

SUPPLEMENTARY DATA

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For a list of all the investigators who have contributed to WHI science, please visit:
<https://www.whi.org/researchers/Documents%20%20Write%20a%20Paper/WHI%20Investigator%20Long%20List.pdf>

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Supplementary Table S1. Characteristics of Women’s Health Initiative Dietary Modification Trial participants who reported first use of oral diabetes agent during the trial

	Intervention (N=1228)		Comparison (N=1951)		P-Value ¹
	N	%	N	%	
Baseline Characteristics					
Age, mean (SD)	62.1	(6.9)	62.1	(6.8)	0.90
Race/Ethnicity					0.70
White	880	71.7	1372	70.3	
Black	232	18.9	368	18.9	
Hispanic	66	5.4	112	5.7	
American Indian	5	0.4	9	0.5	
Asian/Pacific Islander	32	2.6	56	2.9	
Unknown	13	1.1	34	1.7	
Smoking					0.07
Never	632	52.1	1008	52.3	
Past	505	41.6	758	39.3	
Current	77	6.3	163	8.4	
Family history of adult diabetes	592	51.6	935	50.8	0.68
Baseline waist circumference ≥ 88cm	932	76.2	1522	78.3	0.18
Baseline hypertension/CVD status					0.43
Normotensive/no CVD	407	36.1	611	33.8	
Hypertensive/no CVD	656	58.3	1094	60.5	
Prior CVD	63	5.6	103	5.7	
Baseline BP/hypertension status					0.40
BP < 140 and 90 mmHG; never treated	418	39.2	634	36.8	
BP ≥ 140 or 90 mmHG; never treated	99	9.3	173	10.0	
Ever treated for hypertension	548	51.5	917	53.2	
History of high cholesterol requiring medication	185	15.1	333	17.1	0.14
Metabolic syndrome score					0.49
0	92	8.0	137	7.4	
1	317	27.4	494	26.7	
2	635	54.9	1007	54.4	
3	113	9.8	213	11.5	
HT trial arm					0.73
CEE	64	5.2	102	5.2	
CEE placebo	61	5.0	105	5.4	
CEE+MPA	67	5.5	107	5.5	0.89
CEE+MPA placebo	69	5.6	107	5.5	
	Mean	(SD)	Mean	(SD)	
Total energy expenditure/wk from physical activity (MET-hrs)	7.3	(9.9)	7.9	(10.9)	0.20
Body mass index (kg/m ²)	32.6	(6.3)	32.6	(6.0)	0.98
Waist circumference (cm)	98.0	(14.6)	98.1	(13.3)	0.87
Systolic BP (mm Hg)	131.8	(16.4)	132.0	(16.6)	0.77
Diastolic BP (mm Hg)	77.6	(9.2)	77.5	(9.3)	0.88
LDL-C (mg/dL) ²	135.6	(37.5)	132.2	(38.5)	0.54
HDL-C (mg/dL) ²	53.1	(14.8)	52.2	(12.6)	0.67
Triglyceride (mg/dL) (Median/IQR) ²	165.0	(117.0)	146.5	(102.5)	0.89
Glucose (mg/dL) (Median/IQR) ²	114.0	(25.0)	108.0	(28.5)	0.21
Time to pills (years)	5.1	(2.6)	4.9	(2.6)	0.049

Abbreviations: BP, blood pressure; CEE, conjugated equine estrogen; CVD, cardiovascular disease; HDL-C, high-density lipoprotein cholesterol; HT, hormone therapy; LDL-C, low-density lipoprotein cholesterol; MPA, medroxyprogesterone acetate.

¹ P-value corresponds to χ^2 tests (categorical variables), t-tests (continuous variables; not skewed), or Wilcoxon rank tests (continuous variables; skewed); for skewed variables, median (interquartile range) is presented.

