Variants at multiple loci implicated in both innate and adaptive immune responses are associated with Sjögren's syndrome

SUPPLEMENTARY NOTE, FIGURES, AND TABLES

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Note: Supplementary Table 3 was abbreviated to 5 pages in the interest of space, but the authors are pleased to provide this additional data upon request.

Supplementary Note:

The UK Primary Sjögren's Syndrome Registry is composed of the following members:

Wan-Fai Ng[1], Simon J. Bowman[2], Bridget Griffiths[3], Frances Hall[4], Elalaine C. Bacabac[5], Robert Moots[5], Kuntal Chadravarty[6], Shamin Lamabadusuriya[6], Michele Bombardieri[7], Constantino Pitzalis[7], Nurhan Sutcliffe[7], Nagui Gendi[8], Rashidat Adeniba[8], John Hamburger[9], Andrea Richards[9], Saaeha Rauz[10], Sue Brailsford[1], Joanne Logan[11], Diamuid Mulherin[11], Paul Emery[12], Alison McManus[12], Colin Pease[12], Alison Booth[13], Marian Regan[13], Theodoros Dimitroulas[14], Lucy Kadiki[14], Daljit Kaur[14], George Kitas[14], Mark Lloyd[15], Lisa Moore[15], Esther Gordon[16], Cathy Lawson[16], Monica Gupta[17], John Hunter[17], Lesley Stirton[17], Gill Ortiz[18], Elizabeth Price[18], Gavin Clunie[19], Ginny Rose[19], Sue Cuckow[19], Susan Knight[20], Deborah Symmons[20], Beverley Jones[20], Shereen Al-Ali[1], Andrew Carr[1], Katherine Collins[1], Andini Natasari[1], Philip Stocks[1], Jessica Tarn[1], Ian Corbett[3], Christine Downie[3], Suzanne Edgar[3], Marco Carrozzo[3], Francisco Figuereido[3], Heather Foggo[3], Dennis Lendrem[3], Iain Macleod[3], Philip Mawson[3], Sheryl Mitchell[3], Adrian Jones[21], Peter Lanyon[21], Alice Muir[21], Paula White[22], Steven Young-Min[22], Susan Pugmire[23], Saravanan Vadivelu[23], Annie Cooper[24], Marianne Watkins[24], Anne Field[25], Stephen Kaye[25], Devesh Mewar[25], Patricia Medcalf[25], Pamela Tomlinson[25], Debbie Whiteside[25], Neil McHugh[26], John Pauling[26], Julie James[26], Nike Olaitan[26], Mohammed Akil[27], Jayne McDermott[27], Olivia Godia[27], David Coady[28], Elizabeth Kidd[28], Lynne Palmer[28], Bhaskar Dasgupta[29], Victoria Katsande[29], Pamela Long[29], Charles Li[30], Usha Chandra[31], Kirsten MacKay[31], Stefano Fedele[32], Ada Ferenkey-Koroma[32], Ian Giles[32], David Isenberg[32], Helena Maconnell[32], Stephen Porter[32], Paul Allcoat[33], John Mclaren[33]

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Genes and Blood Clotting Study dataset(s):

Funding support for the Genes and Blood Clotting Study was provided through the NIH/NHLBI (R37HL039693). The Genes and Blood Clotting Study is one of the Phase 3 studies as part of the Gene Environment Association Studies (GENEVA) under GEI. Assistance with genotype cleaning was provided by the GENEVA Coordinating Center (U01 HG004446). Funding support for DNA extraction and genotyping, which was performed at the Broad Institute, was provided by NIH/NHLBI (R37HL039693). Additional support was provided by the Howard Hughes Medical Institute. The datasets used for the analyses described in this manuscript were obtained from dbGaP at http://www.ncbi.nlm.nih.gov/sites/entrez?db=gap through dbGaP accession number [phs000304.v1.p1].

Supplementary Note (Continued)

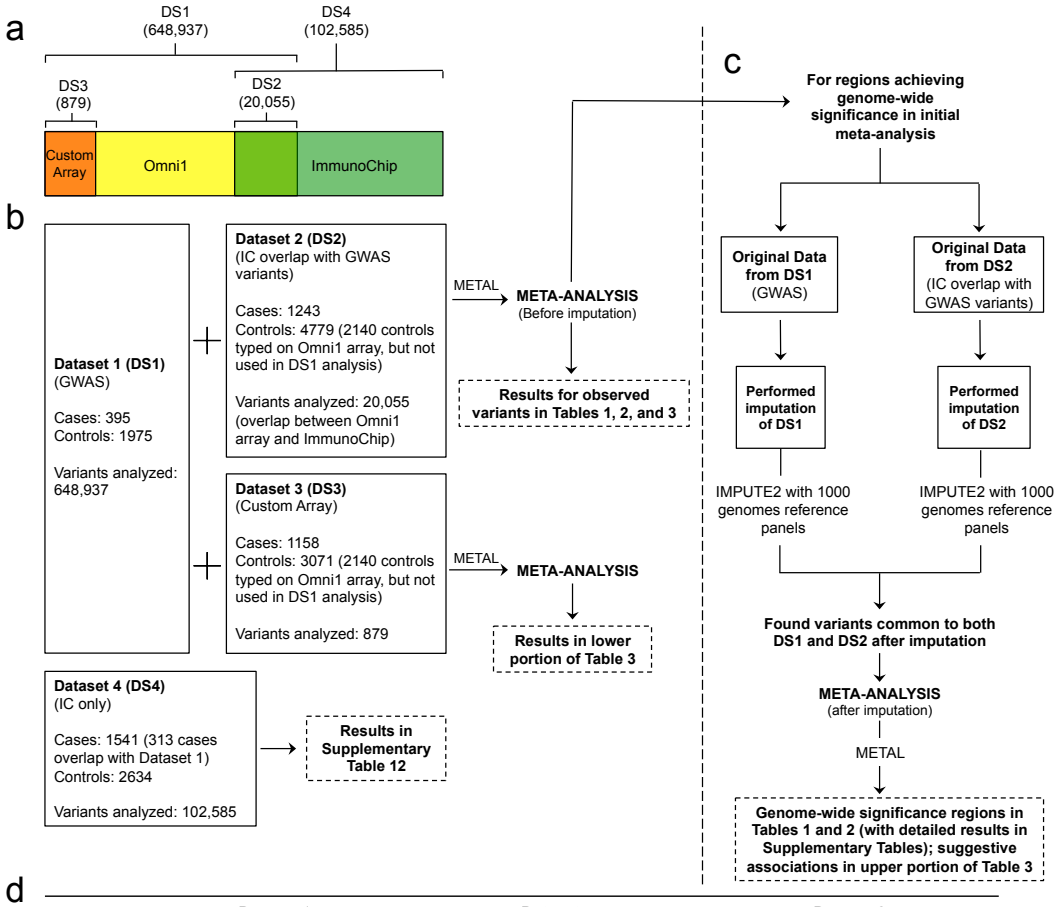
GWAS of Ischemic Stroke dataset(s):

Funding support for the GWAS of Ischemic Stroke study was provided through the NIH Genes, Environment and Health Initiative [GEI] (U01HG004436). The GWAS of Ischemic Stroke study is one of the genome-wide association studies funded as part of the Gene Environment Association Studies (GENEVA) under GEI. Assistance with phenotype harmonization and genotype cleaning, as well as with general study coordination, was provided by the GENEVA Coordinating Center (U01 HG004446). Assistance with data cleaning was provided by the National Center for Biotechnology Information. Funding support for genotyping, which was performed at the Johns Hopkins University Center for Inherited Disease Research, was provided by the NIH GEI (U01HG004438) and the NIH contract "High throughput genotyping for studying the genetic contributions to human disease"(HHSN268200782096C). Field work for this project was supported by a Cooperative Agreement with the Division of Adult and Community Health, Centers for Disease Control and Prevention; the National Institute of Neurological Disorders and Stroke (NINDS) and the NIH Office of Research on Women's Health (ORWH) (Grant R01 NS45012); Office of Research and Development, Medical Research Service, Department of Veterans Affairs; and the University of Maryland General Clinical Research Center (Grant M01 RR 165001), National Center for Research Resources, NIH. This study used samples from the NINDS Human Genetics Resource Center DNA and Cell Line Repository (http://ccr.coriell.org/ninds). The datasets used for the analyses described in this manuscript were obtained from dbGaP at http://www.ncbi.nlm.nih.gov/sites/entrez?db=gap through dbGaP accession number [phs000292.v1.p1].

CIDR:NGRC Parkinson's disease study dataset(s):
This work utilized in part data from the NINDS DbGaP database from the CIDR:NGRC PARKINSON'S DISEASE STUDY. Funding support for this study was provided through the the National Institute of Neurological Disorders and Stroke, National Institutes of Health (5R01NS036960-10). Funding source for genotyping was provided through the National Institutes of Health (HHSN268200782096C). The datasets used for the analyses described in this manuscript were obtained from dbGaP at http://www.ncbi.nlm.nih.gov/sites/entrez?db=gap through dbGaP accession number [phs000196.v2.p1].

High Density SNP Association Analysis of Melanoma: Case-Control and Outcomes Investigation dataset(s):
Research support to collect data and develop an application to support this project was provided by 3P50CA093459, 5P50CA097007, 5R01ES011740, and 5R01CA133996. Funding source for genotyping was provided through the National Institutes of Health (HHSN268200782096C). The datasets used for the analyses described in this manuscript were obtained from dbGaP at http://www.ncbi.nlm.nih.gov/sites/entrez?db=gap through dbGaP accession number [phs000187.v1.p].

Supplementary Figure 1: Summary of the study design and imputation strategy.

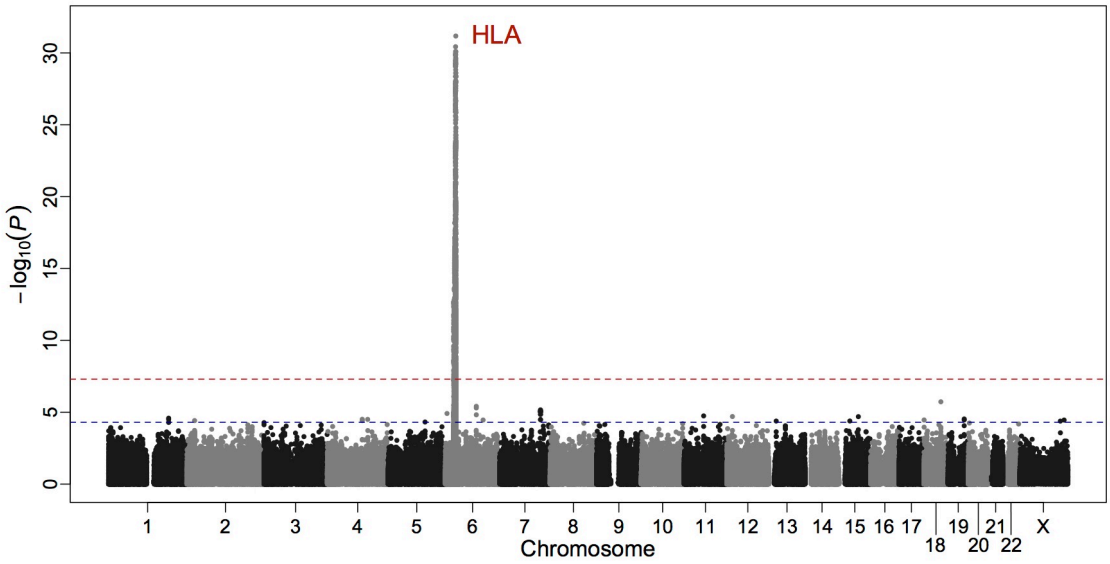


d

Region	Dataset 1			Dataset 4			Dataset 2		
	Genotyped on Omni1		After imputation and QC	Genotyped on IC		After imputation and QC	Good imputation for IC	Good imputation for Omni1	Overlapping variants after QC
	Before QC	After QC		Before QC	After QC				
HLA	13,554	8,362	**37,929**	9,100	5,452	**30,474**	61,832	65,599	**27,080**
IRF5	432	218	**542**	394	229	**540**	1,005	1,047	**486**
STAT4	140	60	**377**	344	157	**271**	650	1,043	**235**
IL12A	55	35	**336**	415	177	**302**	601	664	**265**
BLK	161	131	**808**	840	454	**776**	1,700	1,948	**667**
CXCR5	83	48	**626**	408	205	**615**	1,357	1,524	**551**
TNIP1	232	149	**523**	409	263	**422**	979	967	**387**

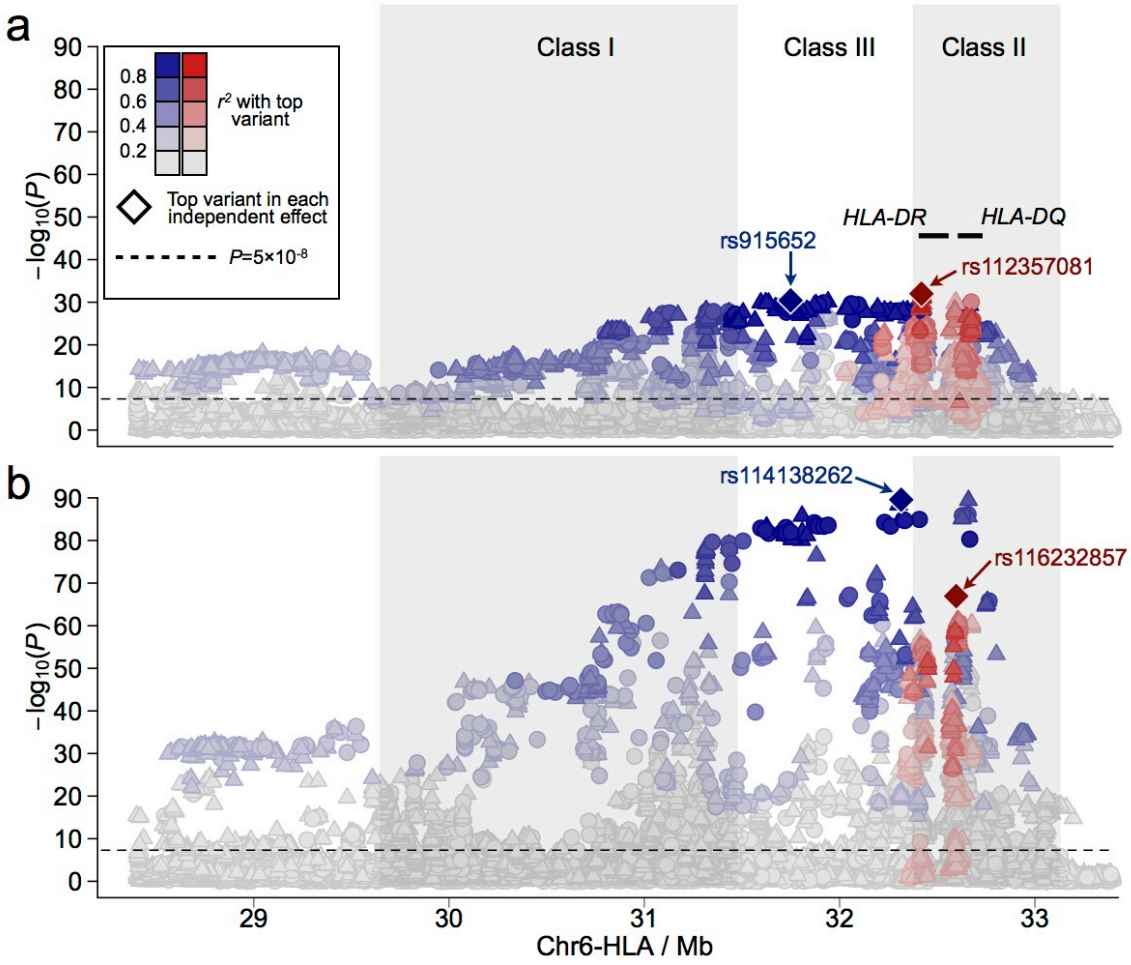
Supplementary Figure 1: Summary of the study design and imputation strategy. (**a**) Genotyping platforms, number of variants analyzed, and overlap of variants between the four datasets after quality control are shown. (**b**) A subset of variants that were analyzed in Dataset (DS) 1 were evaluated in an independent sample set using the ImmunoChip (DS2) and a Custom Array (DS3) followed by meta-analyses. Further evaluation of all the variants available on the ImmunoChip (DS4) was performed using all available samples typed on the array, including 313 cases also in DS1; however, this analysis was not combined with any other dataset. (**c**) Imputation was conducted for regions achieving genome-wide significance following the strategy presented in the panel. (**d**) The number of variants available for analysis (both pre- and post-quality control) from the seven genome-wide significant regions before and after imputation.

Supplementary Figure 2: Summary of genome-wide association results.



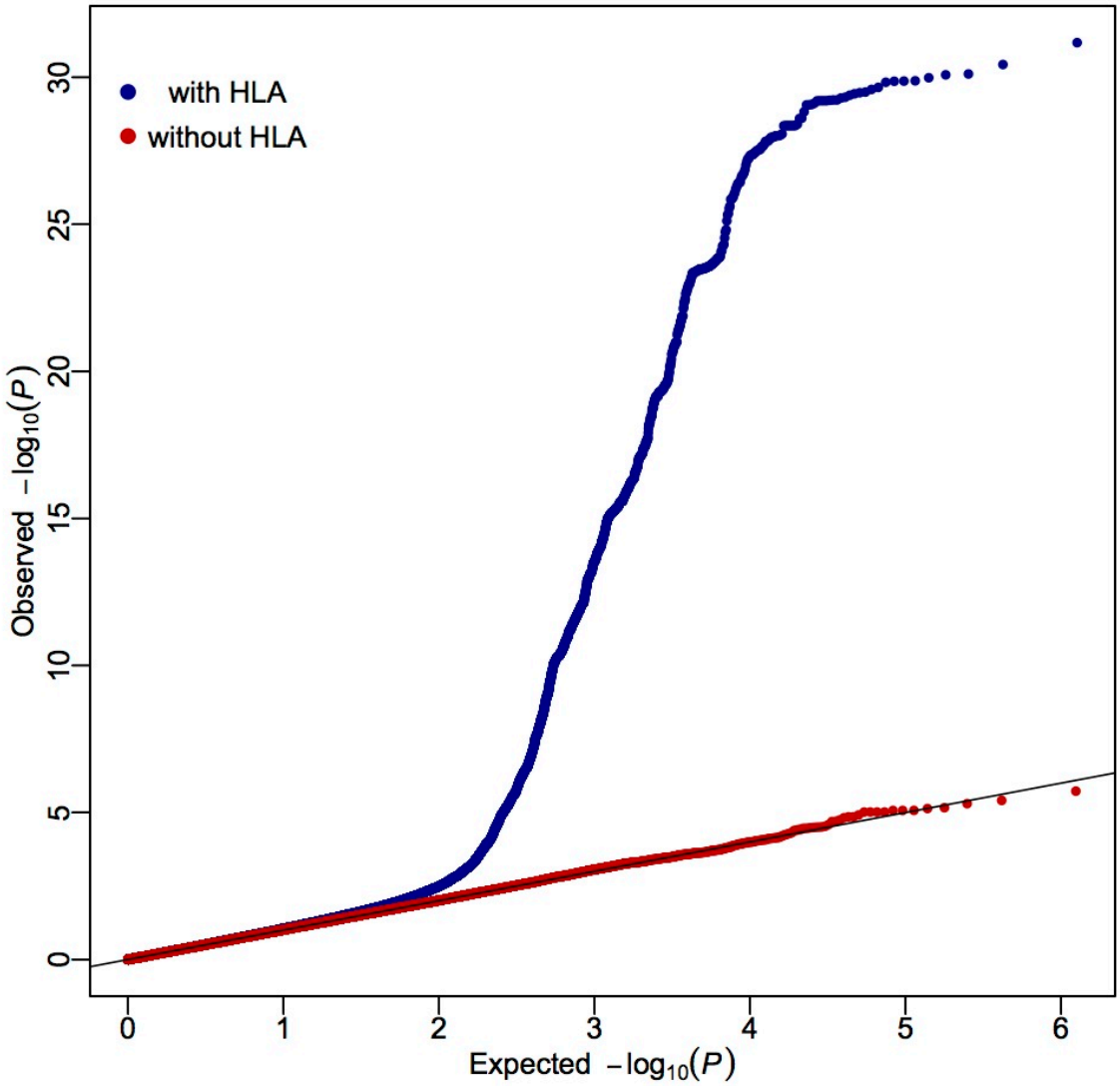
Supplementary Figure 2: Summary of the genome-wide association study results. The $-\log_{10}(P)$ for each variant genotyped in Dataset 1 that passed quality control are plotted by chromosome and base pair. Suggestive (P=5x10^{-5}; blue dashed line) and genome-wide significant (P=5x10^{-8}; red dashed line) thresholds are indicated by dashed lines. Seventeen regions surpassed the suggestive threshold, while only the HLA region surpassed genome-wide significance.

Supplementary Figure 3: Expanded view of the HLA region.



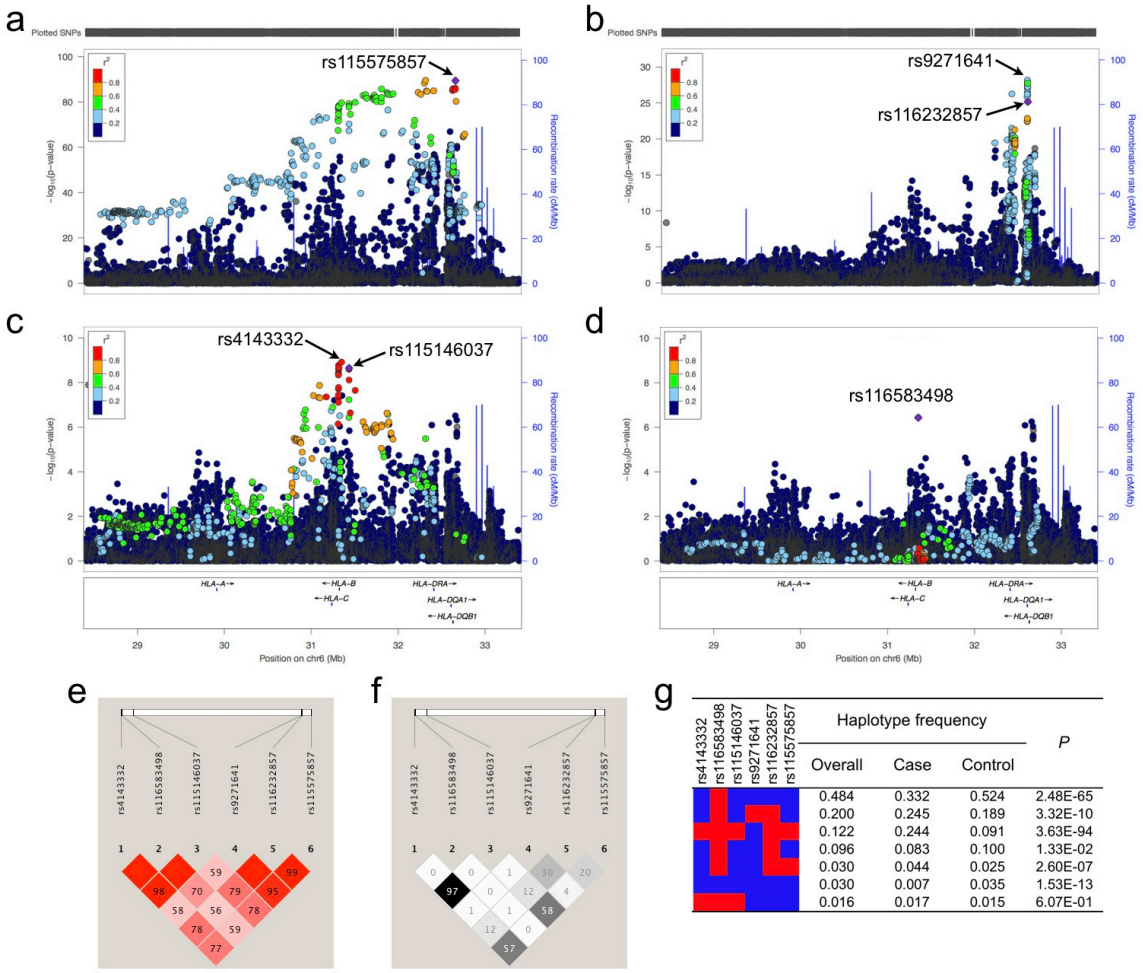
Supplementary Figure 3: Expanded view of the HLA region (Mb 28.4-33.4). The -$\log_{10}(P)$ of each observed (circle) or imputed (triangle) variant is plotted according to base pair position for Dataset 1 (**a**) and Dataset 2 (**b**). The blue and red scales illustrate pairwise linkage disequilibrium (r^2) with the top variants (diamonds), respectively.

Supplementary Figure 4: Quantile-quantile plot of Dataset 1.



