

Table 1. Genotype and allele frequencies of top 48 associated SNPs that mapped directly to intron of genes<sup>d</sup>

No.	SNP ID	Normals subjects' genotype and allele counts				IgAN patients' genotype and allele counts				Genotype frequency**		Allele frequency***		F <sub>st</sub> ****
		AA	AB	BB	Δ	AA	AB	BB	Δ	R	E	R	E	
1	SNP_A-1511134	28	1	1	57	3	3	14	11	3	17	13.95	13.05	0.11
2	SNP_A-1511186	1	1	28	3	57	3	3	11	14	39	13.95	13.05	0.11
3	SNP_A-1509685	15	12	9	42	18	34	24	4	0	4	9.02	9.85	0.08
4	SNP_A-1518362	5	16	9	26	34	34	15	5	4	13	12.17	9.49	0.09
5	SNP_A-1510797	6	9	13	21	35	21	1	5	21	47	6.58	8.72	0.07
6	SNP_A-151058	23	5	2	51	9	9	13	7	7	33	5.75	8.36	0.08
7	SNP_A-1513294	5	14	9	24	32	24	13	8	3	14	8.20	8.36	0.08
8	SNP_A-1513918	28	0	0	56	0	0	19	7	0	7	#DIV/0!	8.06	0.07
9	SNP_A-1509245	3	23	4	29	31	4	4	5	19	43	21.45	7.91	0.07
10	SNP_A-1512855	8	9	7	25	23	3	3	5	15	35	6.31	7.89	0.08
11	SNP_A-1518037	2	13	14	17	41	17	6	15	3	27	8.87	7.85	0.07
12	SNP_A-1512011	3	10	17	16	44	4	20	4	24	4	6.71	7.74	0.07
13	SNP_A-1517231	9	16	5	34	26	2	0	5	3	45	10.38	7.48	0.06
14	SNP_A-1511059	8	15	11	33	25	17	13	11	11	11	8.06	7.26	0.06
15	SNP_A-1516239	9	11	11	27	33	3	13	13	2	39	7.53	7.17	0.06
16	SNP_A-1512028	9	16	16	34	26	3	3	12	13	38	7.07	7.04	0.06
17	SNP_A-1514522	13	14	3	40	20	21	0	7	0	49	7.16	7.04	0.06
18	SNP_A-1507114	1	5	24	7	53	0	0	0	28	0	6.25	6.95	0.06
19	SNP_A-1513339	1	5	24	7	53	0	0	0	28	0	6.25	6.95	0.06
20	SNP_A-1515329	14	15	1	43	17	8	9	11	9	27	8.59	6.66	0.06
21	SNP_A-1516559	2	14	14	18	42	4	9	12	7	29	6.88	6.63	0.06
22	SNP_A-1516748	2	14	14	18	42	4	9	12	7	29	6.88	6.63	0.06
23	SNP_A-1511808	16	9	5	41	19	5	5	15	8	25	7.89	6.63	0.06
24	SNP_A-1518450	1	0	28	2	56	3	3	18	9	39	5.75	6.61	0.06
25	SNP_A-1509507	7	16	7	30	30	1	1	13	14	15	7.08	6.57	0.06
26	SNP_A-1514771	1	11	18	13	47	0	0	3	13	3	6.65	6.48	0.06
27	SNP_A-1515891	9	18	3	36	24	6	6	9	23	35	9.79	5.87	0.05
28	SNP_A-1514202	2	8	17	12	42	2	2	19	6	31	9.74	5.11	0.05
29	SNP_A-1516469	11	16	1	38	18	6	6	9	8	25	8.47	5.11	0.05
30	SNP_A-1513762	2	19	9	23	37	11	11	11	6	33	8.91	4.92	0.04
31	SNP_A-1518773	11	11	8	33	27	13	13	15	0	41	8.72	4.16	0.04
32	SNP_A-1508208	1	6	23	8	52	0	0	16	12	16	8.94	4.10	0.04
33	SNP_A-1516683	1	18	11	20	40	9	9	11	8	27	8.50	4.04	0.03
34	SNP_A-1510472	17	8	5	42	18	6	6	18	4	26	9.16	3.32	0.03
35	SNP_A-1519262	5	8	17	18	42	4	4	18	6	30	9.16	3.32	0.03
36	SNP_A-1512953	15	10	5	40	20	4	4	19	4	27	9.14	3.26	0.03
37	SNP_A-1519269	2	2	26	6	54	0	0	10	18	10	8.73	1.50	0.01
38	SNP_A-1517370	13	10	7	36	24	4	4	20	4	28	8.86	1.17	0.01
39	SNP_A-1513424	13	16	1	42	18	20	20	4	4	12	10.43	1.11	0.01
40	SNP_A-1514336	12	17	1	41	19	13	13	7	8	23	9.59	1.11	0.01
41	SNP_A-1516217	0	9	21	9	51	2	2	1	25	5	8.69	1.01	0.01
42	SNP_A-1511661	22	4	4	48	12	14	14	13	1	15	8.28	0.75	0.01
43	SNP_A-1510615	5	10	15	20	40	1	1	20	7	34	8.85	0.44	0.00
44	SNP_A-1510616	5	10	15	20	40	1	1	20	7	34	8.85	0.44	0.00
45	SNP_A-1511147	19	11	9	49	11	23	3	23	3	8	9.55	0.35	0.00
46	SNP_A-1513592	10	11	9	31	29	2	2	23	3	29	12.51	0.14	0.00
47	SNP_A-1508082	6	17	7	29	31	11	11	5	12	29	9.27	0.00	0.00
48	SNP_A-1514166	6	17	7	29	31	11	11	5	12	29	9.27	0.00	0.00

