

ERRATUM

Erratum to: GC and VDR SNPs and Vitamin D Levels in Parkinson's Disease: The Relevance to Clinical Features

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Tables 3, 4 and supplementary Table 4 of the original article contained errors in the labeling of the genotype and allele columns for the first GC SNP (rs2282679). The correct labels for the genotype columns (left to right) are 'AA', 'CA' and 'CC'. The correct labels for the allele columns (left to right)

are 'A' and 'C'. The error did not affect the genotype or allele distributions, statistical analysis or results, and thus the conclusions of the study were not affected. The authors regret the inconvenience caused to the readers. The corrected Tables 3, 4 and supplementary Table 4 are given along with this erratum.

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Table 3 Distribution of GC gene rs2282679, rs3755967, rs2298850, rs7041 and VDR gene rs731236 (TaqI), rs7975232 (ApaI), rs757343 (Tru9I), rs1544410 (BsmI), rs2228570 (FokI) genotypes and alleles

GC SNPs	Groups	Genotype			<i>p</i> value	Allele		<i>p</i> value
		AA	CA	CC		A	C	
rs2282679	All PD (<i>n</i> = 382)	220 (57.6 %)	140 (36.6 %)	22 (5.8 %)	0.19	580 (75.9 %)	184 (24.1 %)	0.67
	PD sporadic (<i>n</i> = 292)	168 (57.5 %)	106 (36.3 %)	18 (6.2 %)	0.29	442 (75.7 %)	142 (24.3 %)	0.63
	PD sporadic age of onset >50 (<i>n</i> = 205)	118 (57.6 %)	72 (35.1 %)	15 (7.3 %)	0.54	308 (75.1 %)	102 (24.9 %)	0.52
	PD sporadic age of onset <50 (<i>n</i> = 87)	50 (57.5 %)	34 (39.1 %)	3 (3.4 %)	0.16	134 (77.0 %)	40 (23.0 %)	0.99
	PD with familial background (<i>n</i> = 90)	52 (57.8 %)	34 (37.8 %)	4 (4.4 %)	0.29	138 (76.7 %)	42 (23.3 %)	0.93
	Healthy subjects (<i>n</i> = 226)	140 (61.9 %)	68 (30.1 %)	18 (8 %)		348 (77.0 %)	104 (23.0 %)	
		GG	GA	AA		G	A	
rs3755967	All PD (<i>n</i> = 382)	218 (57.1 %)	142 (37.2 %)	22 (5.8 %)	0.25	578 (75.7 %)	186 (24.3 %)	0.45
	PD sporadic (<i>n</i> = 292)	166 (56.8 %)	108 (37.0 %)	18 (6.2 %)	0.32	440 (75.3 %)	144 (24.7 %)	0.41
	PD sporadic age of onset >50 (<i>n</i> = 205)	117 (57.1 %)	73 (35.6 %)	15 (7.3 %)	0.53	307 (74.9 %)	103 (25.1 %)	0.36
	PD sporadic age of onset <50 (<i>n</i> = 87)	49 (56.3 %)	35 (40.2 %)	3 (3.4 %)	0.18	133 (76.4 %)	41 (23.6 %)	0.77
	PD with familial background (<i>n</i> = 90)	52 (57.8 %)	34 (37.8 %)	4 (4.4 %)	0.38	138 (76.7 %)	42 (23.3 %)	0.81