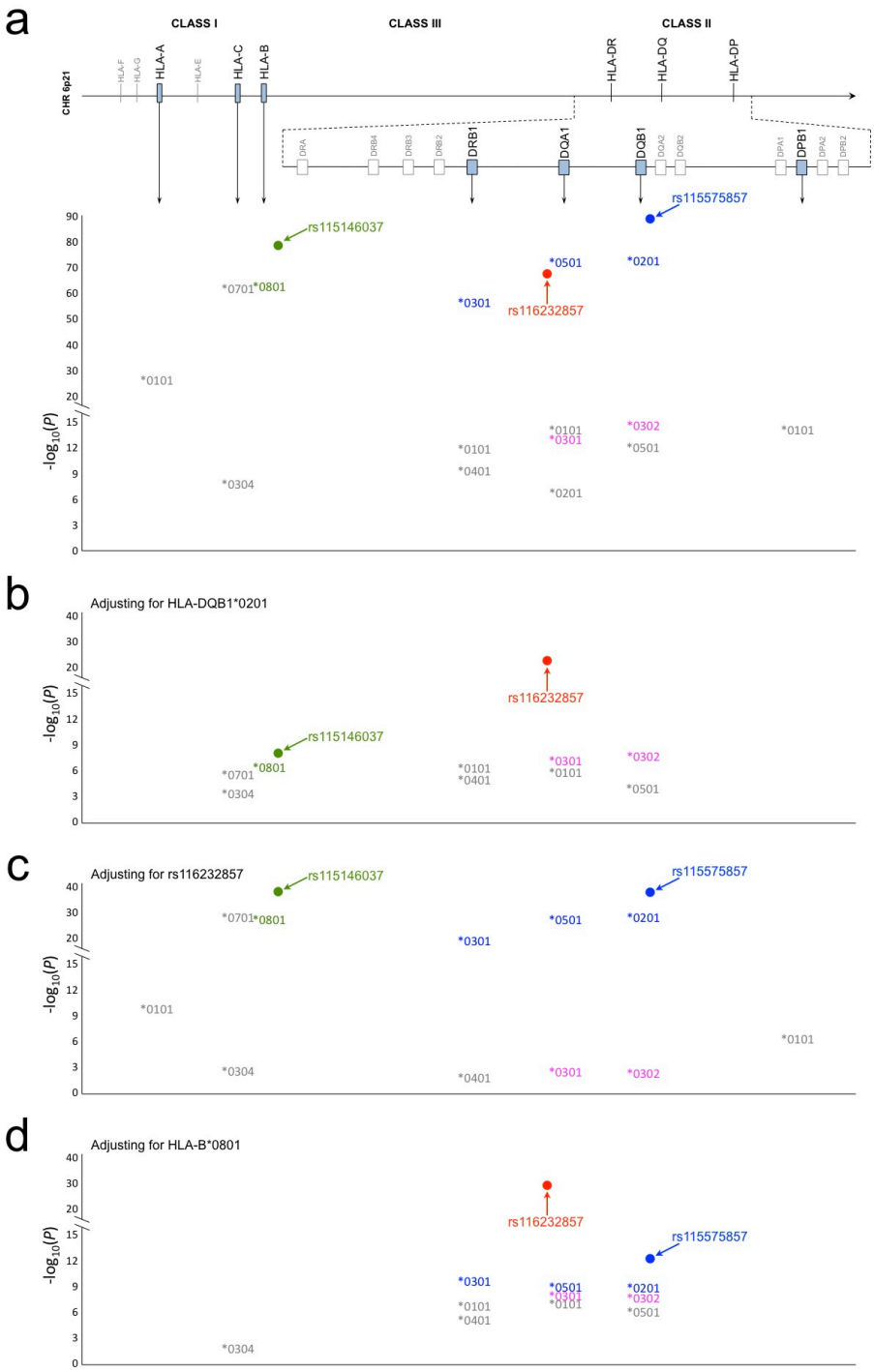
Supplementary Figure 4: Quantile-quantile plot of Dataset 1. Significant deviation from expected distribution of *P*-values (black line) was observed when including the HLA region (blue dots). After removing variants from the HLA region, we observed no significant deviation from expected distribution (red dots).

Supplementary Figure 5: Results of logistic regression analysis after adjusting for top effects, linkage disequilibrium, and haplotypes present in the HLA region.



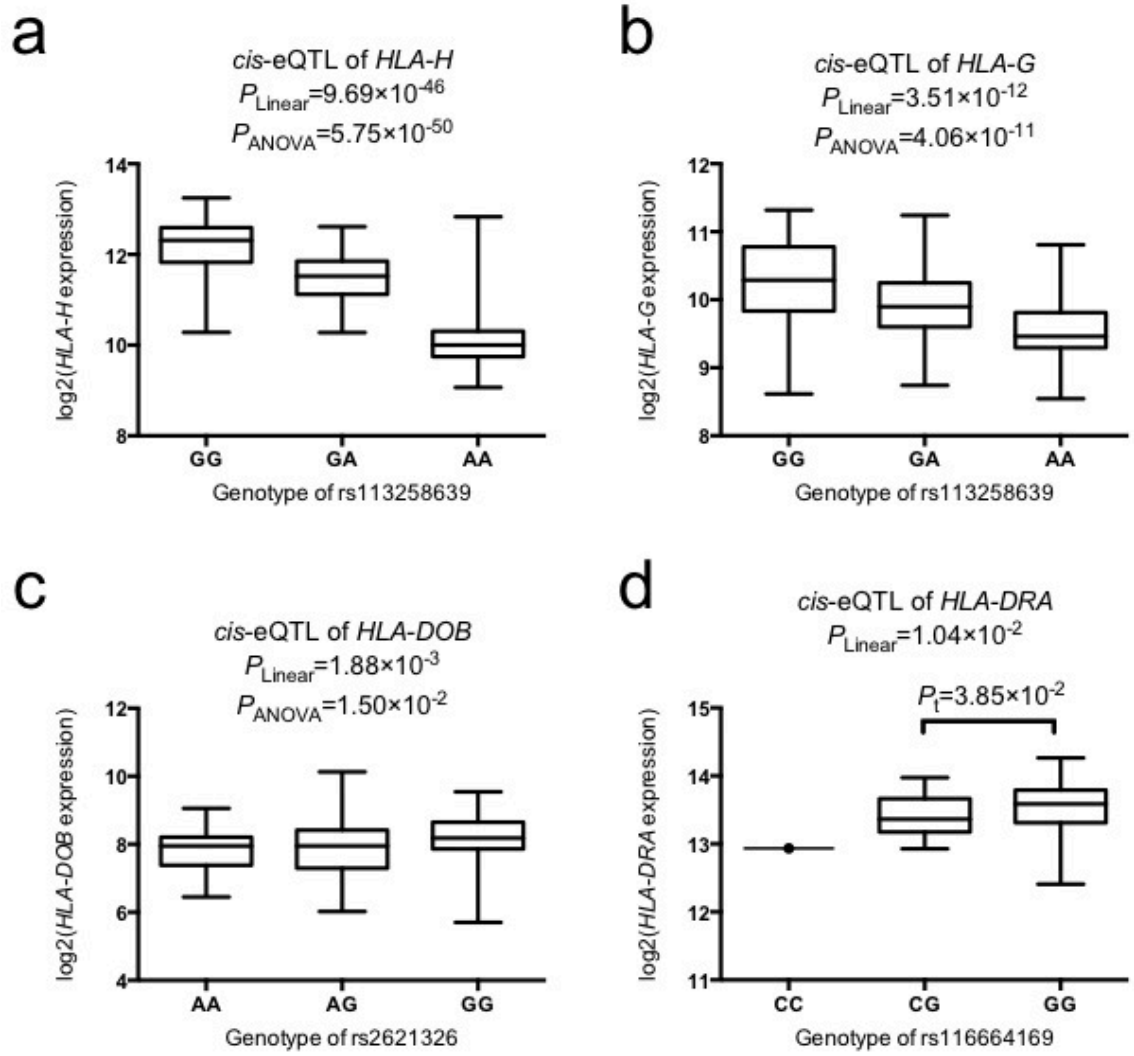
Supplementary Figure 5: Results of logistic regression analysis after adjusting for top effects, linkage disequilibrium, and haplotypes present in the HLA region. Logistic regression analysis was performed using Dataset 2 after imputation. Variants were chosen for adjustment in each logistic regression model based on their statistical significance within the meta-analysis. The most significant Sjögren's syndrome-associated SNP in the meta-analysis (and Dataset 2) was rs115575857 (**a**). After adjusting for rs115575857, association spanning approximately from Mb 28.4 to Mb 32.7 was explained (panel **a** vs. **b**); however, a narrow region of association was still present near *HLA-DQA1* tagged by rs9271641 and rs116232857 (**b**). Adding rs116232857 to the model (we chose rs116232857 instead of rs9271641 because rs116232857 is more significant in the meta-analysis; the same reason for choosing rs115146037 instead of rs4143332 for the next-step adjusting analysis) showed that the association surrounding *HLA-DQA1* was accounted for with residual association observed at rs115146037 in HLA Class I region (**c**). Adding rs115146037 to the model was not able to explain the majority of the residual association (**d**). Moreover, after adjustment, neither rs116232857 nor rs115146037 could account for association observed with rs115575857; and rs115146037 could not account for association observed with rs116232857 (data not shown). The D' (**e**) and r^2 (**f**) between these variants are illustrated, and the haplotypes present with a haplotype frequency >1% are depicted (**g**).

Supplementary Figure 6: Association of HLA classical alleles with Sjögren's syndrome.



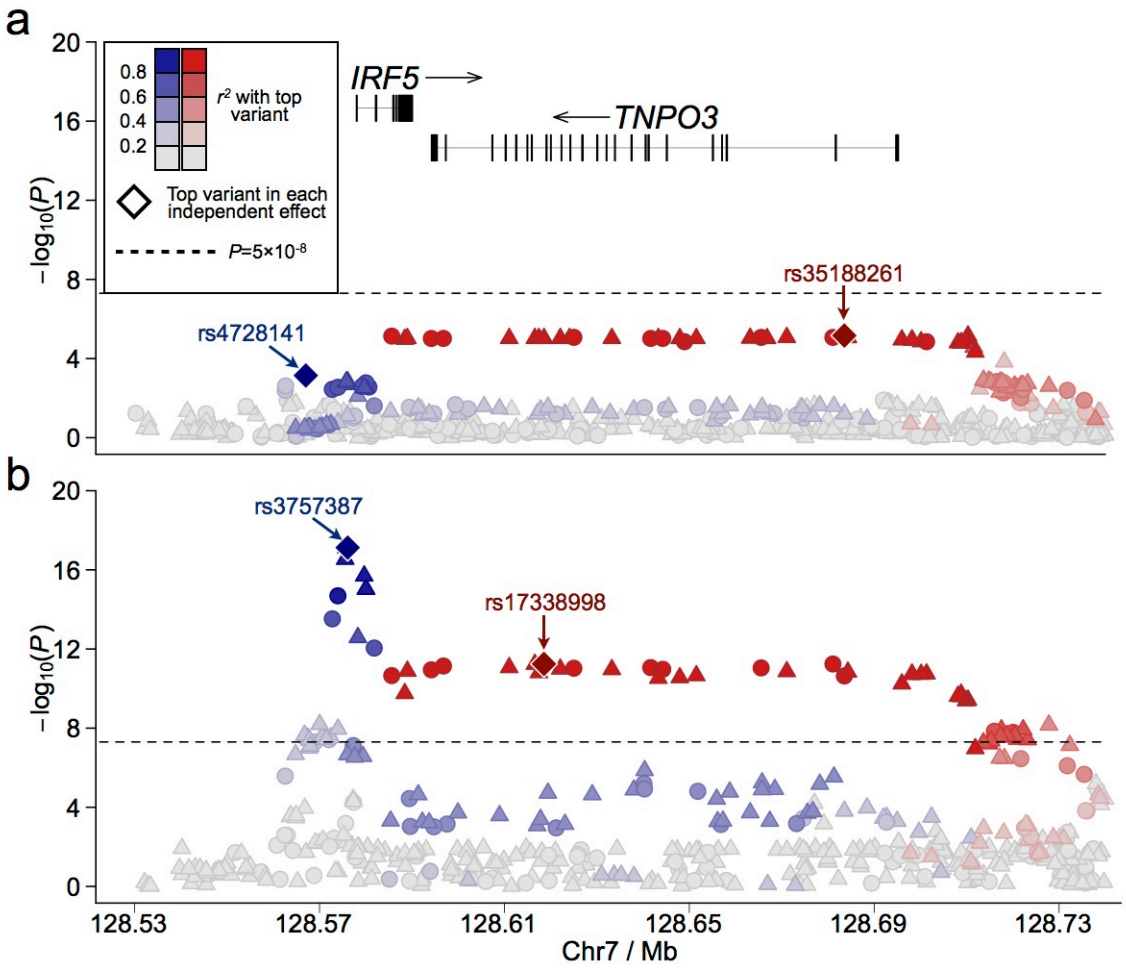
Supplementary Figure 6: Association of HLA classical alleles with Sjögren's syndrome. Logistic regression analysis and adjustment for classical alleles within seven HLA genes was performed using Dataset 2 after HIBAG imputation. (**a**) The locations of HLA-A, B, C, DRB1, DQA1, DQB1, and DPB1 are highlighted. The classical alleles (P<5×10^{-7}; indicated by *) are depicted under each corresponding gene according to the -log$_{10}$(P) value of the association. The 3 SNPs (indicated by single dots) tagging the three independent effects via single marker adjusting analysis (Supplementary Figure 4) are plotted. Through logistic regression analyses adjusted for Sjögren's syndrome-associated classical alleles / SNPs, we identified three main independent effects in the HLA region (tagging classical alleles / SNPS are marked as blue, red, and green) and a possible fourth effect (pink) (**b**, **c**, **d**; only show classical alleles / SNPs with P<0.01 after adjusted logistic regression analysis). Classical alleles / SNPs with the same color are highly correlated with each other (r^2>=0.97).

Supplementary Figure 7: Sjögren's syndrome-associated variants in the HLA region within 100bp of RFX5 binding site were correlated with the expression of HLA genes.



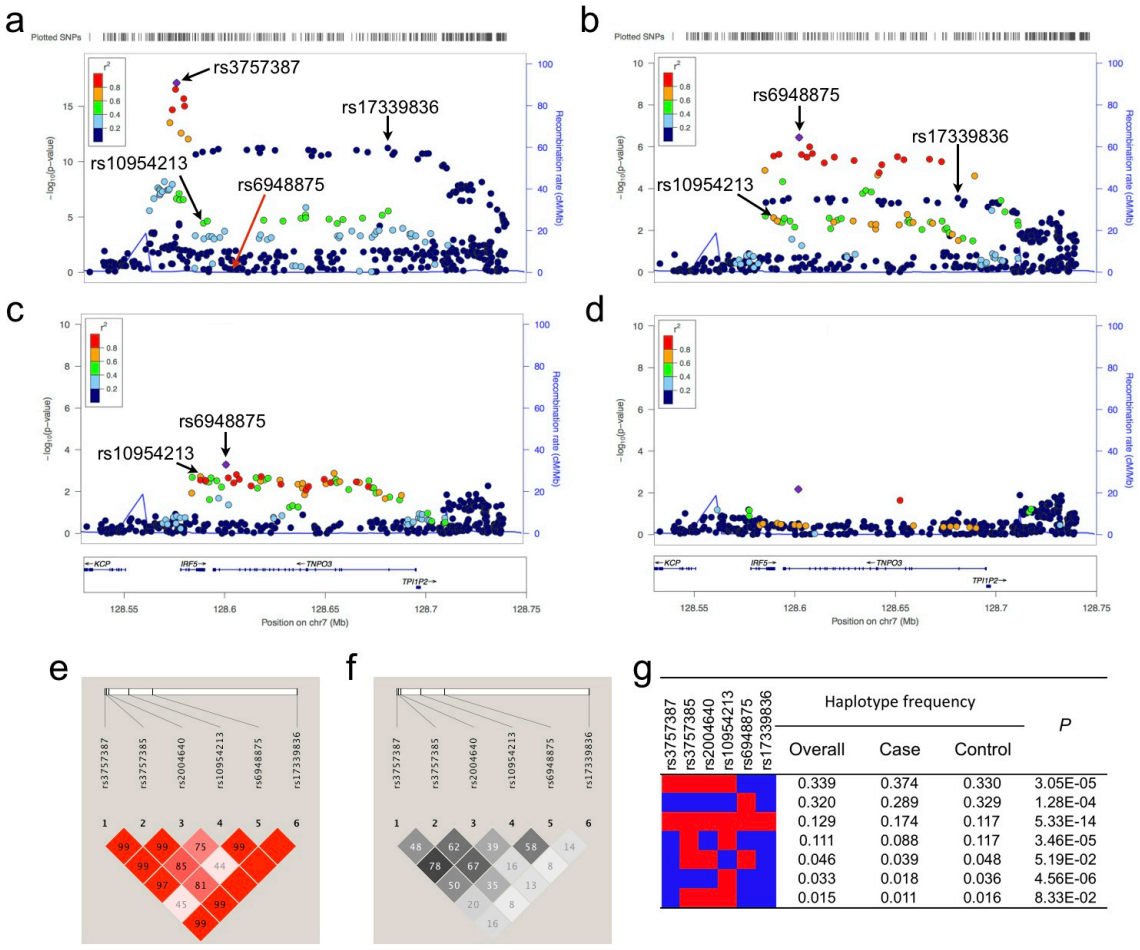
Supplementary Figure 7: Sjögren's syndrome-associated variants in the HLA region within 100bp of RFX5 binding site were correlated with the expression of HLA genes. The top *cis*-eQTL in *HLA-H* (**a**), *HLA-G* (**b**), *HLA-DOB* (**c**), and *HLA-DRA* (**d**) are shown in the figure. The risk genotype of each eQTL variant is plotted on the right side of each figure. Data are shown using box-and-whisker plots, in which distribution of the expression values are highlighted (median, upper quantile, lower quantile, maximum, and minimum). Each eQTL was evaluated using both a linear model and Analysis of Variance (ANOVA) model. *HLA-DRA* (Panel d) only had one subject with the CC genotype; thus, we performed a t-test rather than an ANOVA to compare the CG to the GG genotype.

Supplementary Figure 8: Expanded view of the *IRF5-TNPO3* region.



Supplementary Figure 8: Expanded view of the *IRF5-TNPO3* region. The -log$_{10}$(*P*) of each observed (circle) or imputed (triangle) variant is plotted according to base pair position for Dataset 1 (**a**) and Dataset 2 (**b**). The blue and red scales illustrate the pairwise linkage disequilibrium with the top variants (diamonds), respectively.

Supplementary Figure 9: Results of logistic regression analysis after adjusting for top effects, linkage disequilibrium, and haplotypes present in the *IRF5-TNPO3* region.

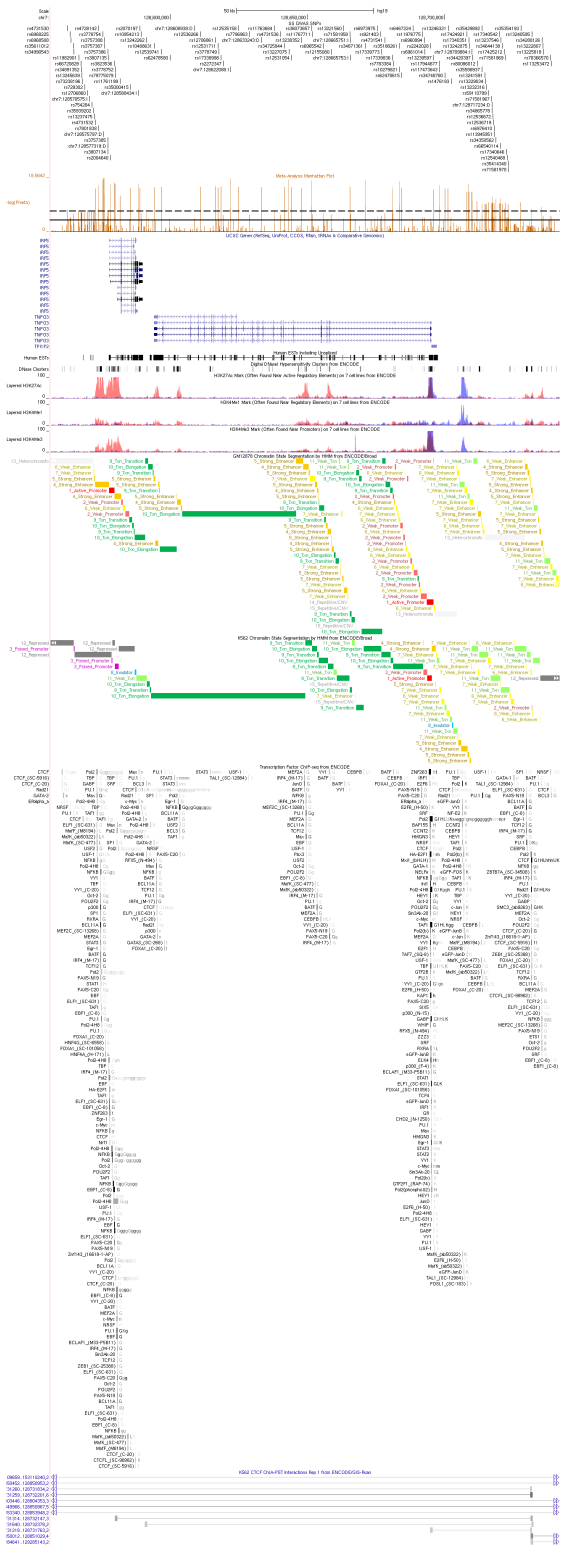


Supplementary Figure 9: Results of logistic regression analysis after adjusting for top effects, linkage disequilibrium, and haplotypes present in the *IRF5-TNPO3* region. Logistic regression analysis was performed using Dataset 2 after imputation. Variants were chosen for adjustment in each logistic regression model based on their statistical significance within the meta-analysis. The most significant Sjögren's syndrome-associated SNP in the meta-analysis (and Dataset 2) was rs3757387 (**a**). Adjusting for rs3757387 showed residual association with rs17339836 ($P_{residual}$=2.86×10^{-4}); however, variants previously not associated with Sjögren's syndrome, tagged by rs6948875, became the most statistically significant (**b**). Adjusting for rs3757387 and rs17339836 still resulted in residual association tagged by rs6948875 (**c**), while adjusting for rs17339836 alone did not lead to the residual effect of rs6948875 (data not shown). Adding rs10954213 (statistically significant in single marker analysis) to the model explained all associations in the region (**d**). The pairwise D' (**e**) and r^2 (**f**) for the top variants are illustrated, and the haplotypes with haplotype frequency >1% are displayed (**g**).

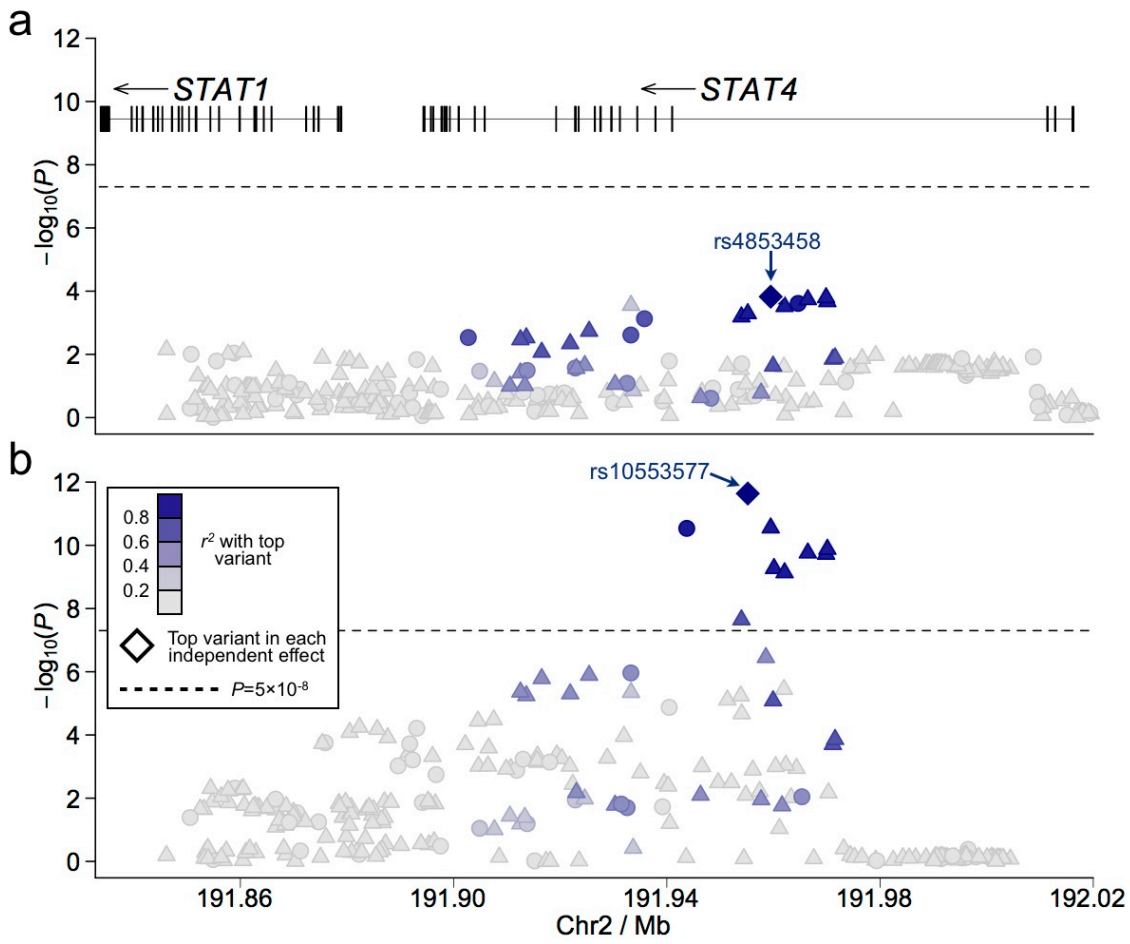
Supplementary Figure 10: Genomic features from data tracks in the UCSC Genome Browser in the region around *IRF5-TNPO3*.

NOTE: Figure presented on next page.

Supplementary Figure 10: This figure presents genomic features found within various data tracks obtained from the UCSC Genome Browser for the region of Chr7 from 128.56-128.74 Mb (hg19), in which the genes *IRF5* and *TNPO3* are found. Variants presented surpassed suggestive association ($P<5\times10^{-5}$) threshold. Meta-analysis association results are presented as a Manhattan plot, where -log(P_{meta}) is presented in the y-axis and suggestive and genome-wide significance ($P<5\times10^{-8}$) thresholds are represented as a solid line and a dashed line, respectively. Genomic boundaries were selected to encompass not only significant associations, but also the diminishing association signals on either side of the strongest associations. No eQTL data is available for *IRF5* due to the transcript probe failing quality control.