# Chi-square statistical analysis of difference in genotype and allele frequencies between patients and normal subjects.

Genes were sorted in descending order based on chi-square values for allele frequency.

\*\* Chi-square values =>6.25, p<0.05

\*\*\* Chi-square values =>4.04, p<0.05

\*\*\*\* F<sub>st</sub> =>0.05 means significant reduction in overall heterozygosity (Fixation Index, a measure of genetic difference among subpopulations)

Boxed: SNP pairs mapped to the same gene (in Table 2) showing absolute linkage in genotype frequencies here.

Table 2. Top 48 Significant SNPs Mapped to Chromosome, CytoBand, Physical Position and Specific Genes\*

S/N	Probe Set ID**	Chromosome	Strand	Physical Position	CytoBand	AlleleA	AlleleB	Accession No.	Associated Gene
1	SNP_A-1511134	6	+	53115162	p12.1	A	G	NM_003643	glial cells missing homolog 1 (Drosophila) (GCM1)
2	SNP_A-1511186	6	+	53115009	p12.1	A	C	NM_003643	glial cells missing homolog 1 (Drosophila) (GCM1)
3	SNP_A-1509885	1	-	172067069	q25.1	G	T	NM_003285	tenascin R (restrictin, janusin) (TNR)
4	SNP_A-1518362	1	-	117641141	p12	A	G	NM_006699	mannosidase, alpha, class 1A, member 2 (MAN1A2)
5	SNP_A-1510797	7	-	7790139	p21.3	A	G	ENST0000223145	
6	SNP_A-1511058	X	-	29237858	p21.2	A	G	NM_014271	interleukin 1 receptor accessory protein-like 1 (IL1RAPL1)
7	SNP_A-1513294	6	+	152729709	q25.2	C	G	NM_133650	specrin repeat containing, nuclear envelope 1 (SYNE1)
8	SNP_A-1513918	6	-	40549850	p21.2	C	T	ENST00000359835	
9	SNP_A-1509245	10	+	69080969	q21.3	C	T	ENST0327748	ENST00000327748
10	SNP_A-1512855	11	-	11335836	p15.3	G	T	NM_198516	UDP-N-acetyl-alpha-D-galactosamine: polypeptide N-acetylgalactosaminyltransferase-like 4 (GALNTL4)
11	SNP_A-1518037	3	+	184087390	q26.33	A	G	AB023173	AB023173 // ATP11B // KIAA0956 protein, partial cds.
12	SNP_A-1512011	16	-	60567412	q21	C	A	NM_001796	cadherin 8, type 2 (CDH8)
13	SNP_A-1517231	14	+	77920731	q24.3	A	G	NM_004801	neurexin 1 (NRXN1)
14	SNP_A-1511059	2	+	206452921	q33.3	C	T	NM_201264	neuropilin 2 (NRP2)
15	SNP_A-1516239	1	-	14755899	p36.21	C	G	ENST00251295	
16	SNP_A-1512028	3	-	132942038	q22.1	A	G	NM_130808	copine IV (CPNE4)
17	SNP_A-1514522	10	+	68424913	q21.3	C	T	NM_013266	catenin (cadherin-associated protein), alpha 3 (CTNNA3)
18	SNP_A-1507714	3	+	85619169	p12.1	C	T	NM_153184	immunoglobulin superfamily, member 4D (IGSF4D)
19	SNP_A-1513339	3	+	85619004	p12.1	C	T	NM_153184	immunoglobulin superfamily, member 4D (IGSF4D)
20	SNP_A-1515529	3	-	141267572	q23	C	T	NM_022131	calyculin 2 (CLSTN2)
21	SNP_A-1516559	10	-	127757768	q26.2	C	T	NM_003474	a disintegrin and metalloproteinase domain 12 (meltrin alpha) (ADAM12)