² Laboratory measurements based on a 5.8% subsample of trial participants; includes 207 participants (79 vs. 128)

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Supplementary Table S2. Diabetes outcomes¹ in the Women’s Health Initiative Dietary Modification Trial by study period

	Intervention		Comparison		HR (95% CI)	P-value
	N	%	N	%		
COHORT: NO DIABETES AT BASELINE²						
Time to first report of pills (T1)						
Intervention	1228	(0.83%)	1951	(0.88%)	0.95 (0.88, 1.02)	0.13
Post intervention: Extension I	721	(1.09%)	1161	(1.13%)	0.96 (0.88, 1.05)	0.39
Post intervention: Extension II	616	(1.48%)	981	(1.53%)	0.96 (0.87, 1.06)	0.46
Cumulative	2565	(1.00%)	4093	(1.05%)	0.96 (0.91, 1.00)	0.07
COHORT: NO DIABETES AT BASELINE²						
Time to first report of insulin (T2)						
Intervention	102	(0.07%)	207	(0.09%)	0.74 (0.59, 0.94)	0.01
Post intervention: Extension I	184	(0.26%)	326	(0.29%)	0.88 (0.73, 1.05)	0.15
Post intervention: Extension II	108	(0.23%)	158	(0.22%)	1.06 (0.83, 1.35)	0.65
Cumulative	394	(0.15%)	691	(0.17%)	0.88 (0.78, 0.99)	0.04
COHORT: NO DIABETES AT BASELINE, BUT LATER SELF-REPORT TAKING PILLS DURING FOLLOW-UP³						
Time from pills to first report of insulin (T3)						
Intervention	102	(2.63%)	207	(3.17%)	0.82 (0.64, 1.04)	0.10
Post intervention: Extension I	184	(3.20%)	326	(3.56%)	0.90 (0.75, 1.08)	0.27
Post intervention: Extension II	108	(1.88%)	158	(1.75%)	1.04 (0.82, 1.34)	0.73
Cumulative	394	(2.56%)	691	(2.80%)	0.95 (0.84, 1.09)	0.49
COHORT: TAKING PILLS FOR DIABETES AT BASELINE						
Time to first report of insulin (T4)⁴						
Intervention	140	(3.60%)	229	(3.82%)	0.92 (0.75, 1.14)	0.47
Post intervention: Extension I	47	(3.78%)	88	(4.57%)	0.85 (0.59, 1.23)	0.39
Post intervention: Extension II	19	(3.45%)	41	(4.71%)	0.75 (0.43, 1.33)	0.33
Cumulative	206	(3.62%)	358	(4.07%)	0.89 (0.75, 1.06)	0.21

¹ Summary statistics include counts of self-reported outcomes (annualized incidence rates), hazard ratios (95% CI), and p-values. Proportional hazards models were stratified by baseline age group and randomization arm of the WHI hormone therapy trials. The model for T3 was also stratified by time from randomization to pills, defined by quartiles specific to each study period. For T1, T2, and T4, the time-scale started at randomization for the intervention period or the start of each extension period. For T3, the time-scale started at self-report of pills.