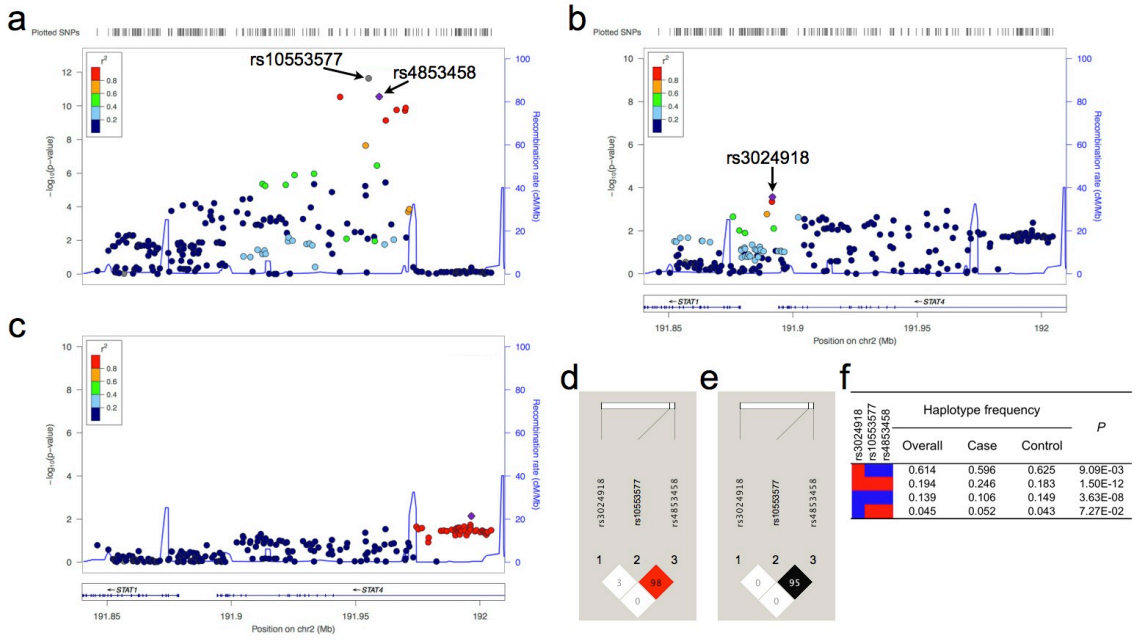

Scale
chr7
128,600,000
128,650,000
128,700,000
hg19
Meta-Analysis Manhattan Plot
-log(Pvalue)
UCSC Genes (RefSeq, UniProt, CCDS, Rfam, tRNAs & Comparative Genomics)
Human ESTs
DNase Clusters
Layered H3K27Ac
Layered H3K4Me1
Layered H3K4Me3
12_Heterochromatin
GM12878 Chromatin State Segmentation by HMM from ENCODE/Broad
K562 Chromatin State Segmentation by HMM from ENCODE/Broad
Transcription Factor ChIP-seq from ENCODE
K562 CTCF CNA-PET Interactions Rep 1 from ENCODE/GIS-Ruan

Supplementary Figure 11: Expanded view of the *STAT1-STAT4* region.



Supplementary Figure 11: Expanded view of the *STAT1-STAT4* region. The -$\log_{10}$(*P*) of each observed (circle) or imputed (triangle) variant is plotted according to base pair position for Dataset 1 (**a**) and Dataset 2 (**b**). The blue scale illustrates the pairwise linkage disequilibrium with the top variant (diamonds).

Supplementary Figure 12: Results of logistic regression analysis after adjusting for top effects, linkage disequilibrium, and haplotypes present in the *STAT1-STAT4* region.

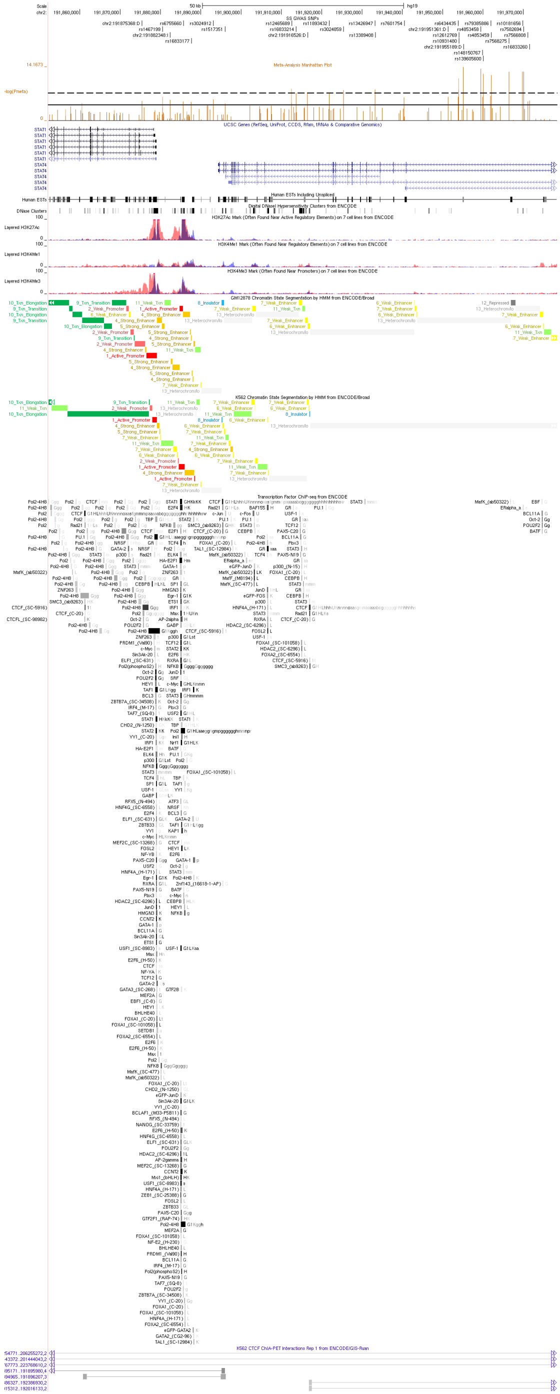


Supplementary Figure 12: Results of logistic regression analysis after adjusting for top effects, linkage disequilibrium, and haplotypes present in the *STAT1-STAT4* region. Logistic regression analysis was performed using Dataset 2 after imputation. Variants were chosen for adjustment in each logistic regression model based on their statistical significance within the meta-analysis. The most significant Sjögren's syndrome-associated variant in the meta-analysis (and Dataset 2) was rs10553577 (**a**). This insertion-deletion polymorphism is not available in the LocusZoom database; thus we used the second top SNP rs4853458 (r^2=0.95 with rs10553577) to show the correlation structure in the region. Adjusting for rs10553577 accounted for all associations in *STAT4*, leaving a residual effect tagged by rs3024918 ($P_{residual}$=2.70×10^{-4}) in the 5' region of *STAT1* (**b**). However, this residual effect did not surpass our required threshold (P<1×10^{-4}) after adjustment for an independent effect. Adding rs3024918 to the adjusted model accounted for all association in *STAT1-STAT4* (**c**). The pairwise D' (**d**) and r^2 (**e**) for the top variants are illustrated, and the haplotypes with haplotype frequency >1% are displayed (**f**).

Supplementary Figure 13: Genomic features from data tracks in the UCSC Genome Browser in the region around *STAT1-STAT4*.

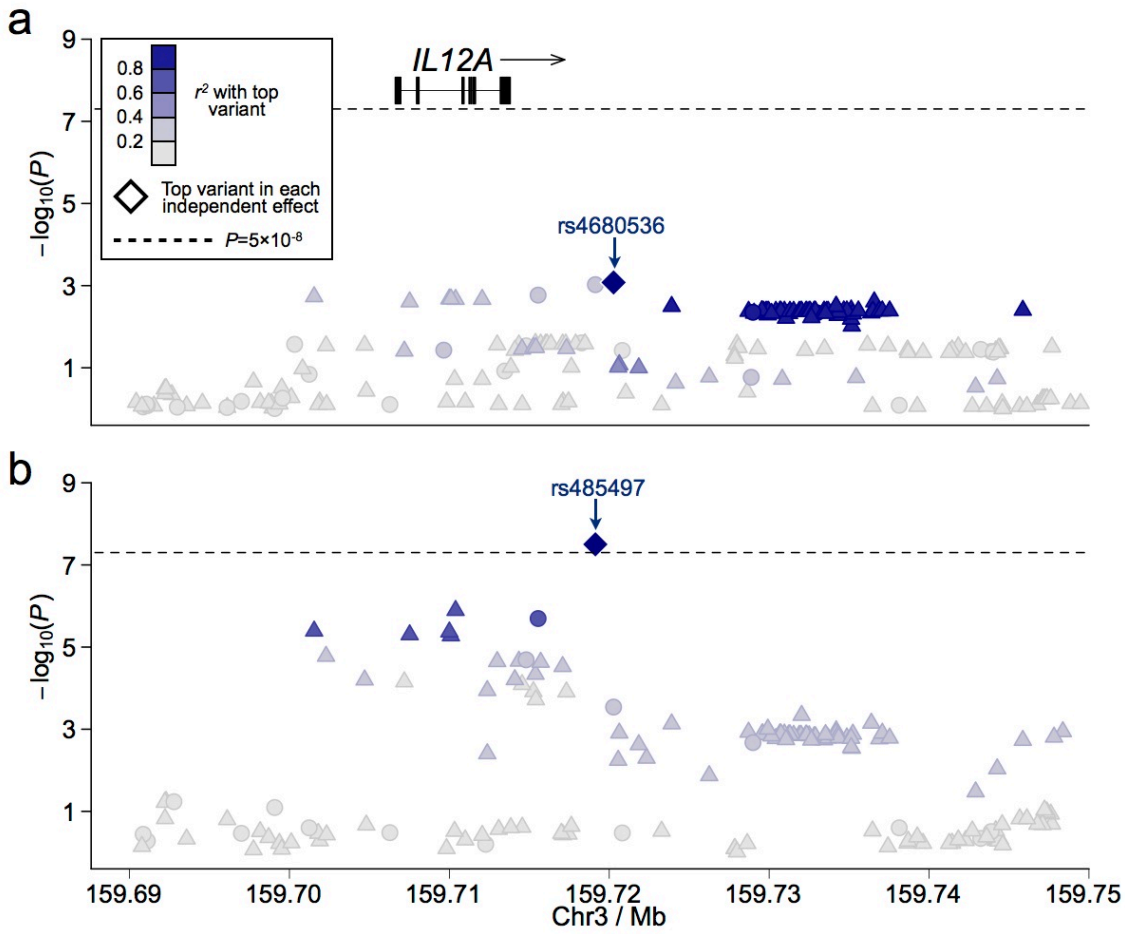
NOTE: Figure presented on next page.

Supplementary Figure 13: This figure presents genomic features found within various data tracks obtained from the UCSC Genome Browser for the region of Chr2 from 191.86-191.98 Mb (hg19), which encompasses the genes *STAT1* and *STAT4*. Variants presented surpassed suggestive association ($P<5\times10^{-5}$) threshold. Meta-analysis association results are presented as a Manhattan plot, where -log(P_{meta}) is presented in the y-axis and suggestive and genome-wide significance ($P<5\times10^{-8}$) thresholds are represented as a solid line and a dashed line, respectively. Genomic boundaries were selected to encompass not only significant associations, but also the diminishing association signals on either side of the strongest associations. No eQTL was observed at Sjögren's syndrome-associated variants in this region.



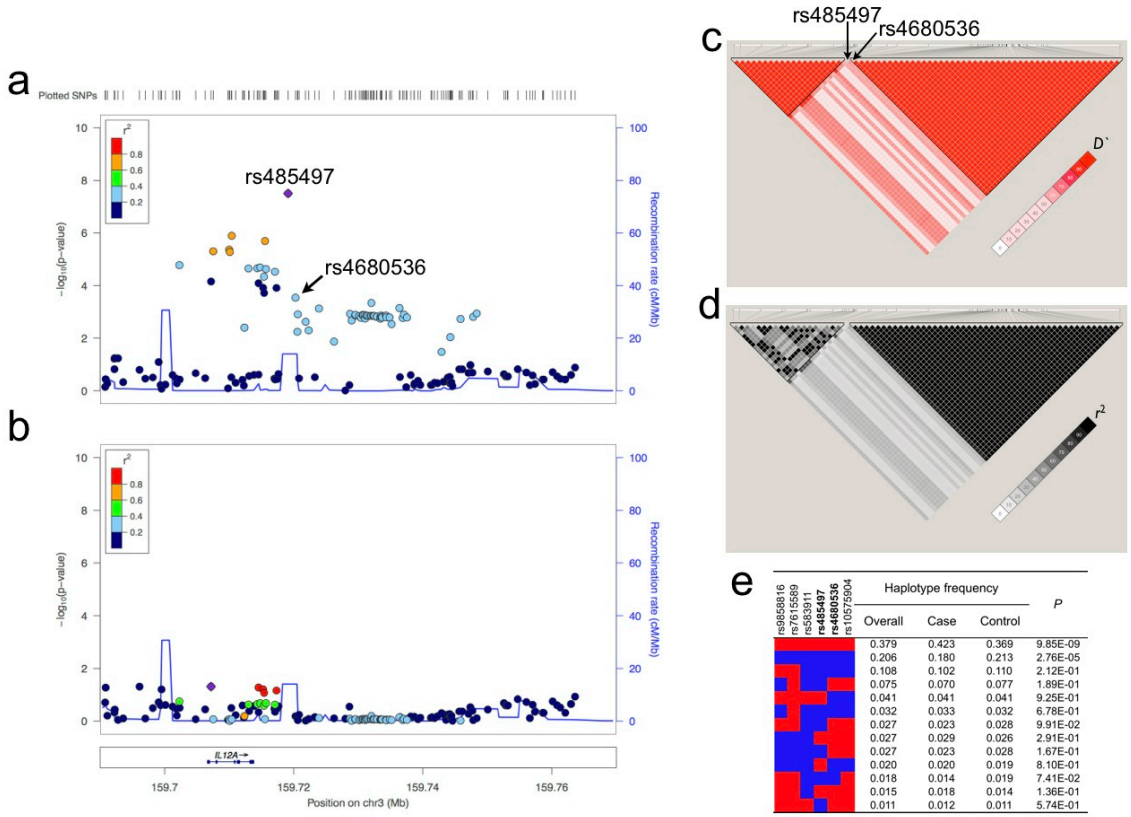
Scale
chr2:
50 kb
hg19
SS GWAS SNPs
Meta-Analysis Manhattan Plot
-log(Pmeta)
UCSC Genes (RefSeq, UniProt, CCDS, Rfam, tRNAs & Comparative Genomics)
STAT1
STAT4
Human ESTs
Human ESTs Including Unspliced
DNase Clusters
Digital DNaseI Hypersensitivity Clusters from ENCODE
H3K27Ac Mark (Often Found Near Active Regulatory Elements) on 7 cell lines from ENCODE
Layered H3K27Ac
H3K4Me1 Mark (Often Found Near Regulatory Elements) on 7 cell lines from ENCODE
Layered H3K4Me1
H3K4Me3 Mark (Often Found Near Promoters) on 7 cell lines from ENCODE
Layered H3K4Me3
GM12878 Chromatin State Segmentation by HMM from ENCODE/Broad
K562 Chromatin State Segmentation by HMM from ENCODE/Broad
Transcription Factor ChIP-seq from ENCODE
K562 CTCF ChIA-PET Interactions Rep 1 from ENCODE/GIS-Ruan

Supplementary Figure 14: Expanded view of the *IL12A* region.



Supplementary Figure 14: Expanded view of the *IL12A* region. The -$\log_{10}(P)$ of each observed (circle) or imputed (triangle) variant is plotted according to base pair position for Dataset 1 (**a**) and Dataset 2 (**b**). The blue scale illustrates the pairwise linkage disequilibrium with the top variant (diamonds).

Supplementary Figure 15: Results of logistic regression analysis after adjusting for top effects, linkage disequilibrium, and haplotypes present in the *IL12A* region.

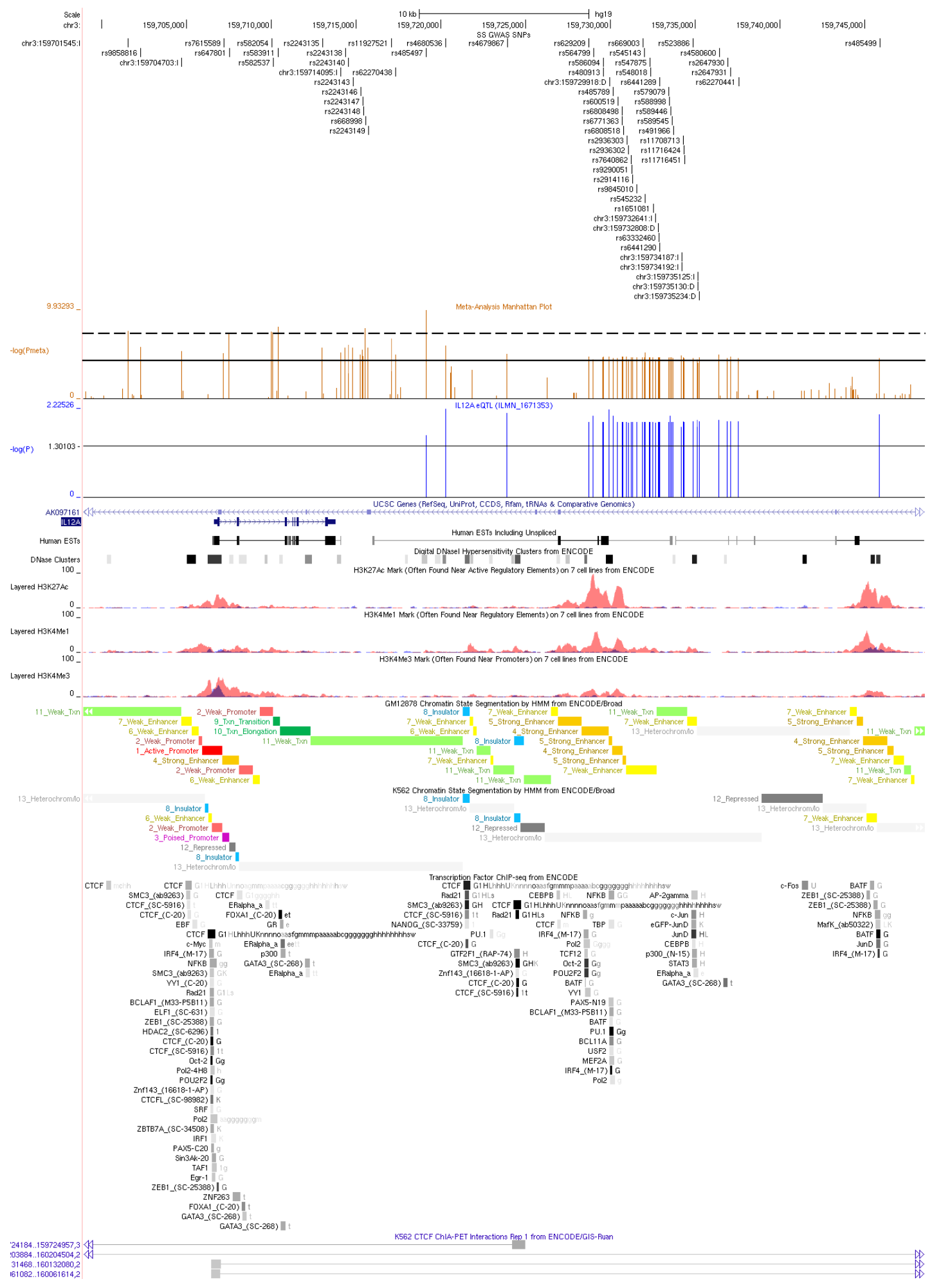


Supplementary Figure 15: Results of logistic regression analysis after adjusting for top effects, linkage disequilibrium, and haplotypes present in the *IL12A* region. Logistic regression analysis was performed using Dataset 2 after imputation. Variants were chosen for adjustment in each logistic regression model based on their statistical significance within the meta-analysis. The most significant Sjögren's syndrome-associated SNP in the meta-analysis (and Dataset 2) was rs485497 (**a**). Adjusting for rs485497 accounted for all associations in this region (**b**). The pairwise D' (**c**) and r^2 (**d**) for the top variants are illustrated. rs485497 was at the intersection between the two LD blocks in this region, and correlated with both of the blocks. Notably, all the suggestive variants on the right block are eQTL with respect to the expression of *IL12A*, with the top eQTL at rs4680536. The haplotypes with haplotype frequency >1% are displayed (**e**).

Supplementary Figure 16: Genomic features from data tracks in the UCSC Genome Browser in the region around *IL12A*.

NOTE: Figure presented on next page.

Supplementary Figure 16: This figure presents genomic features found within various data tracks obtained from the UCSC Genome Browser for the region of Chr3 159.69-159.75 Mb (hg19), which encompasses the gene *IL12A*. Variants presented surpassed suggestive association ($P<5\times10^{-5}$) threshold. Meta-analysis association results are presented as a Manhattan plot, where -log(P_{meta}) is presented in the y-axis and suggestive and genome-wide significance ($P<5\times10^{-8}$) thresholds are represented as a solid line and a dashed line, respectively. Genomic boundaries were selected to encompass not only significant associations, but also the diminishing association signals on either side of the strongest associations. Statistically significant results for eQTL (FDR adjusted *P* value < 0.05) are displayed as -log(*P*), with the solid line representing a threshold of $P<0.05$.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chr3:
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hg19
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159,710,000
159,715,000
159,720,000
159,725,000
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159,735,000
159,740,000
159,745,000
SS GWAS SNPs
chr3:159701545:I
rs7615589
rs582054
rs2243135
rs1927521
rs4680536
rs4679867
rs629209
rs669003
rs523886
rs485499
rs9858816
rs647801
rs583911
rs2243138
rs485497
rs564799
rs545143
rs4580600
chr3:159704703:I
rs582537
rs2243140
rs586094
rs547875
rs2647930
chr3:159714095:I
rs62270438
rs480913
rs548018
rs2647931
rs2243143
chr3:159729918:D
rs6441289
rs62270441
rs2243146
rs485789
rs579079
rs2243147
rs600519
rs588998
rs2243148
rs6808498
rs589446
rs668998
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rs2243149
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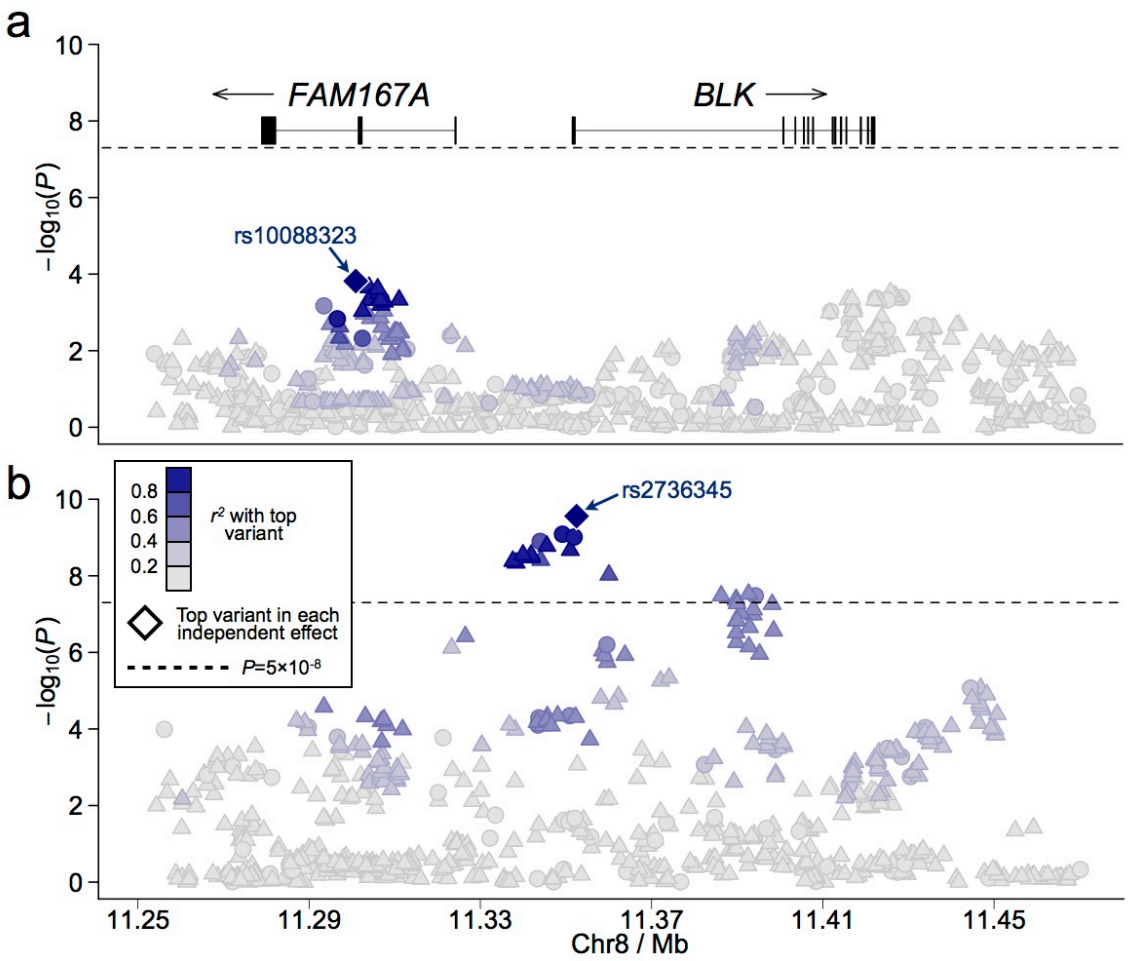
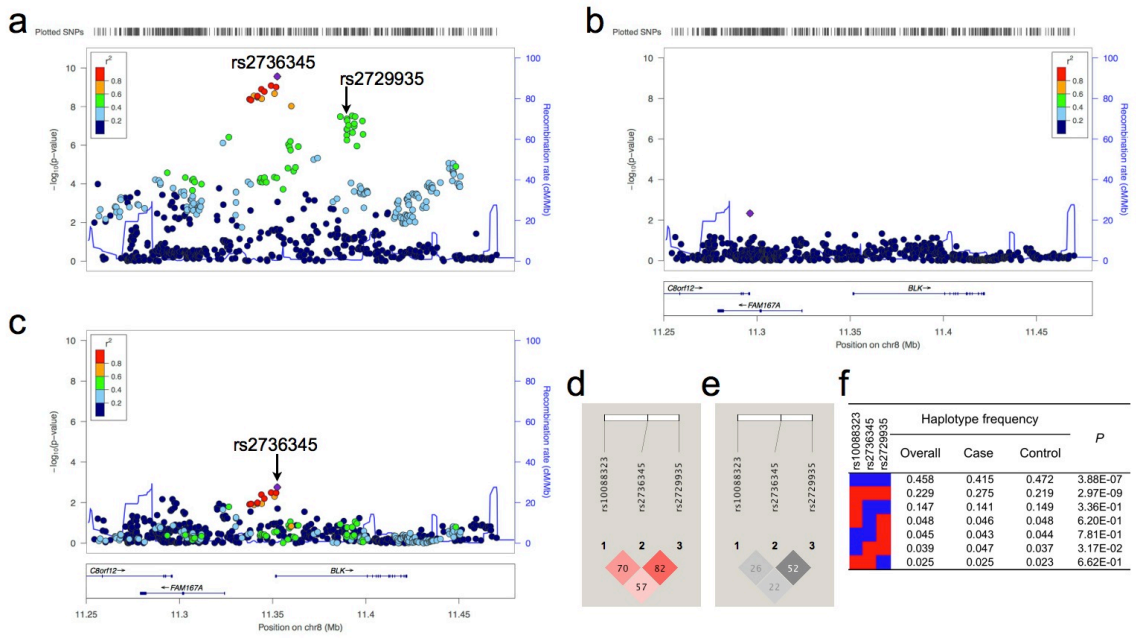
rs9845010
rs545232
rs1651081
chr3:159732641:I
chr3:159732808:D
rs63332460
rs6441290
chr3:159734187:I
chr3:159734192:I
chr3:159735125:I
chr3:159735130:D
chr3:159735234:D
9.93293
Meta-Analysis Manhattan Plot
-log(Pmeta)
0
2.22526
IL12A eQTL (ILMN_1671353)
-log(P)
1.30103
0
UCSC Genes (RefSeq, UniProt, CCDS, Rfam, tRNAs & Comparative Genomics)
AK097161
IL12A
Human ESTs
Human ESTs Including Unspliced
DNase Clusters
Digital DNaseI Hypersensitivity Clusters from ENCODE
100
H3K27Ac Mark (Often Found Near Active Regulatory Elements) on 7 cell lines from ENCODE
Layered H3K27Ac
0
100
H3K4Me1 Mark (Often Found Near Regulatory Elements) on 7 cell lines from ENCODE
Layered H3K4Me1
0
100
H3K4Me3 Mark (Often Found Near Promoters) on 7 cell lines from ENCODE
Layered H3K4Me3
0
GM12878 Chromatin State Segmentation by HMM from ENCODE/Broad
11_Weak_Txn
2_Weak_Promoter
7_Weak_Enhancer
9_Txn_Transition
6_Weak_Enhancer
10_Txn_Elongation
1_Active_Promoter
4_Strong_Enhancer
8_Insulator
5_Strong_Enhancer
13_Heterochrom/lo
K562 Chromatin State Segmentation by HMM from ENCODE/Broad
12_Repressed
3_Poised_Promoter
Transcription Factor ChIP-seq from ENCODE
CTCF
SMC3_(ab9263)
CTCF_(SC-5916)
CTCF_(C-20)
EBF
c-Myc
IRF4_(M-17)
NFKB
YY1_(C-20)
Rad21
BCLAF1_(M33-P5B11)
ELF1_(SC-631)
ZEB1_(SC-25388)
HDAC2_(SC-6296)
Oct-2
Pol2-4H8
POU2F2
Znf143_(16618-1-AP)
CTCFL_(SC-98982)
SRF
Pol2
ZBTB7A_(SC-34508)
IRF1
PAX5-C20
Sin3Ak-20
TAF1
Egr-1
ZEB1_(SC-25388)
ZNF263
FOXA1_(C-20)
GATA3_(SC-268)
ERalpha_a
p300
Rad21
CTCF_(SC-5916)
NANOG_(SC-33759)
PU.1
CTCF_(C-20)
GTF2F1_(RAP-74)
SMC3_(ab9263)
Znf143_(16618-1-AP)
CTCF_(C-20)
CTCF_(SC-5916)
CEBPB
NFKB
AP-2gamma
c-Jun
eGFP-JunD
JunD
CEBPB
p300_(N-15)
STAT3
ERalpha_a
GATA3_(SC-268)
IRF4_(M-17)
Pol2
TCF12
Oct-2
POU2F2
BATF
YY1
PAX5-N19
BCLAF1_(M33-P5B11)
BATF
PU.1
BCL11A
USF2
MEF2A
IRF4_(M-17)
Pol2
c-Fos
BATF
ZEB1_(SC-25388)
ZEB1_(SC-25388)
NFKB
MafK_(ab50322)
BATF
JunD
IRF4_(M-17)
K562 CTCF ChIA-PET Interactions Rep 1 from ENCODE/GIS-Ruan
'24184..159724957,3
'03884..160204504,2
31468..160132080,2
161082..160061614,2

