

SUPPLEMENTARY DATA

Supplementary Table S1. Metformin treatment effects on diabetes defined by fasting or 2-hour post-load glucose or HbA1c among parous women in subgroup combinations defined by gestational diabetes mellitus (GDM) and fasting glucose (FPG).

FPG and GDM subgroups in parous women	N	%	Placebo Rate (cases/100pyr)	Metformin Rate (cases/100pyr)	Hazard Ratio MET vs PLAC (95% CI)	Subgroup by metformin p-value	Rate Difference (95% CI, cases/100pyr)	Subgroup by metformin p-value
Diabetes defined by glucose								
FPG (mg/dl) & GDM						0.04		0.008
No GDM, FPG<110	690	58.3	4.69	4.54	0.97 (0.77, 1.22)		-0.15 (-1.20, 0.90)	
No GDM, FPG≥110	261	22.1	14.59	10.95	0.75 (0.57, 1.00)		-3.65 (-7.32, 0.02)	
GDM, FPG<110	153	12.9	8.46	5.06	0.60 (0.39, 0.93)		-3.40 (-6.31, -0.48)	
GDM, FPG≥110	79	6.7	20.51	10.4	0.48 (0.29, 0.81)		-10.13 (-18.24, -2.01)	
GDM & Age (years) *						0.04		0.01
No GDM, Age < 45	227	19.3	7.18	6.0	0.83 (0.58, 1.20)		-1.22 (-3.61, 1.18)	
No GDM, Age 45-59	552	46.9	6.6	5.6	0.86 (0.68, 1.08)		-0.98 (-2.40, 0.43)	
No GDM, Age≥ 60	172	14.6	4.5	7.0	1.50 (0.97, 2.32)		2.50 (0.00, 5.00)	
GDM, Age < 45	140	11.9	11.5	7.4	0.66 (0.43, 1.00)		-4.13 (-8.16, -0.10)	
GDM, Age 45-59	87	7.4	10.4	5.6	0.56 (0.32, 1.00)		-4.80 (-9.10, -0.49)	
Diabetes defined by HbA1c								
FPG (mg/dl) & GDM						0.55		0.33
No GDM, FPG<110	628	61.8	3.23	2.10	0.65 (0.48, 0.89)		-1.14 (-1.93, -0.35)	
No GDM, FPG≥110	190	18.7	8.35	6.45	0.78 (0.53, 1.14)		-1.89 (-4.75, 0.96)	
GDM, FPG<110	143	14.1	4.02	2.01	0.51 (0.27, 0.95)		-2.01 (-3.82, -0.21)	
GDM, FPG≥110	56	5.5	12.43	6.09	0.49 (0.25, 0.97)		-6.34 (-12.54, -0.14)	
GDM & Age (years) *						0.59		0.47
No GDM, Age < 45	201	19.9	4.44	3.33	0.75 (0.47, 1.19)		-1.11 (-2.90, 0.69)	
No GDM, Age 45-5y	473	46.7	4.17	2.94	0.71 (0.52, 0.97)		-1.23 (-2.32, -0.15)	
No GDM, Age≥ 60	144	14.2	3.34	2.37	0.77 (0.41, 1.42)		-0.97 (-2.70, 0.76)	
GDM, Age < 45	119	11.8	6.80	3.04	0.45 (0.25, 0.80)		-3.77 (-6.58, -0.96)	
GDM, Age 45-59	75	7.4	4.48	2.26	0.51 (0.22, 1.17)		-2.22 (-4.77, 0.33)	

* Since there are no participants in the placebo group with GDM and Age>60+y groups, the combination was excluded in this analysis.

