

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

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Published online: 21 July 2016
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Erratum to: Neuromol Med DOI 10.1007/s12017-016-8415-9

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.

The online version of the original article can be found under doi:[10.1007/s12017-016-8415-9](https://doi.org/10.1007/s12017-016-8415-9).

Electronic supplementary material The online version of this article (doi:[10.1007/s12017-016-8426-6](https://doi.org/10.1007/s12017-016-8426-6)) contains supplementary material, which is available to authorized users.

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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* OR 1.8 95 % CI 1.1–2.8	425 (55.6 %)	339 (44.4 %)	0.09
	PD sporadic (<i>n</i> = 292)	100 (34.2 %)	129 (44.2 %)	63 (21.6 %)	0.040* OR 1.8 95 % CI 1.1–2.9	329 (56.3 %)	255 (43.7 %)	0.18
	PD sporadic age of onset >50 (<i>n</i> = 205)	70 (34.1 %)	90 (43.9 %)	45 (22.0 %)	0.049* OR 1.8 95 % CI 1.1–3.0	230 (56.1 %)	180 (43.9 %)	0.19
	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 (ApaI)	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* OR 1.6 95 % CI 1.0–2.7	342 (58.6 %)	242 (41.4 %)	0.016* OR 1.4 95 % CI 1.1–1.7
	PD sporadic age of onset >50 (<i>n</i> = 205)	68 (33.2 %)	101 (49.3 %)	36 (17.6 %)	0.039* OR 1.8 95 % CI 1.1–3.2	237 (57.8 %)	173 (42.2 %)	0.015* OR 1.4 95 % CI 1.1–1.8
	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
		TD	AR or both		<7 years	≥7 years		<3	≥3		No	Yes		No	Yes	
ALL PD (independent from age of onset and familial background)	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	0.74	0.60	0.59	0.50	0.58	0.59	0.90	0.32	0.40	0.16	0.31	0.37	0.23
	AA	0.33	0.35	0.62	0.64	0.68	0.48	0.66	0.65	0.89	0.65	0.60	0.36	0.66	0.62	0.48
	Aa + aa	0.66	0.65	0.14	0.35	0.38	0.93	0.64	0.63	0.45	0.62	0.68	0.31	0.63	0.65	0.67
	UU	0.65	0.63	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
	Uu + uu	0.35	0.37	0.48	0.48	0.61	OR 1.7	0.49	0.59	0.52	0.58	0.52	0.55	0.52	0.55	0.24
	BB + Bb	0.63	0.66	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
	bb	0.37	0.34	0.64	0.47	0.35	OR 1.6	0.44	0.40	0.43	0.39	0.43	0.45	0.54	0.61	0.17
	FF	0.46	0.50	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
	Ff + ff	0.54	0.50	0.74	0.47	0.36	OR 1.6	0.45	0.40	0.44	0.39	0.44	0.39	0.46	0.39	0.21
PD sporadic No familial background	CA + CC	0.42	0.45	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
	GG	0.57	0.55	0.47	0.47	0.36	OR 1.6	0.45	0.40	0.44	0.38	0.46	0.46	0.39	0.21	
	GA + AA	0.43	0.45	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
	CG + GG	0.43	0.44	0.47	0.47	0.36	OR 1.6	0.45	0.40	0.44	0.38	0.46	0.46	0.39	0.21	
