

Single nucleotide polymorphisms of cytokine-related genes and association with clinical outcome in a Chagas disease case-control study from Brazil

Lucia Elena Alvarado-Arnez1¶#, Angelica Martins Batista1¶, Silvia Marinho Alves2, Gloria Melo2, Virgínia Maria Barros de Lorena3, Cynthia C. Cardoso4, Isabela Resende Pereira1, Cristina Carrazzone2, Antonio G. Pacheco5, Wilson Oliveira Jr2, Milton Ozório Moraes6, Joseli Lannes-Vieira1*

1Laboratório de Biologia das Interações, Instituto Oswaldo Cruz/Fiocruz, Rio de Janeiro, Brazil

2Ambulatório de Doença de Chagas e Insuficiência Cardíaca do Pronto Socorro Cardiológico de Pernambuco (PROCAPE)/UPE), Pernambuco, Brazil

3Laboratório de Imunoparasitologia, Departamento de Imunologia, Instituto Aggeu Magalhães/Fiocruz, Pernambuco, Brazil

4Laboratório de Virologia Molecular, Departamento de Genética, Universidade Federal do Rio de Janeiro, Brazil

5Programa de Computação Científica, Fiocruz, Rio de Janeiro, Brazil

6#Present affiliation: Laboratório de Hanseníase, Instituto Oswaldo Cruz, Fiocruz, Rio de Janeiro

ID	Age strata	Monthly income	Education	Clinical group	LVEF (%)	Bz	TGFB			IL10			IFNG	TNF	BAT	LTA		TNFR1	TNFR2
							rs8179181	rs8105161	rs1800469	rs1800890	rs1800871	rs1800896				rs909253	rs2239704		
PE 1	>45	1	4	B1	60	N	CC	GG	CT	AA	CT	GG	AT	AG	CC	AG	AC	AG	GG
PE 2	>45	1	4	B1	57	N	CC	GG	CT	AT	CT	GA	TT	AG	CC	AG	AC	GG	AG
PE 3	<=45	1	>4	B1	57	Y	CC	AG	CT	AA	CC	GA	AT	GG	CC	AA	AA	GG	AG
PE 4	>45	.2-4	>4	C	57	Y	AA	NA	NA	AA	TT	GG	AT	AG	CC	AG	AC	AA	GG
PE 5	>45	1	4	B1	64	N	NA	GG	CT	AA	CC	GG	TT	GG	CC	AA	AC	AG	AG
PE 6	>45	.2-4	4	B1	52	Y	CC	GG	TT	AA	CC	GG	AA	GG	CG	AG	AC	AA	AG
PE 7	<=45	1	>4	B1	72	N	CC	AG	CC	AA	CC	AA	TT	GG	CG	GG	CC	AG	AG
PE 8	>45	1	4	B1	72	N	CC	GG	CT	AT	CC	GA	AT	GG	CC	AA	AC	GG	AG
PE 9	<=45	1	4	C	35	N	CC	GG	TT	AA	TT	GG	AA	GG	CC	AA	CC	GG	AG
PE 10	>45	1	4	C	29	N	AC	GG	TT	AA	CT	GA	TT	AG	CC	GG	CC	AG	AA
PE 11	>45	1	4	C	44	N	CC	GG	CT	AA	TT	GG	AT	GG	CG	AA	CC	GG	AA
PE 12	>45	1	4	B1	75	N	CC	GG	TT	AT	CC	GA	AT	AG	CC	AG	AC	AG	AG
PE 13	>45	.2-4	4	B1	64	N	CC	GG	CT	AA	CT	GG	AT	GG	CC	GG	CC	GG	AG
PE 14	>45	.2-4	4	A	75	Y	CC	GG	TT	AA	TT	GG	AT	GG	NA	AA	AA	GG	AG
PE 15	>45	NA	NA	C	64	N	AC	GG	TT	AT	CT	GA	AT	GG	CC	AA	AA	AG	AG
PE 16	>45	1	4	C	19	N	AC	GG	CC	AA	CT	GA	TT	GG	CC	AG	AC	AG	AG
PE 17	<=45	>5	4	B1	73	N	CC	GG	CT	AA	CT	GG	TT	GG	CG	AG	CC	AG	AA
PE 18	<=45	1	4	A	71	N	CC	GG	CT	AA	TT	GG	AT	AG	CC	AG	AC	GG	AA
PE 19	>45	1	4	B1	62	N	CC	GG	CC	AA	CT	GG	AT	GG	CC	AA	AC	AA	AA
PE 20	<=45	>5	4	B1	61	N	AC	GG	TT	AT	CC	GA	AT	GG	CC	AG	AC	AG	GG
PE 21	>45	.2-4	4	B1	NA	N	AC	GG	CT	TT	CC	GG	AT	GG	CC	AG	AC	GG	AG

PE 22	>45	>5	4	B1	65	N	CC	GG	CT	AA	CT	GG	AT	GG	CC	AA	AC	GG	AG
PE 23	>45	1	4	C	48	N	CC	GG	CT	AA	TT	GG	AT	AA	CC	GG	CC	AG	GG
PE 24	>45	>5	>4	B1	61	Y	CC	AG	TT	AA	TT	GG	TT	GG	CC	AG	AA	AG	GG
PE 25	>45	1	>4	B1	61	N	CC	AG	CT	AT	CT	GA	TT	GG	CC	AA	AC	GG	AG
PE 26	>45	1	4	A	63	N	NA	GG	NA	TT	CC	AA	TT	GG	CC	AG	CC	GG	AA
PE 27	>45	1	4	C	38	N	CC	GG	TT	AA	CT	GG	AT	AG	GG	GG	CC	AG	AG
PE 28	>45	.2-4	>4	B1	NA	N	AC	GG	CT	AA	TT	GG	TT	GG	CC	AA	CC	AG	GG
PE 29	>45	1	4	C	NA	N	CC	GG	TT	TT	CC	AA	TT	GG	CC	AG	CC	AG	AG
PE 30	>45	1	4	B1	74	Y	AC	GG	CT	AA	CC	GG	TT	AG	CG	GG	CC	AG	GG
PE 31	>45	1	>4	B1	72	N	CC	AG	TT	AT	CT	GA	AT	GG	CC	AG	CC	AG	AG
PE 32	>45	1	4	C	37	N	AC	GG	CT	AT	CT	GA	TT	GG	CC	AG	AC	GG	AG
PE 33	<=45	1	>4	A	61	N	CC	AG	TT	TT	CC	AA	TT	AG	CC	AA	AC	AG	AA
PE 34	>45	1	>4	B1	58	N	CC	GG	TT	AA	CT	GG	AT	GG	CG	AG	CC	AG	AG
PE 35	>45	1	4	B1	63	N	CC	GG	CT	AA	CC	GA	AT	GG	CC	AA	AA	GG	AG
PE 36	>45	1	4	B1	63	N	AC	AG	TT	AT	CT	GA	TT	GG	CC	AG	AC	AG	AG
PE 37	>45	1	4	B1	70	N	AC	AG	TT	AA	CC	GG	TT	GG	CG	AG	AC	AG	AA
PE 38	>45	>5	4	B1	77	N	AC	GG	CT	AA	CC	GG	TT	GG	CC	AA	AC	GG	AG
PE 39	>45	1	4	B1	61	N	AC	GG	CT	AT	CC	GA	TT	GG	CC	AA	AA	AG	AG
PE 40	>45	>5	4	C	43	N	AC	GG	CC	AT	CT	NA	TT	GG	CC	AA	AC	AG	AG
PE 41	>45	1	4	B1	64	N	CC	GG	CT	AT	CC	GG	TT	GG	CC	AA	AA	GG	GG
PE 42	>45	>5	4	B1	70	N	CC	GG	CC	AA	TT	GG	TT	GG	CC	AA	AC	GG	GG
PE 43	>45	.2-4	>4	B1	72	N	CC	AG	TT	AA	CC	GA	TT	GG	CC	AA	AA	AG	AG
PE 44	>45	1	4	B1	73	N	AC	AG	CT	AT	CT	GG	AT	GG	CC	AA	CC	AG	AA
PE 45	<=45	1	4	B1	70	N	CC	GG	CT	AT	CT	GA	AT	GG	CC	AA	AC	AG	AG
PE 46	>45	>5	4	B1	69	N	CC	GG	CT	AA	CT	GG	AT	GG	CC	AA	AA	AA	GG
PE 47	>45	1	4	B1	67	N	CC	GG	TT	AT	CT	GA	AT	AG	CC	AG	AC	AG	GG
PE 48	<=45	1	>4	A	62	N	CC	AG	TT	TT	CC	AA	AT	GG	CC	AA	AC	AG	AG
PE 49	<=45	1	>4	B1	73	Y	AC	GG	TT	AA	TT	GG	TT	GG	CG	AG	CC	AG	AG
PE 50	>45	1	>4	C	47	N	AC	GG	CT	AA	CT	GG	AT	GG	CC	AA	AC	GG	AG
PE 51	>45	1	4	B1	67	N	CC	GG	NA	AA	CC	GA	AT	GG	CC	AA	AC	AG	AA
PE 52	>45	>5	4	C	45	N	CC	AG	TT	AT	CC	GG	AA	GG	CC	AG	CC	AG	AA
PE 53	>45	1	4	C	43	N	CC	AG	NA	AA	CC	GG	AT	AG	CC	AA	CC	AA	AG
PE 54	>45	1	4	B1	65	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PE 55	>45	1	4	B1	79	N	CC	GG	TT	AT	CC	GG	AT	GG	CG	AG	CC	AG	AG