	Healthy subjects (<i>n</i> = 226)	140 (62.2 %)	69 (30.7 %)	16 (7.1 %)		349 (77.6 %)	101 (22.4 %)	
		CC	CG	GG		C	G	
rs2298850	All PD (<i>n</i> = 382)	219 (57.3 %)	141 (36.9 %)	22 (5.8 %)	0.74	579 (75.8 %)	185 (24.2 %)	0.66
	PD sporadic (<i>n</i> = 292)	167 (57.2 %)	107 (36.6 %)	18 (6.2 %)	0.79	441 (75.5 %)	143 (24.5 %)	0.61
	PD sporadic age of onset >50 (<i>n</i> = 205)	117 (57.1 %)	73 (35.6 %)	15 (7.3 %)	0.79	307 (74.9 %)	103 (25.1 %)	0.49
	PD sporadic age of onset <50 (<i>n</i> = 87)	50 (57.5 %)	34 (39.1 %)	3 (3.4 %)	0.48	134 (77.0 %)	40 (23.0 %)	0.97
	PD with familial background (<i>n</i> = 90)	52 (57.8 %)	34 (37.8 %)	4 (4.4 %)	0.70	138 (76.7 %)	42 (23.3 %)	0.95
	Healthy subjects (<i>n</i> = 226)	135 (60.0 %)	76 (33.8 %)	14 (6.2 %)		346 (76.9 %)	104 (23.1 %)	
		GG	GT	TT		G	T	
rs7041	All PD (<i>n</i> = 382)	125 (32.7 %)	175 (45.8 %)	82 (21.5 %)*	0.043*	425 (55.6 %)	339 (44.4 %)	0.09
					OR 1.8			
					95 % CI 1.1–2.8			
	PD sporadic (<i>n</i> = 292)	100 (34.2 %)	129 (44.2 %)	63 (21.6 %)	0.040*	329 (56.3 %)	255 (43.7 %)	0.18
					OR 1.8			
					95 % CI 1.1–2.9			
	PD sporadic age of onset >50 (<i>n</i> = 205)	70 (34.1 %)	90 (43.9 %)	45 (22.0 %)	0.049*	230 (56.1 %)	180 (43.9 %)	0.19
					OR 1.8			
				95 % CI 1.1–3.0				
	PD sporadic age of onset <50 (<i>n</i> = 87)	30 (34.5 %)	39 (44.8 %)	18 (20.7 %)	0.24	99 (56.9 %)	75 (43.1 %)	0.41
	PD with familial background (<i>n</i> = 90)	25 (27.8 %)	46 (51.1 %)	19 (21.1 %)	0.19	96 (53.3 %)	84 (46.7 %)	0.10
	Healthy subjects (<i>n</i> = 225)	77 (34.4 %)	117 (52.2 %)	30 (13.4 %)		271 (60.5 %)	177 (39.5 %)	
VDR SNPs	Groups	Genotype			<i>p</i> value	Allele		<i>p</i> value
		TT (TT)	TC (Tt)	CC (tt)		T (T)	C (t)	
rs731236 (TaqI)	All PD (<i>n</i> = 381)	154 (40.4 %)	182 (47.8 %)	45 (11.8 %)	0.24	490 (64.3 %)	272 (35.7 %)	0.58
	PD sporadic (<i>n</i> = 292)	118 (40.4 %)	142 (48.6 %)	32 (11.0 %)	0.18	378 (64.7 %)	206 (35.3 %)	0.71
	PD sporadic age of onset >50 (<i>n</i> = 205)	86 (42.0 %)	98 (47.8 %)	21 (10.2 %)	0.27	270 (65.9 %)	140 (34.1 %)	0.99
	PD sporadic age of onset <50 (<i>n</i> = 87)	32 (36.8 %)	44 (50.6 %)	11 (12.6 %)	0.28	108 (62.1 %)	66 (37.9 %)	0.37
	PD with familial background (<i>n</i> = 89)	36 (40.4 %)	40 (44.9 %)	13 (14.6 %)	0.72	112 (62.9 %)	66 (37.1 %)	0.48
	Healthy subjects (<i>n</i> = 240)	109 (45.4 %)	98 (40.8 %)	33 (13.8 %)		316 (65.8 %)	164 (34.2 %)	