	GG	0.52	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	0.71	0.59	OR 1.7	0.72	0.62	0.70	0.62	0.70	0.62	0.71	0.64	0.42
	TT	0.42	0.37	0.39	0.41	0.38	0.58	0.43	0.40	0.42	0.73	0.42	0.40	0.72	0.41	0.42
	Tt + tt	0.58	0.63	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	0.31	0.34	0.68	0.68	0.67	0.81	0.66	0.63	0.64	0.66	0.60	0.37	0.67	0.62	0.42
	Aa + aa	0.69	0.66	0.88	0.65	0.64	0.59	0.60	0.66	0.38	0.60	0.69	0.22	0.61	0.65	0.57
UU	0.66	0.65	0.21	0.63	0.34	0.59	0.60	0.66	0.38	0.60	0.69	0.22	0.61	0.65	0.57	
Uu + uu	0.34	0.35	0.37	0.37	0.34	0.05	0.51	0.38	0.03	0.40	0.31	0.39	0.39	0.35	0.42	
BB + Bb	0.61	0.69	0.18	0.50	0.38	OR 1.6	0.49	0.62	0.53	0.60	0.63	0.28	0.53	0.62	0.14	
bb	0.39	0.31	0.50	0.50	0.62	0.16	0.55	0.61	0.28	0.56	0.63	0.28	0.53	0.62	0.14	
FF	0.43	0.51	0.45	0.45	0.37	0.45	0.45	0.39	0.44	0.37	0.44	0.37	0.47	0.38	0.38	
Ff + ff	0.57	0.49	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	
AA	0.60	0.53	0.47	0.45	0.37	0.45	0.45	0.39	0.44	0.37	0.44	0.37	0.47	0.38	0.38	
CA + CC	0.40	0.47	0.45	0.45	0.37	0.45	0.45	0.39	0.44	0.37	0.44	0.37	0.47	0.38	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
		TD	AR or both		<7 years	≥7 years		<3	≥3		No	Yes		No	Yes	
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	
	CC	0.58	0.54	0.44	0.55	0.62	0.21	0.54	0.61	0.24	0.55	0.64	0.115	0.53	0.62	0.11
GC-rs2298850	CG + GG	0.42	0.46		0.45	0.38		0.46	0.39		0.45	0.36		0.47	0.38	
	GG	0.33	0.36	0.54	0.31	0.41	0.08	0.29	0.39	0.09	0.31	0.40	0.116	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	
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	0.59
	Tt + tt	0.55	0.63		0.59	0.57		0.59	0.55		0.59	0.51		0.59	0.55	
	AA	0.32	0.34	0.80	0.34	0.33	0.91	0.33	0.32	0.80	0.33	0.30	0.70	0.30	0.35	0.45
VDR-ApaI	Aa + aa	0.68	0.66		0.66	0.67		0.67	0.68		0.67	0.70		0.70	0.65	
	UU	0.64	0.70	0.37	0.67	0.64	0.65	0.68	0.63	0.53	0.68	0.58	0.22	0.70	0.61	0.21
	Uu + uu	0.36	0.30		0.33	0.36		0.32	0.37		0.32	0.42		0.30	0.39	
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	0.69	0.61	0.65	0.62
	bb	0.41	0.28		0.36	0.36		0.39	0.35		0.38	0.35		0.39	0.35	
	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	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	0.39
	FF + ff	0.59	0.44	OR 1.8	0.48	0.66	OR 2.1	0.50	0.60	0.60	0.55	0.53		0.51	0.58	
	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
GC-rs2282679	CA + CC	0.41	0.45		0.47	0.33		0.45	0.37		0.44	0.33		0.48	0.35	
	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
	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
GC-rs3755967	GA + AA	0.42	0.45		0.47	0.33		0.46	0.37		0.45	0.33		0.48	0.35	
	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
	GT + TT	0.68	0.62	OR 2.3	0.71	0.52	OR 2.0	0.73	0.57	OR 2.0	0.71	0.51	OR 2.3	0.73	0.59	OR 1.9
	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	0.59