Supplementary Figure 17: Expanded view of the *FAM167A-BLK* region.



Supplementary Figure 17: Expanded view of the *FAM167A-BLK* region. The -$\log_{10}(P)$ of each observed (circle) or imputed (triangle) variant is plotted according to base pair position for Dataset 1 (**a**) and Dataset 2 (**b**). The blue scale illustrates the pairwise linkage disequilibrium with the top variant (diamonds).

Supplementary Figure 18: Results of logistic regression analysis after adjusting for top effects, linkage disequilibrium, and haplotypes present in the *FAM167A-BLK* region.

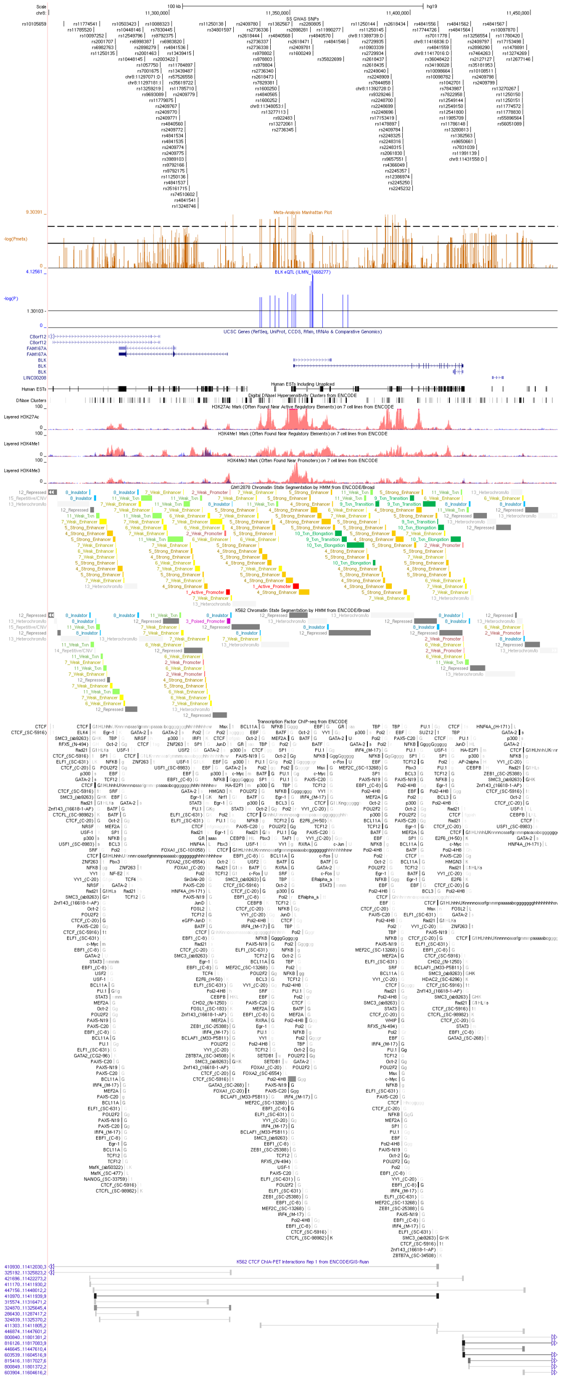


Supplementary Figure 18: Results of logistic regression analysis after adjusting for top effects, linkage disequilibrium, and haplotypes present in the *FAM167A-BLK* region. Logistic regression analysis was performed using Dataset 2 after imputation. Variants were chosen for adjustment in each logistic regression model based on their statistical significance within the meta-analysis. The most significant Sjögren's syndrome-associated SNP in the meta-analysis (and Dataset 2) was rs2736345 (**a**); however, this SNP was not significant in Dataset 1. Rs2729935 was the second top SNP in meta-analysis, and was significant in both Dataset 1 and Dataset 2. Logistic regression adjusting for rs2736345 was able to account for all association in the region (**b**), while adjusting for rs2729935 indicated residual association present at rs2736345 ($P_{residual}$=1.75×10^{-3}) (**c**). The pairwise D' (**d**) and r^2 (**e**) for the top variants are illustrated, and the haplotypes with haplotype frequency >1% are displayed (**f**).

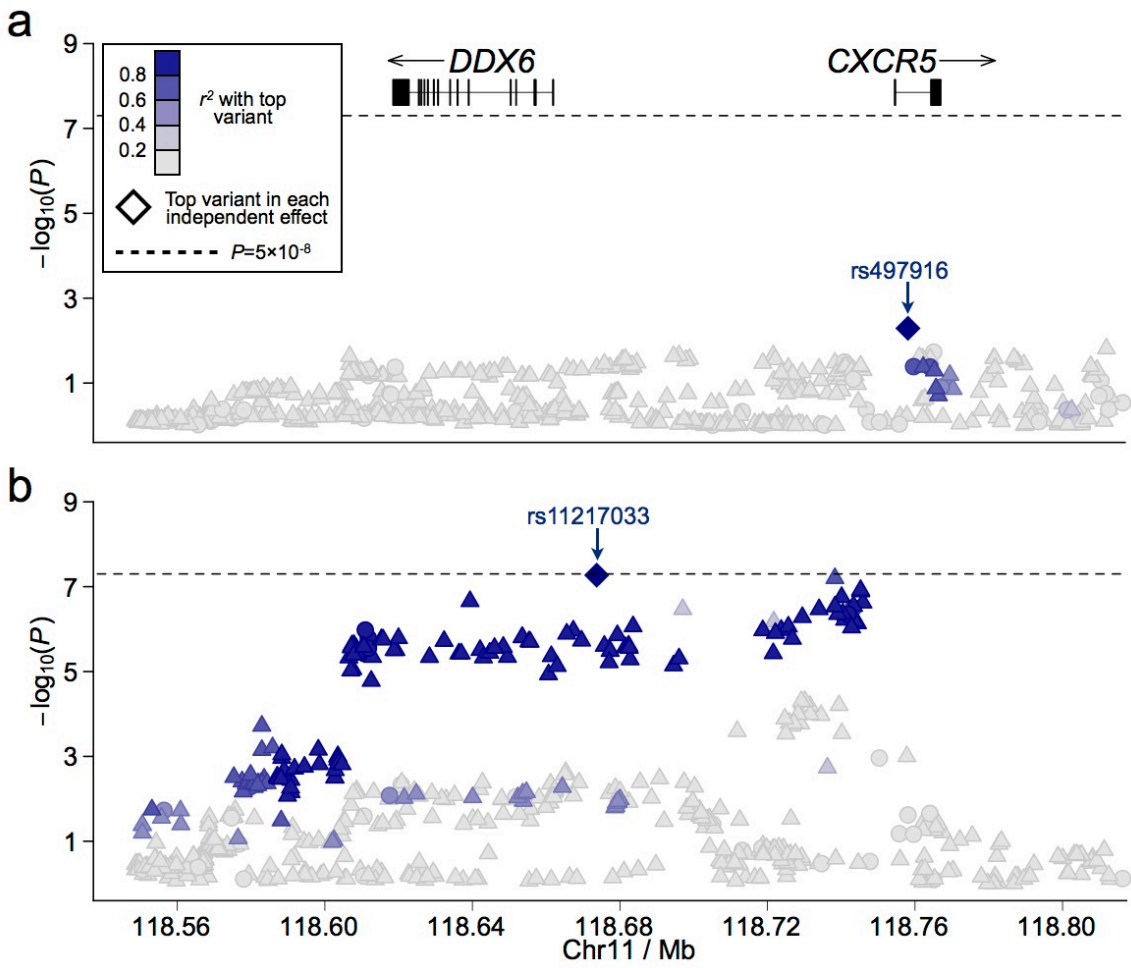
Supplementary Figure 19: Genomic features from data tracks in the UCSC Genome Browser in the region around *FAM167A-BLK*.

NOTE: Figure presented on next page.

Supplementary Figure 19: This figure presents genomic features found within various data tracks obtained from the UCSC Genome Browser for the region of Chr8 11.25-11.46 Mb (hg19), which encompasses the genes *BLK* and *FAM167A*. Variants presented surpassed suggestive association ($P<5\times10^{-5}$) threshold. Meta-analysis association results are presented as a Manhattan plot, where -log(P_{meta}) is presented in the y-axis and suggestive and genome-wide significance ($P<5\times10^{-8}$) thresholds are represented as a solid line and a dashed line, respectively. Genomic boundaries were selected to encompass not only significant associations, but also the diminishing association signals on either side of the strongest associations. Statistically significant results for eQTL (FDR adjusted *P* value < 0.05) are displayed as -log(*P*), with the solid line representing a threshold of $P<0.05$.

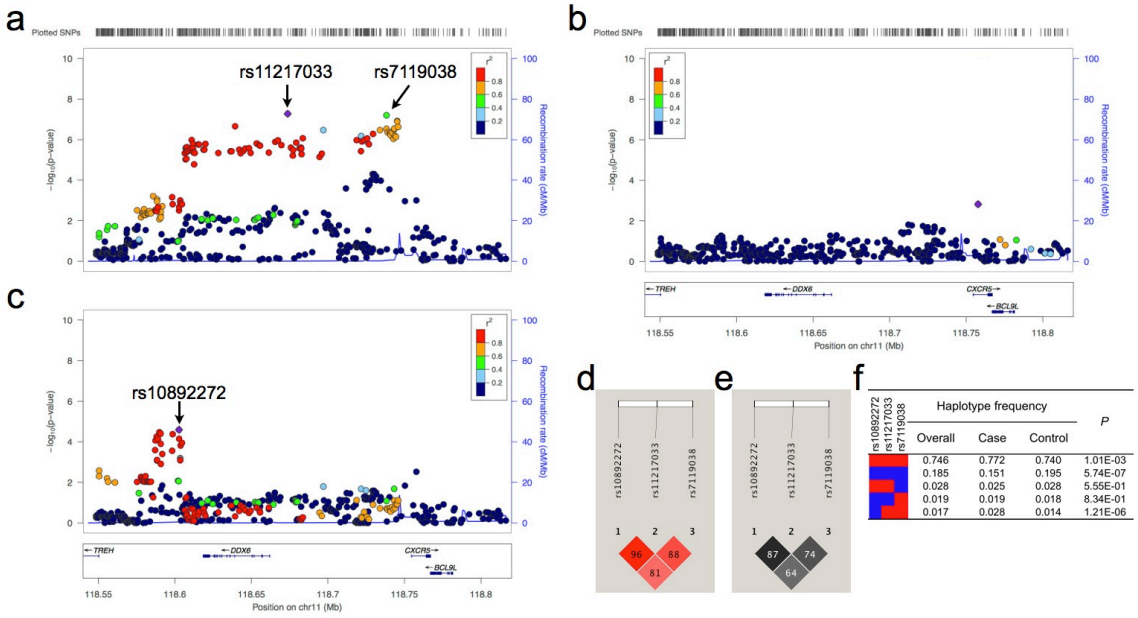

Scale
100 kb
hg19
chr8:
11,300,000
11,350,000
11,400,000
11,450,000
SS GWAS SNPs
Meta-Analysis Manhattan Plot
-log(Pmeta)
9.30391
BLK eQTL (ILMN_1668277)
-log(P)
4.12561
1.30103
UCSC Genes (RefSeq, UniProt, CCDS, Rfam, tRNAs & Comparative Genomics)
C8orf12
FAM167A
BLK
LINC00208
Human ESTs Including Unspliced
Human ESTs
Digital DNaseI Hypersensitivity Clusters from ENCODE
DNase Clusters
H3K27Ac Mark (Often Found Near Active Regulatory Elements) on 7 cell lines from ENCODE
Layered H3K27Ac
H3K4Me1 Mark (Often Found Near Regulatory Elements) on 7 cell lines from ENCODE
Layered H3K4Me1
H3K4Me3 Mark (Often Found Near Promoters) on 7 cell lines from ENCODE
Layered H3K4Me3
GM12878 Chromatin State Segmentation by HMM from ENCODE/Broad
K562 Chromatin State Segmentation by HMM from ENCODE/Broad
Transcription Factor ChIP-seq from ENCODE
K562 CTCF ChIA-PET Interactions Rep 1 from ENCODE/GIS-Ruan

Supplementary Figure 20: Expanded view of the *DDX6-CXCR5* region.



Supplementary Figure 20: Expanded view of the *DDX6-CXCR5* region. The -$\log_{10}(P)$ of each observed (circle) or imputed (triangle) variant is plotted according to base pair position for Dataset 1 (**a**) and Dataset 2 (**b**). The blue scale illustrates the pairwise linkage disequilibrium with the top variant (diamonds).

Supplementary Figure 21: Results of logistic regression analysis after adjusting for top effects, linkage disequilibrium, and haplotypes present in the *CXCR5* region.

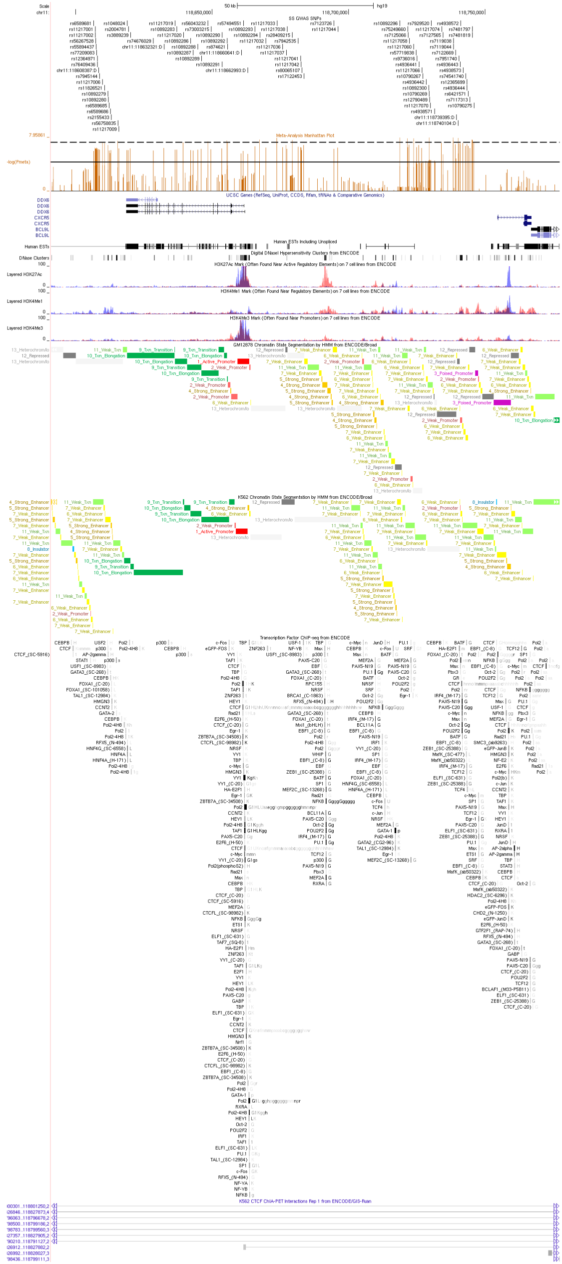


Supplementary Figure 21: Results of logistic regression analysis after adjusting for top effects, linkage disequilibrium, and haplotypes present in the *DDX6-CXCR5* region. Logistic regression analysis was performed using Dataset 2 after imputation. Variants were chosen for adjustment in each logistic regression model based on their statistical significance within the meta-analysis. The most significant Sjögren's syndrome-associated SNP in the Dataset 2 was rs11217033 at 5' to *DDX6*, but the top SNP in meta-analysis was rs7119038 at the promoter region of *CXCR5* (**a**). Logistic regression adjusting for rs7119038 was able to account for all association in the region (**b**), while adjusting for rs11217033 indicated residual association tagged by rs10892272 ($P_{residual}$=2.56×10^{-5}) (**c**). The pairwise D' (**d**) and r^2 (**e**) for the top variants are illustrated, and the haplotypes with haplotype frequency >1% are displayed (**f**).

Supplementary Figure 22: Genomic features from data tracks in the UCSC Genome Browser in the region around *CXCR5*.

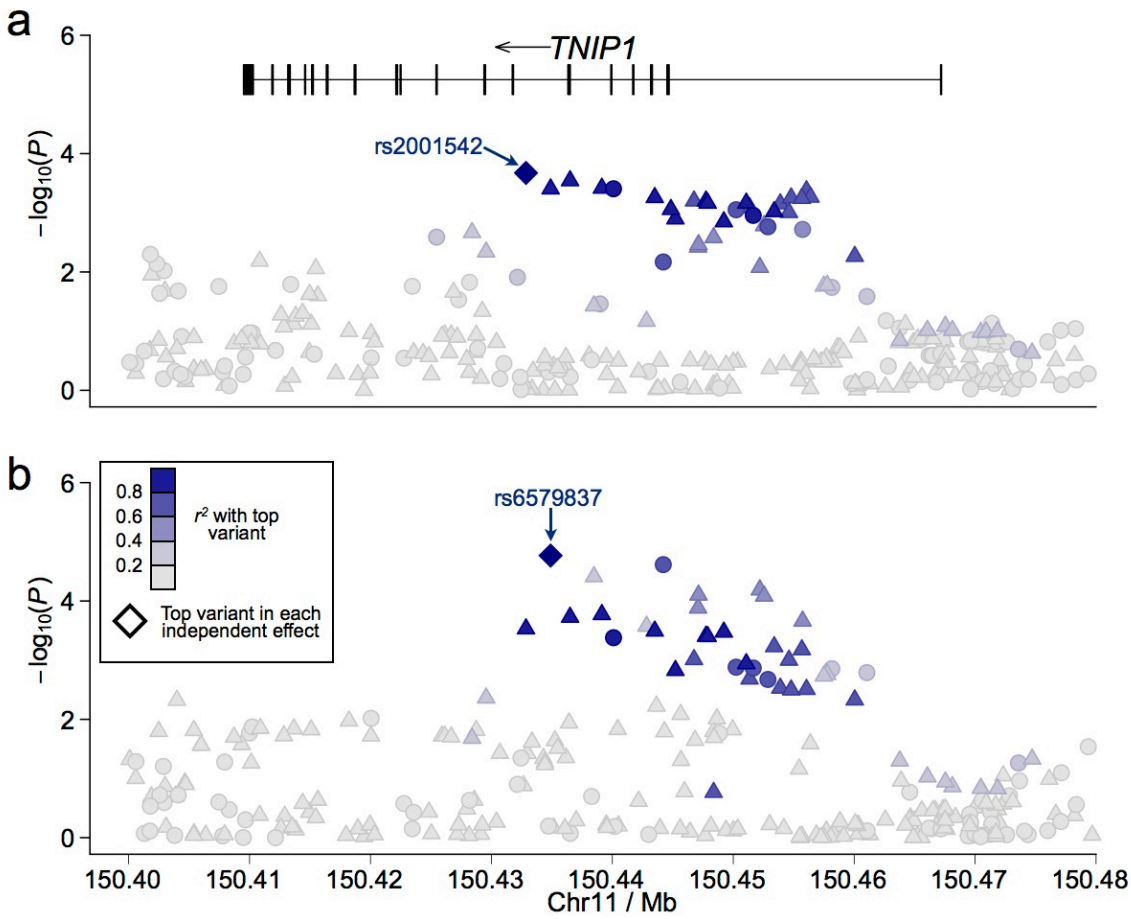
NOTE: Figure presented on next page.

Supplementary Figure 22: This figure presents genomic features found within various data tracks obtained from the UCSC Genome Browser for the region of Chr11 from 118.58-118.78 Mb (hg19), in which the genes *CXCR5* and *DDX6* are found. Variants presented surpassed suggestive association ($P<5\times10^{-5}$) threshold. Meta-analysis association results are presented as a Manhattan plot, where -log(P_{meta}) is presented in the y-axis and suggestive and genome-wide significance ($P<5\times10^{-8}$) thresholds are represented as a solid line and a dashed line, respectively. Genomic boundaries were selected to encompass not only significant associations, but also the diminishing association signals on either side of the strongest associations. No eQTL data is available for *DDX6* due to the transcript probe failing quality controls, while no significant eQTL results were identified for *CXCR5*.