Table 3 continued

		AA (AA)	AC (Aa)	CC (aa)		A (A)	C (a)	
rs7975232 (Apal)	All PD (<i>n</i> = 381)	130 (34.1 %)	194 (50.9 %)	57 (15 %)	0.077	454 (59.6 %)	308 (40.4 %)*	0.029*
							OR 1.3	
							95 % CI 1.03–1.65	
	PD sporadic (<i>n</i> = 292)	95 (32.5 %)	152 (52.1 %)	45 (15.4 %)	0.045*	342 (58.6 %)	242 (41.4 %)	0.016*
							OR 1.6	
							95 % CI 1.0–2.7	
PD sporadic age of onset >50 (<i>n</i> = 205)		68 (33.2 %)	101 (49.3 %)	36 (17.6 %)	0.039*	237 (57.8 %)	173 (42.2 %)	0.015*
							OR 1.8	
							95 % CI 1.1–3.2	
PD sporadic age of onset <50 (<i>n</i> = 87)		27 (31.0 %)	51 (58.6 %)	9 (10.3 %)	0.18	105 (60.3 %)	69 (39.7 %)	0.20
	PD with familial background (<i>n</i> = 89)	35 (39.3 %)	42 (47.2 %)	12 (13.5 %)	0.71	112 (62.9 %)	66 (37.1 %)	0.49
	Healthy subjects (<i>n</i> = 241)	101 (41.9 %)	115 (47.7 %)	25 (10.4 %)		317 (65.8 %)	165 (34.2 %)	
		GG (UU)	GA (Uu)	AA (uu)		G (U)	A (u)	
rs757343 (Tru9I)	All PD (<i>n</i> = 381)	245 (64.3 %)	119 (31.2 %)	17 (4.5 %)	0.41	609 (79.9 %)	153 (20.1 %)	0.18
	PD sporadic (<i>n</i> = 292)	190 (65.1 %)	90 (30.8 %)	12 (4.1 %)	0.33	470 (80.5 %)	114 (19.5 %)	0.13
	PD sporadic age of onset >50 (<i>n</i> = 205)	136 (66.3 %)	60 (29.3 %)	9 (4.4 %)	0.31	332 (81.0 %)	78 (19.0 %)	0.12
	PD sporadic age of onset <50 (<i>n</i> = 87)	54 (62.1 %)	30 (34.5 %)	3 (3.4 %)	0.64	138 (79.3 %)	36 (20.7 %)	0.47
	PD with familial background (<i>n</i> = 89)	55 (61.8 %)	29 (32.6 %)	5 (5.6 %)	0.92	139 (78.1 %)	39 (21.9 %)	0.69
	Healthy subjects (<i>n</i> = 229)	136 (59.4 %)	79 (34.5 %)	14 (6.1 %)		351 (76.6 %)	107 (23.4 %)	>
		AA (BB)	AG (Bb)	GG (bb)		A (B)	G (b)	
rs1544410 (BsmI)	All PD (<i>n</i> = 380)	110 (28.9 %)	134 (35.3 %)	136 (35.8 %)	0.66	354 (46.6 %)	406 (53.4 %)	0.44
	PD sporadic (<i>n</i> = 292)	84 (28.8 %)	102 (34.9 %)	106 (36.3 %)	0.76	270 (46.2 %)	314 (53.8 %)	0.54
	PD sporadic age of onset >50 (<i>n</i> = 205)	60 (29.3 %)	70 (34.1 %)	75 (36.6 %)	0.84	190 (46.3 %)	220 (53.7 %)	0.55
	PD sporadic age of onset <50 (<i>n</i> = 87)	24 (27.6 %)	32 (36.8 %)	31 (35.6 %)	0.76	80 (46.0 %)	94 (54.0 %)	0.71
	PD with familial background (<i>n</i> = 88)	26 (29.5 %)	32 (36.4 %)	30 (34.1 %)	0.68	84 (47.7 %)	92 (52.3 %)	0.44
	Healthy subjects (<i>n</i> = 239)	67 (28.0 %)	78 (32.6 %)	94 (39.3 %)		212 (44.4 %)	266 (55.6 %)	>
		CC (FF)	CT (Ff)	TT (ff)		C (F)	T (f)	
rs2228570 (FokI)	All PD (<i>n</i> = 382)	181 (47.4 %)	164 (42.9 %)	37 (9.7 %)	0.75	526 (68.8 %)	238 (31.2 %)	0.47
	PD sporadic (<i>n</i> = 292)	133 (45.5 %)	133 (45.5 %)	26 (8.9 %)	0.81	399 (68.3 %)	185 (31.7 %)	0.62
	PD sporadic age of onset >50 (<i>n</i> = 205)	96 (46.8 %)	93 (45.4 %)	16 (7.8 %)	0.59	285 (69.5 %)	125 (30.5 %)	0.40
	PD sporadic age of onset <50 (<i>n</i> = 87)	37 (42.5 %)	40 (46.0 %)	10 (11.5 %)	0.98	114 (65.5 %)	60 (34.5 %)	0.75
	PD with familial background (<i>n</i> = 90)	48 (53.3 %)	31 (34.4 %)	11 (12.2 %)	0.22	127 (70.6 %)	53 (29.4 %)	0.37
	Healthy subjects (<i>n</i> = 237)	105 (44.3 %)	107 (45.1 %)	25 (10.5 %)		317 (66.9 %)	157 (33.1 %)	