PE 56	>45	1	4	C	25	N	CC	AG	CT	AA	CT	GA	AT	GG	CC	AA	AC	AG	AG
PE 57	>45	1	4	B1	63	N	CC	AG	TT	AT	CT	GG	AT	GG	CG	AG	AC	AG	AG
PE 58	>45	1	4	A	69	N	CC	AG	CC	AA	CT	GG	TT	GG	CG	AG	CC	AG	GG
PE 59	>45	1	4	A	71	Y	CC	GG	CT	AA	CC	GG	AT	GG	CG	AG	CC	GG	AA
PE 60	>45	1	>4	A	70	N	CC	GG	TT	AA	CT	GG	TT	GG	CC	AG	AC	GG	AA
PE 61	>45	>5	>4	B1	66	N	AC	GG	CT	AT	CT	GA	TT	GG	CC	AG	CC	GG	GG
PE 62	>45	.2-4	>4	C	43	N	AC	GG	CT	AA	TT	GG	TT	GG	CC	AA	AA	AG	AG
PE 63	>45	1	4	B1	59	N	CC	GG	TT	AT	CT	GA	TT	GG	CG	AG	CC	GG	AA
PE 64	>45	1	4	C	45	N	CC	GG	NA	AT	CT	GA	TT	GG	CC	AG	AC	AG	AA
PE 65	>45	>5	4	C	67	N	CC	GG	TT	NA	NA	NA	NA	NA	CC	AA	AC	NA	GG
PE 66	>45	1	4	C	42	Y	CC	GG	CC	AA	CT	GA	AA	AG	CG	AG	CC	AG	AG
PE 67	>45	1	4	B1	63	N	CC	AA	CT	AT	CT	GA	AT	GG	CC	AA	AA	GG	GG
PE 68	>45	NA	NA	C	52	N	CC	AA	CC	AT	CC	GA	AA	GG	CC	AA	AA	AG	GG
PE 69	>45	1	4	B1	66	N	CC	AA	CC	AT	CC	GA	TT	GG	CG	GG	CC	GG	NA
PE 70	>45	1	4	C	NA	N	CC	GG	CT	AA	CC	GG	TT	GG	CC	AG	AA	GG	AA
PE 71	>45	1	>4	B1	64	N	CC	GG	CT	AA	CT	GG	AT	AG	CC	AA	AC	AG	AG
PE 72	>45	1	4	A	69	N	AC	GG	TT	AA	CT	GA	AA	GG	CC	AG	CC	AG	AA
PE 73	>45	1	4	B1	71	N	CC	GG	TT	AA	TT	GG	AT	GG	CC	AA	CC	GG	GG
PE 74	>45	>5	4	C	42	Y	CC	AG	TT	AA	TT	GA	AA	GG	CC	AG	AA	GG	AA
PE 75	>45	1	4	A	64	N	CC	GG	CT	AA	CT	GA	AT	GG	CC	AA	AC	GG	AA
PE 76	>45	>5	4	C	32	N	AC	GG	TT	AT	CC	GA	TT	GG	CC	AG	AC	GG	AG
PE 77	<=45	1	4	C	52	N	AC	GG	TT	AA	CT	GG	TT	GG	CG	AG	CC	GG	AG
PE 78	<=45	1	4	B1	64	Y	CC	GG	CT	AA	CT	GA	TT	GG	CC	AG	AC	GG	AG
PE 79	>45	>5	4	C	66	N	AC	GG	CT	AT	CC	GG	AT	GG	NA	GG	CC	AG	GG
PE 80	>45	1	4	B1	67	Y	CC	GG	CT	AA	CT	GG	AT	GG	CC	GG	CC	GG	GG
PE 81	>45	1	4	B1	69	N	CC	GG	TT	AT	CC	AA	TT	AG	CC	GG	CC	GG	GG
PE 82	>45	1	4	B1	28	N	CC	AG	CC	AA	CT	GA	AT	GG	CC	AA	AA	AG	AG
PE 83	>45	1	4	B1	NA	N	CC	AG	CT	NA	TT	GG	TT	GG	CG	AG	AC	AA	AA
PE 84	>45	.2-4	>4	B1	NA	Y	CC	AG	TT	NA	NA	GA	NA	NA	NA	AG	NA	NA	NA
PE 85	>45	1	>4	C	50	Y	AC	GG	CT	AT	CC	GG	TT	GG	CC	AA	AC	AG	GG
PE 86	>45	>5	4	B1	69	N	CC	GG	CT	AA	CT	GG	TT	AG	CC	AG	AC	GG	AG
PE 87	<=45	>5	4	B1	77	N	CC	GG	TT	AT	CT	GA	TT	GG	CC	AG	AC	AG	AG
PE 88	>45	1	4	B1	60	N	CC	GG	TT	AA	CT	GG	TT	GG	CC	AG	AC	GG	AG
PE 89	>45	>5	4	A	64	Y	CC	AA	NA	TT	CC	AA	AT	GG	CC	AA	CC	AA	AA

