

Appendix I. Common mtDNA variants among PsA patients and controls.

Locus	Variant	Variant type	Amino acid change	rs ID	Homoplasmcy/ Heteroplasmcy	Patient's frequency (%)	Control's frequency (%)	P-value
Non-coding region								
D-loop	m.58T>C	Substitution		Not provided	Homoplasmcy	4	5	>0.05
D-loop	m.64C>T	Substitution		rs3883917	Homoplasmcy	9	20	>0.05
D-loop	m.73A>G	Substitution		rs869183622	Homoplasmcy	74	80	>0.05
D-loop	m.146 T>C	Substitution		rs370482130	Homoplasmcy	22	30	>0.05
D-loop	m.150C>T	Substitution		rs62581312	Homoplasmcy	17	10	>0.05
D-loop	m.152T>C	Substitution		rs117135796	Homoplasmcy	26	55	0.02
D-loop	m.195T>C	Substitution		rs2857291	Homoplasmcy	26	25	>0.05
D-loop	m.204T>C	Substitution		rs3135032	Homoplasmcy	9	10	>0.05
D-loop	m.247G>A	Substitution		rs41334645	Homoplasmcy	4	5	>0.05
D-loop	m.263A>G	Substitution		rs2853515	Homoplasmcy	100	100	>0.05
D-loop	m.295C>T	Substitution		rs41528348	Homoplasmcy	13	20	>0.05
D-loop	m.302A>C, CC	Insertion		rs878871521	Homoplasmcy	22	20	>0.05
D-loop	m.309CT>CTC	Insertion		rs66492218	Homoplasmcy	17	15	>0.05
D-loop	m.310T>TC	Insertion		rs369786048	Homoplasmcy	61	70	>0.05
D-loop	m.398T>C	Substitution		rs878930477	Homoplasmcy	4	5	>0.05
D-loop	m.456C>T	Substitution		rs41356551	Homoplasmcy	4	5	>0.05
D-loop	m.462C>T	Substitution		rs41402146	Homoplasmcy	4	20	>0.05
D-loop	m.489T>C	Substitution		rs28625645	Homoplasmcy	26	25	>0.05
D-loop	m.513 G>GCACA	Insertion		rs878880226	Homoplasmcy	4	5	>0.05
D-loop	m.522CAC>C	Deletion		Not provided	Heteroplasmcy	17	25	>0.05
D-loop	m.16069C>T	Substitution		rs147903261	Homoplasmcy	13	20	>0.05
D-loop	m.16126T>C	Substitution		rs147029798	Homoplasmcy	35	55	>0.05
D-loop	m.16129G>A	Substitution		rs41534744	Homoplasmcy	17	15	>0.05
D-loop	m.16145G>A	Substitution		rs41419246	Homoplasmcy	4	20	>0.05
D-loop	m.16172T>C	Substitution		rs2853817	Homoplasmcy	9	10	>0.05
D-loop	m.16184C>T	Substitution		rs34100702	Homoplasmcy	4	10	>0.05
D-loop	m.16187CCT>TCC, TGC	Substitution		rs386828865	Heteroplasmcy	4	5	>0.05
D-loop	m.16189T>CC	Insertion		rs369574569	Homoplasmcy	13	10	>0.05
D-loop	m.16189T>C	Substitution		rs28693675	Homoplasmcy	22	30	>0.05
D-loop	m.16222C>T	Substitution		rs386829282	Homoplasmcy	4	5	>0.05
D-loop	m.16223C>T	Substitution		rs2853513	Homoplasmcy	35	20	>0.05
D-loop	m.16261C>T	Substitution		rs138126107	Homoplasmcy	9	20	>0.05