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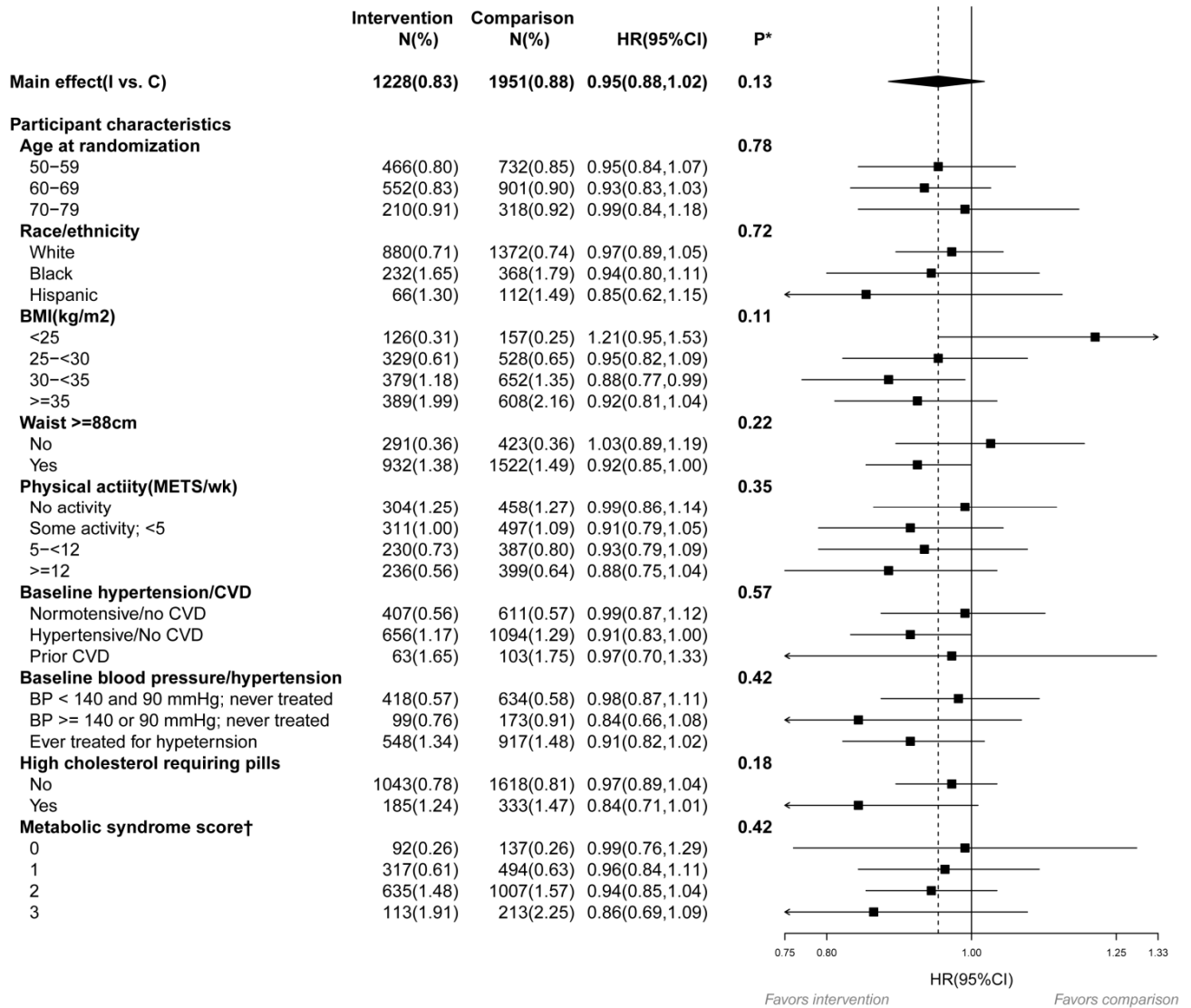
² Full dietary trial cohort exclusive of women with diabetes at randomization.

³ Participants among the full dietary trial cohort exclusive of women with diabetes at randomization who self-reported first use of oral agents during followup.

⁴ Dietary trial participants with diabetes and taking oral agents at baseline.

SUPPLEMENTARY DATA

Supplementary Figure S1. Subgroup analysis for the time from randomization to first report of pills for diabetes during the intervention period among the full Women’s Health Initiative Dietary Modification Trial cohort, exclusive of women with diabetes at randomization (T1).