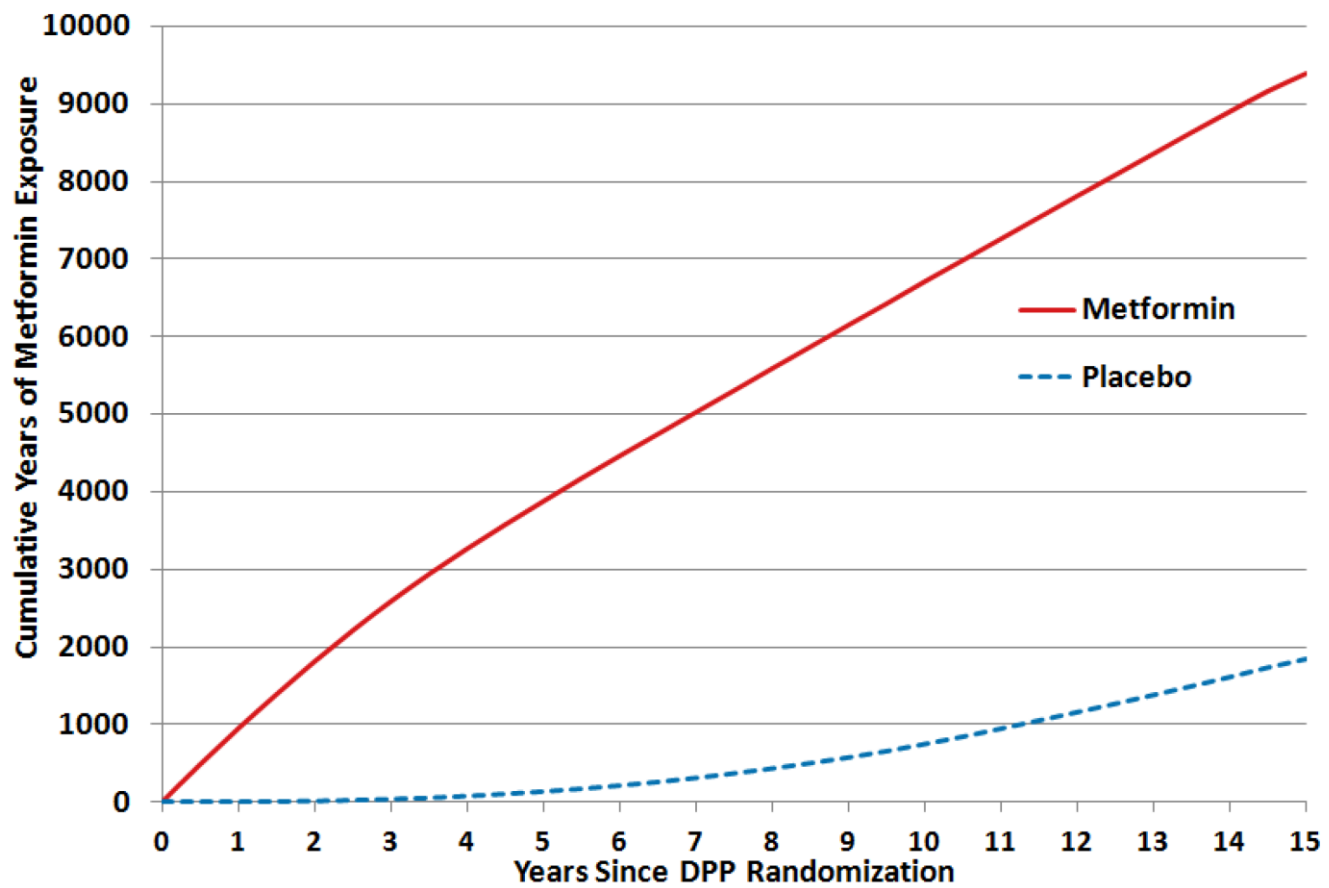
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Supplementary Table S2. Metformin treatment effects on diabetes defined by fasting or 2-hour post-load glucose or HbA1c among all participants in subgroup combinations defined by baseline age and fasting glucose (FPG).

FPG and age subgroups in all participants	N	%	Placebo Rate (cases/100pyr)	Metformin Rate (cases/100pyr)	Hazard Ratio MET vs PLAC (95% CI)	Subgroup by metformin p-value	Rate Difference (95% CI, cases/100pyr)	Subgroup by metformin p-value
Diabetes defined by glucose								
Age (years) and FPG (mg/dl)						0.63		0.61
Age < 45, FPG < 110	441	20.5	4.34	3.05	0.70 (0.51, 0.97)		-1.30 (-2.48, -0.11)	
Age < 45, FPG ≥ 110	201	9.3	13.32	10.17	0.80 (0.57, 1.13)		-3.15 (-7.15, 0.84)	
Age 45-59, FPG < 110	727	33.7	4.23	2.65	0.64 (0.50, 0.83)		-1.58 (-2.44, -0.73)	
Age 45-59, FPG ≥ 110	371	17.2	11.15	7.60	0.71 (0.55, 0.92)		-3.55 (-5.97, -1.14)	
Age ≥60, FPG ≤ 110	272	12.6	4.53	2.37	0.56 (0.37, 0.87)		-2.16 (-3.61, -0.71)	
Age ≥60, FPG ≥ 110	143	6.6	10.20	8.38	0.90 (0.59, 1.37)		-1.83 (-5.78, 2.12)	
Diabetes defined by HbA1c								
Age (years) and FPG (mg/dl)						0.74		0.49
Age < 45, FPG < 110	418	22.8	3.85	2.77	0.72 (0.51, 1.01)		-1.08 (-2.21, 0.06)	
Age < 45, FPG ≥ 110	144	7.9	9.96	6.43	0.65 (0.42, 1.02)		-3.53 (-7.08, 0.02)	
Age 45-59, FPG < 110	665	36.3	3.28	2.06	0.63 (0.47, 0.85)		-1.22 (-1.98, -0.46)	
Age 45-59, FPG ≥ 110	269	14.7	7.22	4.59	0.66 (0.47, 0.92)		-2.63 (-4.64, -0.62)	
Age ≥60, FPG ≤ 110	241	13.1	3.56	1.47	0.44 (0.26, 0.75)		-2.09 (-3.35, -0.84)	
Age ≥60, FPG ≥ 110	96	5.2	6.22	4.30	0.73 (0.40, 1.33)		-1.91 (-5.05, 1.22)	

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Supplementary Figure S1. Cumulative exposure to metformin by DPP treatment group



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