D-loop	m.16274G>A	Substitution	rs144095641	Homoplasmy	4	5	>0.05	
D-loop	m.16278C>T	Substitution	rs41458645	Homoplasmy	4	10	>0.05	
D-loop	m.16292C>T	Substitution	rs144417390	Homoplasmy	9	5	>0.05	
D-loop	m.16294C>T	Substitution	rs140662392	Homoplasmy	17	15	>0.05	
D-loop	m.16309A>G	Substitution	rs373517769	Homoplasmy	9	5	>0.05	
D-loop	m.16311T>C	Substitution	rs34799580	Homoplasmy	26	25	>0.05	
D-loop	m.16355C>T	Substitution	rs138576863	Homoplasmy	4	5	>0.05	
D-loop	m.16362T>C	Substitution	rs62581341	Homoplasmy	26	25	>0.05	
D-loop	m.16390G>A	Substitution	rs41378955	Homoplasmy	4	5	>0.05	
D-loop	m.16519T>C	Substitution	rs3937033	Homoplasmy	61	50	>0.05	
rRNA genes								
MT-RNR1 (12sRNA)	m.709G>A	Substitution	rs2853517	Homoplasmy	13	15	>0.05	
MT-RNR1 (12sRNA)	m.750A>G	Substitution	rs2853518	Homoplasmy	96	100	>0.05	
MT-RNR1 (12sRNA)	m.769G>A	Substitution	rs2853519	Homoplasmy	9	10	>0.05	
MT-RNR1 (12sRNA)	m.825T>A	Substitution	rs2853520	Homoplasmy	4	5	>0.05	
MT-RNR1 (12sRNA)	m.1018G>A	Substitution	rs2856982	Homoplasmy	9	5	>0.05	
MT-RNR1 (12sRNA)	m.1438A>G	Substitution	rs2001030	Homoplasmy	100	90	>0.05	
MT-RNR2 (16sRNA)	m.1719G>A	Substitution	rs3928305	Homoplasmy	9	5	>0.05	
MT-RNR2 (16sRNA)	m.1811A>G	Substitution	rs28358576	Homoplasmy	17	25	>0.05	
MT-RNR2 (16sRNA)	m.1888G>A	Substitution	rs2897260	Homoplasmy	4	10	>0.05	
MT-RNR2 (16sRNA)	m.2352T>C	Substitution	rs28358579	Homoplasmy	4	5	>0.05	
MT-RNR2 (16sRNA)	m.2355A>G	Substitution	rs1603218711	Homoplasmy	4	15	>0.05	
MT-RNR2 (16sRNA)	m.2416T>C	Substitution	rs28358580	Homoplasmy	4	5	>0.05	
MT-RNR2 (16sRNA)	m.2442T>C	Substitution	rs878892298	Homoplasmy	9	20	>0.05	
MT-RNR2 (16sRNA)	m.2706A>G	Substitution	rs2854128	Homoplasmy	91	100	>0.05	
MT-RNR2 (16sRNA)	m.2758G>A	Substitution	rs2856980	Homoplasmy	4	5	>0.05	
MT-RNR2 (16sRNA)	m.2789C>T	Substitution	rs28358581	Homoplasmy	4	5	>0.05	
MT-RNR2 (16sRNA)	m.2885T>C	Substitution	rs2854130	Homoplasmy	4	5	>0.05	
MT-RNR2 (16sRNA)	m.3010G>A	Substitution	rs3928306	Homoplasmy	4	20	>0.05	
tRNA genes								
MT-TR (tRNA)	m.10410T>C	Substitution	rs200478835	Homoplasmy	4	5	>0.05	
MT-TR (tRNA)	m.10463T>C	Substitution	rs28358279	Homoplasmy	9	10	>0.05	
MT-TL2 (tRNA)	m.12308A>G	Substitution	rs2853498	Homoplasmy	26	30	>0.05	
MT-TT (tRNA)	m.15924A>G	Substitution	rs193303001	Homoplasmy	4	5	>0.05	
MT-TT (tRNA)	m.15928G>A	Substitution	rs527236198	Homoplasmy	4	10	>0.05	
Coding genes								
MT-ND1	m.3480A>G	Silent	p.Lys58=	rs28358584	Homoplasmy	13	10	>0.05
MT-ND1	m.3594C>T	Silent	p.Val96=	rs193303025	Homoplasmy	9	10	>0.05
MT-ND1	m.3847T>C	Silent	p.Leu181=	rs878887783	Homoplasmy	9	20	>0.05