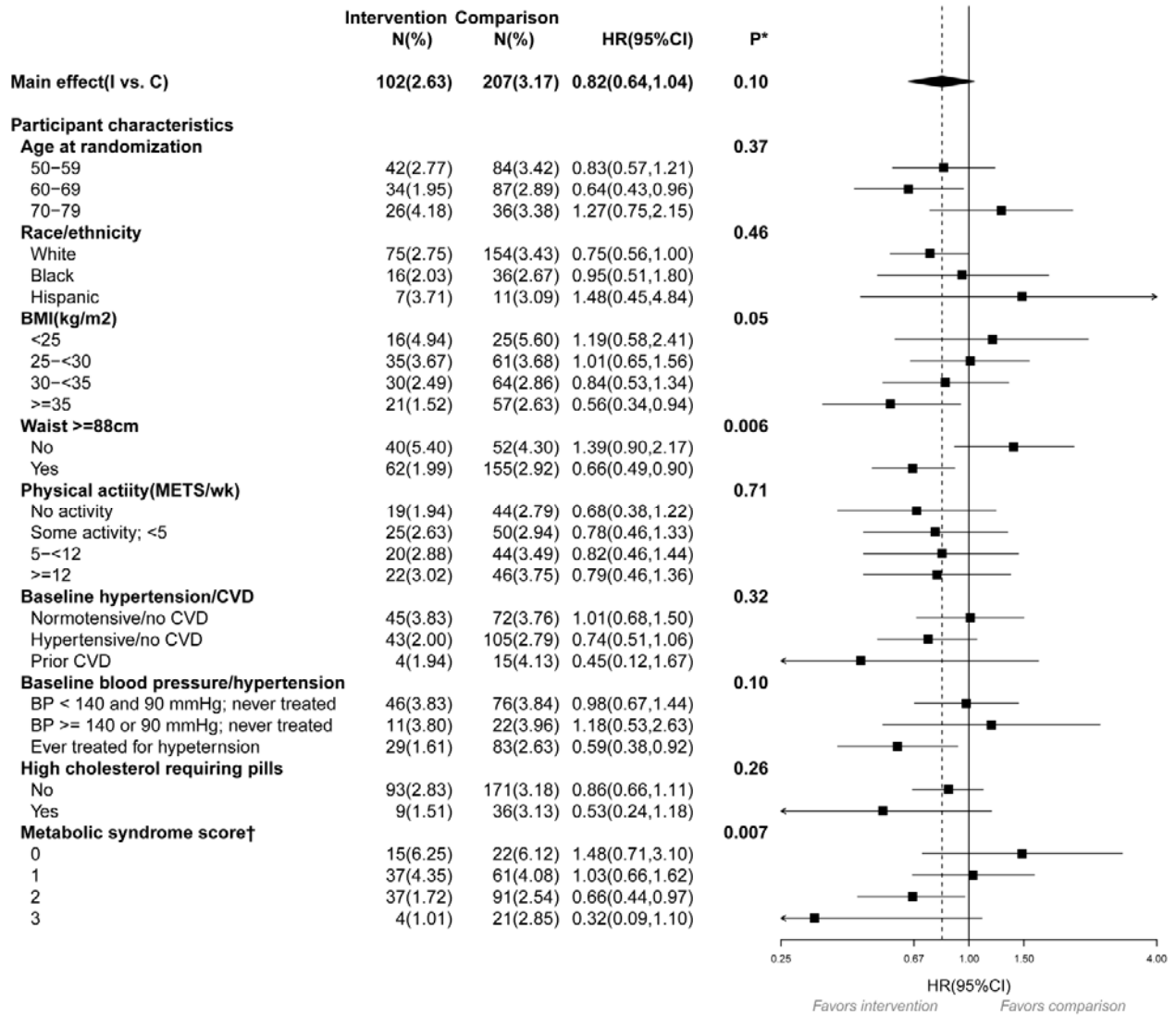
Abbreviations: BP, blood pressure; BMI, body mass index; CVD, cardiovascular disease.

*Statistical significance of subgroups is based on a test of the interaction between subgroup and randomization group. For the subgroups of age, BMI, physical activity, blood pressure/hypertension, and metabolic syndrome score, a 1–df trend test of the interaction was used.

†Score ranges from 0 (best) to 3 (worst) and is a sum of these binary components: waist circumference ≥ 88 cm, high cholesterol requiring pills, or blood pressure ≥ 130/85 mmHg (or ever treated for hypertension).

SUPPLEMENTARY DATA

Supplementary Figure S2. Subgroup analysis for the time from pills to first report of insulin for diabetes during the intervention period among women self-reporting use of pills for diabetes during the intervention (T3).