* Compared with health subjects, Chi-square, *df*: 2 (for genotypes), *df*: 1 (for alleles), significance 2-sided; significance also confirmed with Cramer's V/Kendall's tau-c

Table 4 Comparisons of genotype distributions according to clinical features

SNP ID	Genotypes	Initial symptom (frequency)	p	PD duration (frequency)		p	Disease stage (frequency)		p	FoG (frequency)		p	Falls (frequency)		p				
				<7 years			≥7 years			<3			≥3						
				TD	AR or both								No	Yes					
ALL PD (independent from age of onset and familial background)	VDR-TaqI	TT	0.42	0.39	0.58	0.40	0.41	0.88	0.42	0.41	0.94	0.41	0.42	0.90	0.40	0.42	0.72		
		Tt + tt	0.58	0.61	0.60	0.59	0.58	0.59	0.58	0.59	0.59	0.58	0.60	0.60	0.58				
	VDR-Apal	AA	0.33	0.35	0.74	0.36	0.32	0.50	0.34	0.35	0.90	0.32	0.40	0.16	0.31	0.37	0.23		
	Aa + aa	0.66	0.65	0.64	0.64	0.68	0.66	0.65	0.65	0.65	0.68	0.60	0.69	0.69	0.63				
	VDR-Tru9I	UU	0.65	0.63	0.62	0.65	0.62	0.48	0.64	0.63	0.89	0.65	0.60	0.36	0.66	0.62	0.48		
		Uu + uu	0.35	0.37	0.35	0.38	0.36	0.36	0.37	0.37	0.35	0.40	0.35	0.40	0.34	0.38			
	VDR-BsmI	BB + Bb	0.63	0.66	0.14	0.64	0.65	0.93	0.62	0.66	0.45	0.62	0.68	0.31	0.63	0.65	0.67		
	bb	0.37	0.34	0.36	0.35	0.38	0.35	0.38	0.35	0.35	0.38	0.32	0.37	0.37	0.35				
	VDR-FokI	FF	0.46	0.50	0.45	0.52	0.39	0.01	0.51	0.41	0.07	0.48	0.43	0.38	0.48	0.45	0.65		
		Ff + ff	0.54	0.50	0.48	0.61	0.49	0.49	0.59	0.52	0.58	0.52	0.55	0.53	0.55	0.55			
	GC-rs2282679	AA	0.58	0.55	0.53	0.53	0.65	0.03	0.56	0.60	0.39	0.57	0.61	0.53	0.55	0.61	0.24		