MT-ND1	m.4216T>C	Missense	p.Tyr304His	rs1599988	Homoplasmy	26	30	>0.05
MT-ND2	m.4769A>G	Silent	p.Met100=	rs3021086	Heteroplasmy	17	10	>0.05
MT-ND2	m.4917A>G	Missense	p.Asn150Asp	rs28357980	Homoplasmy	4	10	>0.05
MT-CO1	m.6671T>C	Silent	p.His256=	rs1978028	Homoplasmy	9	5	>0.05
MT-CO1	m.7175T>C	Silent	p.Thr424=	rs28358874	Homoplasmy	4	5	>0.05
MT-CO1	m.7256C>T	Silent	p.Asn451=	rs1556423258	Homoplasmy	9	10	>0.05
MT-CO1	m.7274C>T	Silent	p.Gly457=	rs879089638	Homoplasmy	4	5	>0.05
MT-CO2	m.7771A>G	Silent	p.Glu62=	rs368038563	Homoplasmy	4	5	>0.05
MT-CO2	m.8206G>A	Silent	p.Met207=	rs28358883	Homoplasmy	4	5	>0.05
MT-ATP8	m.8468C>T	Silent	p.Leu35=	rs1116907	Homoplasmy	4	5	>0.05
MT-ATP6	m.8697G>A	Silent	p.Met57=	rs879233543	Homoplasmy	4	10	>0.05
MT-ATP6	m.8701A>G	Missense	p.Thr59Pro	rs2000975	Homoplasmy	35	20	>0.05
MT-ATP6	m.9055G>A	Missense	p.Ala177Thr	rs193303045	Homoplasmy	13	10	>0.05
MT-CO3	m.9540T>C	Silent	p.Leu112=	rs2248727	Homoplasmy	35	15	>0.05
MT-CO3	m.9554G>A	Silent	p.Trp116=	rs193303052	Homoplasmy	4	5	>0.05
MT-CO3	m.9698T>C	Silent	p.Leu164=	rs9743	Homoplasmy	13	10	>0.05
MT-ND3	m.10115T>C	Silent	p.Ile19=	rs3899188	Homoplasmy	4	5	>0.05
MT-ND3	m.10400C>T	Silent	p.Thr114=	rs28358278	Homoplasmy	9	5	>0.05
MT-ND4L	m.10688G>A	Silent	p.Val73=	rs2853488	Homoplasmy	4	5	>0.05
MT-ND4	m.10810T>C	Silent	p.Leu17=	rs28358282	Homoplasmy	4	5	>0.05
MT-ND4	m.10873T>C	Silent	p.Pro38=	rs2857284	Homoplasmy	35	15	>0.05
MT-ND4	m.11251A>G	Silent	p.Leu164=	rs869096886	Homoplasmy	17	30	>0.05
MT-ND4	m.11467A>G	Silent	p.Leu236=	rs2853493	Homoplasmy	22	30	>0.05
MT-ND4	m.11719G>A	Silent	p.Gly320=	rs2853495	Homoplasmy	74	80	>0.05
MT-ND4	m.11761C>T	Silent	p.Tyr334	rs1603223405	Homoplasmy	4	5	>0.05
MT-ND4	m.11812A>G	Silent	p.Leu351=	rs3088053	Homoplasmy	4	5	>0.05
MT-ND4	m.11914G>A	Silent	p.Thr385=	rs2853496	Homoplasmy	17	10	>0.05
MT-ND4	m.11944T>C	Silent	p.Leu395=	rs3087901	Homoplasmy	4	5	>0.05
MT-ND5	m.12519T>C	Silent	p.Val61=	rs28359171	Homoplasmy	4	5	>0.05
MT-ND5	m.12612A>G	Silent	p.Val92=	rs28359172	Homoplasmy	13	20	>0.05
MT-ND5	m.12693A>G	Silent	p.Lys119=	rs28359173	Homoplasmy	4	5	>0.05
MT-ND5	m.12705C>T	Silent	p.Ile123=	rs193302956	Homoplasmy	30	15	>0.05
MT-ND5	m.13188C>T	Silent	p.Thr284=	rs879224282	Homoplasmy	9	20	>0.05
MT-ND5	m.13368G>A	Silent	p.Gly344=	rs3899498	Homoplasmy	4	10	>0.05
MT-ND5	m.13506C>T	Silent	p.Tyr390=	rs2857287	Homoplasmy	4	5	>0.05
MT-ND5	m.13590G>A	Silent	p.Leu418=	rs28359177	Homoplasmy	4	5	>0.05
MT-ND5	m.13650C>T	Silent	p.Pro438=	rs2854123	Homoplasmy	9	10	>0.05
MT-ND5	m.13708G>A	Missense	p.Ala458Thr	rs28359178	Homoplasmy	13	20	>0.05
MT-ND5	m.13743T>C	Silent	p.Phe466=	rs41421644	Homoplasmy	4	5	>0.05

MT-ND5	m.13803A>G	Silent	p.Thr489=	rs28359180	Homoplasmy	4	5	>0.05
MT-ND6	m.14167C>T	Silent	p.Glu169=	rs193302977	Homoplasmy	13	10	>0.05
MT-ND6	m.14233A>G	Silent	p.Asp147=	rs3915611	Homoplasmy	4	5	>0.05
MT-ND6	m.14566A>G	Silent	p.Gly36=	rs28357677	Homoplasmy	4	5	>0.05
MT-ND6	m.14569G>A	Silent	p.Ser 35=	rs386420019	Homoplasmy	4	10	>0.05
MT-CYB	m.14766C>T	Missense	p.Thr7Ile	rs193302980	Homoplasmy	87	100	>0.05
MT-CYB	m.14783T>C	Silent	p.Leu13=	rs193302982	Homoplasmy	13	5	>0.05
MT-CYB	m.14798T>C	Missense	p.Phe18Leu	rs28357681	Homoplasmy	4	10	>0.05
MT-CYB	m.14905G>A	Silent	p.Met53=	rs193302983	Homoplasmy	4	10	>0.05
MT-CYB	m.15043G>A	silent	p.Gly99=	rs193302985	Homoplasmy	9	10	>0.05
MT-CYB	m.15148G>A	Silent	p.Pro134=	rs527236206	Homoplasmy	4	5	>0.05
MT-CYB	m.15301G>A	Silent	p.Leu185=	rs193302991	Homoplasmy	30	10	0.04
MT-CYB	m.15326A>G	Missense	p.Thr194Ala	rs2853508	Homoplasmy	100	100	>0.05
MT-CYB	m.15452C>A	Missense	p.Leu236Ile	rs193302994	Homoplasmy	17	30	>0.05
MT-CYB	m.15607A>G	Silent	p.Lys 287=	rs193302996	Homoplasmy	4	10	>0.05
MT-CYB	m.15674T>C	Missense	p.Ser310Pro	rs1603225419	Homoplasmy	4	15	>0.05
MT-CYB	m.15784T>C	Silent	p.Pro346=	rs527236194	Homoplasmy	4	5	>0.05