PE 90	<=45	>5	4	A	67	N	CC	GG	NA	AT	CT	GG	TT	GG	CC	AA	AC	GG	GG
PE 91	>45	>5	>4	B1	63	N	CC	AA	NA	AA	CT	GG	AT	GG	CC	AA	AC	GG	AA
PE 92	>45	.2-4	4	C	44	N	AC	GG	TT	AA	CT	GG	AA	GG	CC	AA	AC	AG	GG
PE 93	>45	>5	4	B1	65	N	CC	AG	TT	AT	CT	GA	TT	AG	CC	AG	AC	AG	GG
PE 94	>45	1	4	B1	62	N	CC	GG	TT	AT	CT	GA	AT	GG	CG	AG	AC	AG	AA
PE 95	<=45	>5	4	C	47	N	CC	AA	CT	AT	CT	GG	AT	GG	CC	AA	AC	AA	AA
PE 96	>45	1	4	C	40	N	AC	AG	CT	AA	CT	GG	AT	GG	CC	AA	AA	AG	GG
PE 97	>45	1	4	A	76	N	CC	AG	CT	AT	CT	GG	TT	GG	CG	AG	AC	GG	AG
PE 98	>45	>5	>4	B1	67	N	CC	AG	CT	AA	CC	AA	AA	GG	CC	AA	AA	AG	AG
PE 99	>45	1	4	B1	58	N	AC	GG	CT	AA	TT	GG	TT	GG	CC	AG	AC	GG	AG
PE 100	>45	>5	4	B1	57	N	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PE 101	>45	1	4	C	40	N	CC	AG	CC	AA	CT	GA	AT	GG	CC	AA	CC	AG	GG
PE 102	>45	>5	4	B1	71	N	AC	GG	CT	AT	CT	GA	TT	GG	CC	AG	CC	AA	AA
PE 103	>45	1	4	B1	63	N	CC	GG	NA	AT	CT	GA	TT	GG	CG	AG	CC	GG	AG
PE 104	>45	>5	4	A	63	N	AC	AG	CT	AT	CT	GA	AT	GG	CC	AG	CC	AG	AG
PE 105	>45	1	4	B1	NA	N	CC	AG	NA	AT	CC	GA	AT	GG	CG	AG	AC	GG	GG
PE 106	>45	1	4	C	NA	N	AC	GG	CT	AA	CT	GA	AT	GG	CC	AG	CC	AA	AA
PE 107	>45	>5	4	B1	67	N	CC	GG	CC	AA	CT	GG	AT	GG	CC	AA	AA	AG	AG
PE 108	>45	1	>4	B1	71	N	CC	GG	CT	AA	TT	GG	AT	GG	NA	AG	AC	AA	AG
PE 109	<=45	1	4	C	24	N	CC	GG	TT	AA	TT	GG	TT	GG	CC	AA	AC	AG	AG
PE 110	>45	1	4	A	58	N	CC	GG	CT	TT	CC	AA	AA	GG	CC	AA	AA	GG	AG
PE 111	>45	1	4	A	66	N	CC	AG	CC	AT	CT	GA	TT	GG	CC	AA	AA	GG	AG
PE 112	>45	1	4	B1	75	N	AC	AG	CT	AA	CT	GG	AT	AG	CG	GG	CC	GG	GG
PE 113	>45	1	>4	B1	73	N	CC	GG	CT	AA	CT	GA	AA	GG	CC	AG	NA	GG	AG
PE 114	>45	1	>4	B1	62	N	AC	GG	CC	AA	CT	GG	AA	GG	CC	AG	CC	AA	AG
PE 115	>45	1	4	B1	63	N	CC	AG	TT	AA	CT	GA	TT	GG	CG	AG	CC	GG	AA
PE 116	>45	1	>4	B1	58	Y	CC	GG	TT	AA	CC	GG	TT	AG	NA	GG	CC	GG	AG
PE 117	>45	1	4	B1	62	Y	CC	GG	TT	AA	CC	AA	TT	GG	CG	AG	CC	GG	AG
PE 118	>45	>5	4	B1	59	N	CC	AG	CT	AA	CC	GG	TT	GG	CC	AA	AA	GG	AG
PE 119	<=45	>5	4	B1	75	N	CC	GG	CC	TT	CC	GG	AT	GG	CC	AA	CC	GG	AG
PE 120	>45	.2-4	4	A	57	N	CC	GG	CC	AA	CT	GG	AA	GG	CC	AA	AA	GG	GG
PE 121	>45	1	4	C	47	N	NA	GG	CT	AA	CT	GG	TT	GG	CG	AG	AC	AG	AA
PE 122	>45	1	4	C	39	Y	CC	AG	TT	AA	CT	GG	AT	GG	CG	GG	CC	AG	GG
PE 123	>45	>5	4	C	18	N	CC	GG	CT	AT	CC	GA	TT	GG	CC	AA	AC	GG	AA

PE 124	<=45	1	4	C	22	Y	CC	GG	TT	AT	CT	GA	TT	GG	CG	GG	CC	GG	GG
PE 125	>45	>5	4	C	52	N	AC	AG	TT	AA	TT	GG	AT	GG	CC	AA	AC	AG	AA
PE 126	>45	1	4	C	35	N	CC	GG	CC	AA	TT	GG	AT	GG	CC	AA	CC	AG	AG
PE 127	>45	1	4	C	41	N	NA	NA	NA	AA	CT	GA	AA	GG	CC	AA	AC	GG	AG
PE 128	>45	>5	4	B1	71	N	CC	AA	TT	AT	CT	GA	TT	GG	CC	AA	AC	GG	GG
PE 129	>45	1	4	B1	76	N	CC	GG	CT	AT	CC	AA	AA	AG	CC	AG	CC	AA	AG
PE 130	>45	1	4	B1	66	N	AC	GG	CT	AT	CT	GA	AT	GG	CC	AG	CC	AG	AG
PE 131	>45	1	4	C	43	Y	AC	GG	CT	AT	CT	GA	AT	GG	CC	AA	AC	AG	AG
PE 132	>45	1	4	B1	69	N	CC	AG	CC	TT	CC	AA	AA	AG	CC	AG	AC	AG	AA
PE 133	>45	>5	4	A	67	Y	CC	AG	CT	AT	CC	GA	AT	AG	CC	AG	AC	AG	AG
PE 134	>45	>5	4	B1	62	N	AA	GG	CT	AT	CT	GA	TT	AG	CG	GG	CC	AA	AG
PE 135	>45	1	4	C	21	N	CC	GG	CT	AA	CC	GG	TT	AG	CC	AG	AC	GG	AG
PE 136	>45	1	4	B1	67	Y	AC	GG	NA	AT	CC	GA	AT	GG	CC	AA	CC	AA	AG
PE 137	>45	>5	4	A	69	Y	CC	AG	TT	AA	TT	GG	AT	GG	CC	AA	CC	GG	AA
PE 138	>45	1	4	C	30	N	CC	AG	TT	AT	CC	GA	AT	AG	CC	AG	CC	AG	AA
PE 139	>45	1	4	A	69	N	CC	AG	CT	AT	CC	GA	AT	AG	CC	AG	CC	AG	AA
PE 140	>45	>5	4	A	75	N	AC	AG	CT	AA	TT	GG	AT	GG	CC	AA	AA	GG	AA
PE 141	<=45	>5	4	A	66	Y	CC	GG	CT	AA	CT	GG	AA	GG	CC	AA	AC	GG	AG
PE 142	>45	>5	>4	B1	65	N	CC	AG	CT	AA	CT	GG	TT	GG	CC	AA	AC	GG	AG
PE 143	>45	1	4	C	21	N	CC	AG	TT	AA	CT	GG	AA	NA	NA	GG	CC	GG	AA
PE 144	>45	1	4	B1	70	Y	CC	AG	TT	AA	CC	GG	AT	AG	CC	AG	CC	AG	GG
PE 145	>45	1	4	B1	67	N	CC	GG	TT	AT	CT	GA	TT	GG	CC	AA	CC	GG	AA
PE 146	<=45	>5	4	B1	64	N	CC	AG	TT	AA	TT	GG	AT	GG	CG	GG	CC	GG	AG
PE 147	<=45	1	4	C	56	N	CC	GG	TT	AT	CC	GA	TT	GG	CC	GG	CC	GG	AA
PE 148	>45	1	4	B1	56	Y	CC	GG	CT	AA	CC	GA	TT	GG	CC	AA	AC	AG	AA
PE 149	>45	1	4	B1	54	N	AC	AG	TT	AA	CC	GA	TT	AG	CC	AG	CC	AG	AA
PE 150	>45	1	>4	C	37	N	CC	AG	CC	AA	TT	GG	TT	GG	CC	AA	AC	GG	AG
PE 151	>45	1	4	B1	65	N	AC	GG	CT	AA	CC	GG	TT	GG	CC	AG	AC	AG	AG
PE 152	>45	.2-4	4	C	50	N	CC	GG	CC	AA	CC	GG	TT	GG	CC	AA	CC	GG	GG
PE 153	>45	1	4	C	20	N	CC	GG	TT	AA	CC	GG	TT	AG	CC	AG	AA	AG	AA
PE 154	>45	>5	4	C	32	N	CC	GG	CC	AA	CT	GG	AT	GG	CC	AA	AC	AG	AG
PE 155	>45	1	4	C	37	N	CC	GG	CT	AA	CT	GG	TT	GG	CC	AA	CC	AG	AG
PE 156	>45	1	4	C	38	N	CC	GG	CT	AA	TT	GG	TT	GG	CG	GG	CC	GG	AG
PE 157	>45	>5	4	C	28	N	AC	GG	CT	AA	CT	GG	TT	GG	CC	AA	AC	AA	GG