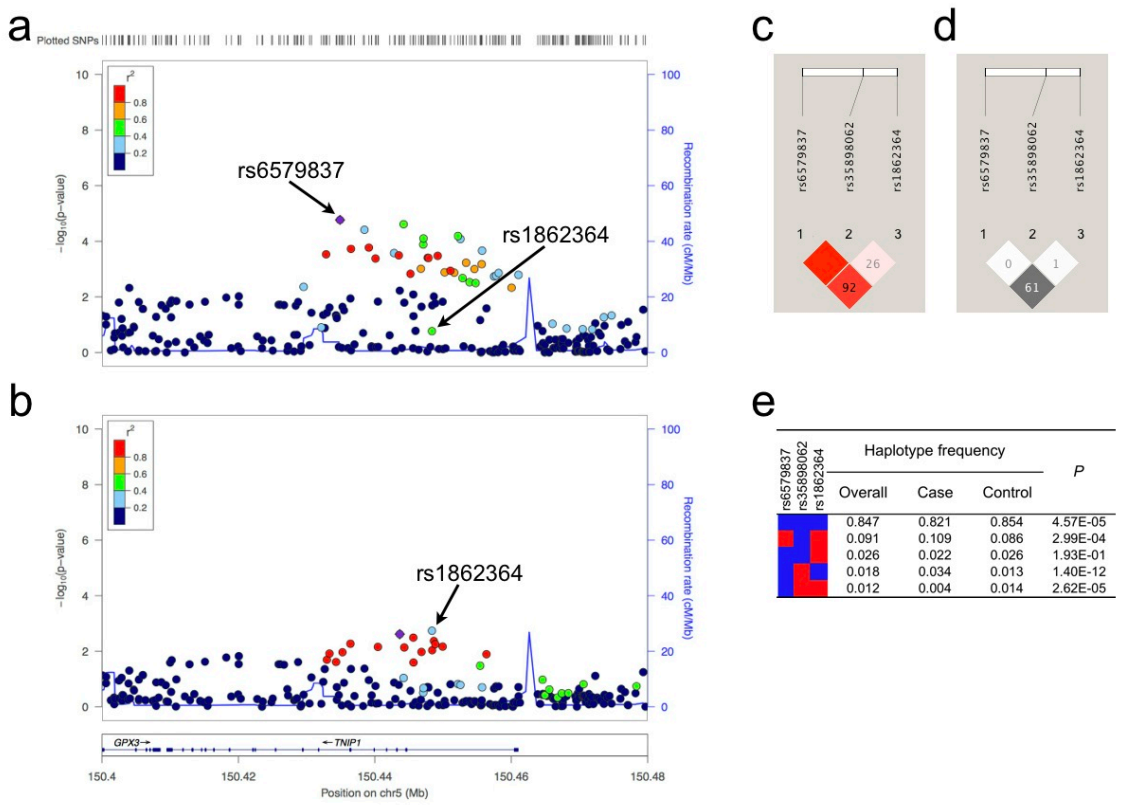
Scale
chr11:
50 kb
hg19
118,650,000
118,700,000
118,750,000
SS GWAS SNPs
7.95861
-log(Pmeta)
Meta-Analysis Manhattan Plot
UCSC Genes (RefSeq, UniProt, CCDS, Rfam, tRNAs & Comparative Genomics)
DDX6
CXCR5
BCL9L
Human ESTs
Human ESTs Including Unspliced
DNase Clusters
Digital DNaseI Hypersensitivity Clusters from ENCODE
Layered H3K27Ac
H3K27Ac Mark (Often Found Near Active Regulatory Elements) on 7 cell lines from ENCODE
Layered H3K4Me1
H3K4Me1 Mark (Often Found Near Regulatory Elements) on 7 cell lines from ENCODE
Layered H3K4Me3
H3K4Me3 Mark (Often Found Near Promoters) on 7 cell lines from ENCODE
GM12878 Chromatin State Segmentation by HMM from ENCODE/Broad
K562 Chromatin State Segmentation by HMM from ENCODE/Broad
Transcription Factor ChIP-seq from ENCODE
K562 CTCF ChIA-PET Interactions Rep 1 from ENCODE/GIS-Ruan

Supplementary Figure 23: Expanded view of the *TNIP1* region.



Supplementary Figure 23: Expanded view of the *TNIP1* region. The -$\log_{10}(P)$ of each observed (circle) or imputed (triangle) variant is plotted according to base pair position for Dataset 1 (**a**) and Dataset 2 (**b**). The blue scale illustrates the pairwise linkage disequilibrium with the top variant (diamonds).

Supplementary Figure 24: Results of logistic regression analysis after adjusting for top effects, linkage disequilibrium, and haplotypes present in the *TNIP1* region.

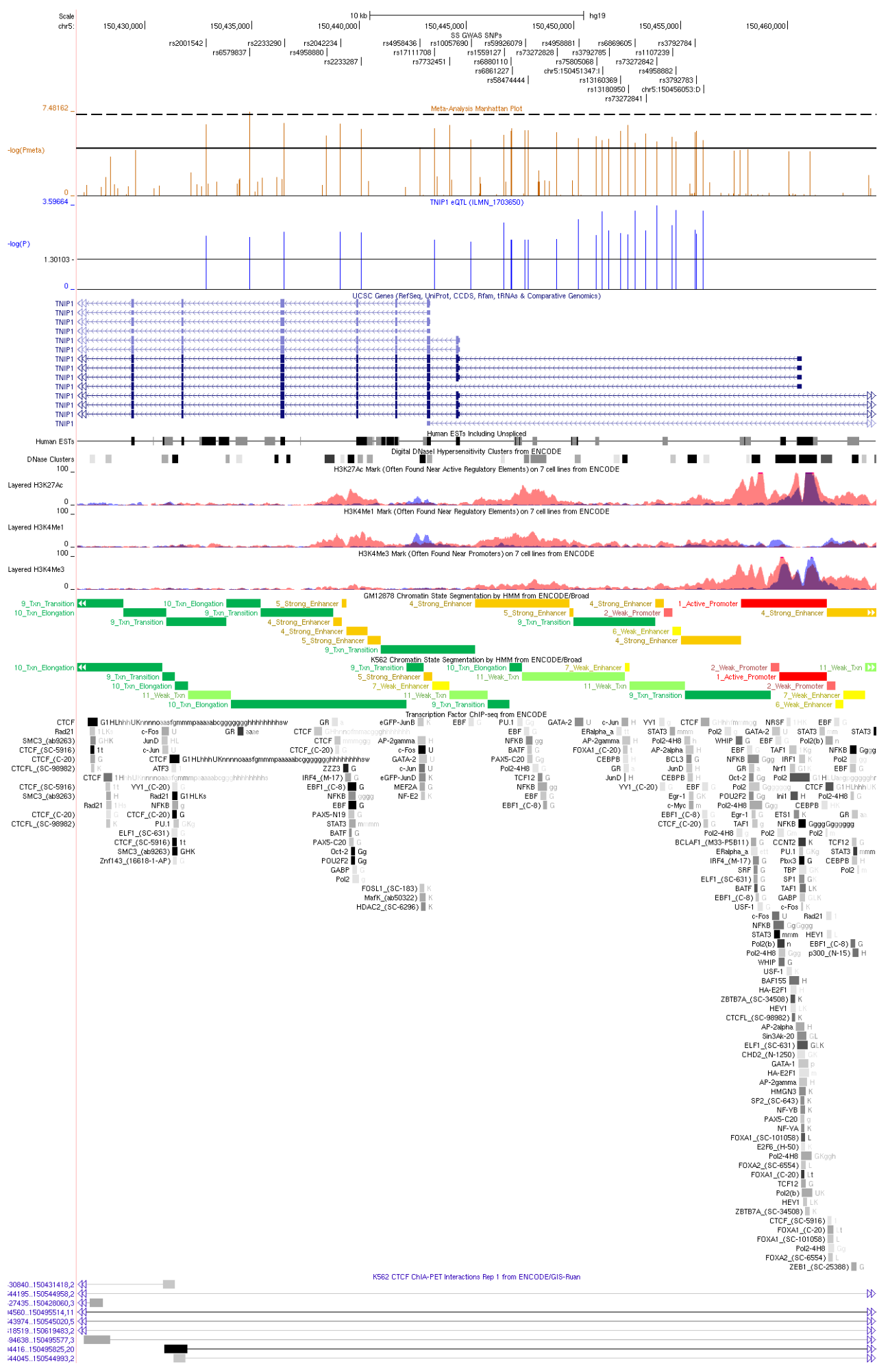


Supplementary Figure 24: Results of logistic regression analysis after adjusting for top effects, linkage disequilibrium, and haplotypes present in the *TNIP1* region. Logistic regression analysis was performed using Dataset 2 after imputation. Variants were chosen for adjustment in each logistic regression model based on their statistical significance within the meta-analysis. The most significant Sjögren's syndrome-associated SNP in the meta-analysis (and Dataset 2) was rs6579837 (**a**). Adjusting for rs6579837 accounted for all the association in the region with the peak residual association at rs1862364 ($P_{residual}$=1.83×10^{-3}), which was not associated with Sjögren's syndrome in the single marker analysis (**b**). The pairwise D' (**c**) and r^2 (**d**) for the top variants are illustrated, and the haplotypes with haplotype frequency >1% are displayed (**e**).

Supplementary Figure 25: Genomic features from data tracks in the UCSC Genome Browser in the region around *TNIP1*.

NOTE: Figure presented on next page.

Supplementary Figure 25: This figure presents genomic features found within various data tracks obtained from the UCSC Genome Browser for the region of Chr5 150.427-150.465 Mb (hg19), which encompasses the gene *TNIP1*. Variants presented surpassed suggestive association ($P<5\times10^{-5}$) threshold. Meta-analysis association results are presented as a Manhattan plot, where -log(P_{meta}) is presented in the y-axis and suggestive and genome-wide significance ($P<5\times10^{-8}$) thresholds are represented as a solid line and a dashed line, respectively. Genomic boundaries were selected to encompass not only significant associations, but also the diminishing association signals on either side of the strongest associations. Statistically significant results for eQTL (FDR adjusted *P* value < 0.05) are displayed as -log(*P*), with the solid line representing a threshold of $P<0.05$.


Scale
10 kb
hg19
chr5:
150,430,000
150,435,000
150,440,000
150,445,000
150,450,000
150,455,000
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SS GWAS SNPs
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rs2233290
rs2042234
rs4958436
rs10057690
rs59926079
rs4958881
rs6869605
rs3792784
rs6579837
rs4958880
rs17111708
rs1559127
rs73272828
rs3792785
rs1107239
rs2233287
rs7732451
rs6880110
rs75805068
rs73272842
rs6861227
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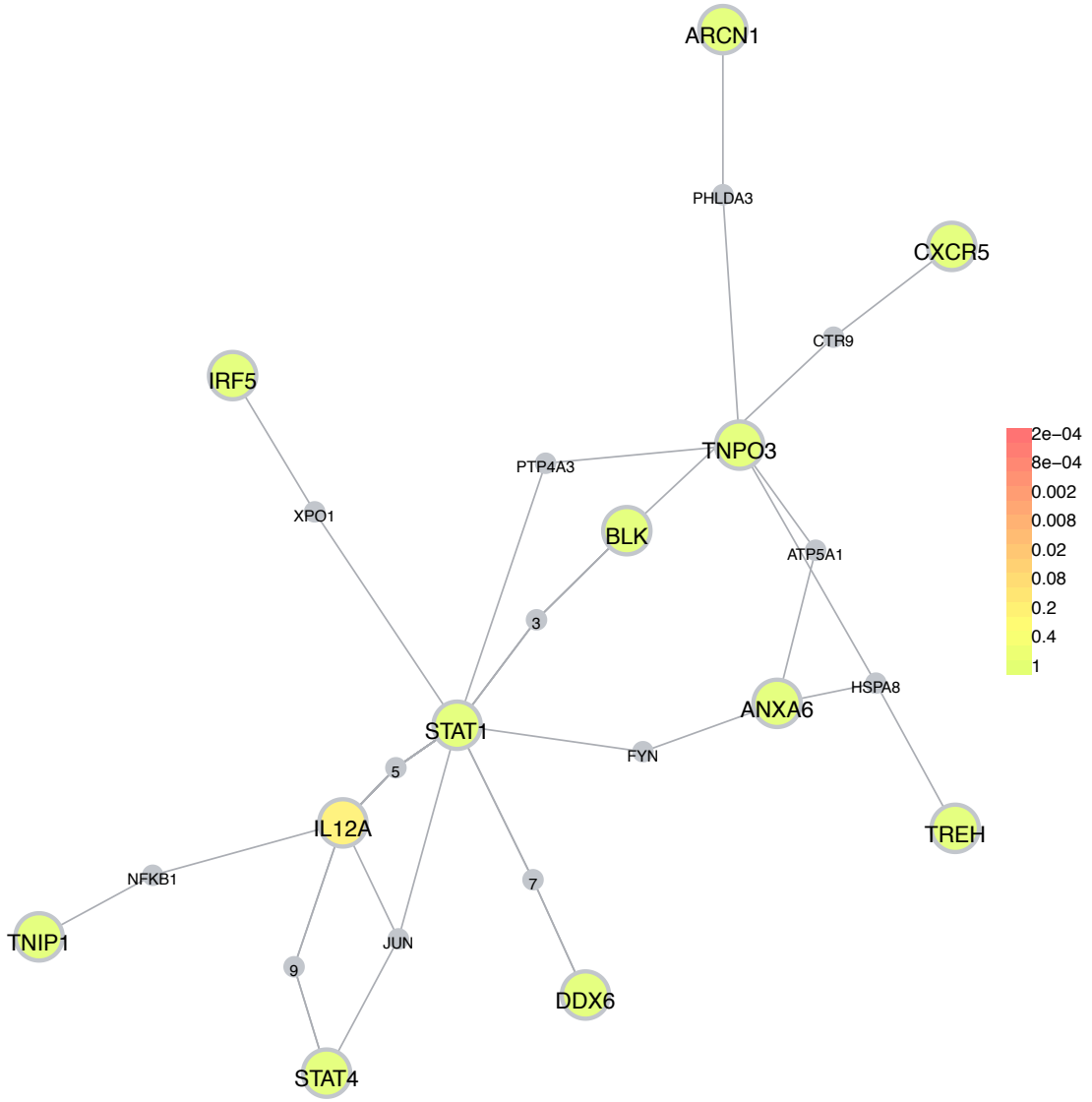
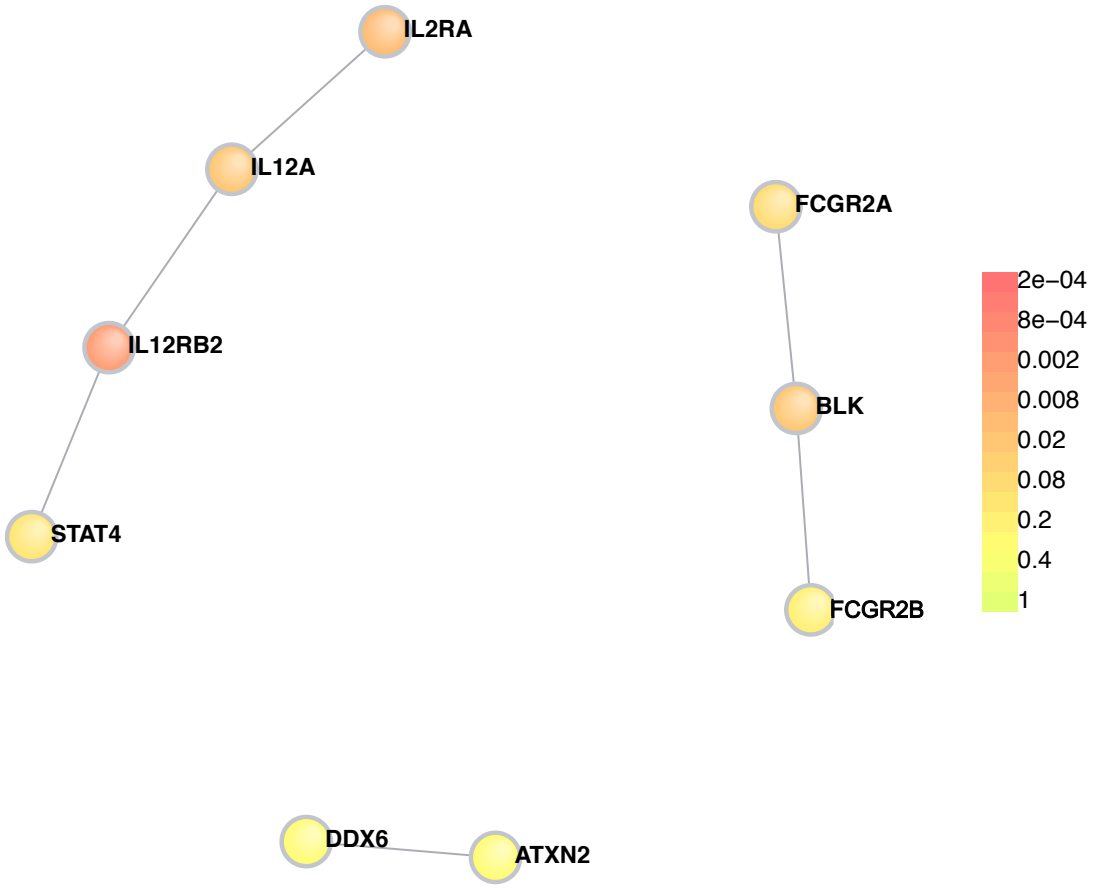
rs4958882
rs58474444
rs13160369
rs3792783
rs13180950
chr5:150456053:D
rs73272841
7.48162
Meta-Analysis Manhattan Plot
-log(Pmeta)
0
3.59664
TNIP1 eQTL (ILMN_1703650)
-log(P)
1.30103
0
UCSC Genes (RefSeq, UniProt, CCDS, Rfam, tRNAs & Comparative Genomics)
TNIP1
Human ESTs
Human ESTs Including Unspliced
DNase Clusters
Digital DNaseI Hypersensitivity Clusters from ENCODE
100
H3K27Ac Mark (Often Found Near Active Regulatory Elements) on 7 cell lines from ENCODE
Layered H3K27Ac
H3K4Me1 Mark (Often Found Near Regulatory Elements) on 7 cell lines from ENCODE
Layered H3K4Me1
H3K4Me3 Mark (Often Found Near Promoters) on 7 cell lines from ENCODE
Layered H3K4Me3
GM12878 Chromatin State Segmentation by HMM from ENCODE/Broad
9_Txn_Transition
10_Txn_Elongation
5_Strong_Enhancer
4_Strong_Enhancer
1_Active_Promoter
2_Weak_Promoter
6_Weak_Enhancer
K562 Chromatin State Segmentation by HMM from ENCODE/Broad
11_Weak_Txn
7_Weak_Enhancer
Transcription Factor ChIP-seq from ENCODE
CTCF
Rad21
SMC3_(ab9263)
CTCF_(SC-5916)
CTCF_(C-20)
CTCFL_(SC-98982)
YY1_(C-20)
ATF3
Rad21
NFKB
ELF1_(SC-631)
PU.1
SMC3_(ab9263)
Znf143_(16618-1-AP)
c-Fos
c-Jun
JunD
GR
AP-2gamma
GATA-2
IRF4_(M-17)
ZZZ3
eGFP-JunD
EBF1_(C-8)
MEF2A
NF-E2
PAX5-N19
STAT3
BATF
PAX5-C20
Oct-2
POU2F2
GABP
Pol2
FOSL1_(SC-183)
MafK_(ab50322)
HDAC2_(SC-6296)
EBF
PU.1
NFKB
PAX5-C20
BATF
TCF12
ERalpha_a
FOXA1_(C-20)
CEBPB
BCL3
JunD
CEBPB
YY1_(C-20)
Egr-1
c-Myc
EBF1_(C-8)
CTCF_(C-20)
STAT3
Pol2-4H8
WHIP
Pol2(b)
BCLAF1_(M33-P5B11)
ERalpha_a
IRF4_(M-17)
SRF
ELF1_(SC-631)
BATF
EBF1_(C-8)
USF-1
c-Fos
NFKB
STAT3
Pol2(b)
Pol2-4H8
WHIP
USF-1
BAF155
HA-E2F1
ZBTB7A_(SC-34508)
HEY1
CTCFL_(SC-98982)
AP-2alpha
Sin3Ak-20
ELF1_(SC-631)
CHD2_(N-1250)
GATA-1
HA-E2F1
AP-2gamma
HMGN3
SP2_(SC-643)
NF-YB
PAX5-C20
NF-YA
FOXA1_(SC-101058)
E2F6_(H-50)
Pol2-4H8
FOXA2_(SC-6554)
FOXA1_(C-20)
TCF12
Pol2(b)
HEY1
ZBTB7A_(SC-34508)
CTCF_(SC-5916)
FOXA1_(C-20)
FOXA1_(SC-101058)
Pol2-4H8
FOXA2_(SC-6554)
ZEB1_(SC-25388)
K562 CTCF ChIA-PET Interactions Rep 1 from ENCODE/GIS-Ruan

Supplementary Figure 26: Indirect protein-protein interaction network created in DAPPLE using non-HLA variants achieving genome-wide significance.



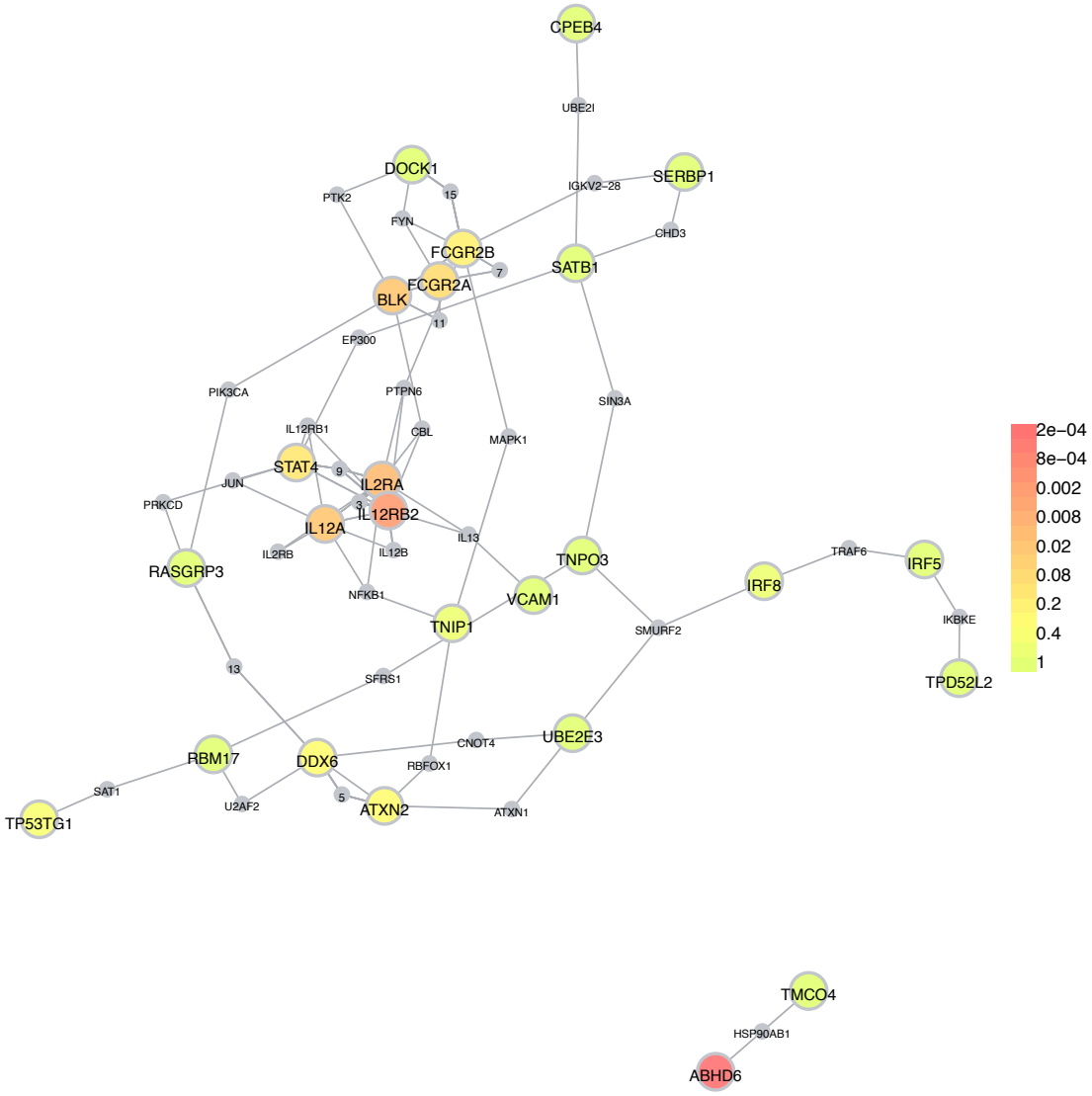
Supplementary Figure 26: This figure presents the indirect protein-protein interaction (PPI) network generated with DAPPLE and using only those input variants outside the HLA that achieved genome-wide significance ($P<5\times10^{-8}$). The color of the gene indicates the significance of participation in this PPI network. None of the indirect connections shown are more likely than expected by chance.

Supplementary Figure 27: Direct protein-protein interaction network created in DAPPLE using non-HLA variants demonstrating genome-wide or suggestive association.



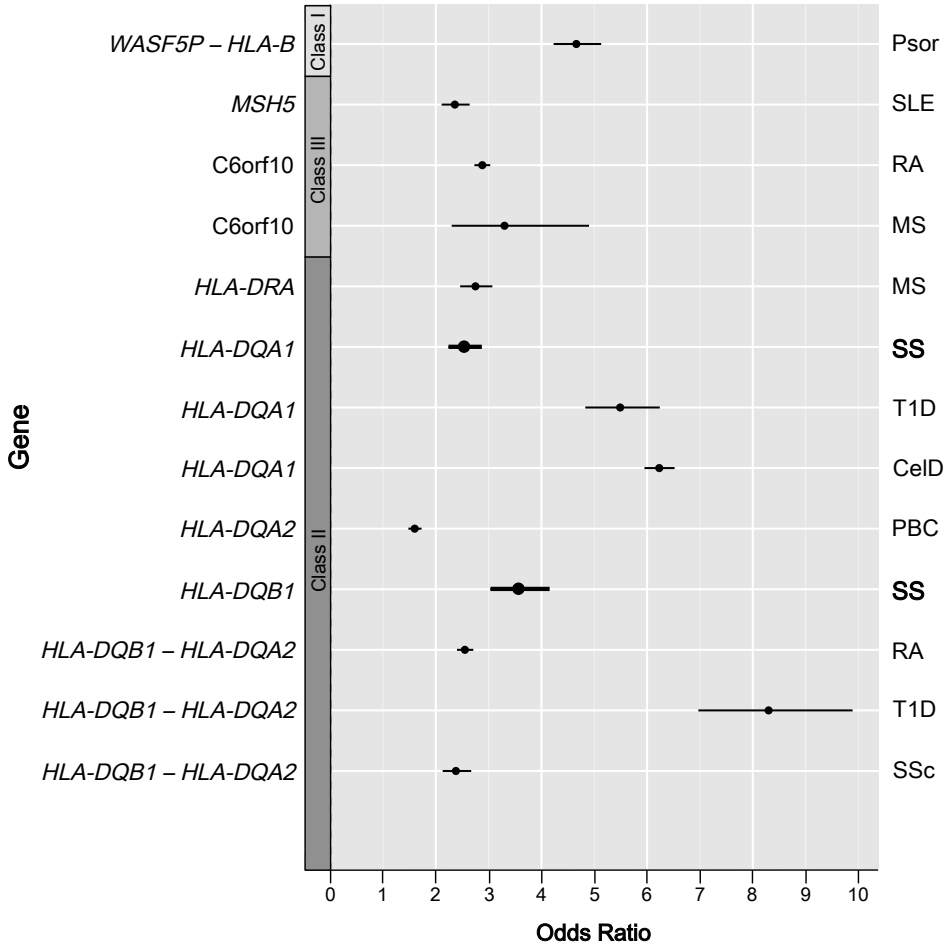
Supplementary Figure 27: This figure presents the direct protein-protein interaction (PPI) network created with DAPPLE and using as input variants outside the HLA that achieved suggestive association ($P<5\times10^{-5}$) in addition to those that achieved genome-wide significance ($P<5\times10^{-8}$). The color of the gene indicates the significance of participation in this PPI network. Here, we observed a direct PPI network consisting of 9 proteins with 6 direct interactions (P=0.0007) and mean associated protein direct connectivity of 1.33 (expected=0.63, P=0.048).

