endogenous estradiol on the association of hormone therapy with stroke	Lee, Cummings, Farhat, Yaffe, LaCroix, Parimi, Vittinghoff, Huang, Curb, Manson, Rossouw, Bushnell	3	CT		BAA7
1141	Effect of endogenous estradiol on the association of hormone therapy with venous thromboembolism	Lee, Cummings, Farhat, Bauer, Grady, Huang, Parimi, Vittinghoff, Manson, Allison	3	CT		BAA7
1144	Replication of genetic variants associated with breast cancer in the CTF, 8q24 and 9p21.3 genomic regions in African Americans	Chen, Carlson, Chlebowski, Agalliu, Ochs-Balcom	3	Gen		M5
1146	Low fat diet and skin cancer risk in post-menopausal women in the Women's Health Initiative Study	Tang, Linos, Stefanick, VanHorn, Marshall, Zeitouni, Boussard-Hernandez, Sims	3	CT		
1150	Influence of diabetic retinopathy on cognitive function and regional brain volumes: The Women's Health Initiative	Haan, Espeland, Yaffe, Gaussoin, Casanova, Wallace, Jackson, Rossouw, Millen, Klein	3	CT		AS183, AS39, AS62
1152	DASH and Mediterranean diet patterns and mortality in women with a history of heart failure	Levitan, Shikany, Lewis, Ahmed, Trevisan, Martin, Snetselaar, Manson, Curb, Eaton, Howard	3	OS		
1153	Calcium, magnesium, and potassium intake and mortality in women with a history of heart failure	Levitan, Shikany, Lewis, Ahmed, Martin, Curb, Snetselaar	3	OS		
1155	The relationship between alcohol consumption and risk of mortality among breast cancer survivors	Li, Chlebowski, Yasmeen, Simon, Freudenheim, Snetselaar, Bluhm, Lane	3	Gen		
1156	Antidepressant use and incident cognitive decline and cognitive impairment in postmenopausal women: The Women's Health Initiative Memory Study	Goveas, Tummala, Kotchen, Espeland, Wassertheil-Smoller, Woods, Smoller, Mysiw, Denburg, Ockene, Manson, Hogan	3	WHIMS		AS39

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1157	Genome-wide association study of ventricular repolarization among minority women in the WHI clinical trials	Avery, Whitsel, Heiss, Lin, North, Wilhelmsen, Smith, Liao, Tinker, Limacher, Zhang, Wallace, Curb, Solomon	3	Gen		AS264, M5
1158	Vitamin D levels and ethnicity	Robbins, Seldin, Qi, Cauley, Liu, Johnson, Wright, Manson, Wactawski-Wende, Curb, LeBlanc, Womack, Millen	3	Gen		BAA1, BAA9
1160	Genome-wide association study of heart rate variability measures among minority women in the WHI clinical trials	Quibrera, Whitsel, Avery, Heiss, North, Smith, Wilhelmsen, Liao, Tinker, Limacher, Lin, Zhang, Trevisan, Robinson, Curb	3	Gen		AS264, M5
1164	Plasma markers of interleukin (IL)-6 dysregulation and risk of multiple myeloma: a pooled study in the Multiple Myeloma Cohort Consortium	Birmann, Neuhausser, Manson, Colditz, Wallace, Albanes, Buring, Giles, Lan, Landgren, Lee, Purdue, Rosner, Rothman, Severi, Virtamo, et al.	3	Gen		AS207
1165	Plasma markers of insulin-like growth factor (IGF)-1 dysregulation and risk of multiple myeloma: a pooled study in the Multiple Myeloma Cohort Consortium	Birmann, Neuhausser, Manson, Colditz, Lessin, Albanes, Buring, Giles, Lan, Landgren, Lee, Purdue, Rosner, Rothman, Severi, Virtamo, et al.	3	Gen		AS207
1167	Genome-wide association study of quantitative blood count traits in minority women in WHI	Reiner, Curb, LaCroix, Lewis, Manson, Robbins, Rodriguez, Kooperberg, Chen, Thomson, Liu, Eaton, Ho, Wright, Chen, Carlson, et al.	3	Gen		M5
1170	Mature genetic variants and incident coronary heart disease in multi-ethnic cohorts of the PAGE Consortium	Heiss, Franceschini, Boerwinkle, Cole, Person, Jenny, Buzkova, Psaty, Kooperberg, Carty, Eaton, Taverna, Greenland, Duggan, Hindorff, Bookman, et al.	3	Gen		M6
1171	Mature genetic variants and subclinical atherosclerosis in multi-ethnic cohorts of the PAGE Consortium	North, Boerwinkle, Franceschini, Li	3	Gen		M6