PE 158	>45	1	4	C	50	N	CC	GG	TT	AA	CC	GA	TT	GG	CC	AA	AC	GG	AG
PE 159	>45	1	4	C	61	N	CC	AG	TT	AA	CT	GG	TT	AG	CC	AG	CC	AA	AG
PE 160	>45	1	4	C	53	N	CC	AG	NA	TT	CC	AA	AT	GG	CC	AG	CC	GG	AA
PE 161	>45	1	4	C	27	N	CC	GG	CT	AA	CC	GA	AT	GG	CC	AG	CC	AG	AG
PE 162	>45	1	4	B1	57	N	CC	GG	TT	AT	CC	GA	TT	GG	CC	AA	AA	AG	AG
PE 163	>45	1	>4	C	30	N	CC	AG	CT	AA	CC	GA	AT	GG	CC	AG	CC	GG	AA
PE 164	>45	1	4	C	46	N	CC	GG	TT	AT	CT	GA	AT	GG	CC	AG	CC	GG	AG
PE 165	>45	1	4	C	39	N	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PE 166	>45	1	4	C	42	N	CC	GG	CT	AT	CC	GA	AA	GG	CC	AA	AA	AG	AA
PE 167	>45	1	4	C	46	N	CC	GG	CT	AA	CT	GG	AT	GG	CC	AG	AC	AG	AG
PE 168	>45	1	4	C	54	N	AC	GG	CT	TT	CC	AA	AT	GG	CC	GG	CC	AG	AG
PE 169	>45	NA	NA	C	21	N	CC	GG	CT	AA	TT	GG	TT	GG	CC	AA	CC	GG	AG
PE 170	>45	1	4	B1	62	N	AC	GG	CC	AT	CC	GA	TT	GG	CC	AG	CC	GG	AG
PE 171	>45	>5	4	B1	NA	N	CC	AG	TT	AT	CC	GA	AT	GG	CC	AA	AA	AG	AA
PE 172	<=45	>5	4	B1	64	N	AC	GG	TT	AA	CT	GG	TT	GG	CC	AA	CC	AG	AA
PE 173	>45	.2-4	4	B1	75	N	CC	GG	CT	AA	CC	GG	TT	GG	CC	AG	AC	GG	AA
PE 174	>45	>5	4	A	74	N	CC	GG	CT	NA	CC	GG	AA	GG	CG	AG	AC	GG	GG
PE 175	>45	1	NA	C	54	N	CC	AG	CC	AA	CT	GG	TT	AG	CC	AA	AC	GG	GG
PE 176	>45	1	NA	C	34	N	CC	GG	CT	AT	CC	NA	AT	GG	NA	AG	AC	GG	AA
PE 177	>45	1	4	B1	61	N	CC	AG	CT	AA	CT	GG	AT	GG	CG	AG	CC	GG	GG
PE 178	>45	1	4	B1	65	N	AC	GG	CT	AT	CC	GG	AT	GG	CG	AG	CC	GG	AA
PE 179	>45	1	4	A	74	N	CC	AG	CT	AT	CC	GG	AA	GG	CC	AA	AC	AG	AG
PE 180	>45	>5	4	C	74	N	CC	AA	CT	TT	CC	AA	TT	AG	CC	GG	CC	GG	AG
PE 181	<=45	1	4	B1	57	Y	CC	GG	TT	AT	CT	GA	TT	GG	CC	AA	AC	AG	AA
PE 182	>45	>5	4	A	71	N	CC	GG	CT	AA	CT	GG	TT	GG	CC	AG	CC	GG	AG
PE 183	>45	1	4	B1	65	N	CC	AG	CT	AA	CC	GG	AT	GG	CC	AA	CC	GG	AG
PE 184	>45	1	4	C	37	N	CC	AG	CT	AT	CC	GA	AT	GG	CC	AA	AA	AG	AA
PE 185	>45	1	4	C	42	N	CC	AG	CT	AA	CT	GG	TT	AG	CC	AG	AC	AG	AG
PE 186	<=45	1	4	B1	63	N	AC	GG	TT	AT	CT	GA	AT	AG	CC	GG	CC	AG	GG
PE 187	>45	1	4	B1	72	N	CC	GG	TT	AA	CT	GA	TT	GG	CC	AA	AA	AG	AG
PE 188	>45	NA	NA	B1	75	N	CC	GG	CT	AA	CC	GA	TT	AA	CC	GG	CC	GG	AG
PE 189	>45	NA	>4	B1	63	N	CC	GG	CT	AA	CC	NA	AT	GG	NA	AA	AC	NA	AG
PE 190	>45	1	4	B1	68	N	CC	AG	TT	AA	CT	GG	AT	GG	CC	AA	AC	GG	GG
PE 191	<=45	.2-4	>4	B1	61	N	CC	GG	CT	AA	TT	GG	AT	GG	CC	AA	AC	AA	AG