Supplementary Figure 28: Indirect protein-protein interaction network created in DAPPLE using non-HLA variants demonstrating genome-wide or suggestive association.



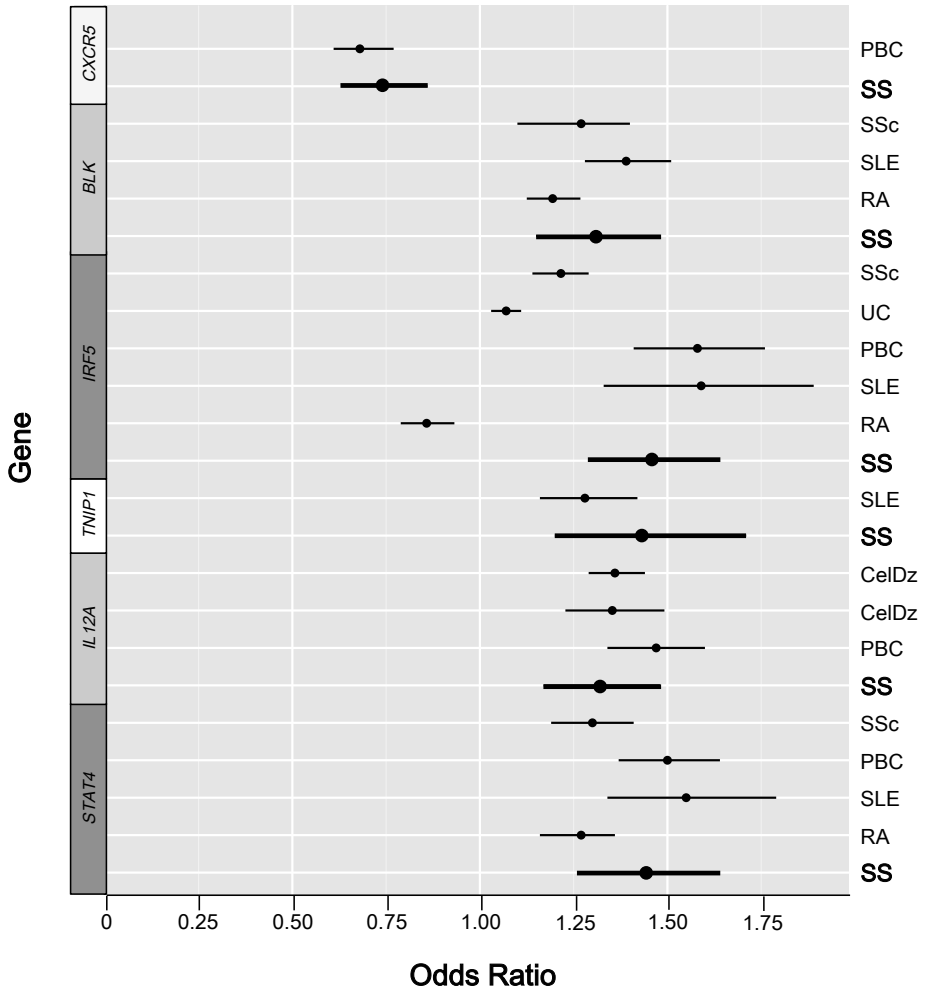
Supplementary Figure 28: This figure presents the indirect protein-protein interaction (PPI) network created with DAPPLE and using as input variants outside the HLA that achieved suggestive association ($P<5\times10^{-5}$) in addition to those that achieved genome-wide significance ($P<5\times10^{-8}$). The color of the gene indicates the significance of participation in this PPI network. This indirect network has a mean associated protein indirect connectivity trending toward significance ($P=0.082$)

Supplementary Figure 29: Forest plot of odds ratios for significantly associated loci within the HLA in Sjögren's syndrome and various autoimmune disorders.



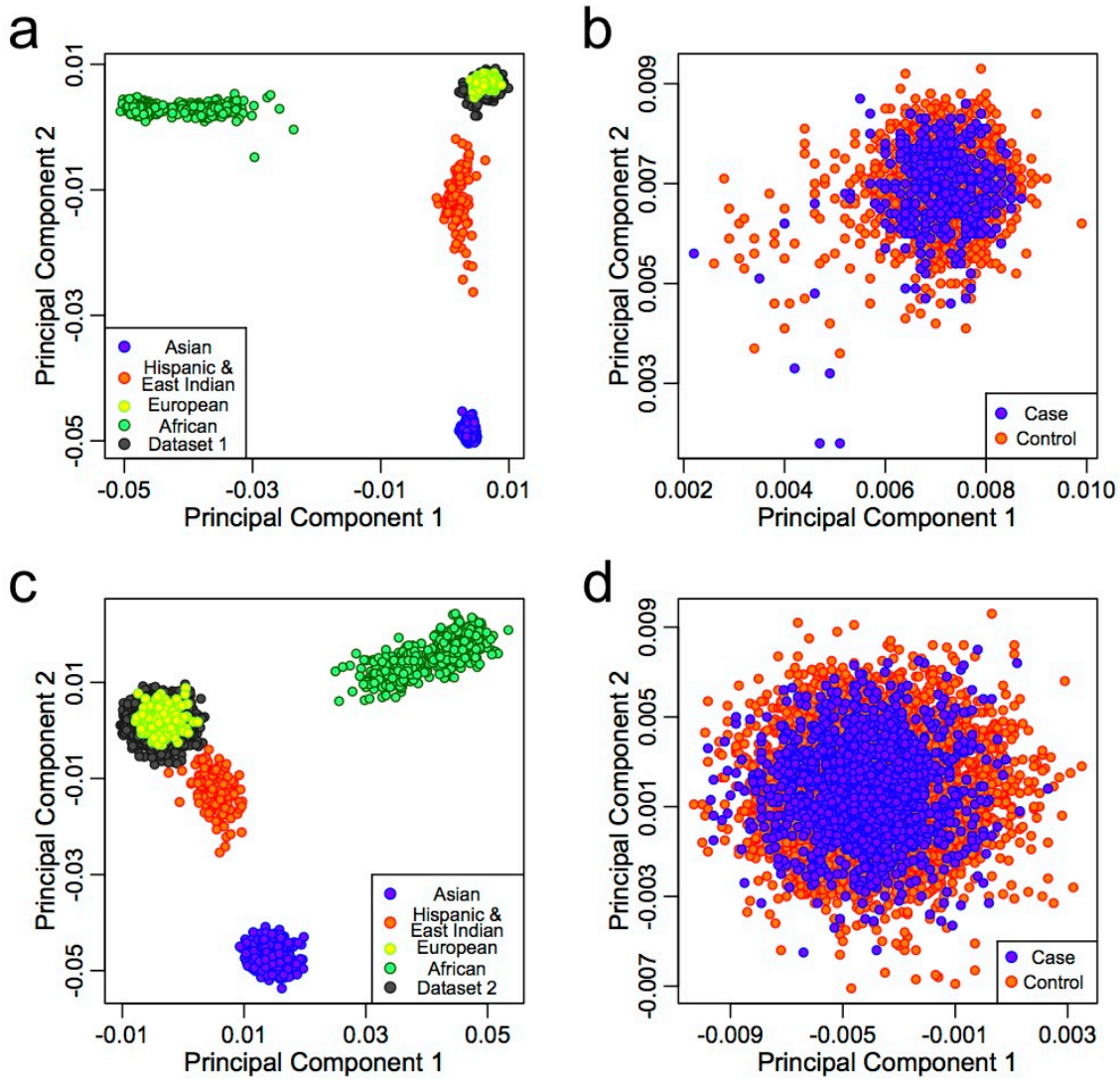
Supplementary Figure 29: Forest plot of odds ratios (ORs) with the 95% confidence intervals for variants within the region of the HLA in various autoimmune disorders. OR data for Sjögren's syndrome -associated variants were obtained from this study, while ORs for other phenotypes were obtained through the catalog of GWAS-publications from the National Human Genome Research Institute (www.genome.gov/GWAStudies). Odds ratios for Sjögren's syndrome-associated variants identified in this study are bolded. Detailed information regarding the ORs presented in this figure can be found in Supplementary Table 15. Abbreviations used in this figure: Sjögren's syndrome (SS); multiple sclerosis (MS); celiac disease (CelD); psoriasis (Psor); primary biliary cirrhosis (PBC); rheumatoid arthritis (RA); systemic lupus erythematosus (SLE); systemic sclerosis (SSc); type 1 diabetes (T1D).

Supplementary Figure 30: Forest plot of odds ratios for significantly associated loci outside of the HLA in Sjögren's syndrome and various autoimmune disorders.



Supplementary Figure 30: Forest plot of odds ratios (ORs) with the 95% confidence intervals for significantly associated loci outside the HLA in Sjögren's syndrome and various autoimmune disorders. For loci surpassing GWS, the peak effect at each locus was identified, strongly correlated variants (r^2>0.8) were determined, and literature mining was used to determine whether or not the peak variants or their correlated variants had been previously described in other autoimmune diseases. Odds ratios for Sjögren's syndrome-associated variants identified in this study are bolded. Detailed information regarding the variants, including the ORs and *p*-values, used in this figure can be found in Supplementary Table 14. Abbreviations used in this figure: Sjögren's syndrome (SS); celiac disease (CelD); primary biliary cirrhosis (PBC); rheumatoid arthritis (RA); ulcerative colitis (UC); systemic lupus erythematosus (SLE); systemic sclerosis (SSc).

Supplementary Figure 31: Plots of PC2 vs. PC1 from the principle component analyses (PCA) for Dataset 1 and Dataset 2.



Supplementary Figure 31: Plots of PC2 vs. PC1 from the principle component analyses (PCA) for Dataset 1 and Dataset 2. PCA was performed using the HapMap populations along with the Dataset 1 (**a**) and the Dataset 2(**b**) samples. Zoomed figures with subjects used in the final analyses in Dataset 1 (**c**) and Dataset 2 (**d**) after QC are shown.

Supplementary Table 1: Sjögren's syndrome loci previously implicated in candidate gene studies and established in the current study.

Chromosome	Locus of Interest	Phenotype Studied	No. of Cases	No. of Controls	*P*-value	Odds Ratio	Publication Referenced
2	*STAT4*	SS	120	1112	0.01	1.47	Korman et al. Genes Immun 2008;9(3):267.
		SS	368	711	0.0014	1.41	Nordmark et al. Genes Immun 2009;10:68.
		SS	540	532	0.0007	1.4	Nordmark et al. Genes Immun 2011;12:100.
		anti-Ro or anti-La in SS	391	532	0.00069	1.44	Nordmark et al. Genes Immun 2011;12:100.
7	*IRF5*	SS	210	154	0.01	1.93	Miceli-Richard et al. Arthritis Rheum 2007;56(12):3989.
		SS	368	711	0.000024	1.49	Nordmark et al. Genes Immun 2009;10:68.
		SS	368	711	0.00032	1.57	Nordmark et al. Genes Immun 2009;10:68.
7	*IRF-5 / TNPO3*	SS	540	532	0.0000055	1.7	Nordmark et al. Genes Immun 2011;12:100.
		anti-Ro or anti-La in SS	391	532	0.0000017	1.81	Nordmark et al. Genes Immun 2011;12:100.
8	*FAM167A-BLK*	SS	540	532	0.00047	1.37	Nordmark et al. Genes Immun 2011;12:100.
		anti-Ro or anti-La in SS	391	532	0.00082	1.4	Nordmark et al. Genes Immun 2011;12:100.

Supplementary Table 2: Summary of study samples contributed by each site.

Sample contribution site	Samples contributed	Samples after QC							
		Dataset 1		Dataset 2		Dataset 3		Dataset 4	
		Case	Control[a]	Case	Control[b]	Case	Control[b]	Case	Control
Oklahoma Medical Research Foundation (OMRF), USA	254	143	3	61	2	91	2	159	5
University of Minnesota, USA	192	123	20	3	23	3	23	53	41
Newcastle University, United Kingdom	438	129	0	156	2	230	0	290	5
ACCESS Research Group / Henry Ford Health System, USA	379	-	194	-	140	-	138	-	-
King's College London, United Kingdom	195	-	124	-	70	-	70	-	-
Illumina iControl, USA	267	-	37	-	111	-	111	-	-
NIH dbGaP, USA	4184	-	1597	-	1805	-	1808	-	-
Université Paris-Sud, France	382	-	-	285	-	222	-	280	-
Uppsala University Hospital, Sweden	1344	-	-	163	1006	164	109	163	999
The Queen Elizabeth Hospital and University of Adelaide, Australia	265	-	-	122	75	119	66	121	74
University of Bergen, Norway	278	-	-	114	134	117	133	119	132
Hannover Medical School, Germany	258	-	-	111	105	83	25	121	74
National Institutes of Health, USA	144	-	-	105	-	17	-	113	-
Karolinska Institute, Sweden	183	-	-	65	62	63	61	65	51
Stavanger University Hospital, Norway	144	-	-	58	52	49	49	57	50
OMRF / Lupus Family Registry and Repository, USA	1054	-	-	-	658	-	356	-	661
OMRF / Oklahoma Rheumatic Disease Research Cores Center, USA	744	-	-	-	534	-	120	-	542
Overall	**10705**	**395**	**1975**	**1243**	**4779**	**1158**	**3071**	**1541**	**2634**

a. Each case was genetically matched to 5 controls

b. Remaining controls typed on Omni1 arrays were used in the replication phase

Supplementary Table 3. Association analysis in HLA

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs112357081	32419276	TCTAA/T	0.59	0.33	I / -	2.89 (2.43-3.44)	1.01E-32	-	-	-	-	-	-
rs114138262	32315511	T/G	0.28	0.10	- / I	-	-	3.64 (3.21-4.13)	2.68E-90	-	-	-	-
rs4143332	31348365	G/A	0.28	0.12	- / O	-	-	3.30 (2.91-3.73)	2.37E-80	-	-	-	-
rs115575857	32659645	A/G	0.29	0.12	I / I	3.25 (2.61-4.05)	4.10E-26	3.65 (3.22-4.14)	3.70E-90	0.38	0	3.53 (3.03-4.11)	7.65E-114
rs389884	31940897	A/G	0.28	0.11	I / O	3.69 (2.95-4.60)	7.74E-31	3.47 (3.06-3.94)	2.49E-84	0.64	0	3.53 (3.03-4.11)	2.83E-113
rs3135394	32408497	A/G	0.27	0.11	I / O	3.52 (2.83-4.38)	2.47E-29	3.52 (3.10-3.99)	1.14E-85	1.00	0	3.52 (3.02-4.10)	5.22E-113
rs558702	31870326	G/A	0.28	0.11	I / O	3.58 (2.87-4.46)	6.33E-30	3.46 (3.06-3.92)	6.78E-85	0.80	0	3.49 (3.00-4.07)	7.06E-113
rs1270942	31918860	A/G	0.28	0.11	O / O	3.63 (2.91-4.52)	1.32E-30	3.46 (3.05-3.92)	4.66E-84	0.71	0	3.50 (3.01-4.08)	9.14E-113
rs519417	31878433	G/A	0.28	0.11	I / O	3.59 (2.88-4.46)	3.19E-30	3.45 (3.05-3.91)	3.14E-84	0.76	0	3.49 (3.00-4.06)	1.54E-112
rs115549526	31626013	C/T	0.28	0.11	I / I	3.66 (2.93-4.56)	1.92E-30	3.44 (3.04-3.90)	5.96E-84	0.65	0	3.50 (3.01-4.08)	1.71E-112
rs3132450	31596138	A/G	0.28	0.11	I / O	3.66 (2.93-4.56)	1.35E-30	3.44 (3.03-3.89)	1.29E-83	0.63	0	3.50 (3.00-4.07)	2.55E-112
rs2395149	32325562	G/A	0.27	0.11	I / O	3.49 (2.80-4.35)	9.75E-29	3.55 (3.13-4.03)	1.37E-85	0.90	0	3.54 (3.03-4.12)	2.70E-112
rs497309	31892484	A/C	0.28	0.11	O / O	3.58 (2.88-4.46)	4.08E-30	3.45 (3.05-3.91)	4.25E-84	0.77	0	3.49 (3.00-4.06)	2.70E-112
rs3117574	31725230	G/A	0.28	0.11	O / O	3.61 (2.90-4.50)	3.35E-30	3.43 (3.02-3.88)	8.85E-84	0.68	0	3.48 (2.99-4.05)	4.50E-112
rs3129716	32657436	T/C	0.29	0.12	I / O	3.29 (2.66-4.09)	2.11E-27	3.51 (3.10-3.97)	7.74E-87	0.62	0	3.45 (2.97-4.00)	4.59E-112
rs915652	31749142	G/A	0.28	0.11	I / O	3.72 (2.98-4.64)	3.69E-31	3.42 (3.02-3.88)	1.16E-82	0.52	0	3.50 (3.01-4.08)	5.80E-112
rs139789464	31624864	A/G	0.28	0.11	I / I	3.66 (2.93-4.57)	1.94E-30	3.44 (3.03-3.89)	2.09E-83	0.62	0	3.50 (3.00-4.07)	5.93E-112
rs3117582	31620520	T/G	0.28	0.11	I / O	3.66 (2.93-4.56)	1.37E-30	3.43 (3.03-3.89)	4.46E-83	0.62	0	3.49 (3.00-4.07)	8.75E-112
rs3132971	32230256	T/G	0.27	0.11	I / O	3.49 (2.80-4.35)	9.75E-29	3.53 (3.11-4.00)	5.58E-85	0.94	0	3.52 (3.02-4.10)	1.06E-111
rs3130484	31715882	T/C	0.28	0.11	O / O	3.60 (2.88-4.48)	4.78E-30	3.41 (3.01-3.86)	3.52E-83	0.68	0	3.46 (2.97-4.02)	2.53E-111
rs9267531	31636742	A/G	0.27	0.11	I / O	3.65 (2.93-4.56)	1.48E-30	3.42 (3.02-3.87)	2.05E-82	0.61	0	3.48 (2.99-4.06)	4.26E-111
rs2854275	32628428	C/A	0.29	0.12	O / O	3.24 (2.61-4.02)	9.59E-27	3.52 (3.11-3.99)	1.42E-86	0.51	0	3.44 (2.96-4.00)	4.43E-111
rs114913832	32626484	T/C	0.29	0.12	I / I	3.27 (2.63-4.05)	3.87E-27	3.48 (3.07-3.94)	7.15E-86	0.62	0	3.42 (2.94-3.97)	7.78E-111
rs3131379	31721033	G/A	0.28	0.11	O / O	3.58 (2.88-4.46)	6.29E-30	3.40 (3.00-3.85)	8.83E-83	0.68	0	3.45 (2.96-4.01)	8.33E-111
rs7775397	32261252	T/G	0.27	0.11	I / O	3.49 (2.80-4.35)	1.28E-28	3.53 (3.11-4.01)	4.31E-84	0.93	0	3.52 (3.02-4.10)	1.03E-110
rs3101017	31733466	T/C	0.28	0.11	I / I	3.58 (2.88-4.46)	6.29E-30	3.39 (3.00-3.84)	1.19E-82	0.68	0	3.45 (2.96-4.01)	1.11E-110
rs3131383	31704294	G/T	0.28	0.11	O / O	3.59 (2.88-4.48)	5.91E-30	3.39 (3.00-3.84)	1.54E-82	0.66	0	3.45 (2.96-4.01)	1.35E-110
rs3117575	31726253	T/C	0.28	0.11	O / O	3.57 (2.87-4.45)	8.62E-30	3.41 (3.01-3.86)	1.23E-82	0.72	0	3.45 (2.97-4.02)	1.60E-110
rs3117577	31727474	A/G	0.28	0.11	O / O	3.58 (2.88-4.46)	6.29E-30	3.39 (3.00-3.84)	2.06E-82	0.67	0	3.44 (2.96-4.01)	1.91E-110
rs114320488	32659609	T/C	0.29	0.12	I / I	3.25 (2.61-4.05)	4.10E-26	3.52 (3.10-3.98)	2.52E-86	0.55	0	3.44 (2.96-4.00)	3.60E-110
rs3117573	31718396	C/G	0.28	0.11	I / I	3.60 (2.89-4.48)	4.69E-30	3.38 (2.98-3.83)	7.42E-82	0.63	0	3.44 (2.96-4.00)	4.99E-110
rs3115671	31734345	G/T	0.27	0.11	I / O	3.58 (2.87-4.46)	8.47E-30	3.40 (3.00-3.85)	5.26E-82	0.69	0	3.45 (2.96-4.01)	6.54E-110
rs1794282	32666526	C/T	0.27	0.11	I / O	3.62 (2.90-4.51)	5.07E-30	3.50 (3.08-3.98)	4.91E-81	0.80	0	3.53 (3.02-4.12)	3.51E-109
rs114702065	31808436	C/T	0.27	0.11	I / I	3.53 (2.82-4.41)	2.19E-28	3.44 (3.03-3.90)	1.06E-82	0.84	0	3.46 (2.97-4.04)	4.02E-109
rs141268612	31832038	A/G	0.27	0.11	I / I	3.54 (2.84-4.42)	7.57E-29	3.44 (3.03-3.90)	6.57E-82	0.82	0	3.47 (2.97-4.04)	8.04E-109
rs141597299	31810612	C/T	0.27	0.11	I / I	3.52 (2.82-4.41)	2.43E-28	3.44 (3.03-3.90)	2.24E-82	0.85	0	3.46 (2.97-4.04)	9.39E-109
rs116099232	31754830	T/C	0.27	0.11	I / I	3.56 (2.85-4.43)	2.67E-29	3.38 (2.98-3.83)	5.55E-81	0.70	0	3.43 (2.94-3.99)	2.20E-108
chr6:31767673:I	31767673	T/TA	0.27	0.11	I / I	3.57 (2.86-4.46)	5.48E-29	3.38 (2.98-3.84)	6.26E-81	0.68	0	3.43 (2.95-4.00)	5.14E-108
rs2734583	31505480	A/G	0.28	0.11	I / O	3.32 (2.68-4.11)	2.81E-28	3.29 (2.91-3.72)	1.36E-80	0.94	0	3.30 (2.84-3.82)	6.19E-107
rs115146037	31434331	A/T	0.28	0.12	I / I	3.40 (2.74-4.24)	3.26E-28	3.25 (2.88-3.68)	8.60E-80	0.72	0	3.30 (2.84-3.83)	4.39E-106
rs3094013	31434366	G/A	0.28	0.12	I / O	3.39 (2.72-4.21)	5.68E-28	3.27 (2.89-3.70)	4.71E-80	0.79	0	3.30 (2.84-3.84)	4.43E-106
rs114659560	31317063	A/G	0.28	0.12	I / I	3.46 (2.77-4.30)	1.34E-28	3.23 (2.86-3.65)	1.31E-78	0.60	0	3.29 (2.83-3.82)	2.51E-105
rs115377772	31317065	T/C	0.28	0.12	I / I	3.46 (2.77-4.30)	1.34E-28	3.23 (2.86-3.65)	1.31E-78	0.60	0	3.29 (2.83-3.82)	2.51E-105
rs114397575	31316448	T/A	0.28	0.12	I / I	3.47 (2.79-4.33)	1.04E-28	3.23 (2.86-3.65)	1.95E-78	0.57	0	3.30 (2.84-3.83)	2.86E-105
rs115724794	31316520	G/A	0.28	0.12	I / I	3.46 (2.78-4.31)	1.32E-28	3.23 (2.86-3.65)	1.95E-78	0.59	0	3.29 (2.83-3.83)	3.65E-105
rs116684188	31316613	G/A	0.28	0.12	I / I	3.45 (2.77-4.30)	1.66E-28	3.23 (2.86-3.65)	1.95E-78	0.60	0	3.29 (2.83-3.82)	4.64E-105
rs3131618	31434621	A/G	0.28	0.12	I / O	3.41 (2.74-4.24)	3.57E-28	3.23 (2.86-3.65)	1.71E-78	0.67	0	3.28 (2.82-3.81)	9.03E-105
rs116423149	31434520	G/C	0.28	0.12	I / I	3.34 (2.69-4.14)	1.12E-27	3.22 (2.85-3.64)	5.37E-79	0.78	0	3.25 (2.80-3.77)	9.73E-105
rs114272716	31314652	A/G	0.28	0.12	I / I	3.41 (2.73-4.25)	1.28E-27	3.25 (2.87-3.67)	9.55E-79	0.71	0	3.29 (2.83-3.83)	1.92E-104
rs112809350	31312492	A/G	0.28	0.12	I / I	3.38 (2.71-4.22)	4.76E-27	3.25 (2.87-3.67)	2.55E-78	0.76	0	3.28 (2.82-3.82)	2.00E-103
rs116385615	31881309	T/C	0.31	0.14	I / I	3.06 (2.49-3.76)	2.46E-26	3.03 (2.70-3.41)	3.58E-77	0.95	0	3.04 (2.64-3.50)	1.52E-101
rs3099844	31448976	C/A	0.28	0.12	I / O	3.24 (2.62-4.02)	4.44E-27	3.10 (2.75-3.50)	2.43E-75	0.72	0	3.14 (2.71-3.64)	1.55E-100
rs3132510	31172151	T/C	0.26	0.11	I / O	3.41 (2.73-4.24)	9.75E-28	3.19 (2.81-3.61)	9.20E-74	0.61	0	3.25 (2.79-3.78)	1.16E-99
rs115759691	31313722	C/T	0.28	0.12	I / I	3.29 (2.64-4.11)	5.05E-26	3.17 (2.80-3.58)	2.11E-75	0.77	0	3.20 (2.75-3.72)	1.72E-99
rs3130557	31094703	C/T	0.28	0.12	O / O	3.38 (2.72-4.21)	4.63E-28	3.04 (2.69-3.43)	5.31E-73	0.40	0	3.13 (2.70-3.63)	3.05E-99
rs114528009	31312941	C/T	0.28	0.12	I / I	3.20 (2.56-3.99)	6.61E-25	3.20 (2.83-3.62)	3.16E-76	1.00	0	3.20 (2.75-3.72)	3.89E-99
rs3130985	31085356	C/T	0.28	0.12	I / I	3.32 (2.66-4.15)	6.53E-26	3.10 (2.74-3.50)	3.52E-74	0.59	0	3.16 (2.72-3.67)	3.33E-98
rs3131788	31024796	G/A	0.28	0.12	I / O	3.31 (2.66-4.11)	3.87E-27	3.04 (2.69-3.44)	5.10E-72	0.51	0	3.11 (2.68-3.61)	2.51E-97
rs116232857	32597064	A/G	0.64	0.42	I / I	2.83 (2.37-3.38)	9.05E-31	2.42 (2.19-2.67)	1.14E-67	0.13	57	2.53 (2.24-2.86)	1.33E-96
rs3130562	31100974	T/C	0.28	0.12	I / I	3.25 (2.60-4.05)	2.51E-25	3.08 (2.72-3.48)	1.06E-72	0.68	0	3.12 (2.69-3.63)	3.85E-96
rs111456260	31311449	T/A	0.28	0.12	I / I	3.18 (2.54-3.97)	1.88E-24	3.15 (2.79-3.57)	1.43E-73	0.95	0	3.16 (2.72-3.67)	4.63E-96
rs114469371	32189921	A/G	0.29	0.13	I / I	2.89 (2.34-3.58)	9.82E-23	3.01 (2.67-3.39)	1.10E-72	0.76	0	2.97 (2.57-3.44)	2.46E-93
rs3132956	32179438	G/A	0.29	0.13	I / O	2.96 (2.40-3.65)	4.23E-24	2.97 (2.63-3.35)	2.43E-70	0.98	0	2.96 (2.56-3.43)	1.64E-92
rs3128987	31434198	T/C	0.34	0.17	I / O	2.71 (2.22-3.31)	1.83E-22	2.72 (2.44-3.04)	5.14E-71	0.98	0	2.72 (2.37-3.11)	2.13E-91
rs114585692	32674643	G/A	0.65	0.43	O / I	3.03 (2.51-3.65)	8.28E-31	2.27 (2.06-2.50)	5.23E-61	0.01	86	2.46 (2.17-2.78)	9.95E-90
rs148861668	32756653	C/T	0.24	0.10	I / I	3.12 (2.50-3.89)	8.33E-24	3.15 (2.76-3.59)	1.72E-66	0.94	0	3.14 (2.69-3.67)	1.94E-88
rs693906	31835164	G/C	0.29	0.13	I / I	2.90 (2.35-3.57)	4.11E-23	2.90 (2.57-3.27)	3.14E-67	1.00	0	2.90 (2.50-3.35)	2.02E-88
rs115688765	31433831	A/G	0.34	0.17	I / I	2.70 (2.21-3.30)	3.43E-22	2.66 (2.39-2.98)	4.90E-68	0.91	0	2.67 (2.33-3.06)	3.25E-88
rs114720630	32751244	C/T	0.24	0.10	I / I	3.14 (2.51-3.92)	5.16E-24	3.13 (2.75-3.57)	8.44E-66	0.99	0	3.13 (2.68-3.66)	5.60E-88
rs1150754	32050758	C/T	0.31	0.15	O / O	2.76 (2.25-3.39)	4.56E-22	2.74 (2.45-3.07)	6.64E-68	0.96	0	2.75 (2.39-3.16)	5.79E-88