22	SNP_A-1516748	10	-	127758100	q26.2	A	G	NM_003474	a disintegrin and metalloproteinase domain 12 (meltrin alpha) (ADAM12)
23	SNP_A-1511808	X	+	177072363	q25.3	C	G	NM_032360	acyl-Coenzyme A binding domain containing 6 (ACBD6)
24	SNP_A-1518450	1	+	30837095	p21.2	A	G	NM_004023	dystrophin (muscular dystrophy, Duchenne and Becker types) (DMD)
25	SNP_A-1509507	9	+	113822445	q32	A	G	ENST0288466	
26	SNP_A-1514771	18	-	70667412	q22.3	A	G	NM_017757	zinc finger protein 407 (ZNF407)
27	SNP_A-1515691	2	-	46026676	p21	G	T	NM_005400	protein kinase C, epsilon (PRKCE)
28	SNP_A-1514202	3	-	30672665	p24.1	G	T	NM_003242	transforming growth factor, beta receptor II (70/80kDa) (TGFB2)
29	SNP_A-1516469	16	-	48948887	q12.1	C	G	NM_013263	bromodomain containing 7 (BRD7)
30	SNP_A-1513762	1	-	162109210	q23.3	C	T	NM_006917	retinoid X receptor, gamma (RXRG)
31	SNP_A-1518773	5	+	53314739	q11.2	C	T	NM_019087	ADP-ribosylation factor related protein 2 (ARFRP2)
32	SNP_A-1508208	11	+	131388017	q25	C	T	NM_016522	neurotrophin (HNT)
33	SNP_A-1516683	1	-	111932021	p13.2	G	T	NM_002884	RAP1A, member of RAS oncogene family (RAP1A)
34	SNP_A-1510472	6	-	123673907	q22.31	C	T	NM_006073	triadin (TRDN)
35	SNP_A-1519262	6	-	123674331	q22.31	A	G	NM_006073	triadin (TRDN)
36	SNP_A-1512953	20	+	40318090	q12	A	G	NM_133170	protein tyrosine phosphatase, receptor type, T (PTPRT)
37	SNP_A-1519269	11	+	5427292	p15.4	A	G	NM_001005288	olfactory receptor, family 51, subfamily I, member 1 (OR5111)
38	SNP_A-1517370	14	+	41157584	q21.1	C	T	NM_152447	leucine rich repeat and fibronectin type III domain containing 5 (LRFN5)
39	SNP_A-1513424	11	+	76728362	q13.5	A	C	NM_002576	p21/Cdc42/Rac1-activated kinase 1 (STE20 homolog, yeast) (PAK1)
40	SNP_A-1514336	14	-	94993423	q32.13	G	T	NM_152592	chromosome 14 open reading frame 49 (C14orf49)
41	SNP_A-1516217	2	-	185627749	q32.1	G	T	NM_194250	zinc finger protein 804A (ZNF804A)
42	SNP_A-1511661	10	-	63901901	q21.2	C	T	NM_199450	zinc finger protein 365 (ZNF365)
43	SNP_A-1510566	20	+	16454369	p12.1	C	T	NM_024704	chromosome 20 open reading frame 23 (C20orf23)
44	SNP_A-1510616	20	+	16454405	p12.1	G	T	NM_024704	chromosome 20 open reading frame 23 (C20orf23)
45	SNP_A-1511147	1	+	181867402	q25.3	A	G	NM_017673	chromosome 1 open reading frame 26 (C1orf26)
46	SNP_A-1513592	18	-	48133056	q21.1	C	T	NM_005215	deleted in colorectal carcinoma (DCC)
47	SNP_A-1508082	14	+	24430215	q12	C	T	NM_014178	syntaxin binding protein 6 (amsyn) (STXBP6)
48	SNP_A-1514166	14	-	24430424	q12	G	T	NM_014178	syntaxin binding protein 6 (amsyn) (STXBP6)