PE 192	>45	NA	NA	B1	64	N	AA	GG	TT	AT	CT	GA	AT	GG	CC	AA	CC	AG	GG
PE 193	>45	1	4	C	38	N	CC	GG	TT	AT	CC	GA	TT	GG	CC	AA	CC	AA	AA
PE 194	>45	1	NA	B1	72	N	CC	AA	TT	AA	TT	GG	AA	GG	CC	AG	CC	GG	AA
PE 195	>45	NA	4	C	26	N	CC	GG	CT	AA	CT	GA	TT	AG	CC	AG	AC	AG	AA
PE 196	>45	1	4	B1	75	Y	CC	AA	CT	TT	CC	AA	TT	GG	CG	AG	CC	AG	AA
PE 197	>45	NA	4	B1	70	N	CC	AG	CT	AA	CT	GG	AA	GG	CC	AG	CC	AG	AG
PE 198	>45	1	4	B1	62	N	CC	GG	TT	AA	CT	GG	TT	GG	GG	GG	CC	GG	AG
PE 199	>45	1	4	B1	58	N	CC	GG	TT	AA	TT	GG	AT	GG	NA	AA	AC	GG	AG
PE 200	>45	1	4	B1	68	N	CC	AG	CC	AA	CT	GG	AT	GG	CG	GG	CC	GG	AG
PE 201	<=45	1	4	B1	66	N	CC	GG	CC	AT	CT	GG	AA	GG	CC	AA	AA	GG	AG
PE 202	>45	1	4	C	33	N	CC	AG	CT	AA	CT	GG	TT	GG	CC	AA	CC	AG	AA
PE 203	>45	1	4	C	34	N	CC	AG	TT	AA	CT	GG	TT	GG	CC	AG	CC	GG	AG
PE 204	>45	.2-4	4	B1	55	N	AC	GG	CC	AA	CT	GG	TT	AG	CC	AG	AA	AA	GG
PE 205	>45	1	4	C	37	N	CC	AG	TT	AT	CC	GA	TT	GG	CC	AA	CC	GG	GG
PE 206	>45	1	4	C	47	N	AC	GG	TT	AT	CC	GA	AT	GG	CC	AA	AC	GG	AA
PE 207	>45	1	4	B1	71	N	CC	AG	TT	AA	CT	GG	TT	AG	CC	AG	CC	AG	GG
PE 208	>45	>5	4	A	75	N	CC	AG	TT	AT	CT	GA	TT	GG	CC	AG	CC	AG	AG
PE 209	>45	1	4	B1	58	N	AC	GG	TT	AA	CC	GG	AA	GG	CC	AG	CC	AG	AG
PE 210	>45	NA	4	C	43	N	CC	AG	TT	AT	CC	GA	TT	GG	CG	AG	AC	AG	AG
PE 211	<=45	>5	4	A	69	N	CC	GG	CT	AT	CC	GA	TT	GG	CC	AA	AC	GG	AG
PE 212	>45	1	4	B1	61	N	CC	AG	CT	AA	TT	GG	TT	GG	CC	AA	CC	GG	AA
PE 213	>45	1	4	B1	72	N	CC	AG	CC	AA	TT	GG	AT	GG	GG	GG	CC	AG	GG
PE 214	<=45	.2-4	4	B1	68	N	CC	AG	CT	AT	CT	GA	TT	GG	CC	AG	CC	AG	AA
PE 215	>45	>5	4	C	28	N	CC	AG	CT	AT	CT	GA	AT	GG	CC	AA	AC	GG	GG
PE 216	>45	.2-4	4	A	73	Y	CC	GG	NA	NA	NA	GA	NA	GG	NA	AG	AC	AG	AA
PE 217	>45	1	4	A	67	N	CC	AG	CT	AT	CT	GG	TT	GG	CC	AA	AA	AA	AG
PE 218	>45	1	4	C	44	N	CC	GG	CT	AA	CT	GA	TT	GG	GG	GG	CC	AG	GG
PE 219	<=45	>5	>4	C	47	Y	CC	GG	CT	AT	CT	GA	TT	GG	CC	AA	AC	AG	AA
PE 220	>45	NA	NA	B1	55	N	CC	GG	TT	AT	CT	GA	TT	GG	CG	AG	AC	GG	AG
PE 221	<=45	NA	NA	C	27	Y	CC	AA	CT	AA	CT	GG	TT	GG	GG	GG	CC	GG	GG
PE 222	>45	NA	NA	C	29	N	CC	AG	TT	AA	CC	GA	AT	GG	CC	AA	CC	AG	AG
PE 223	>45	>5	NA	C	31	N	CC	AG	TT	AT	CT	GA	AA	AG	CC	AG	AC	GG	AG
PE 224	>45	1	NA	C	37	Y	CC	GG	CT	AT	CC	GA	AA	GG	CG	AG	CC	AG	GG
PE 225	>45	1	4	C	32	N	CC	GG	TT	AT	CC	GA	AT	GG	CG	AG	AC	GG	AG

PE 226	>45	1	4	B1	74	N	CC	GG	TT	AT	CC	GA	TT	AG	CC	AG	CC	GG	AG
PE 227	>45	1	>4	B1	62	N	CC	GG	TT	AA	CT	GG	TT	GG	CC	AA	CC	GG	AG
PE 228	>45	1	4	B1	59	N	CC	GG	TT	AA	CT	GA	AT	GG	CC	AA	CC	GG	AG
PE 229	>45	>5	4	C	50	N	CC	GG	CT	AA	CC	GA	AA	GG	CG	AG	CC	AG	GG
PE 230	<=45	>5	4	A	63	Y	CC	GG	CT	AA	CC	GA	AT	AG	CC	AG	CC	GG	GG
PE 231	>45	1	4	C	23	N	CC	GG	CC	AA	CT	GG	AT	GG	CC	AG	AC	AA	AG
PE 232	>45	1	4	C	62	N	CC	GG	TT	AT	CT	GA	TT	GG	CC	GG	CC	GG	AA
PE 233	>45	.2-4	4	C	45	N	CC	GG	CT	AT	CT	GA	AT	GG	CC	AA	AA	AA	GG
PE 234	>45	1	4	C	30	N	AC	GG	NA	AT	CT	GA	TT	GG	CC	AA	AC	AG	AG
PE 235	>45	1	4	C	26	Y	CC	GG	TT	TT	CC	AA	TT	AG	CC	AG	AC	GG	AA
PE 236	>45	1	4	B1	74	N	CC	AG	CT	AT	CT	GA	TT	GG	CC	AG	CC	GG	AG
PE 237	>45	1	4	B1	67	N	CC	GG	CT	AT	CC	GA	AT	GG	CC	AA	AC	GG	AA
PE 238	<=45	>5	4	A	72	Y	AC	GG	CT	AT	CC	GA	AA	AG	CC	AG	CC	AG	AG
PE 239	>45	1	4	B1	60	N	AA	GG	TT	AT	CC	GA	TT	AG	CC	AG	CC	AG	AG
PE 240	>45	1	>4	C	24	N	CC	GG	TT	AA	CT	GG	AT	GG	CC	AA	AC	AG	NA
PE 241	>45	1	NA	A	68	N	CC	AA	CT	AA	CT	GG	TT	GG	CG	GG	CC	GG	AG
PE 242	>45	NA	4	B1	NA	N	CC	AG	CC	AA	CC	GA	AT	GG	CC	AA	CC	GG	GG
PE 243	>45	1	4	A	62	N	CC	AA	TT	AA	CT	GG	AT	AG	CC	AG	CC	AA	AG
PE 244	>45	NA	4	A	63	Y	CC	AG	CT	AA	TT	GG	TT	GG	CC	AA	AA	GG	AA
PE 245	<=45	1	4	C	43	N	AC	GG	CC	AT	CT	GA	AT	GG	NA	AG	AC	AA	AG
PE 246	<=45	NA	NA	B1	69	N	CC	GG	TT	AT	CC	AA	AT	GG	CC	AA	AA	GG	AG
PE 247	>45	NA	NA	B1	74	N	CC	AG	TT	AT	CC	GA	TT	GG	CC	AA	AA	GG	AG
PE 248	>45	.2-4	NA	B1	77	Y	CC	GG	CC	AA	TT	GG	AT	GG	CC	AG	AC	GG	AG
PE 249	>45	NA	4	B1	64	N	CC	AG	CT	AA	CT	GA	TT	AG	CG	GG	CC	AG	AG
PE 250	>45	NA	NA	B1	68	N	AC	GG	CT	AA	CT	GA	AA	GG	CC	AA	AC	AG	GG
PE 251	<=45	1	>4	B1	65	N	AC	GG	CC	AA	CT	GG	AT	GG	CG	AG	CC	AG	AA
PE 252	>45	1	>4	A	61	Y	AC	GG	CT	AT	CC	GA	TT	GG	CC	AA	AA	GG	AG
PE 253	>45	1	4	B1	69	N	CC	GG	TT	AA	CT	GA	TT	GG	CC	AA	AC	GG	GG
PE 254	<=45	>5	4	B1	66	N	AC	GG	CT	AT	CC	GA	AT	GG	CC	AG	AC	AG	NA
PE 255	>45	1	4	C	41	N	CC	GG	NA	AT	CC	GG	TT	AG	CC	GG	CC	AG	AG
PE 256	>45	1	4	C	43	N	CC	GG	CT	TT	CC	AA	AT	GG	CC	AA	AC	AG	AG
PE 257	<=45	NA	4	B1	67	Y	CC	GG	CT	AT	CC	GA	TT	GG	CC	AA	CC	GG	GG
PE 258	>45	1	4	B1	62	N	CC	GG	CT	AA	CC	GA	TT	GG	CC	AA	CC	GG	AG
PE 259	>45	.2-4	>4	C	41	N	AC	GG	CT	AA	TT	GG	AA	GG	CC	AA	CC	GG	AA

