

## Supplementary Information

**Table S1.** SNPs in *TXNDC5* gene coding region (synonymous, missense and nonsense) and SNPs present in *TXNDC5* non-coding regions, associated with pathologies [16].

dbSNP Cluster ID	Function	DbSNP Allele	Protein Residue	Codon Position	Amino Acid Position	Pathology
rs377273518	missense	G → C	V → L	1	122	N/A
rs147681862	missense	A → G	K → E	1	130	N/A
rs71559189	missense	C → T	H → Y	1	143	N/A
rs139130947	missense	A → G	R → G	1	148	N/A
rs199964711	missense	G → C	V → L	1	157	N/A
rs141375323	missense	G → C	V → L	1	178	N/A
rs200044389	missense	A → G	N → D	1	18	N/A
rs45441296	missense	A → G	M → V	1	182	N/A
rs369704257	missense	G → A	A → T	1	189	N/A
rs147956330	missense	A → G	K → E	1	210	N/A
rs146368083	missense	T → G	S → A	1	211	N/A
rs142322001	missense	A → G	N → D	1	212	N/A
rs144589063	nonsense	T → C	Stop codon → Q	1	23	N/A
rs145581599	missense	T → C	S → P	1	250	N/A
rs2277106	missense	C → T	L → F	1	260	N/A
rs200329311	missense	A → G	T → A	1	269	N/A
rs374310716	missense	C → A	H → N	1	278	N/A
rs377761794	nonsense	T → C	Stop codon → R	1	286	N/A
rs201450918	missense	G → T	V → L	1	292	N/A
rs139736017	missense	A → C	S → R	1	314	N/A
rs139736017	missense	T → C	C → R	1	314	N/A
rs375213532	synonymous	T → C	L	1	317	N/A
rs369648581	missense	G → A	G → S	1	75	N/A
rs375524173	missense	A → T	T → S	1	87	N/A
rs58711083	missense	A → G	I → V	1	95	N/A

Table S1. *Cont.*

dbSNP Cluster ID	Function	DbSNP Allele	Protein Residue	Codon Position	Amino Acid Position	Pathology
rs144611399	missense	T → C	V → A	2	123	N/A
rs145246440	missense	T → A	V → E	2	130	N/A
rs34228534	frame shift	C → -	H → Q	2	150	N/A
rs150804461	missense	A → G	H → R	2	152	N/A
rs137937387	missense	T → C	M → T	2	194	N/A
rs145305681	missense	T → C	I → T	2	196	N/A
rs149618625	missense	C → T	A → V	2	197	N/A
rs199530614	missense	T → G	V → G	2	231	N/A
rs147698471	missense	T → C	L → P	2	240	N/A
rs111331197	missense	A → G	Q → G	2	295	N/A
rs111331197	missense	C → G	P → R	2	295	N/A
rs137930317	missense	A → C	N → T	2	30	N/A
rs202149821	missense	G → A	G → D	2	310	N/A
rs146220191	missense	A → G	H → R	2	314	N/A
rs145133420	missense	C → A	T → K	2	32	N/A
rs141223042	missense	T → C	V → A	2	320	N/A
rs199917640	missense	A → G	Q → R	2	47	N/A
rs372609174	missense	T → C	L → S	2	87	N/A
rs183172271	missense	C → T	P → L	2	93	N/A
rs9502658	synonymous	T → C	F	3	105	N/A
rs145727157	synonymous	A → G	P	3	107	N/A
rs140867313	synonymous	T → C	S	3	129	N/A
rs145214714	synonymous	T → C	S	3	17	N/A
rs138364696	synonymous	T → C	D	3	18	N/A
rs145951032	synonymous	A → G	S	3	184	N/A
rs142347872	synonymous	A → G	A	3	193	N/A
rs150451942	synonymous	T → C	P	3	199	N/A
rs201328333	synonymous	A → G	P	3	203	N/A