\* Annotation data were extracted from the Affymetrix database

\*\* Genes were sorted in descending order on chi-square statistic value calculated for the difference between patients and normal subjects in allele frequency. Boxed: SNP-pairs are map to the same genes and their physical positions are only 36-668 basic-pairs apart.

Table 3. Associated Genes, Components, Functions and Processes\*

S/N	Gene**	Components	Functions	Processes
1	Glial cells missing homolog 1 (Drosophila) (GCM1)	Nuclear, transcription factor complex	Bind zinc ion, transcript factor activity	Morphogenesis, regulate transcription
2	Tenascin R (resticrin, janusin) (TNR)	Matrix, extracellular	Bind protein, matrix constituent	Axon guidance, cell adhesion
3	Mannosidase, alpha, class 1A, member 2 (MAN1A2)	Membrane, integral to endoplasmic, golgi	Bind Ca, acting on glycosyl bonds	Metabolism, N-glycan processing
4	ENST00000223145	Hypothetical protein	-	-
5	Interleukin 1 receptor accessory protein-like 1 (IL1RAPL1)	Membrane, integral to	Transmembran receptor activity	Learning, memory, signal transduction
6	Spectrin repeat containing, nuclear envelope 1 (SYNE1)	Membrane, integral to	Bind actin, lamin	Golgi,nuclear, cell organisation
7	ENST00000359835 // ENST00000338305	Hypothetical protein	-	-
8	ENST00000327748	Hypothetical protein	-	-
9	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase-like 4 (GALNTL4)	Membrane, integral to	Bind metal ions, transferring glycosyl groups	-
10	AB023173 // ATP1B // KIAA0956 protein, partial cds.	Hypothetical protein	-	-
11	Cadherin 8, type 2 (CDH8)	Membrane, integral to	Bind protein, Ca	Homophilic cell adhesion
12	Neurexin 1 (NRXN1)	Membrane, integral to	Bind protein	Axon guidance
13	Neuropilin 2 (NRP2)	Membrane, integral to	EndothGF receptor,electron carrier	Axon guidance, angiogenesis
14	ENST00000251295	Hypothetical protein	-	-
15	Copine IV (CPNE4)	Cytoplasm	Ca dependent membrane binding	Regulate events cell memb/cytoplasm
16	Catenin (cadherin-associated protein), alpha 3 (CTNNA3)	Cytoskeleton	Binding protein, cadherin	Cell-cell adhesion, cell adhesion
17	Immunoglobulin superfamily, member 4D (IGSF4D)	Extracellular	Adhesion molecules	Extracell recognition,intercell adhesion
18	Calsynenin 2 (CLSTN2)	Membrane, integral to	Binding protein, calcium	homophilic cell adhesion
19	A disintegrin, metalloproteinase domain12 (ADAM12)	Membrane, integral to	Bind protein, zinc, metalloendopeptidase	Cell adhesion, proteolysis, signaling
20	Acyl-Coenzyme A binding domain containing 6 (ACBD6)	-	-	-
21	Dystrophin (muscular dystrophy,Duchenne& Becker)(DMD)	Cytoskeleton	Bind actin/Ca, cytoskeleton/muscle constituent	Muscle contraction/development,cytoskel anchor
22	ENST00000288466	Hypothetical protein	-	-