PE 260	>45	1	4	B1	71	N	AC	GG	CT	AT	CC	GA	TT	GG	CC	AA	CC	AA	AA
PE 261	>45	>5	>4	A	70	Y	AC	GG	TT	AA	CT	GA	AT	GG	CC	AA	AA	GG	AG
PE 262	<=45	1	4	C	47	N	AC	GG	CC	AT	CC	GA	TT	GG	CG	AG	AC	GG	AG
PE 263	>45	.2-4	4	B1	67	N	CC	AG	NA	TT	CC	NA	TT	GG	CC	AG	CC	AG	AG
PE 264	>45	>5	4	C	32	N	CC	AG	CT	AA	CC	GG	TT	GG	CC	AG	CC	AG	NA
PE 265	>45	>5	4	C	38	N	CC	GG	TT	AA	CT	GA	TT	GG	CC	AA	AA	GG	AG
PE 266	>45	>5	>4	A	62	N	CC	AA	CT	AA	CC	GG	AT	AG	CC	GG	CC	GG	GG
PE 267	>45	1	4	A	65	Y	CC	GG	CT	AA	CT	GG	AT	AG	CC	AG	CC	AG	AG
PE 268	>45	1	4	A	66	N	CC	GG	TT	AA	CT	GG	TT	AG	CC	AG	CC	GG	GG
PE 269	<=45	1	>4	B1	76	N	AC	GG	TT	AA	CT	GA	TT	GG	CC	AA	AC	GG	AA
PE 270	>45	1	4	C	65	N	CC	GG	CT	AA	CT	GA	TT	GG	CC	AG	CC	AG	AG
PE 271	>45	1	4	C	35	N	AC	AG	CT	TT	CC	AA	TT	AG	CG	GG	CC	AG	GG
PE 272	>45	1	4	B1	57	N	AC	GG	TT	AT	CC	GA	TT	GG	CG	AG	AC	GG	AA
PE 273	>45	NA	NA	C	40	N	CC	GG	TT	AT	CT	GA	AT	GG	CC	AA	AC	AG	AA
PE 274	>45	.2-4	4	C	NA	N	CC	AG	CC	AT	CT	GA	AT	GG	CC	AA	AC	AG	AG
PE 275	>45	.2-4	>4	B1	58	N	CC	AG	CC	AA	CT	GG	AT	AG	CC	AG	AC	GG	AG
PE 276	<=45	1	>4	C	38	N	CC	GG	CT	AT	CC	GA	AT	AG	CC	AG	CC	AG	AA
PE 277	>45	1	4	B1	57	N	CC	AG	TT	AA	CC	GA	AT	GG	CG	AG	CC	NA	AG
PE 278	>45	.2-4	4	C	45	N	AC	GG	CT	AT	CT	GA	TT	GG	CC	AA	CC	GG	AA
PE 279	>45	1	4	B1	70	N	AC	GG	CT	AT	CT	GG	AT	GG	CC	AG	CC	GG	AA
PE 280	>45	>5	>4	A	63	Y	AC	AG	CT	AA	CT	GG	AT	GG	CC	AA	CC	GG	AG
PE 281	>45	1	4	A	63	N	CC	AA	CT	AA	CC	GG	AT	GG	CC	AA	AC	AG	AA
PE 282	>45	1	>4	B1	65	N	AC	AG	CT	AA	CT	GG	AT	GG	CC	AG	AC	GG	GG
PE 283	>45	1	4	C	53	N	AC	GG	TT	AT	CC	AA	AT	GG	CG	AG	AC	AG	GG
PE 284	>45	.2-4	>4	B1	72	N	CC	GG	CT	AA	NA	GA	AT	GG	CC	AA	AC	AG	AG
PE 285	>45	1	4	A	59	N	AC	GG	CT	AA	CT	GA	TT	GG	CG	GG	CC	AG	GG
PE 286	>45	.2-4	>4	C	44	N	CC	AG	CC	NA	NA	GG	NA	NA	CC	AG	CC	AG	AG
PE 287	>45	.2-4	4	C	23	N	AC	AG	TT	AT	NA	GA	TT	AG	CC	AG	CC	GG	GG
PE 288	>45	>5	4	A	70	N	AA	GG	CC	AT	CC	GA	AT	GG	GG	GG	CC	AG	AG
PE 289	<=45	1	4	A	71	N	CC	GG	TT	NA	CC	GA	AT	GG	NA	AG	CC	AG	AA
PE 290	>45	1	4	B1	NA	N	CC	GG	TT	AA	NA	GG	AT	GG	GG	GG	CC	GG	AG
PE 291	>45	.2-4	4	C	NA	N	AC	AG	CC	AA	CT	GG	AT	GG	CC	AA	AA	AG	AG
PE 292	<=45	1	4	B1	NA	N	CC	GG	CT	AT	NA	GA	AA	GG	CC	AA	AC	AG	AG
PE 293	>45	>5	4	B1	64	N	AC	GG	TT	AA	CC	GG	TT	GG	CC	AG	CC	AG	GG