Supplementary Table 3. Association analysis in HLA

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs115645661	32752844	A/G	0.24	0.10	I / I	3.12 (2.50-3.89)	8.37E-24	3.13 (2.75-3.57)	8.04E-66	0.97	0	3.13 (2.68-3.66)	8.87E-88
rs719655	32752333	C/T	0.24	0.10	I / I	3.10 (2.48-3.87)	2.36E-23	3.13 (2.75-3.57)	9.25E-66	0.94	0	3.12 (2.67-3.65)	2.98E-87
rs115951480	32747790	G/T	0.24	0.10	I / I	3.10 (2.49-3.88)	1.74E-23	3.12 (2.74-3.56)	2.29E-65	0.96	0	3.12 (2.67-3.65)	5.27E-87
rs67682613	31826705	G/A	0.29	0.13	I / I	2.83 (2.29-3.49)	4.82E-22	2.87 (2.54-3.23)	1.03E-66	0.91	0	2.85 (2.47-3.30)	8.70E-87
rs1150755	32038550	C/T	0.31	0.15	O / O	2.73 (2.22-3.35)	1.31E-21	2.73 (2.44-3.06)	4.58E-67	1.00	0	2.73 (2.37-3.14)	1.19E-86
rs145560043	31878495	G/A	0.48	0.29	I / I	2.67 (2.24-3.19)	4.89E-28	2.32 (2.10-2.57)	3.26E-60	0.18	46	2.42 (2.14-2.73)	2.19E-86
rs114240894	32418710	A/C	0.54	0.34	I / I	2.82 (2.37-3.35)	7.12E-32	2.18 (1.98-2.40)	8.62E-57	0.01	84	2.34 (2.08-2.64)	2.34E-86
rs114121212	32418018	T/C	0.54	0.34	I / I	2.82 (2.37-3.35)	7.56E-32	2.18 (1.98-2.40)	9.15E-57	0.01	84	2.34 (2.08-2.64)	2.59E-86
chr6:32418355:I	32418355	AC/A	0.54	0.34	I / I	2.82 (2.37-3.35)	7.39E-32	2.18 (1.98-2.40)	9.88E-57	0.01	84	2.35 (2.08-2.64)	2.72E-86
rs886422	30864279	C/T	0.26	0.12	I / O	3.07 (2.47-3.82)	4.32E-24	2.86 (2.53-3.23)	5.88E-64	0.57	0	2.91 (2.51-3.38)	3.03E-86
rs115950714	32424568	G/A	0.54	0.34	I / I	2.82 (2.37-3.35)	6.85E-32	2.18 (1.98-2.40)	1.72E-56	0.01	84	2.34 (2.08-2.64)	4.37E-86
rs2535340	30838497	T/C	0.26	0.12	I / O	3.08 (2.48-3.82)	3.73E-24	2.84 (2.52-3.21)	1.34E-63	0.53	0	2.91 (2.50-3.37)	5.85E-86
rs1264308	30879987	C/T	0.26	0.12	I / O	3.07 (2.47-3.81)	4.76E-24	2.85 (2.52-3.22)	1.47E-63	0.56	0	2.91 (2.51-3.37)	8.24E-86
rs886420	30879636	C/T	0.26	0.12	I / O	3.08 (2.48-3.83)	2.88E-24	2.84 (2.52-3.21)	2.66E-63	0.52	0	2.91 (2.51-3.38)	8.89E-86
rs114846898	32591141	G/A	0.27	0.48	I / I	0.35 (0.29-0.42)	1.84E-28	0.43 (0.39-0.48)	3.19E-59	0.05	73	0.40 (0.36-0.46)	8.96E-86
rs116364608	30834331	A/G	0.26	0.12	I / I	3.09 (2.49-3.85)	3.60E-24	2.85 (2.52-3.21)	2.19E-63	0.51	0	2.91 (2.51-3.38)	9.18E-86
chr6:32418354:I	32418354	AAC/A	0.55	0.34	I / I	2.85 (2.40-3.40)	5.48E-32	2.18 (1.98-2.40)	4.23E-56	0.01	86	2.35 (2.09-2.65)	9.62E-86
rs2535332	30813249	C/T	0.26	0.12	I / O	3.08 (2.48-3.83)	3.17E-24	2.85 (2.52-3.22)	2.74E-63	0.53	0	2.91 (2.51-3.38)	1.02E-85
rs9271620	32591777	G/T	0.27	0.48	I / I	0.35 (0.29-0.42)	1.42E-28	0.43 (0.39-0.48)	4.78E-59	0.05	74	0.40 (0.36-0.46)	1.05E-85
rs114631657	32590916	A/G	0.27	0.48	I / I	0.35 (0.29-0.42)	2.04E-28	0.43 (0.39-0.48)	4.23E-59	0.05	73	0.41 (0.36-0.46)	1.31E-85
rs9271588	32590953	T/C	0.27	0.48	I / O	0.35 (0.29-0.42)	1.93E-28	0.43 (0.39-0.48)	4.62E-59	0.05	73	0.41 (0.36-0.46)	1.37E-85
chr6:32592902:I	32592902	A/AG	0.26	0.47	I / I	0.35 (0.29-0.42)	6.40E-28	0.42 (0.38-0.47)	1.92E-59	0.10	64	0.40 (0.35-0.45)	1.63E-85
rs114392088	32374595	A/G	0.31	0.15	I / I	2.71 (2.22-3.32)	3.94E-22	2.68 (2.39-3.00)	3.80E-65	0.92	0	2.69 (2.34-3.09)	2.13E-85
rs1264341	30802465	T/C	0.26	0.12	I / O	3.03 (2.44-3.77)	1.75E-23	2.84 (2.51-3.21)	1.78E-63	0.61	0	2.89 (2.49-3.36)	3.79E-85
rs142627922	30831195	G/A	0.26	0.12	I / I	3.08 (2.47-3.82)	4.34E-24	2.83 (2.50-3.19)	1.00E-62	0.51	0	2.89 (2.49-3.36)	4.99E-85
chr6:30826945:D	30826945	GA/G	0.26	0.12	I / I	3.04 (2.45-3.79)	1.71E-23	2.84 (2.52-3.21)	2.75E-63	0.59	0	2.90 (2.50-3.36)	5.63E-85
rs137975635	30872783	C/T	0.26	0.12	I / I	3.06 (2.46-3.80)	7.37E-24	2.83 (2.50-3.20)	1.14E-62	0.54	0	2.89 (2.49-3.36)	9.75E-85
rs3130303	32205867	A/G	0.30	0.15	I / O	2.63 (2.15-3.23)	1.39E-20	2.75 (2.45-3.09)	4.20E-66	0.71	0	2.72 (2.36-3.13)	1.29E-84
rs2213584	32413259	G/A	0.61	0.41	I / I	2.74 (2.30-3.27)	4.41E-29	2.19 (1.99-2.42)	1.67E-57	0.03	79	2.34 (2.07-2.63)	1.35E-84
rs149011455	32390332	C/T	0.31	0.15	I / I	2.88 (2.34-3.55)	1.34E-23	2.70 (2.40-3.04)	1.15E-62	0.59	0	2.75 (2.39-3.17)	1.79E-84
rs115377613	30825994	C/T	0.26	0.12	I / I	3.03 (2.44-3.78)	2.84E-23	2.83 (2.51-3.20)	6.33E-63	0.59	0	2.89 (2.49-3.35)	2.16E-84
chr6:32171134:I	32171134	T/TA	0.30	0.15	I / I	2.74 (2.24-3.36)	7.49E-23	2.69 (2.40-3.02)	2.45E-63	0.87	0	2.71 (2.35-3.11)	2.36E-84
rs144726945	32201279	G/C	0.30	0.14	I / I	2.71 (2.21-3.33)	9.26E-22	2.72 (2.42-3.05)	2.27E-64	0.99	0	2.72 (2.36-3.13)	3.26E-84
rs145547914	32206243	C/T	0.31	0.15	I / I	2.60 (2.12-3.18)	1.81E-20	2.74 (2.44-3.08)	8.69E-66	0.65	0	2.70 (2.35-3.11)	3.58E-84
rs2071278	32165444	A/G	0.30	0.15	I / O	2.74 (2.24-3.36)	7.49E-23	2.70 (2.40-3.03)	3.93E-63	0.88	0	2.71 (2.36-3.12)	3.76E-84
rs141558605	30851989	G/A	0.26	0.12	I / I	3.04 (2.44-3.78)	1.78E-23	2.83 (2.51-3.20)	1.87E-62	0.58	0	2.89 (2.49-3.35)	3.94E-84
rs114632632	32415522	T/C	0.62	0.41	I / I	2.81 (2.35-3.35)	3.40E-30	2.17 (1.97-2.38)	5.36E-56	0.01	84	2.33 (2.07-2.63)	4.85E-84
rs9268832	32427789	C/T	0.61	0.41	I / O	2.79 (2.34-3.33)	2.59E-30	2.16 (1.96-2.37)	7.39E-56	0.01	84	2.32 (2.06-2.61)	5.38E-84
rs116713910	32674700	A/G	0.64	0.43	I / I	2.50 (2.10-2.98)	1.47E-24	2.27 (2.06-2.50)	4.16E-61	0.34	0	2.33 (2.07-2.63)	6.78E-84
rs116739320	32413830	C/G	0.61	0.40	I / I	2.75 (2.31-3.29)	2.10E-29	2.17 (1.97-2.38)	1.77E-56	0.02	82	2.32 (2.06-2.61)	8.05E-84
rs115496616	32674649	G/A	0.64	0.43	I / I	2.50 (2.10-2.99)	1.39E-24	2.27 (2.06-2.50)	5.23E-61	0.33	0	2.33 (2.07-2.63)	8.07E-84
rs2227139	32413459	A/G	0.61	0.40	I / O	2.74 (2.30-3.27)	4.41E-29	2.17 (1.97-2.39)	1.13E-56	0.02	81	2.32 (2.06-2.61)	9.92E-84
rs114608781	32678199	A/G	0.64	0.43	O / I	2.49 (2.09-2.97)	2.70E-24	2.28 (2.06-2.51)	3.33E-61	0.38	0	2.34 (2.07-2.63)	1.00E-83
rs115002150	32674573	C/T	0.64	0.43	I / I	2.51 (2.10-2.99)	1.31E-24	2.26 (2.05-2.50)	8.42E-61	0.32	0	2.33 (2.07-2.63)	1.22E-83
rs2213586	32413094	G/A	0.61	0.40	I / O	2.74 (2.30-3.27)	4.41E-29	2.17 (1.97-2.38)	1.45E-56	0.02	81	2.32 (2.06-2.61)	1.30E-83
rs113241530	32412480	A/G	0.61	0.40	I / I	2.74 (2.29-3.27)	4.33E-29	2.17 (1.97-2.38)	1.51E-56	0.02	81	2.31 (2.06-2.60)	1.33E-83
rs9275524	32675109	C/T	0.64	0.43	I / I	2.50 (2.10-2.98)	1.49E-24	2.26 (2.05-2.50)	8.97E-61	0.33	0	2.33 (2.07-2.62)	1.48E-83
rs115168371	32675829	G/A	0.64	0.43	I / I	2.51 (2.10-2.99)	1.34E-24	2.26 (2.05-2.49)	1.03E-60	0.32	0	2.33 (2.07-2.63)	1.53E-83
rs115670275	32675789	A/G	0.64	0.43	I / I	2.49 (2.09-2.97)	2.50E-24	2.27 (2.06-2.51)	5.73E-61	0.37	0	2.33 (2.07-2.63)	1.58E-83
rs2213585	32413150	A/G	0.61	0.40	I / O	2.74 (2.30-3.27)	4.41E-29	2.17 (1.97-2.39)	2.03E-56	0.02	81	2.32 (2.06-2.61)	1.83E-83
rs4935354	32412398	T/C	0.61	0.40	I / I	2.76 (2.31-3.29)	4.47E-29	2.16 (1.97-2.38)	2.26E-56	0.02	82	2.32 (2.06-2.61)	2.12E-83
rs115924299	32674564	T/A	0.64	0.43	I / I	2.49 (2.09-2.97)	2.87E-24	2.27 (2.06-2.50)	8.17E-61	0.35	0	2.33 (2.07-2.62)	2.59E-83
rs115734347	32418579	C/A	0.62	0.42	I / I	2.77 (2.32-3.31)	1.07E-29	2.16 (1.96-2.37)	9.83E-56	0.01	83	2.31 (2.06-2.61)	2.65E-83
rs114141545	32674566	A/T	0.64	0.43	I / I	2.49 (2.09-2.97)	2.91E-24	2.27 (2.06-2.50)	8.96E-61	0.35	0	2.33 (2.07-2.62)	2.89E-83
rs116453192	32676017	C/T	0.64	0.43	I / I	2.51 (2.10-2.99)	1.34E-24	2.26 (2.05-2.49)	2.46E-60	0.31	2	2.33 (2.06-2.62)	3.62E-83
rs116763127	32676139	A/T	0.64	0.43	I / I	2.49 (2.09-2.97)	2.83E-24	2.27 (2.06-2.50)	1.29E-60	0.36	0	2.33 (2.07-2.63)	4.02E-83
rs115215206	30894965	T/A	0.26	0.12	I / I	3.05 (2.45-3.79)	1.47E-23	2.80 (2.48-3.16)	2.42E-61	0.50	0	2.87 (2.47-3.33)	4.04E-83
rs58547911	32411646	G/T	0.61	0.40	I / O	2.74 (2.30-3.27)	4.41E-29	2.16 (1.96-2.38)	5.61E-56	0.02	81	2.31 (2.05-2.60)	5.18E-83
rs7195	32412539	G/A	0.61	0.40	I / O	2.74 (2.30-3.27)	4.41E-29	2.16 (1.96-2.38)	6.01E-56	0.02	81	2.31 (2.05-2.60)	5.50E-83
rs138029766	32420238	C/T	0.62	0.42	I / I	2.77 (2.32-3.30)	1.08E-29	2.17 (1.97-2.39)	3.25E-55	0.02	82	2.32 (2.06-2.62)	8.22E-83
rs114641912	32424677	T/A	0.62	0.42	I / I	2.77 (2.32-3.30)	1.24E-29	2.15 (1.96-2.37)	2.75E-55	0.01	84	2.31 (2.05-2.60)	8.59E-83
rs141449709	32426458	G/T	0.62	0.41	I / I	2.74 (2.30-3.27)	3.48E-29	2.15 (1.96-2.37)	2.92E-55	0.02	82	2.31 (2.05-2.60)	2.38E-82
rs116078169	32425135	T/C	0.62	0.42	I / I	2.77 (2.32-3.30)	2.02E-29	2.16 (1.96-2.38)	5.98E-55	0.02	83	2.31 (2.05-2.61)	2.96E-82
rs419788	31928799	C/T	0.49	0.30	I / O	2.62 (2.20-3.12)	2.66E-27	2.20 (2.00-2.43)	1.41E-56	0.09	66	2.31 (2.05-2.61)	5.57E-82
rs437179	31929014	C/A	0.49	0.30	I / I	2.64 (2.22-3.14)	1.42E-27	2.20 (1.99-2.42)	3.13E-56	0.07	69	2.31 (2.05-2.61)	7.02E-82
rs114137717	32420715	C/T	0.62	0.42	I / I	2.76 (2.31-3.29)	2.92E-29	2.16 (1.96-2.38)	1.21E-54	0.02	82	2.32 (2.05-2.61)	8.68E-82
chr6:32206374:I	32206374	T/TA	0.30	0.15	I / I	2.59 (2.12-3.17)	1.81E-20	2.70 (2.40-3.03)	3.42E-63	0.74	0	2.67 (2.32-3.07)	1.17E-81
rs6936204	32217092	C/T	0.55	0.35	I / O	2.28 (1.93-2.69)	3.92E-22	2.23 (2.03-2.45)	4.34E-61	0.83	0	2.24 (2.00-2.52)	2.12E-81
rs115414488	32421329	G/T	0.63	0.43	I / I	2.77 (2.32-3.30)	1.50E-29	2.16 (1.96-2.38)	9.09E-54	0.02	83	2.32 (2.06-2.62)	3.20E-81
rs440454	31927342	G/A	0.49	0.30	I / O	2.63 (2.21-3.13)	2.18E-27	2.19 (1.98-2.41)	2.36E-55	0.07	69	2.30 (2.04-2.60)	8.26E-81