23	Zinc finger protein 407 (ZNF407)	Intracellular, nucleus	Bind DNA, zinc, nucleic acid	Regulate transcription, DNA dependent
24	Protein kinase C, epsilon (PRKCE)	Membrane fraction	Bind ATP, metal, nucleotide, kinase, signal transducer	Apoptosis induction, intracell signaling cascade
25	Transforming growth factor, beta receptor II (TGFB2)	Integral of membrane	Bind protein,metal,nucleotide,ATP, transferase	regulate cell prolif, phosphorylation, signal path
26	Bromodomain containing 7 (BRD7)	Nucleus	Bind histone, transcription factor	Transcription from RNA, promoter, signal path
27	Retinoid X receptor, gamma (RXRG)	Nucleus	Bind metal ions/specificDNAseq/steroid, receptor	Regulate transcription, DNA dependent
28	ADP-ribosylation factor related protein 2 (ARFRP2)	-	Bind GTP	-
29	Neurotrophin (HNT)	Membrane, integral to	Bind protein/GPI anchor	Cell adhesion, neuron recognition
30	RAP1A, member of RAS oncogene family (RAP1A)	Intracellular, membrane	Bind proteins/nucleotides/GTP	Regul progression cell cycle, signal transduction
31	Triadin (TRDN)	Membrane, integral to	Bind receptor	Muscle contraction
32	Protein tyrosine phosphatase, receptor type, I (PTPRT)	Membrane, integral to	Hydrolase, transmembr, phosphatase receptor	phosphorylation, transmembr receptor signal path
33	Olfactory receptor, family51, subfamily1, member1 (ORS511)	Membrane, integral to	Olfactory receptor activity	Sensory perception of smell, signal pathway
34	Leucine rich repeat, fibronectin type III domain 5 (LRFN5)	-	-	-
35	P21/Cdc42/Rac1-activated kinase 1 (PAK1)	-	Bind ATP, protein, nucleotide, kinase, transferase	Apoptosis, protein amino acid phosphorylation
36	Chromosome 14 open reading frame 49 (C14orf49)	Membrane, integral to	Bind actin	-
37	Similar to C630007C17Rik protein (LOC91752)	Hypothetical protein	-	-
38	Zinc finger protein 365 (ZNF365) ?	Intracellular	Bind Zn /nucleic acid	New candidate locus of uric acid nephrolithiasis
39	Chromosome 20 open reading frame 23 (C20orf23)	Microtubule assoc complex	Bind proteinATP/nucleotide,microtubule motor act.	IntracellularSignalcascade, microtubule movement
40	Chromosome 1 open reading frame 26 (C1orf26)	Hypothetical protein	-	-
41	Deleted in colorectal carcinoma (DCC)	Membrane, integral to	Bind protein, transmembrane receptor	Apoptosis, axonogenesis, cellcycle progression
42	Syntaxin binding protein 6 (amisy) (STXBP6)	Membrane, integral to	Bind components of the SNARE complex	Vesicle-mediated transport, regulate SNARE

\* Through accession number, the GenBank database was searched for information on gene component, function and process.

\*\* Genes were sorted in descending order on chi-square statistic value calculated for the difference between patients and normal subjects in allele frequency.