		CA + CC	0.42	0.45	0.47	0.48	0.35	0.44	0.40	0.40	0.43	0.39	0.45	0.45	0.39				
	GC-rs3755967	GG	0.57	0.55	0.64	0.53	0.64	0.03	0.55	0.60	0.30	0.56	0.61	0.45	0.54	0.61	0.17		
		GA + AA	0.43	0.45	0.47	0.47	0.36	0.45	0.40	0.40	0.44	0.39	0.46	0.46	0.39				
	GC-rs2298850	CC	0.57	0.56	0.74	0.53	0.64	0.04	0.55	0.60	0.35	0.56	0.62	0.35	0.54	0.61	0.21		
		CG + GG	0.43	0.44	0.47	0.47	0.36	0.45	0.40	0.40	0.44	0.39	0.46	0.46	0.39				
	GC-rs7041	GG	0.32	0.34	0.58	0.29	0.41	0.01	0.28	0.38	0.05	0.30	0.38	0.13	0.29	0.36	0.12		
		GT + TT	0.68	0.66	0.71	0.59	0.72	0.62	0.67	0.72	0.70	0.62	0.71	0.64					
PD sporadic	VDR-TaqI	TT	0.42	0.37	0.39	0.41	0.38	0.58	0.43	0.40	0.73	0.42	0.40	0.72	0.41	0.42	0.91		
No familial background	VDR-Apal	AA	0.31	0.34	0.56	0.32	0.33	0.93	0.32	0.33	0.83	0.30	0.38	0.17	0.29	0.35	0.25		
		Aa + aa	0.69	0.66	0.68	0.67	0.67	0.68	0.67	0.67	0.70	0.62	0.71	0.65					
	VDR-Tru9I	UU	0.66	0.65	0.88	0.65	0.64	0.81	0.66	0.63	0.64	0.66	0.60	0.58	0.60	0.59	0.58		
		Uu + uu	0.34	0.35	0.35	0.35	0.36	0.34	0.34	0.37	0.37	0.34	0.40	0.33	0.38				
	VDR-BsmI	BB + Bb	0.61	0.69	0.21	0.63	0.66	0.59	0.60	0.66	0.38	0.60	0.69	0.22	0.61	0.65	0.57		
	bb	0.39	0.31	0.37	0.34	0.34	0.40	0.34	0.38	0.51	0.38	0.03	0.47	0.40	0.39	0.35			
	VDR-FokI	FF	0.43	0.51	0.18	0.50	0.38	0.05	0.51	0.38	0.03	0.47	0.40	0.29	0.48	0.43	0.42		
		Ff + ff	0.57	0.49	0.50	0.62	0.62	0.49	0.62	0.62	0.53	0.60	0.52	0.52	0.57				
	GC-rs2282679	AA	0.60	0.53	0.26	0.55	0.63	0.16	0.55	0.61	0.28	0.56	0.63	0.28	0.53	0.62	0.14		
		CA + CC	0.40	0.47	0.45	0.37	0.45	0.45	0.45	0.45	0.44	0.37	0.44	0.47	0.47	0.38			