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1172	On the generalization of GWAS findings to minority populations	Carlson, Crawford, North, Haiman, Ritchie, Stram, Matisse, Thomas, Eaton, Carty, Kooperberg, Young, Peters	3	Gen		M6
1173	Lifestyle risk factors of breast cancer -- quantification of the mediating effect of endogenous estrogen levels	Hvidtfeldt, Gunter, Wassertheil-Smolter, Lee, Farhat, Hulvej Rod, Lange, Keiding, Tjønneland, Chlebowski, Vitolins, Lane, Freiberg, Prentice	3	OS		
1175	Germline telomere length and the risk of pancreatic cancer in five prospective cohorts	Wolpin, Manson, Fuchs, Rohan, Cochrane	3	OS		AS214
1176	Genome-wide association study meta-analysis of fibrinogen in minority women in WHI and CARE	Eaton, Liu, Wallace, Curb, Reiner	3	Gen		M5
1178	Recovery biomarker comparison of energy and protein assessment using food records, recalls, or frequencies	Prentice, Mossavar-Rahmani, Huang, Tinker, Neuhaus, Eaton, VanHorn, Schoeller, Beresford, Caan, Thomson, Johnson, Ockene, Heiss, Sarto	3	Gen		AS218, W8
1179	Association of depression, antidepressant use with diabetes risk factors: The Women's Health Initiative	Ma, Ockene, Pagoto, Schneider, Hebert, Balasubramanian, Beck, Culver, Olenzki, Sepavich, Phillips, Smoller, Calhoun, Rodriguez, Goveas, Liu, et al.	3	Gen		
1180	Genome-wide association of kidney stones in postmenopausal women of varying ethnicity	Stoller, Kahn, Chi, Franceschini, Reiner, Carty, Jackson	3	Gen		M5
1181	Relationship between SAA and CRP, and risk of incident colorectal cancer in the Women's Health Initiative Observational Cohort	Ulrich, Beresford, Wener, Neuhaus, Zheng, Cheng, Gunter	3	OS		AS195
1183	Quantitative walking speed, self-reported physical activity and incidence of breast cancer incidence in postmenopausal women	Kwan, Chlebowski, Irwin, McTiernan, Kaplan, Martin, LaMonte, Lane, Bell	3	Gen		
1188	The influence of excess body weight in postmenopausal women on the risk of skin cancer: The Women's Health Initiative Study	Boussard-Hernandez, Tang, Stefanick, Sims, McTiernan, Aroda, Sangi-Haghpeykar, Thomas, Morton	3	Gen		

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1192	Genetic association of ventricular repolarization and heart rate in the multi-ethnic cohorts of the PAGE Consortium	Avery, Whitsel, Deelman, Hindorff, Buzkova, Heckbert, Psaty, Jeff, Perez, Martin	3	Gen		M6
1193	Genetic association of atrioventricular conduction and atrial fibrillation in the multi-ethnic cohorts of the PAGE Consortium	Whitsel, Avery, Deelman, Hindorff, Buzkova, Heckbert, Psaty, Jeff, Albert, Perez, Martin	3	Gen		M6
1194	Association of genetic variants and inflammation in the PAGE study	Kocarnik, Peters, Pendergrass, Pankow, Cheng, Schumacher, Matise	3	Gen		M6
1197	Epidemiology of sudden cardiac death in post-menopausal women	Eaton, Bertoina, Wassertheil-Smoller, Limacher, Allison, Solomon, Freiberg, Kuller, Johnson, Manson, Curb	3	Gen		
1199	Genome-wide association study of atrioventricular conduction among minority women in the WHI clinical trials	Butler, Avery, Whitsel, Heiss, North, Limacher, Tinker, Smith, Wilhelmson, Liao, Zhang, Albert, Lin	3			AS264, M5
1200	CHARGE meta-analysis of RBC traits	Chen, Snively	3	Gen		
1201	ABO allele variants and risk of pancreatic cancer	LaCroix, Kooperberg, Wactawski-Wende, Austin	3	Gen		M4
1202	Racial/ethnic differences in the use of adjuvant hormonal therapies among women with ER+ breast cancer	Livaudais, LaCroix, Coronado, Yasmeen, Chlebowski, Simon, Erwin, Hubbell, Li, Thompson, Yanez, Habel	3	Gen		
1203	Vitamin D intake and potential interaction with vitamin A/retinol in relation to lung cancer risk in the Women's Health Initiative	Cheng, Neuhouser, LaCroix, Chlebowski, Ho, Zheng	3	Gen		
1204	Genome-wide association of kidney function traits in post-menopausal women of varying ethnicity	Franceschini, Jackson, Carty, Reiner, Howard, Liu, Martin, Umans, Curb, Eaton	3	Gen		M5
1211	Diabetes mellitus as a risk factor for gastrointestinal cancers	Luo, Margolis, Liu, Chlebowski, McGlynn, Parekh, White	3	Gen		