**Table 4. Associated Genes and Clinical Relevance\***

<u>S/N</u>	<u>Gene**</u>	<u>Clinical Relevance</u>	<u>Reference***</u>
1	Glial cells missing homolog 1 (Drosophila) (GCM1) <sup>AFG</sup>	Plasma GCM1 increased expression in pre-eclampsia	Fujito N, Samura O, et al. 2006
2	Tenascin R (restictin, janusin) (TNR) <sup>AFG</sup>	Deficient in extracellular matrix, impaired motor coordination, anxiety	Freitag S, Schachner M, et al. 2003
3	Mannosidase, alpha, class 1A, member 2 (MAN1A2) <sup>AFG</sup>	Involve in N-glycan maturation	Tremblay LO, Campbell Dyke N, et al. 1998
4	ENST0000223145	Not ascertained	-
5	Interleukin 1 receptor accessory protein-like 1 (IL1RAPL1)	Non specific mental retardation in males	Tabolacci E, Pomponi MG, et al. 2006
6	Spectrin repeat containing, nuclear envelope 1 (SYNE1)	Responsible for autosomal recessive cerebellar ataxia	Gros-Louis F, Dupre N, et al. 2007
7	ENST0000359835 // ENST0000338305	Not ascertained	-
8	ENST0000327748 <sup>AFG</sup>	Not ascertained	-
9	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase-like 4 (GALNTL4)	O-glycan pathobiology	Ten Hagen KG, Fritz TA, et al. 2003
10	AB023173 // ATP1B1 // KIAA0956 protein, partial cds. <sup>AFG</sup>	Not ascertained	-
11	Cadherin 8, type 2 (CDH8)	Involve in kidney morphogenesis and tumorigenesis	Blaschke S, Mueller CA, et al. 2002
12	Neurexin 1 (NRXN1) <sup>AFG</sup>	Synaptic transmembrane receptor and cell adhesion molecule	Craig AM, Kang Y 2007
13	Neuropilin 2 (NRP2)	Mediator of angiogenesis and tumor growth	Miao HQ, Klagsbrun M 2000
14	ENST0000251295	Not ascertained	-
15	Copine IV (CPNE4)	Possible role in regulation of tumor necrosis factor: alpha receptor signaling	Tomsig JL, Sohma H, et al. 2004
16	Catenin (cadherin-associated protein), alpha 3 (CTNNA3)	Tumor suppressor	Smith DJ, Zhu Y, et al. 2006
17	Immunoglobulin superfamily, member 4D (IGSF4D)	Down-regulated in lung cancer	Katoh M, Katoh M 2004
18	Calsynin 2 (CLSTN2)	Excitatory synaptic transmission	Hintsch G, Zurlinden A, et al. 2002
19	A disintegrin metalloproteinase domain12 (ADAM12)	Involve in pathogenesis of gastric cancer	Carl-McGrath S, Lendeckel U, et al. 2005
20	AcyL-Coenzyme A binding domain containing 6 (ACBD6)	Not ascertained	-
21	Dystrophin (muscular dystrophy,Duchenne& Becker)(DMD)	Duchenne Muscular Dystrophy	-
22	ENST0000288466	Not ascertained	-
23	Zinc finger protein 407 (ZNF407)	Modulates gene expression directly at DNA level.	Gommans WM, Haisma HJ, et al. 2005
24	Protein kinase C, epsilon (PRKCE)	Control inflammation, immune disorders	Aksoy E, Goldman M, et al. 2004
25	Transforming growth factor, beta receptor II (TGFB2)	Loss expression in malignant progression in colon & other cancers	Brattain MG, Markowitz SD, et al. 1996
26	Bromodomain containing 7 (BRD7)	Presence widely in leukemogenic and cancer genes	Fietici P, P. O. et al. 2001
27	Retinoid X receptor, gamma (RXRG)	Regulator adult diabetes, hyperlipidemia, atherosclerosis metabolism	Metzger D, Chambon P 2007
28	ADP-ribosylation factor related protein 2 (ARFRP2)	Influence microtubule dynamics in breast cancer	Beghin A, Honore S, et al. 2007
29	Neurotrophin (HNT)	Stronger expression in nervous tumors than normal brain tissues	Liu J, Li G, et al. 2004
30	RAP1A, member of RAS oncogene family (RAP1A)	Prominently expressed in nucleus of squamous carcinomas	Mitra RS, Zhang Z, et al. 2003
31	Triadin (TRDN)	Overexpression in cellular arrhythmia in cardiac myocytes	Terentyev D, Cala SE, et al. 2005
32	Protein tyrosine phosphatase, receptor type, T (PTPR T)	Growth factor receptor co-cluster with estrogen receptor alpha in breast tumor	Tozlu S, Girau HI, et al. 2006
33	Olfactory receptor, family51, subfamily, member1(OR511)	Role in chemotaxis of spermatozoa to oocytes	Goto T, Saipakar A, et al. 2001
34	Leucine rich repeat, fibronectin type III domain 5 (LRFN5)	Role in vertebrate nervous system development	Morimura N, Inoue T, et al. 2006
35	P21/Cdc42/Rac1-activated kinase 1 (PAK1)	Elevated level in liver carcinogenesis, regulated cell motility and morphology	Parekh P, Rao KV 2007
36	Chromosome 14 open reading frame 49 (C14orf49)	Nesprin-3, connecting nuclear and extracellular matrix	Wilhelmsen K, Lijjens SH, et al. 2005
37	Similar to C630007C17Rik protein (LOC91752)	Not ascertained	-
38	Zinc finger protein 365 (ZNF365)	Associated with uric acid nephrolithiasis	Gianfrancesco F, Esposito T, et al. 2004
39	Chromosome 20 open reading frame 23 (C20orf23)	Role in membrane trafficking and protein sorting	Worby CA, Dixon JE 2002
40	Chromosome 1 open reading frame 26 (C1orf26)	Mapped to 1q25, positional candidate gene for hereditary prostate cancer	Sood R, Bonner TI, et al. 2001
41	Deleted in colorectal carcinoma (DCC)	Tumor suppressor gene involved in tumorigenesis, colon, lung, renal etc.	Hirata H, Matsuyama H, et al. 2005
42	Syntaxin binding protein 6 (amisyn) (STXBP6)	Novel brain-enriched protein, inhibitor of exocytosis, regulate release of neurotransmitters	Constable JR, Graham ME, et al. 2005