Table S1. *Cont.*

dbSNP Cluster ID	Function	DbSNP Allele	Protein Residue	Codon Position	Amino Acid Position	Pathology
rs201328333	synonymous	C → G	P	3	203	N/A
rs140645336	synonymous	T → C	P	3	209	N/A
rs187873554	synonymous	T → C	S	3	21	N/A
rs145422768	synonymous	G → A	P	3	240	N/A
rs149716354	synonymous	A → G	E	3	253	N/A
rs2277105	synonymous	A → G	A	3	264	N/A
rs371329483	synonymous	A → G	S	3	284	N/A
rs369864303	synonymous	A → G	G	3	297	N/A
rs142360289	synonymous	T → C	V	3	300	N/A
rs9502656	synonymous	T → C	D	3	322	N/A
rs370405940	synonymous	T → C	A	3	4	N/A
rs200316196	synonymous	T → C	D	3	48	N/A
rs150394784	synonymous	A → G	P	3	69	N/A
rs151119008	synonymous	A → G	P	3	73	N/A
rs1043784	N/A	G → A	N/A	N/A	3' near gene	Vitiligo [14]
rs1044104	N/A	T → C	N/A	N/A	3' near gene	Arthritis [11]
rs41302895	N/A	A → T	N/A	N/A	3' near gene	Arthritis [11]
rs7764128	N/A	A → G	N/A	N/A	3' near gene	Vitiligo [14]
rs8643	N/A	G → A	N/A	N/A	3' near gene	Vitiligo [14]
rs9505298	N/A	A → G	N/A	N/A	3' near gene	Arthritis and cervical, esophageal and liver carcinomas [4,11]
rs13210097	N/A	A → C	N/A	N/A	5' near gene	Cervical, esophageal and liver carcinomas [4]
rs3812162	N/A	A → C	N/A	N/A	5' near gene	Arthritis [11]
rs1225936	N/A	C → A	N/A	N/A	Intron	Arthritis [11]
rs1225937	N/A	T → C	N/A	N/A	Intron	Arthritis [11]
rs1225938	N/A	G → A	N/A	N/A	Intron	Arthritis [11]

Table S1. *Cont.*

dbSNP Cluster ID	Function	DbSNP Allele	Protein Residue	Codon Position	Amino Acid Position	Pathology
rs1225943	N/A	A → C	N/A	N/A	Intron	Hepatocellular carcinoma, schizophrenia and vitiligo [3,13,14]
rs1225944	N/A	C → T	N/A	N/A	Intron	Arthritis, hepatocellular carcinoma, schizophrenia and vitiligo [3,11,13,14]
rs1225945	N/A	T → C	N/A	N/A	Intron	Schizophrenia and vitiligo [13,14]
rs1225947	N/A	G → T	N/A	N/A	Intron	Arthritis [11]
rs1225954	N/A	G → A	N/A	N/A	Intron	Arthritis [11]
rs1225955	N/A	G → A	N/A	N/A	Intron	Arthritis [11]
rs1225958	N/A	G → A	N/A	N/A	Intron	Schizophrenia and vitiligo [13,14]
rs1238994	N/A	G → T	N/A	N/A	Intron	Arthritis [11]
rs13209404	N/A	C → T	N/A	N/A	Intron	Arthritis [11]
rs13873	N/A	G → T	N/A	N/A	Intron	Schizophrenia [13]
rs368074	N/A	C → G	N/A	N/A	Intron	Arthritis [11]
rs369086	N/A	G → A	N/A	N/A	Intron	Arthritis [11]
rs372578	N/A	A → G	N/A	N/A	Intron	Arthritis [11]
rs378963	N/A	T → C	N/A	N/A	Intron	Arthritis [11]
rs408014	N/A	G → A	N/A	N/A	Intron	Arthritis [11]
rs443861	N/A	G → A	N/A	N/A	Intron	Arthritis [11]
rs7771314	N/A	T → C	N/A	N/A	Intron	Cervical, esophageal and liver carcinomas [4]
rs89715	N/A	C → G	N/A	N/A	Intron	Arthritis [4]

N/A, not applicable except for pathology section where it means non-available.