PE 294	>45	.2-4	>4	B1	67	N	AC	GG	CT	AT	CC	GA	TT	AG	CC	AG	CC	AG	AA
PE 295	<=45	.2-4	>4	A	67	N	AC	GG	CT	AT	NA	GA	AT	GG	CC	AA	CC	AG	AG
PE 296	>45	1	4	C	NA	N	AC	GG	TT	AT	CC	AA	TT	GG	CC	AA	AC	AA	AG
PE 297	>45	1	4	C	31	N	CC	AG	CT	AA	TT	GG	TT	GG	CC	AG	CC	GG	AA
PE 298	<=45	1	4	B1	63	N	CC	GG	TT	AT	NA	GA	AT	GG	CC	AA	AA	GG	GG
PE 299	>45	.2-4	4	A	63	N	CC	GG	TT	AT	NA	GG	AT	GG	CC	GG	CC	GG	AA
PE 300	>45	1	4	A	NA	N	CC	AG	CT	AA	CC	GA	TT	GG	CC	AG	AC	AG	AG
PE 301	>45	1	4	B1	59	N	CC	GG	CT	AA	CT	GG	TT	GG	CC	AG	AC	AA	GG
PE 302	>45	1	4	B1	NA	N	CC	GG	CT	AT	CT	GA	TT	GG	CC	AG	AC	GG	AG
PE 303	>45	1	4	A	63	N	CC	AA	TT	AT	NA	GA	AT	GG	CC	AA	AC	AA	AG
PE 304	>45	.2-4	4	B1	NA	N	AC	GG	TT	AA	CT	GG	TT	GG	CC	AG	CC	AG	AG
PE 305	>45	>5	4	B1	NA	N	CC	AG	CT	AA	CT	GG	TT	AG	CC	AG	AC	GG	AA
PE 306	>45	1	4	B1	62	N	CC	GG	TT	AT	CC	AA	TT	GG	CC	AA	AC	GG	AG
PE 307	>45	1	4	B1	63	N	CC	AG	TT	AT	CT	GA	TT	GG	CC	AG	AC	GG	AA
PE 308	>45	1	4	A	64	N	AC	GG	CT	AA	TT	GG	AT	GG	CC	GG	CC	GG	AG
PE 309	>45	.2-4	>4	B1	75	N	CC	GG	CC	AT	CC	GA	TT	GG	CC	AA	AA	GG	GG
PE 310	>45	>5	4	C	28	N	CC	GG	CC	AA	CT	GG	TT	GG	CC	AA	AA	GG	AG
PE 311	>45	.2-4	4	B1	70	N	CC	AG	TT	AT	CC	GA	TT	AG	CC	AG	CC	GG	AA
PE 312	<=45	>5	>4	A	68	N	CC	GG	TT	AA	CC	GG	AA	GG	CC	AG	AC	AA	AG
PE 313	>45	1	4	C	33	N	AC	AG	CT	AT	CT	GA	AT	GG	CC	AG	AC	AG	GG
PE 314	<=45	1	4	C	29	N	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PE 315	>45	1	4	A	66	N	CC	GG	TT	AA	NA	GG	NA	GG	CC	AA	AC	GG	GG
PE 316	>45	.2-4	>4	C	42	N	CC	AG	CT	TT	CC	AA	AT	GG	CC	AG	CC	GG	GG
PE 317	>45	.2-4	4	B1	64	N	CC	GG	TT	AA	TT	GG	TT	GG	CC	AA	CC	AA	AA
PE 318	>45	.2-4	4	B1	65	N	CC	GG	CT	AA	TT	GG	TT	GG	CC	AG	AC	AG	AG
PE 319	>45	1	4	B1	71	N	AC	NA	NA	AA	CC	GG	AA	GG	CG	AG	AC	AG	AG
PE 320	>45	.2-4	4	B1	69	N	CC	GG	TT	AA	TT	GA	TT	GG	CG	GG	CC	AG	AG
PE 321	<=45	1	>4	A	58	N	CC	AG	CT	TT	CC	AA	AA	GG	CC	AA	AA	AA	AG
PE 322	<=45	NA	NA	A	55	N	CC	GG	TT	AT	NA	GA	NA	GG	CC	AA	AC	AG	AG
PE 323	>45	1	4	A	NA	N	CC	GG	TT	AA	CC	GG	TT	GG	CC	AA	AA	AG	AA
PE 324	>45	NA	4	C	46	N	CC	AG	TT	AA	CT	GA	TT	GG	CC	AA	AA	AG	AA
PE 325	>45	NA	>4	B1	69	N	CC	AG	TT	AA	NA	GG	TT	GG	CG	AG	AC	AG	AG
PE 326	>45	>5	4	C	41	N	CC	AG	CT	AA	CT	GG	TT	GG	CC	AA	AA	GG	AG
PE 327	>45	NA	4	C	47	N	CC	GG	CT	AA	CT	GG	TT	GG	CC	AG	CC	AG	AG

PE 328	>45	1	4	C	29	N	NA	GG	NA	AA	TT	GG	AT	GG	CC	AG	AC	GG	AA
PE 329	<=45	1	4	A	72	N	CC	AG	CT	AT	CT	GA	TT	GG	CC	AG	AC	GG	GG
PE 330	>45	1	4	B1	73	N	CC	GG	CC	AT	CT	GA	AA	GG	CC	AG	AC	GG	GG
PE 331	>45	1	4	A	65	N	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PE 332	>45	NA	4	B1	NA	N	CC	AA	CC	AA	NA	GG	TT	GG	CC	AA	AC	GG	AG
PE 333	>45	NA	NA	B1	64	N	CC	GG	CT	AA	CC	GG	TT	GG	CG	AG	CC	AG	AG
PE 334	<=45	NA	NA	A	70	N	CC	GG	CT	AT	CC	GA	AT	GG	CC	AA	AC	AG	AG
PE 335	>45	NA	NA	C	45	N	CC	GG	CT	AA	NA	GG	TT	GG	CC	AG	CC	AG	AG
PE 336	>45	.2-4	4	C	42	N	CC	GG	CT	AA	CC	GG	AT	AG	CC	AG	CC	GG	GG
PE 337	>45	1	4	A	61	N	CC	AG	TT	AT	NA	GA	NA	GG	CG	AG	CC	AG	AA
PE 338	>45	1	4	A	63	N	CC	GG	CT	AT	NA	GA	NA	GG	CC	AG	CC	GG	NA
PE 339	<=45	1	>4	A	68	Y	AC	GG	CT	AA	CT	GG	AT	AG	CC	AG	CC	AG	AG
PE 340	>45	1	4	A	66	N	CC	AG	CT	AA	CT	GG	AT	GG	CC	AA	CC	AG	AG
PE 341	>45	NA	NA	A	66	Y	AC	AG	CT	TT	CC	AA	TT	GG	CG	AG	CC	AG	GG
PE 342	>45	1	4	C	49	N	AC	AG	CT	AA	CC	AA	TT	GG	CC	AA	AC	AA	AG
PE 343	>45	1	NA	A	73	Y	CC	NA	CT	AT	CC	GA	TT	AG	CC	AG	CC	AG	AG
PE 344	<=45	1	4	A	70	Y	CC	AG	CC	AA	CT	GA	TT	AG	CC	AG	CC	AG	AG
PE 345	>45	1	4	C	37	N	AC	GG	TT	AA	CT	GG	TT	GG	CC	AA	AC	GG	AG
PE 346	<=45	.2-4	4	A	67	Y	CC	AA	CT	AA	CC	GG	AT	AG	CC	AG	AC	AG	AG
PE 347	>45	1	4	A	76	Y	CC	GG	CT	AT	CC	GA	TT	GG	CC	AA	AC	AG	AA
PE 348	>45	1	4	A	68	N	CC	AG	CC	AA	NA	GA	NA	GG	CC	AA	CC	GG	AG
PE 349	>45	1	4	A	NA	N	CC	AG	TT	AT	NA	GA	NA	GG	CC	AG	AC	GG	AG
PE 350	<=45	1	4	A	79	N	CC	GG	CT	AT	CC	GA	TT	AG	CC	AG	AA	AG	GG
PE 351	>45	>5	4	A	66	N	CC	GG	TT	TT	NA	AA	NA	AG	CG	GG	CC	GG	AA
PE 352	>45	1	4	A	63	Y	CC	GG	CT	AT	CC	AA	TT	AG	CC	AG	AC	AG	AA
PE 353	<=45	1	>4	A	60	Y	AC	GG	TT	AA	TT	GG	TT	GG	CC	AG	CC	GG	AG
PE 354	<=45	1	>4	A	70	Y	CC	GG	CC	AA	CT	GG	AT	AA	CC	GG	AC	AG	AG
PE 355	<=45	.2-4	NA	A	72	N	CC	GG	CT	AT	CC	GA	AA	GG	CC	AA	AC	AG	AG
PE 356	>45	1	4	A	67	N	AC	AG	CT	AA	CC	GG	TT	GG	CG	AG	AC	AG	AG
PE 357	<=45	>5	>4	A	77	N	CC	AG	CC	AA	CC	GG	AT	GG	CC	AA	AA	GG	AG
PE 358	<=45	1	4	A	65	Y	CC	GG	CT	AA	CT	GA	TT	GG	CC	AA	AC	GG	GG
PE 359	>45	>5	>4	A	69	N	AC	GG	CT	AA	CC	GG	AA	GG	CC	AA	AC	GG	AG
PE 360	>45	1	4	A	59	Y	AC	GG	TT	AA	CT	GG	AA	GG	CC	AA	AC	AA	AG
PE 361	>45	1	>4	A	68	Y	AC	GG	TT	AA	CC	GG	AA	GG	NA	GG	CC	AG	AG