\* Clinical relevance was researched and ascertained from publications in PUBMED database

\*\* Genes were sorted in descending order on chi-square statistic value calculated for the difference between patients and normal subjects in allele frequency.

\*\*\* First 2 authors and year may identify articles in PUBMED and therefore are not listed again in References.

**Table 5. The Combined Effects of GMC1 and TNR Polymorphisms (separately or combined) on Risk of IgAN\***

<u>GCM1 genotype</u>	<u>TNR genotype</u>	<u>Genotype Combination</u> <u>GCM1 : TNR</u>	<u>IgAN (counts)</u>	<u>Normals count</u>	<u>Odds Ratio (95%CI)</u>	<u>P value</u>
AA			14	28	0.07 ( 0.01 - 0.36 )	0.000
AB			11	1	18.8 ( 2.2 - 158.3 )	0.001
BB			3	1	3.5 ( 0.3 - 35.6 )	0.344
	AA		24	15	6.0 ( 1.7 - 21.5 )	0.005
	AB		4	12	0.25 ( 0.07 - 0.91 )	0.040
	BB		0	3	-	-
		AA : AA	12	14	0.86 ( 0.3 - 2.4 )	0.798
		AA : AB	2	11	0.13 ( 0.03 - 0.67 )	0.011
		AA : BB	0	3	-	-
		AB : AA	10	1	16.1 ( 1.9 - 136.7 )	0.002
		AB : AB	1	0	-	-
		BB : AA	2	0	-	-
		BB : AB	1	1	1.07 ( 0.06 - 18.0 )	1.000

\* Genotype combination counts and individual genotype counts were subjected to Odds Ratio analysis for risk of IgAN. GCM1-B allele seems to increase susceptibility for IgAN whereas TNR-B allele is protective from IgAN.