Table 4 continued

	SNP ID	Genotypes	Initial symptom (frequency)	p	PD duration (frequency)		p	Disease stage (frequency)		p	FoG (frequency)	p	Falls (frequency)	p					
					<7 years			≥7 years											
					TD	AR or both													
GC-rs3755967	GG	0.58	0.53	0.35	0.54	0.62	0.19	0.53	0.61	0.19	0.55	0.63	0.22	0.52	0.62	0.08			
	GA + AA	0.42	0.47		0.46	0.38		0.47	0.39		0.45	0.37		0.48	0.38				
GC-rs2298850	CC	0.58	0.54	0.44	0.55	0.62	0.21	0.54	0.61	0.24	0.55	0.64	0.15	0.53	0.62	0.11			
	CG + GG	0.42	0.46		0.45	0.38		0.46	0.39		0.45	0.36		0.47	0.38				
GC-rs7041	GG	0.33	0.36	0.54	0.31	0.41	0.08	0.29	0.39	0.09	0.31	0.40	0.16	0.30	0.37	0.19			
	GT + TT	0.67	0.64		0.69	0.59		0.71	0.61		0.69	0.60		0.70	0.63				
PD sporadic	VDR-TaqI	TT	0.45	0.37	0.25	0.41		0.43	0.79	0.41	0.45	0.65	0.41	0.49	0.36	0.41	0.45		
Age onset >50		Tt + tt	0.55	0.63		0.59	0.57		0.59	0.55		0.59	0.51		0.59	0.55			
	VDR-ApaI	AA	0.32	0.34	0.80	0.34		0.33	0.91		0.33	0.32		0.80	0.30	0.30	0.35		
	Aa + aa	0.68	0.66		0.66	0.67		0.67	0.68		0.67	0.67		0.70	0.65				
	VDR-Tru9I	UU	0.64	0.70		0.37	0.67		0.64	0.65		0.68	0.58		0.22	0.70	0.61		
	Uu + uu	0.36	0.30		0.33	0.36		0.32	0.37		0.32	0.42		0.42	0.30	0.39	0.21		
	VDR-BsmI	BB + Bb	0.59	0.72	0.06	0.64		0.64	0.99	0.61	0.65	0.65	0.62	0.65	0.61	0.65	0.62		
	bb	0.41	0.28		0.36	0.36		0.39	0.35		0.38	0.35		0.35	0.39				
	VDR-FokI	FF	0.41	0.56	0.04	0.52		0.34	0.02	0.50	0.40	0.17	0.45	0.47	0.87	0.49	0.42		
					OR 1.8			OR 2.1								0.39			
		Ff + ff	0.59	0.44	0.48	0.66		0.66	0.50		0.60	0.60		0.55	0.53		0.58		
GC-rs2282679	AA	0.59	0.55	0.59	0.53	0.67	0.07	0.55	0.63	0.26	0.56	0.67	0.16	0.52	0.65	0.09			
	CA + CC	0.41	0.45		0.47	0.33		0.45	0.37		0.44	0.33		0.48	0.35				
GC-rs3755967	GG	0.58	0.55	0.67	0.53	0.67	0.05	0.54	0.63	0.21	0.55	0.67	0.14	0.52	0.65	0.06			
	GA + AA	0.42	0.45		0.47	0.33		0.46	0.37		0.45	0.33		0.48	0.35				
GC-rs2298850	CC	0.58	0.55	0.67	0.53	0.66	0.11	0.55	0.62	0.34	0.55	0.67	0.14	0.52	0.64	0.12			
	CG + GG	0.42	0.45		0.47	0.34		0.45	0.38		0.45	0.33		0.48	0.36				
GC-rs7041	GG	0.32	0.38	0.39	0.29	0.48	0.008	0.27	0.43	0.02	0.29	0.49	0.02	0.27	0.41	0.04			
					OR 2.3			OR 2.0						OR 2.3		0.04			
		GT + TT	0.68	0.62		0.71	0.52		0.73	0.57		0.71	0.51		0.73	0.59			
PD sporadic	VDR-TaqI	TT	0.34	0.38	0.72	0.42	0.31		0.27	0.46	0.33	0.23	0.46	0.27	0.09	0.42	0.36		
Age onset >50		Tt + tt	0.66	0.62	0.58	0.69		0.54	0.67		0.54	0.73		0.58	0.64				
	VDR-ApaI	AA	0.28	0.35	0.46	0.29		0.33	0.65	0.26	0.35	0.38	0.19	0.50	0.004	0.25	0.31		
														OR 4.3					
		Aa + aa	0.72	0.65		0.71	0.67		0.74	0.65		*0.81	0.50		0.75	0.64			
VDR-Tru9I	UU	0.70	0.54	0.13	0.60	0.64		0.68	0.60		0.63	0.80	0.60	0.63	0.79	0.58	0.59		
	Uu + uu	0.30	0.46		0.40	0.36		0.40	0.37		0.40	0.37		0.40	0.37				
VDR-BsmI	BB + Bb	0.68	0.62	0.57	0.60	0.69	0.37	0.57	0.67	0.35	0.56	0.73	0.13	0.61	0.64	0.77			
	bb	0.32	0.38		0.40	0.31		0.43	0.33		0.44	0.27		0.39	0.36				