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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1212	Association of hot flashes with breast cancer risk	Cummings, Farhat, LaCroix, Grady, Yasmeen, Chlebowski, Vitolins, Manson, LeBlanc, Messina	3	CT		AS183, AS39
1214	Application of imbalanced learning methods to study associations of region-specific brain volumes with cognitive function using WHIMS study data	Casanova, Resnick, Rapp, Gaussoin, Espeland, Maidjian, Petrovich	3	WHIMS		
1215	Candidate gene analysis of blood pressure in WHI using the IBC genotyping platform: an inter-study collaboration	Franceschini, Curb, Martin, Eaton, Reiner, Keating, Duggan	3	Gen		BAA14
1216	Meta-analysis of IBC array studies for type-2 diabetes related phenotypes	Keating, Saxena, Reiner, Liu	3	Gen		BAA14
1217	Concordance of diabetes self-reports with CMS data in the Women's Health Initiative	Margolis, Hunt, Manson, Curb	3	Gen		AS197, W35
1219	Polymorphisms in sex hormones pathway in relation to type 2 diabetes risk among African-American and Hispanic postmenopausal women	Goto, Liu, Song, Curb	3	Gen		M5
1222	Reproductive history and risk of colorectal cancer in the Women's Health Initiative Observational Study	Gunter, Strickler, Howard, O'Sullivan, Thomson, Messina	3	OS		
1223	Metabolically benign obese postmenopausal women present a favorable adipokine profile: the Women's Health Initiative Observational Study	Ogorodnikova, Wildman, Vitolins, Xu, Wassertheil-Smoller, Ho, Allison, Mackey, Manson, Rajpathak	3	OS		AS126
1224	Relation of telomere length to risk of diabetes mellitus in the Women's Health Initiative Observational Study	You, Chen, Song, Liu, Manson, Tinker, Margolis, Stefamick, Phillips, Curb, Howard	3	OS		AS254
1226	Relationship between homocysteine and cysteine and risk of incident colorectal cancer in the Women's Health Initiative Observational Cohort	Miller, Ulrich, Beresford, Zheng, Neuhauser, Cheng, Rodriguez, Green	3	OS		AS195
1227	Relationship between red blood cell folate and plasma folate and risk of incident colorectal cancer in the Women's Health Initiative	Neuhouser, Beresford, Song, Ulrich, Miller, Cheng, Brown, Zheng, Rohan, Connelly, Vitolins, Thomson, Shikany	3	OS		AS195