VDR-TaqI	Tt + tt	0.66	0.62		0.58	0.69		0.54	0.67		0.54	0.73		0.58	0.64	
	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	0.36	0.31
	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	0.36	0.31
VDR-ApaI	Aa + aa	0.72	0.65		0.71	0.67		0.74	0.65		*0.81	0.50	OR 4.3	0.75	0.64	
	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	0.64	0.59
	Uu + uu	0.30	0.46		0.40	0.36		0.40	0.37		0.40	0.37		0.42	0.36	
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	
	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)		p	PD duration (frequency)		p	Disease stage (frequency)		p	FoG (frequency)		p	Falls (frequency)		p
		TD	AR or both		<7 years	≥7 years		<3	≥3		No	Yes		No	Yes	
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
	Ff + ff	0.53	0.59		0.58	0.57		0.46	0.65		0.48	0.70*	OR 2.5	0.56	0.57	
GC-rs2282679	AA	0.62	0.49	0.23	0.58	0.57	0.95	0.54	0.58	0.73	0.56	0.57	0.97	0.56	0.57	0.89
	CA + CC	0.38	0.51		0.42	0.43		0.46	0.42		0.44	0.43		0.44	0.43	
GC-rs3755967	GG	0.60	0.49	0.32	0.58	0.55	0.77	0.51	0.58	0.55	0.54	0.57	0.83	0.53	0.57	0.70
	GA + AA	0.40	0.51		0.42	0.45		0.49	0.42		0.46	0.43		0.47	0.43	
GC-rs2298850	CC	0.60	0.51	0.45	0.58	0.57	0.95	0.51	0.61	0.42	0.54	0.60	0.61	0.53	0.60	0.55
	CG + GG	0.40	0.49		0.42	0.43		0.49	0.39		0.46	0.40		0.47	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
	GT + TT	0.66	0.68		0.62	0.69		0.66	0.70		0.65	0.73		0.64	0.71	
PD with familial background	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		0.60	0.54		0.62	0.50		0.61	0.55	
VDR-ApaI	AA	0.41	0.38	0.74	0.45	0.29	0.14	0.40	0.42	0.84	0.38	0.45	0.58	0.37	0.45	0.49
	Aa + aa	0.59	0.62		0.55	0.71		0.60	0.58		0.62	0.55		0.63	0.55	
VDR-Tm9I	UU	0.64	0.56	0.46	0.65	0.54	0.30	0.60	0.65	0.64	0.64	0.60	0.78	0.63	0.62	0.94
	Uu + uu	0.36	0.44		0.35	0.46		0.40	0.35		0.36	0.40		0.37	0.38	
VDR-BsmI	BB + Bb	0.70	0.58	0.28	0.70	0.61	0.41	0.65	0.65	0.96	0.66	0.65	0.93	0.66	0.65	0.96
	bb	0.30	0.42		0.30	0.39		0.35	0.35		0.34	0.35		0.34	0.35	
VDR-FokI	FF	0.56	0.47	0.40	0.60	0.41	0.09	0.51	0.56	0.69	0.51	0.52	0.90	0.48	0.57	0.45
	Ff + ff	0.44	0.53		0.40	0.59		0.49	0.44		0.49	0.48		0.52	0.43	
GC-rs2282679	AA	0.54	0.63	0.46	0.50	0.72	0.04	0.58	0.56	0.82	0.60	0.52	0.52	0.59	0.57	0.82
	CA + CC	0.46	0.37		0.50	0.28	OR 2.6	0.42	0.44		0.40	0.48		0.41	0.43	
GC-rs3755967	GG	0.54	0.63	0.46	0.50	0.72	0.04	0.58	0.56	0.82	0.60	0.52	0.52	0.59	0.57	0.82
	GA + AA	0.46	0.37		0.50	0.28	OR 2.6	0.42	0.44		0.40	0.48		0.41	0.43	
GC-rs2298850	CC	0.54	0.63	0.46	0.50	0.72	0.04	0.58	0.56	0.82	0.60	0.52	0.52	0.59	0.57	0.82
	CG + GG	0.46	0.37		0.50	0.28	OR 2.6	0.42	0.44		0.40	0.48		0.41	0.43	
GC-rs7041	GG	0.28	0.28	0.99	0.22	0.41	0.05	0.26	0.33	0.45	0.27	0.33	0.58	0.26	0.33	0.47
	GT + TT	0.72	0.72		0.78	0.59	OR 2.5	0.74	0.67		0.73	0.67		0.74	0.67	

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