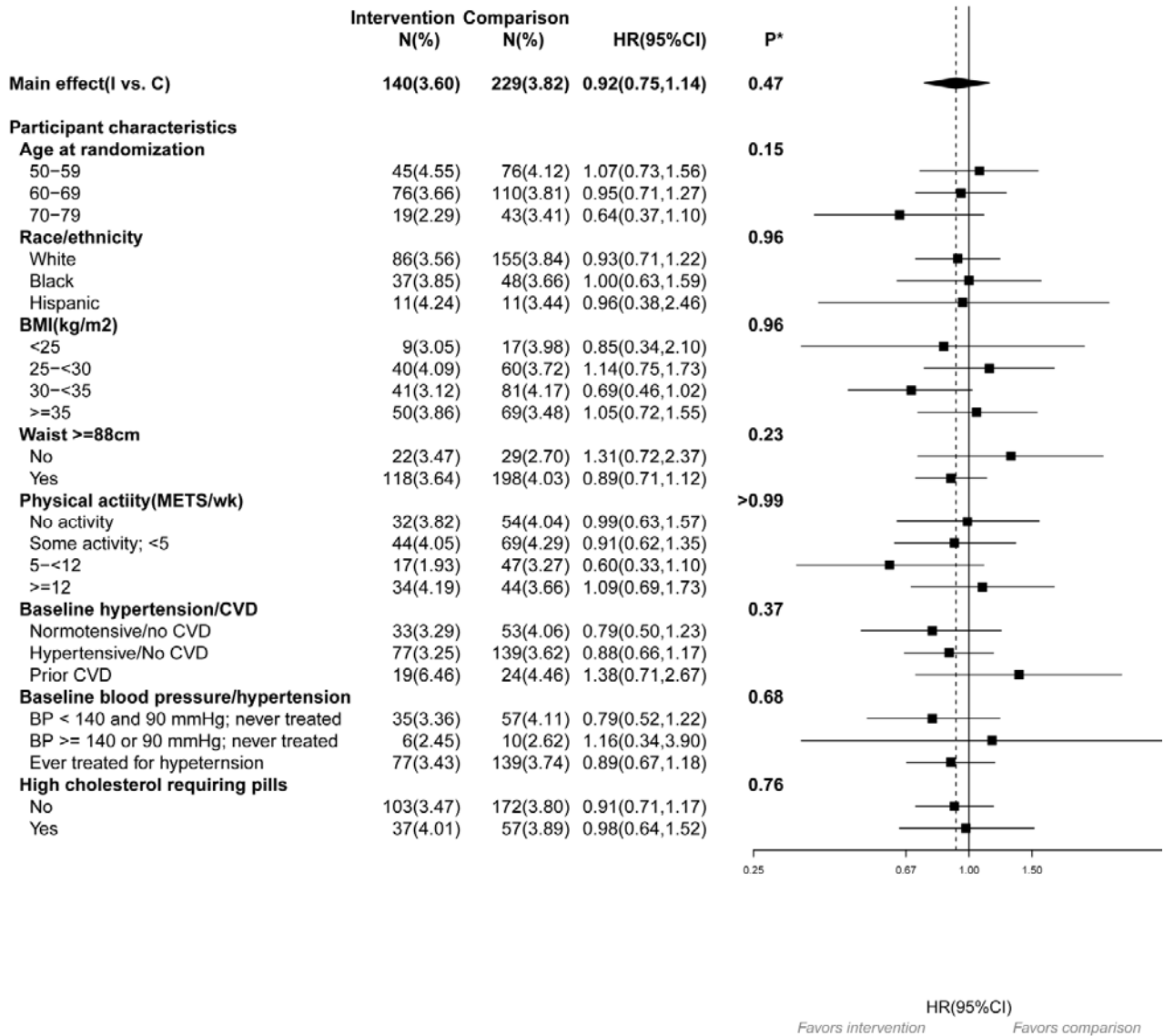
Abbreviations: BP, blood pressure; BMI, body mass index; CVD, cardiovascular disease.

*Statistical significance of subgroups is based on a test of the interaction between subgroup and randomization group. For the subgroups of age, BMI, physical activity, blood pressure/hypertension, and metabolic syndrome score, a 1-df trend test of the interaction was used.

†Score ranges from 0 (best) to 3 (worst) and is a sum of these binary components: waist circumference ≥ 88 cm, high cholesterol requiring pills, or blood pressure ≥ 130/85 mmHg (or ever treated for hypertension).

SUPPLEMENTARY DATA

Supplementary Figure S3. Subgroup analysis for the time from randomization to first report of insulin for diabetes during the intervention period among women self-reporting use of pills for diabetes at baseline (**T4**).



Abbreviations: BP, blood pressure; BMI, body mass index; CVD, cardiovascular disease.

*Statistical significance of subgroups is based on a test of the interaction between subgroup and randomization group. For the subgroups of age, BMI, physical activity, blood pressure/hypertension, and metabolic syndrome score, a 1-df trend test of the interaction was used.