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1228	Relationship between time spent in sedentary activities and mortality in older women: the Women's Health Initiative (WHI) Observational Study	Seguin, LaCroix, Buchner, Patel, Beresford, Allison, Stefanick, Moreland, Manson, Messina	3	OS		M6
1235	MYH9 polymorphisms and chronic kidney disease progression in CARDIA		3	Gen		M6
1236	Phenome-wide study of complex traits	Avery, Wallace, Reiner, Jackson, Wu, Lin, Fesinmeyer, Kooperberg	3	Gen		M6
1237	Phenotype-wide association study for exploration of novel SNP and phenotype relationships within PAGE	Ritchie, Wallace, Moreland, Reiner, Jackson, Kooperberg, Lin, Fesinmeyer	3	Gen		M6
1238	Gene-gene interaction and gene-environment interaction analysis of lipid traits in diverse populations within PAGE	Pendergrass, Assimes, Martin, Brennan, Ockene, Kooperberg, Carty	3	Gen		M6
1239	PAGE metabochip project - summary and generalization of findings	North, Fesinmeyer, Kooperberg, Carty, Carlson, Peters, Haessler, Duggan	3	Gen		M6
1240	PAGE metabochip project - anthropometry	Kooperberg, Fesinmeyer, Peters, Haessler, Rajkovic, Kuller, Jackson	3	Gen		M6
1241	PAGE metabochip project - lipids	Crawford, Robinson, Eaton, Assimes, Carty, Lin, Duggan, Young	3	Gen		M6
1242	PAGE metabochip project - type 2 diabetes, glucose, insulin	Haiman, Aroda, Liu, Peters, Haessler, Howard, Jackson, Kuller	3	Gen		M6
1243	PAGE metabochip project - blood pressure/hypertension	Franceschini, Bluhm, Martin, Fesinmeyer, Wu, Anderson, Mann, Carty	3	Gen		M6
1244	PAGE metabochip project - CHD	Heiss, Franceschini, Boerwinkle, Manson, Greenland, Johnson, Martin, Lin, Carty, Howard	3	Gen		M6
1245	PAGE metabochip project - QT interval and related ECG traits	Avery, Whitsetl, Klein, Perez, Anderson, Fesinmeyer, Duggan, Young, Kooperberg	3	Gen		M6

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MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1246	PAGE metabochip project - inflammation/clotting	Reiner, Liu, Haessler, Peters, LaCroix, Kocarnik, Assimes	3	Gen		M6
1247	PAGE metabochip project - subclinical atherosclerosis measures	Franceschini, Heiss, Manson, Allison, Robinson, Assimes, Martin	3	Gen		M6
1248	PAGE metabochip project - reproductive SNPs	Spencer, Brennan, Carty, Rajkovic, Young, Wu, Park, Carlson	3	Gen		M6
1249	PAGE metabochip project - metabolic syndrome	Carty, Liu, Aroda, Haessler, Peters, Jackson, Carlson	3	Gen		M6
1250	PAGE metabochip project - admixture and chronic disease	Buyske, Wallace, Lee, Kooperberg, Haessler, Carlson, Peters, Duggan	3	Gen		M6
1251	Candidate gene analysis of gall bladder disease in WHI using the IBC genotyping platform	Keating, Reiner, Duggan, Pettinger	3	Gen		BAA14
1252	C-reactive protein and coronary heart disease: test of causality by Mendelian randomization analysis		3	Gen		BAA14
1256	Genome-wide association of diabetes-related quantitative traits in post-menopausal women of varying ethnicities	Mcigs, Chan, Reiner, Liu, Sarto, Rajpathak, Manson	3	Gen		M5
1258	Genetic variants associated with self-reports of happiness	Kohen, Nguyen, Lange, LaCroix, Woods, Tindle, Ockene, Mouton, Manson	3			M5
1259	Omega-3 fatty acid biomarkers and domains of cognitive function, affect, and mood	Robinson, Denburg, Pottala, Harris, Espeland, Carnahan, Wallace, Shumaker, Limacher	3	CT		AS103, BAA19
1260	Omega-3 fatty acid biomarkers, global cognitive function, and cognitive impairment	Robinson, Denburg, Pottala, Harris, Espeland, Carnahan, Wallace, Shumaker, Jackson, Manson, Mysiw	3	CT		AS39, BAA19
1263	The influence of physical activity and age on changes in body composition of postmenopausal women: The Women's Health Initiative Study	Sims, Stefanick, Chen, Allison, Bea, Beasley, Beresford, Manson, Seguin, Sullivan, Wylie-Rosette, Michael	3	Gen		

Table 12.2  
Manuscripts - Stages 3 through 12

MS ID	Title	Authors	Stage	Data Focus	Reference	Study #
1264	Prospective analysis of sleep and coronary heart disease among post-menopausal women participating in the Women's Health Initiative	Sands, Loucks, Linkletter, Eaton, Carskadon, Hairston, Hale, Limacher, Ockene, Robinson, Shah, Stefanick, Sharkey	3	Gen		
1277	Patient-level analysis of randomized controlled trials on Vitamin D on risk of death	Rejmanik, Robbins, Jackson, Jacobs, Manson	3	CT		