Table 4 continued

SNP ID	Genotypes	Initial symptom (frequency)	<i>p</i>	PD duration (frequency)		<i>p</i>	Disease stage (frequency)		<i>p</i>	FoG (frequency)		<i>p</i>	Falls (frequency)					
				<7 years			≥7 years			<3			≥3					
				TD	AR		TD	AR		TD	AR		TD	AR				
VDR-FokI	FF	0.47	0.41	0.57	0.42	0.43	0.95	0.54	0.35	0.08	0.52	0.30	0.05	0.44	0.43	0.89		
GC-rs2282679	Ff + ff	0.53	0.59	0.58	0.57	0.57	0.95	0.54	0.46	0.65	0.48	0.70*	0.56	0.57	0.57	0.57		
GC-rs3755967	AA	0.62	0.49	0.23	0.58	0.57	0.43	0.46	0.42	0.73	0.56	0.57	0.97	0.56	0.57	0.89		
GC-rs3755967	CA + CC	0.38	0.51	0.42	0.43	0.43	0.77	0.51	0.58	0.55	0.54	0.43	0.44	0.43	0.43	0.43		
GC-rs2298850	GG	0.60	0.49	0.32	0.58	0.55	0.45	0.49	0.42	0.42	0.46	0.43	0.47	0.43	0.47	0.70		
GC-rs2298850	GA + AA	0.40	0.51	0.42	0.45	0.58	0.57	0.95	0.51	0.61	0.42	0.54	0.60	0.61	0.53	0.60		
GC-rs2298850	CC	0.60	0.51	0.45	0.58	0.57	0.43	0.42	0.43	0.39	0.46	0.40	0.47	0.40	0.40	0.40		
GC-rs7041	GG	0.34	0.32	0.88	0.38	0.31	0.50	0.34	0.30	0.70	0.35	0.27	0.42	0.36	0.29	0.48		
GC-rs7041	GT + TT	0.66	0.68	0.62	0.62	0.69	0.66	0.70	0.66	0.65	0.73	0.64	0.71	0.64	0.71	0.70		
PD with familial background	VDR-TaqI	TT	0.39	0.44	0.68	0.35	0.50	0.18	0.40	0.46	0.60	0.38	0.50	0.35	0.39	0.45	0.60	
	Tt + tt	0.61	0.56	0.65	0.50	0.50	0.14	0.40	0.42	0.84	0.38	0.45	0.58	0.37	0.45	0.49		
	VDR-ApaI	AA	0.41	0.38	0.74	0.45	0.29	0.71	0.60	0.58	0.62	0.55	0.63	0.55	0.63	0.55		
	Aa + aa	0.59	0.62	0.55	0.55	0.54	0.30	0.60	0.65	0.64	0.64	0.60	0.78	0.63	0.62	0.94		
	VDR-Trn9I	UU	0.64	0.56	0.46	0.65	0.46	0.41	0.40	0.40	0.35	0.36	0.40	0.37	0.38	0.38		
	Uu + uu	0.36	0.44	0.35	0.46	0.46	0.30	0.61	0.65	0.65	0.96	0.66	0.65	0.66	0.65	0.96		
	VDR-BsmI	BB + Bb	0.70	0.58	0.28	0.70	0.61	0.41	0.65	0.65	0.65	0.65	0.93	0.66	0.65	0.65		
	bb	0.30	0.42	0.30	0.39	0.39	0.09	0.51	0.56	0.69	0.51	0.52	0.90	0.48	0.57	0.45		
	VDR-FokI	FF	0.56	0.47	0.40	0.60	0.41	0.09	0.49	0.44	0.49	0.48	0.52	0.43	0.52	0.43		
	Ff + ff	0.44	0.53	0.40	0.59	0.72	0.04	0.58	0.56	0.82	0.60	0.52	0.59	0.57	0.82	0.82		
GC-rs2282679	AA	0.54	0.63	0.46	0.50	0.72	OR 2.6	TD	AR	TD	AR	TD	AR	TD	AR	TD		
GC-rs3755967	CA + CC	0.46	0.37	0.46	0.50	0.28	0.72	0.04	0.58	0.56	0.82	0.60	0.52	0.52	0.59	0.57	0.82	
GC-rs3755967	GG	0.54	0.63	0.46	0.50	0.50	0.72	0.04	0.58	0.42	0.44	0.40	0.48	0.41	0.43	0.43		
GC-rs3755967	GA + AA	0.46	0.37	0.46	0.50	0.28	0.72	0.04	0.58	0.56	0.82	0.60	0.52	0.52	0.59	0.57	0.82	
GC-rs2298850	CC	0.54	0.63	0.46	0.50	0.72	OR 2.6	TD	AR	TD	AR	TD	AR	TD	AR	TD		
GC-rs2298850	CG + GG	0.46	0.37	0.99	0.22	0.41	0.05	0.26	0.33	0.45	0.27	0.33	0.58	0.41	0.43	0.43		
GC-rs7041	GG	0.28	0.28	0.99	0.22	0.78	0.59	0.74	0.67	0.73	0.67	0.74	0.67	0.74	0.67	0.67		

Chi-square; *df*: 1; significance 2-sided; significance also confirmed with Cramer's V/Kendall's tau-c