PE 362	>45	1	4	C	45	N	CC	AG	TT	AT	NA	GG	AA	GG	CC	AG	AC	GG	AA
PE 363	>45	1	4	C	46	N	AC	GG	TT	AA	NA	GG	AT	GG	CC	AA	AA	AG	AA
PE 364	>45	1	4	C	45	N	AC	GG	CT	AA	NA	GG	AA	GG	CC	AG	AC	GG	AA
PE 365	>45	1	>4	C	43	Y	CC	AG	CT	AA	NA	GG	AA	GG	CG	AG	AC	GG	GG
PE 366	<=45	1	4	C	41	Y	AC	AG	CT	AA	NA	GA	AT	GG	CG	AG	AC	AG	AA
PE 367	>45	1	4	A	62	Y	CC	GG	CT	AA	NA	GG	AT	GG	CC	AA	AA	GG	GG
PE 368	>45	1	4	A	64	N	AC	GG	CC	AA	NA	GG	AT	GG	CG	AG	AC	GG	AA
PE 369	>45	1	4	C	44	N	CC	AG	CT	AT	NA	GA	AA	GG	CC	AA	CC	AA	AA
PE 370	<=45	1	4	C	38	N	CC	GG	TT	AT	NA	GG	AT	GG	GG	GG	CC	AG	GG
PE 371	<=45	.2-4	4	C	20	N	CC	AG	TT	AT	NA	GA	AT	GG	CC	AA	CC	GG	AA
PE 372	>45	1	4	C	32	Y	CC	GG	CT	AT	NA	GA	TT	GG	CG	AG	AC	AG	AG
PE 373	<=45	.2-4	>4	A	67	Y	CC	GG	TT	TT	NA	AA	TT	GG	CC	AA	CC	GG	AG
PE 374	>45	1	4	A	62	N	AC	GG	CT	AA	NA	GA	AA	GG	CC	AG	AC	AG	AA
PE 375	<=45	1	4	A	68	N	CC	AG	TT	AA	NA	GG	TT	GG	CG	AG	CC	GG	AG
PE 376	<=45	1	4	C	40	Y	CC	GG	TT	AT	NA	GA	AA	AG	NA	AG	CC	AG	AG
PE 377	<=45	1	>4	A	64	Y	CC	GG	CT	TT	NA	AA	AA	AG	CC	AG	CC	GG	AA
PE 378	<=45	1	4	A	63	N	AC	GG	TT	AA	NA	GG	AA	GG	CC	AA	CC	AA	AG
PE 379	NA	.2-4	>4	B1	56		CC	AG	CT	AT	NA	AA	AT	GG	CG	AG	AC	AG	AG
PE 380	>45	1	>4	C	45	N	AA	GG	TT	AA	NA	GA	AA	AG	CC	AG	CC	GG	GG
PE 381	>45	1	4	A	63	N	CC	GG	TT	AA	NA	GA	AT	GG	CC	AA	AC	GG	AG
PE 382	>45	.2-4	4	A	73	Y	AC	GG	TT	AA	NA	GG	AT	GG	CC	AA	AA	AG	AA
PE 383	>45	1	4	A	54	N	CC	AG	TT	AA	NA	GA	TT	GG	GG	GG	CC	GG	AA
PE 384	>45	.2-4	4	A	63	Y	CC	GG	CT	AA	NA	GA	AA	GG	CC	AG	CC	GG	AG
PE 385	NA	.2-4	4	B1	65		AC	GG	CT	NA	NA	GA	AT	GG	CC	AA	CC	GG	GG
PE 386	>45	1	4	A	77	N	CC	GG	CT	AA	NA	GA	AA	GG	CG	AG	CC	NA	GG
PE 387	>45	1	4	A	65	Y	CC	AG	TT	AT	NA	GA	AA	GA	CC	GG	CC	AA	AG
PE 388	>45	1	4	A	74	N	CC	AG	CT	AA	NA	GG	AA	AG	CC	AG	CC	GG	GG
PE 389	<=45	.2-4	4	A	64	N	NA	NA	NA	AT	NA	NA	AA	GG	CC	NA	AC	NA	AG
PE 390	<=45	1	4	A	72	N	CC	GG	CT	NA	NA	GG	TT	GG	CC	AA	AA	GG	AG
PE 391	<=45	1	4	A	65	Y	CC	GG	TT	NA	NA	GG	NA	GA	CC	AG	AA	GG	GG
PE 392	<=45	1	4	A	67	N	AC	GG	CC	NA	NA	GG	NA	GG	CC	AA	AA	GG	AG
PE 393	>45	1	4	A	76	N	CC	GG	TT	NA	NA	GG	NA	GG	CC	AG	CC	AG	GG
PE 394	<=45	1	4	A	68	Y	AC	GG	CT	NA	NA	GG	NA	GG	CC	AA	AA	GG	AG
PE 395	<=45	1	4	A	66	N	CC	AG	TT	NA	NA	GG	NA	GG	CC	AA	AA	AG	GG

PE 396	<=45	1	>4	A	64	N	AC	GG	CC	NA	NA	GA	NA	GG	CG	GG	CC	GG	AA
PE 397	>45	1	4	A	67	N	AC	AG	CT	NA	NA	GG	NA	GG	CC	AG	AC	AG	AA
PE 398	<=45	1	4	A	64	Y	AC	AG	TT	NA	NA	GG	NA	GG	CC	AG	CC	AG	AG
PE 399	<=45	1	4	C	40	N	CC	AG	TT	NA	NA	GG	#N/D	GG	CC	AA	AC	GG	AA
PE 400	>45	1	4	A	68	N	CC	GG	TT	NA	NA	AA	#N/D	GG	CC	AG	AC	GG	AG
PE 401	>45	1	NA	A	73	N	CC	AG	CT	NA	NA	GG	#N/D	GG	CC	AA	AC	AG	AG
PE 402	>45	.2-4	4	A	61	N	CC	GG	TT	NA	NA	GG	#N/D	GG	CC	AG	AC	AA	AA
PE 403	<=45	.2-4	4	A	62	N	CC	AG	TT	NA	NA	GG	#N/D	GA	CC	AG	CC	GG	AA
PE 404	>45	.2-4	4	A	61	N	CC	GG	TT	NA	NA	GG	#N/D	GG	CC	AG	CC	AG	AG
PE 405	>45	1	4	C	37	Y	CC	AG	CT	NA	NA	GG	#N/D	GG	CC	AA	AC	GG	AG
PE 406	>45	NA	4	A	67		CC	AG	TT	NA	NA	GG	#N/D	GG	CC	AG	CC	AG	AA