Supplementary Table 3. Association analysis in HLA

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs3131934	30931844	T/C	0.28	0.14	I / O	2.82 (2.29-3.48)	1.95E-22	2.61 (2.33-2.93)	1.45E-59	0.53	0	2.67 (2.32-3.08)	3.25E-80
rs116257090	32585055	G/A	0.58	0.38	I / I	2.53 (2.13-3.01)	1.26E-25	2.17 (1.97-2.39)	7.50E-56	0.13	56	2.27 (2.02-2.56)	1.16E-79
rs115124407	30913458	G/A	0.27	0.13	I / I	2.79 (2.25-3.44)	2.69E-21	2.69 (2.39-3.03)	4.26E-60	0.78	0	2.72 (2.35-3.14)	1.44E-79
rs115404837	32223258	C/T	0.56	0.36	I / I	2.33 (1.97-2.76)	4.68E-23	2.17 (1.98-2.39)	5.11E-57	0.47	0	2.22 (1.97-2.49)	2.55E-78
chr6:31606677:D	31606677	indel/A	0.32	0.16	I / I	2.59 (2.12-3.17)	2.20E-20	2.57 (2.29-2.88)	3.61E-59	0.94	0	2.58 (2.24-2.96)	1.10E-77
rs644045	31883957	G/A	0.54	0.35	I / O	2.52 (2.12-2.99)	4.80E-26	2.12 (1.93-2.33)	1.70E-53	0.09	66	2.23 (1.98-2.50)	1.20E-77
rs3128759	31885930	T/C	0.54	0.35	I / I	2.50 (2.11-2.97)	7.62E-26	2.12 (1.93-2.33)	1.59E-53	0.10	64	2.22 (1.98-2.50)	1.72E-77
rs115491205	32446010	T/C	0.26	0.45	I / I	0.36 (0.30-0.44)	4.03E-25	0.44 (0.39-0.48)	5.56E-54	0.10	64	0.41 (0.36-0.47)	2.69E-77
rs116392240	31881731	A/G	0.54	0.35	I / I	2.50 (2.11-2.97)	8.67E-26	2.11 (1.92-2.32)	8.38E-53	0.09	66	2.21 (1.97-2.49)	1.07E-76
rs113457344	32603599	C/T	0.43	0.26	I / I	2.20 (1.83-2.64)	7.70E-17	2.33 (2.11-2.58)	1.99E-61	0.59	0	2.29 (2.02-2.59)	5.86E-76
rs3131921	30907335	T/C	0.28	0.14	I / O	2.71 (2.20-3.33)	5.24E-21	2.58 (2.29-2.90)	1.03E-56	0.69	0	2.62 (2.27-3.02)	6.20E-76
rs1811197	31327660	G/A	0.33	0.17	I / I	2.58 (2.12-3.14)	4.05E-21	2.47 (2.21-2.76)	1.43E-56	0.71	0	2.50 (2.18-2.87)	6.57E-76
rs3132579	30940989	T/C	0.32	0.17	I / O	2.58 (2.12-3.14)	6.96E-21	2.44 (2.19-2.73)	1.20E-56	0.63	0	2.48 (2.17-2.84)	9.64E-76
rs115657185	32602372	G/T	0.43	0.26	I / I	2.14 (1.78-2.56)	2.64E-16	2.33 (2.11-2.57)	7.73E-62	0.42	0	2.27 (2.01-2.57)	1.12E-75
rs9273011	32611611	T/C	0.43	0.26	I / I	2.14 (1.79-2.57)	2.35E-16	2.33 (2.11-2.57)	9.76E-62	0.44	0	2.27 (2.01-2.57)	1.25E-75
rs113642651	32603583	A/G	0.43	0.26	I / I	2.19 (1.82-2.64)	8.26E-17	2.32 (2.10-2.57)	5.81E-61	0.60	0	2.29 (2.02-2.59)	1.77E-75
rs116105527	32602352	C/T	0.43	0.26	I / I	2.14 (1.78-2.56)	2.59E-16	2.32 (2.10-2.57)	1.37E-61	0.43	0	2.27 (2.01-2.57)	1.90E-75
rs115982876	32603133	C/T	0.43	0.26	I / I	2.13 (1.78-2.56)	3.38E-16	2.33 (2.11-2.57)	1.01E-61	0.41	0	2.27 (2.01-2.57)	1.91E-75
rs116148828	32602952	T/A	0.43	0.26	I / I	2.14 (1.78-2.56)	3.09E-16	2.33 (2.11-2.57)	1.14E-61	0.41	0	2.27 (2.01-2.57)	1.95E-75
rs147811059	32445306	G/A	0.25	0.44	I / I	0.37 (0.30-0.45)	1.03E-24	0.44 (0.40-0.49)	1.71E-52	0.11	61	0.42 (0.37-0.48)	2.18E-75
rs114502629	32451570	C/T	0.25	0.44	I / I	0.36 (0.30-0.44)	5.36E-25	0.44 (0.39-0.49)	3.87E-52	0.08	67	0.41 (0.36-0.47)	2.66E-75
rs116792440	32602702	T/C	0.43	0.26	I / I	2.13 (1.78-2.56)	4.68E-16	2.32 (2.10-2.57)	1.32E-61	0.42	0	2.27 (2.01-2.57)	3.37E-75
rs116271468	32452626	C/G	0.25	0.44	I / I	0.36 (0.30-0.44)	1.28E-24	0.44 (0.40-0.49)	3.06E-52	0.09	66	0.42 (0.37-0.48)	4.95E-75
rs1964995	32449411	T/C	0.25	0.44	I / O	0.36 (0.30-0.44)	5.57E-25	0.45 (0.40-0.50)	7.23E-52	0.06	71	0.42 (0.37-0.48)	5.54E-75
rs9273047	32612006	C/T	0.43	0.26	I / I	2.13 (1.77-2.55)	6.01E-16	2.34 (2.11-2.58)	1.55E-61	0.38	0	2.27 (2.01-2.57)	5.94E-75
rs9273012	32611641	A/G	0.43	0.26	O / O	2.12 (1.77-2.55)	5.67E-16	2.32 (2.10-2.57)	1.82E-61	0.39	0	2.27 (2.00-2.56)	6.26E-75
rs115795212	32445114	A/G	0.25	0.44	I / I	0.36 (0.30-0.44)	3.00E-25	0.45 (0.40-0.50)	1.92E-51	0.05	74	0.42 (0.37-0.48)	8.33E-75
rs116247318	32445117	C/T	0.25	0.44	I / I	0.36 (0.30-0.44)	3.00E-25	0.45 (0.40-0.50)	1.92E-51	0.05	74	0.42 (0.37-0.48)	8.33E-75
rs9272450	32605478	C/T	0.43	0.26	I / I	2.10 (1.75-2.53)	1.99E-15	2.34 (2.11-2.58)	7.17E-62	0.33	0	2.27 (2.00-2.57)	1.05E-74
rs114852083	32447216	A/T	0.25	0.44	I / I	0.36 (0.30-0.44)	3.84E-25	0.45 (0.40-0.50)	2.22E-51	0.06	73	0.42 (0.37-0.48)	1.20E-74
rs116573973	32447219	G/A	0.25	0.44	I / I	0.36 (0.30-0.44)	3.84E-25	0.45 (0.40-0.50)	2.22E-51	0.06	73	0.42 (0.37-0.48)	1.20E-74
chr6:32444733:D	32444733	TG/T	0.25	0.44	I / I	0.37 (0.30-0.44)	5.69E-25	0.45 (0.40-0.50)	1.60E-51	0.07	70	0.42 (0.37-0.48)	1.23E-74
rs9272448	32605439	A/T	0.43	0.26	I / I	2.10 (1.75-2.53)	2.10E-15	2.34 (2.12-2.59)	7.94E-62	0.32	0	2.27 (2.01-2.57)	1.24E-74
rs115719056	32447162	G/A	0.25	0.44	I / I	0.36 (0.30-0.44)	5.11E-25	0.45 (0.40-0.50)	2.12E-51	0.06	72	0.42 (0.37-0.48)	1.49E-74
rs149461177	32444330	A/C	0.25	0.44	I / I	0.37 (0.30-0.44)	5.23E-25	0.45 (0.40-0.50)	2.28E-51	0.06	71	0.42 (0.37-0.48)	1.65E-74
rs114505663	32450678	T/C	0.25	0.44	I / I	0.36 (0.30-0.44)	6.77E-25	0.45 (0.40-0.50)	1.84E-51	0.06	71	0.42 (0.37-0.48)	1.71E-74
rs115741842	32444198	G/T	0.25	0.44	I / I	0.37 (0.30-0.44)	5.23E-25	0.45 (0.40-0.50)	2.36E-51	0.06	71	0.42 (0.37-0.48)	1.71E-74
rs144156572	32447715	A/G	0.25	0.44	I / I	0.36 (0.30-0.44)	6.16E-25	0.45 (0.40-0.50)	2.18E-51	0.07	70	0.42 (0.37-0.48)	1.83E-74
rs116254096	32445992	G/A	0.25	0.44	I / I	0.36 (0.30-0.44)	3.50E-25	0.45 (0.41-0.50)	3.97E-51	0.05	73	0.42 (0.37-0.48)	1.99E-74
rs115912550	32443451	G/A	0.25	0.44	I / I	0.37 (0.30-0.44)	5.56E-25	0.45 (0.40-0.50)	2.74E-51	0.06	71	0.42 (0.37-0.48)	2.12E-74
rs116004025	32447111	A/G	0.25	0.44	I / I	0.36 (0.30-0.44)	3.21E-25	0.45 (0.41-0.50)	5.04E-51	0.05	74	0.42 (0.37-0.48)	2.37E-74
rs148818498	32447014	G/A	0.25	0.44	I / I	0.36 (0.30-0.44)	3.23E-25	0.45 (0.41-0.50)	5.09E-51	0.05	74	0.42 (0.37-0.48)	2.41E-74
rs9273037	32611912	G/A	0.43	0.26	I / I	2.13 (1.77-2.56)	6.59E-16	2.32 (2.10-2.56)	7.48E-61	0.43	0	2.26 (2.00-2.56)	2.49E-74
rs145378220	32446674	A/T	0.25	0.43	I / I	0.37 (0.30-0.44)	1.35E-24	0.44 (0.40-0.49)	1.69E-51	0.10	62	0.42 (0.37-0.48)	2.83E-74
rs116464335	32445079	C/T	0.25	0.44	I / I	0.37 (0.30-0.44)	5.62E-25	0.45 (0.41-0.50)	5.22E-51	0.06	72	0.42 (0.37-0.48)	4.11E-74
rs114142794	32447341	G/A	0.25	0.44	I / I	0.36 (0.30-0.44)	3.92E-25	0.45 (0.41-0.50)	8.35E-51	0.05	74	0.42 (0.37-0.48)	4.76E-74
rs114473234	32443666	G/C	0.24	0.43	I / I	0.37 (0.30-0.44)	7.08E-25	0.44 (0.39-0.49)	6.74E-51	0.11	61	0.42 (0.36-0.47)	6.05E-74
rs116030749	31265135	G/C	0.44	0.26	I / I	2.38 (2.01-2.82)	1.18E-23	2.17 (1.97-2.40)	4.54E-52	0.36	0	2.23 (1.98-2.51)	6.18E-74
chr6:32611850:D	32611850	AC/A	0.43	0.26	I / I	2.14 (1.78-2.57)	7.15E-16	2.33 (2.10-2.58)	1.98E-60	0.43	0	2.27 (2.01-2.57)	6.76E-74
rs114106992	32394537	C/T	0.33	0.18	I / I	2.52 (2.07-3.06)	1.48E-20	2.38 (2.14-2.65)	5.10E-55	0.63	0	2.42 (2.12-2.76)	8.39E-74
rs9273064	32612202	A/G	0.43	0.26	I / I	2.09 (1.74-2.52)	4.08E-15	2.33 (2.10-2.57)	3.14E-61	0.32	0	2.26 (2.00-2.56)	9.24E-74
rs9272421	32605118	G/A	0.43	0.26	I / I	2.10 (1.74-2.52)	2.82E-15	2.32 (2.10-2.56)	6.26E-61	0.34	0	2.25 (1.99-2.55)	1.21E-73
rs9268659	32410941	C/T	0.63	0.44	I / I	2.46 (2.07-2.92)	2.22E-24	2.08 (1.89-2.28)	4.87E-51	0.09	64	2.18 (1.94-2.45)	1.42E-73
rs3129763	32590925	G/A	0.38	0.22	I / O	2.32 (1.92-2.81)	2.69E-18	2.35 (2.12-2.61)	3.08E-57	0.91	0	2.34 (2.06-2.67)	1.46E-73
rs115804231	32391516	G/A	0.33	0.18	I / I	2.50 (2.06-3.04)	3.18E-20	2.39 (2.14-2.66)	4.49E-55	0.68	0	2.42 (2.12-2.76)	1.64E-73
chr6:32802712:D	32802712	TTTG/T	0.24	0.11	I / I	2.83 (2.28-3.52)	3.32E-21	2.76 (2.42-3.13)	5.34E-54	0.83	0	2.78 (2.38-3.24)	1.87E-73
rs9272496	32606144	A/G	0.43	0.26	I / I	2.12 (1.77-2.55)	9.34E-16	2.31 (2.09-2.55)	5.04E-60	0.44	0	2.25 (1.99-2.55)	2.30E-73
rs115519609	32452399	G/A	0.25	0.44	I / I	0.36 (0.30-0.44)	1.82E-24	0.44 (0.40-0.49)	1.40E-50	0.07	70	0.42 (0.37-0.48)	3.36E-73
rs115260515	32452361	C/T	0.25	0.44	I / I	0.36 (0.30-0.44)	1.98E-24	0.44 (0.40-0.49)	1.55E-50	0.08	68	0.42 (0.37-0.48)	3.99E-73
rs2395161	32387752	A/C	0.33	0.18	I / O	2.47 (2.03-3.00)	7.04E-20	2.38 (2.13-2.65)	5.15E-55	0.74	0	2.40 (2.10-2.74)	4.31E-73
chr6:32605982:I	32605982	T/TTA	0.43	0.26	I / I	2.12 (1.76-2.54)	1.38E-15	2.31 (2.09-2.55)	6.20E-60	0.41	0	2.25 (1.99-2.55)	4.41E-73
rs2535296	31060219	A/G	0.30	0.16	I / O	2.77 (2.25-3.40)	3.12E-22	2.40 (2.15-2.69)	1.50E-52	0.24	27	2.50 (2.18-2.88)	4.87E-73
rs116399799	32452602	C/T	0.26	0.45	I / I	0.38 (0.31-0.46)	3.64E-23	0.45 (0.40-0.50)	1.37E-51	0.15	51	0.43 (0.37-0.48)	5.46E-73
rs9272449	32605451	A/G	0.43	0.26	I / I	2.10 (1.75-2.53)	2.84E-15	2.32 (2.10-2.56)	5.01E-60	0.36	0	2.25 (1.99-2.55)	8.72E-73
rs9273072	32612265	C/A	0.43	0.26	I / I	2.10 (1.74-2.52)	3.75E-15	2.31 (2.09-2.56)	3.88E-60	0.36	0	2.25 (1.99-2.55)	8.79E-73
rs9272646	32608394	T/C	0.43	0.26	I / I	2.14 (1.78-2.57)	5.19E-16	2.30 (2.08-2.54)	5.30E-59	0.51	0	2.25 (1.99-2.55)	1.08E-72
rs1047993	32605271	C/T	0.43	0.26	I / I	2.10 (1.75-2.52)	2.15E-15	2.31 (2.09-2.56)	1.07E-59	0.38	0	2.25 (1.99-2.55)	1.28E-72
rs9267972	32217232	G/A	0.58	0.39	I / I	2.25 (1.90-2.66)	4.77E-21	2.12 (1.92-2.33)	3.84E-53	0.55	0	2.15 (1.92-2.42)	1.90E-72
rs1264361	30777498	A/G	0.26	0.13	I / O	2.71 (2.19-3.36)	3.72E-20	2.58 (2.29-2.91)	4.68E-54	0.69	0	2.62 (2.26-3.03)	1.92E-72
rs116417913	32668323	A/G	0.59	0.40	I / I	2.47 (2.08-2.94)	2.01E-24	2.07 (1.88-2.28)	1.09E-49	0.08	67	2.18 (1.93-2.45)	3.19E-72

Supplementary Table 3. Association analysis in HLA

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs114038635	32601222	T/C	0.43	0.26	I / I	2.13 (1.77-2.56)	8.23E-16	2.28 (2.06-2.52)	9.80E-59	0.51	0	2.24 (1.98-2.53)	3.41E-72
rs3131783	30932068	G/A	0.29	0.15	I / O	2.47 (2.02-3.03)	1.70E-18	2.50 (2.23-2.80)	1.58E-55	0.94	0	2.49 (2.17-2.86)	3.97E-72
rs3135376	32385470	A/G	0.33	0.18	I / O	2.47 (2.03-2.99)	7.73E-20	2.36 (2.12-2.63)	4.90E-54	0.70	0	2.39 (2.09-2.73)	4.29E-72
rs115782258	32668336	C/A	0.59	0.40	I / I	2.46 (2.06-2.92)	3.26E-24	2.07 (1.88-2.28)	1.20E-49	0.09	65	2.17 (1.93-2.44)	5.52E-72
rs114903282	32668713	G/C	0.59	0.40	I / I	2.45 (2.06-2.91)	3.76E-24	2.07 (1.88-2.28)	1.09E-49	0.10	63	2.17 (1.93-2.44)	5.63E-72
rs9272630	32608150	G/A	0.43	0.26	I / I	2.14 (1.78-2.58)	5.71E-16	2.29 (2.07-2.53)	2.70E-58	0.55	0	2.25 (1.98-2.54)	5.65E-72
rs116647890	32671765	G/A	0.59	0.40	I / I	2.45 (2.06-2.91)	3.50E-24	2.07 (1.88-2.28)	1.48E-49	0.10	64	2.17 (1.93-2.44)	7.25E-72
chr6:32608168:D	32608168	CAT/C	0.43	0.26	I / I	2.14 (1.78-2.58)	6.02E-16	2.28 (2.06-2.52)	3.81E-58	0.56	0	2.24 (1.98-2.54)	8.39E-72
rs114179331	32667958	G/A	0.59	0.40	I / I	2.47 (2.07-2.94)	2.30E-24	2.07 (1.88-2.28)	2.68E-49	0.08	66	2.18 (1.93-2.45)	8.79E-72
rs114699653	32393959	T/C	0.33	0.18	I / I	2.50 (2.06-3.04)	3.16E-20	2.35 (2.10-2.62)	2.71E-53	0.58	0	2.39 (2.09-2.73)	9.20E-72
rs114882497	32391192	T/C	0.33	0.18	I / I	2.52 (2.08-3.07)	1.10E-20	2.33 (2.09-2.60)	8.09E-53	0.49	0	2.39 (2.09-2.72)	9.23E-72
rs115042972	32394845	G/A	0.32	0.18	I / I	2.50 (2.06-3.04)	3.40E-20	2.35 (2.11-2.62)	2.58E-53	0.59	0	2.39 (2.09-2.73)	9.43E-72
rs2647012	32664458	C/T	0.59	0.40	I / O	2.47 (2.08-2.94)	1.43E-24	2.06 (1.87-2.27)	4.71E-49	0.07	69	2.17 (1.93-2.44)	1.02E-71
rs2647003	32664880	G/T	0.59	0.40	I / I	2.46 (2.07-2.92)	1.68E-24	2.06 (1.87-2.27)	4.24E-49	0.08	68	2.17 (1.93-2.44)	1.06E-71
rs115768610	32394585	C/T	0.33	0.18	I / I	2.50 (2.05-3.03)	4.32E-20	2.35 (2.10-2.62)	2.39E-53	0.59	0	2.39 (2.09-2.73)	1.12E-71
rs144130032	32443172	C/T	0.25	0.43	I / I	0.38 (0.31-0.46)	1.21E-22	0.45 (0.40-0.50)	9.20E-51	0.14	53	0.43 (0.38-0.49)	1.24E-71
rs2646998	32665367	G/T	0.59	0.40	I / I	2.45 (2.06-2.91)	3.11E-24	2.06 (1.87-2.27)	3.98E-49	0.09	66	2.16 (1.92-2.43)	1.77E-71
rs114241677	30781301	T/C	0.25	0.12	I / I	2.66 (2.14-3.30)	7.83E-19	2.59 (2.30-2.92)	1.94E-54	0.84	0	2.61 (2.25-3.03)	1.90E-71
rs3093988	31492453	G/A	0.31	0.16	I / O	2.64 (2.17-3.21)	2.75E-22	2.35 (2.10-2.62)	6.54E-51	0.30	5	2.43 (2.12-2.78)	1.91E-71
rs9268534	32383307	T/G	0.33	0.18	I / O	2.47 (2.03-3.00)	7.04E-20	2.35 (2.10-2.62)	2.80E-53	0.66	0	2.38 (2.08-2.72)	2.17E-71
rs1264353	30787762	C/A	0.26	0.13	I / O	2.71 (2.19-3.36)	3.82E-20	2.56 (2.27-2.89)	6.23E-53	0.65	0	2.61 (2.25-3.02)	2.54E-71
rs2213580	32388574	T/C	0.33	0.18	I / O	2.47 (2.03-3.00)	7.04E-20	2.35 (2.11-2.63)	3.75E-53	0.68	0	2.39 (2.09-2.73)	2.90E-71
rs143700239	32386495	T/C	0.33	0.18	I / I	2.49 (2.05-3.03)	3.83E-20	2.33 (2.09-2.60)	8.13E-53	0.55	0	2.38 (2.08-2.71)	3.30E-71
rs2856666	32665285	T/G	0.59	0.40	I / I	2.44 (2.05-2.89)	6.59E-24	2.06 (1.87-2.27)	4.25E-49	0.10	64	2.16 (1.92-2.43)	3.84E-71
rs138498099	32386506	T/C	0.33	0.18	I / I	2.49 (2.05-3.02)	5.26E-20	2.33 (2.09-2.60)	7.13E-53	0.57	0	2.37 (2.08-2.71)	4.01E-71
rs3135366	32388709	T/C	0.33	0.18	I / I	2.47 (2.03-3.00)	7.04E-20	2.33 (2.09-2.60)	5.29E-53	0.62	0	2.37 (2.08-2.71)	4.05E-71
rs2233956	31081205	T/C	0.33	0.18	O / O	2.22 (1.83-2.70)	4.62E-16	2.41 (2.16-2.68)	3.09E-57	0.49	0	2.35 (2.06-2.69)	4.72E-71
rs116340694	32387278	T/A	0.33	0.18	I / I	2.46 (2.03-2.99)	9.89E-20	2.33 (2.10-2.60)	4.42E-53	0.64	0	2.37 (2.08-2.71)	4.80E-71
rs3130623	31597700	C/T	0.34	0.19	I / O	2.40 (1.98-2.91)	5.58E-19	2.35 (2.11-2.62)	7.06E-54	0.86	0	2.36 (2.07-2.70)	4.85E-71
rs114114671	32386707	T/C	0.33	0.18	I / I	2.47 (2.03-3.00)	7.23E-20	2.33 (2.09-2.60)	7.73E-53	0.61	0	2.37 (2.07-2.71)	6.04E-71
chr6:31620483:D	31620483	TC/T	0.33	0.18	I / I	2.39 (1.97-2.91)	3.08E-18	2.40 (2.15-2.68)	1.40E-54	0.98	0	2.40 (2.10-2.74)	6.21E-71
rs138363570	32386643	G/A	0.33	0.18	I / I	2.47 (2.03-3.00)	7.23E-20	2.33 (2.09-2.60)	9.93E-53	0.61	0	2.37 (2.07-2.70)	7.73E-71
rs116271293	32661302	G/T	0.59	0.41	I / I	2.47 (2.08-2.94)	1.97E-24	2.05 (1.86-2.26)	3.32E-48	0.07	70	2.16 (1.92-2.44)	1.01E-70
rs113508636	32583477	T/C	0.61	0.42	I / I	2.45 (2.06-2.92)	8.47E-24	2.07 (1.88-2.29)	1.04E-48	0.10	63	2.18 (1.93-2.45)	1.12E-70
rs76804881	32611527	A/T	0.43	0.26	I / I	2.15 (1.79-2.59)	3.26E-16	2.25 (2.04-2.49)	1.39E-56	0.68	0	2.23 (1.97-2.52)	1.30E-70
rs2395164	32387860	C/T	0.32	0.18	I / O	2.48 (2.04-3.01)	5.16E-20	2.34 (2.10-2.62)	2.98E-52	0.62	0	2.38 (2.08-2.72)	1.62E-70
rs2736157	31600820	A/G	0.33	0.18	I / O	2.35 (1.94-2.86)	7.56E-18	2.39 (2.14-2.66)	1.50E-54	0.89	0	2.38 (2.08-2.72)	1.75E-70
rs77484723	32611531	T/C	0.43	0.26	I / I	2.15 (1.79-2.59)	3.46E-16	2.25 (2.04-2.49)	1.97E-56	0.68	0	2.22 (1.96-2.52)	1.94E-70
rs3130070	31591808	A/G	0.33	0.18	I / O	2.37 (1.95-2.88)	4.29E-18	2.38 (2.13-2.65)	4.61E-54	0.97	0	2.38 (2.08-2.72)	2.81E-70
rs1051336	32412592	G/A	0.33	0.18	I / O	2.45 (2.02-2.97)	4.97E-20	2.31 (2.07-2.58)	5.80E-52	0.60	0	2.35 (2.06-2.68)	3.00E-70
rs116442837	31633496	G/T	0.33	0.18	I / I	2.36 (1.94-2.87)	5.12E-18	2.38 (2.13-2.65)	4.26E-54	0.95	0	2.37 (2.08-2.71)	3.17E-70
rs116832701	32390196	T/C	0.32	0.18	I / I	2.47 (2.03-3.00)	1.58E-19	2.33 (2.09-2.60)	1.93E-52	0.63	0	2.37 (2.07-2.71)	3.33E-70
chr6:31606901:I	31606901	C/CAAAG	0.33	0.18	I / I	2.36 (1.94-2.86)	6.11E-18	2.38 (2.13-2.65)	5.27E-54	0.95	0	2.37 (2.07-2.71)	4.71E-70
rs147105852	31606398	C/G	0.33	0.18	I / I	2.36 (1.94-2.86)	6.11E-18	2.38 (2.13-2.65)	5.27E-54	0.95	0	2.37 (2.07-2.71)	4.71E-70
rs2395159	32384077	C/T	0.33	0.18	I / I	2.43 (2.00-2.96)	3.45E-19	2.33 (2.09-2.60)	1.43E-52	0.70	0	2.36 (2.06-2.69)	5.50E-70
rs116031824	31630968	G/A	0.33	0.18	I / I	2.35 (1.93-2.86)	8.80E-18	2.38 (2.13-2.66)	4.15E-54	0.91	0	2.37 (2.07-2.71)	5.53E-70
rs11229	31603770	A/G	0.33	0.18	I / O	2.36 (1.94-2.86)	6.11E-18	2.38 (2.13-2.65)	7.97E-54	0.95	0	2.37 (2.07-2.71)	7.01E-70
rs116300513	31597875	A/G	0.33	0.18	I / I	2.36 (1.94-2.86)	6.02E-18	2.37 (2.12-2.65)	9.02E-54	0.96	0	2.37 (2.07-2.71)	7.81E-70
rs2239806	32411307	C/T	0.33	0.18	I / O	2.48 (2.04-3.00)	2.53E-20	2.30 (2.07-2.57)	3.12E-51	0.52	0	2.35 (2.06-2.68)	8.01E-70
rs3117583	31619576	A/G	0.33	0.18	I / O	2.35 (1.94-2.86)	6.81E-18	2.37 (2.13-2.65)	1.55E-53	0.94	0	2.37 (2.07-2.71)	1.50E-69
rs642093	32582075	G/A	0.38	0.23	I / O	2.18 (1.81-2.62)	1.48E-16	2.29 (2.06-2.54)	6.59E-55	0.65	0	2.26 (1.99-2.56)	2.13E-69
rs116750281	32412809	T/A	0.33	0.18	I / I	2.45 (2.02-2.96)	6.59E-20	2.29 (2.06-2.55)	3.80E-51	0.56	0	2.34 (2.05-2.66)	2.57E-69
rs114686292	32412566	T/A	0.33	0.18	I / I	2.44 (2.01-2.95)	1.03E-19	2.30 (2.06-2.56)	2.42E-51	0.60	0	2.33 (2.05-2.66)	2.60E-69
rs115340233	32447873	A/G	0.24	0.42	I / I	0.36 (0.30-0.44)	2.83E-23	0.45 (0.41-0.51)	7.43E-48	0.06	73	0.43 (0.37-0.49)	2.80E-69
rs143655145	32340176	C/T	0.37	0.21	I / I	2.26 (1.87-2.73)	2.81E-17	2.26 (2.04-2.50)	6.20E-54	0.99	0	2.26 (1.99-2.56)	2.84E-69
rs3130626	31598489	A/G	0.33	0.18	I / O	2.36 (1.94-2.86)	6.11E-18	2.37 (2.12-2.64)	3.59E-53	0.97	0	2.36 (2.07-2.70)	3.03E-69
rs2856723	32667762	G/A	0.59	0.40	I / I	2.38 (2.00-2.84)	1.31E-22	2.04 (1.86-2.25)	2.29E-48	0.13	57	2.13 (1.90-2.40)	3.59E-69
chr6:32382363:D	32382363	AG/A	0.32	0.18	I / I	2.45 (2.01-2.97)	2.84E-19	2.31 (2.07-2.57)	1.65E-51	0.61	0	2.35 (2.05-2.68)	4.99E-69
rs3135393	32408842	A/G	0.33	0.18	I / O	2.44 (2.01-2.95)	1.22E-19	2.32 (2.08-2.58)	4.61E-51	0.65	0	2.35 (2.06-2.68)	5.80E-69
rs143788567	32447900	T/C	0.24	0.42	I / I	0.36 (0.30-0.44)	2.83E-23	0.46 (0.41-0.51)	1.93E-47	0.05	73	0.43 (0.37-0.49)	7.35E-69
rs2524074	31244021	A/G	0.48	0.31	I / O	2.22 (1.88-2.63)	1.95E-20	2.11 (1.91-2.33)	4.56E-50	0.60	0	2.14 (1.90-2.41)	8.89E-69
rs1264350	30796545	T/C	0.26	0.13	I / O	2.50 (2.03-3.08)	7.50E-18	2.53 (2.25-2.85)	1.07E-52	0.91	0	2.52 (2.18-2.91)	1.08E-68
rs142520578	31861815	A/G	0.50	0.33	I / I	2.26 (1.91-2.67)	1.73E-21	2.06 (1.87-2.27)	9.17E-49	0.36	0	2.12 (1.88-2.38)	1.66E-68
rs115543501	32380785	G/A	0.34	0.52	I / I	0.40 (0.33-0.47)	1.48E-24	0.49 (0.45-0.54)	9.36E-46	0.03	78	0.46 (0.41-0.52)	2.73E-68
rs114907058	32148403	G/C	0.32	0.17	I / I	2.20 (1.82-2.67)	7.78E-16	2.40 (2.15-2.68)	1.43E-54	0.44	0	2.35 (2.05-2.68)	2.88E-68
rs115004569	32148031	A/G	0.32	0.17	I / I	2.20 (1.82-2.67)	7.78E-16	2.40 (2.15-2.68)	1.43E-54	0.44	0	2.35 (2.05-2.68)	2.88E-68
rs145301992	32416467	G/A	0.34	0.19	I / I	2.48 (2.05-3.00)	5.73E-21	2.23 (2.00-2.48)	5.33E-49	0.33	0	2.29 (2.01-2.61)	3.11E-68
rs3130349	32147696	G/A	0.32	0.17	I / O	2.20 (1.82-2.67)	9.09E-16	2.40 (2.15-2.68)	3.94E-54	0.45	0	2.34 (2.05-2.68)	8.86E-68
rs114056809	32415426	A/G	0.34	0.20	I / I	2.45 (2.03-2.96)	1.34E-20	2.22 (2.00-2.47)	7.59E-49	0.37	0	2.28 (2.01-2.60)	1.02E-67
rs6926737	32375745	G/A	0.34	0.52	I / O	0.40 (0.34-0.48)	2.62E-24	0.50 (0.45-0.55)	2.18E-45	0.04	77	0.47 (0.42-0.53)	1.10E-67

Supplementary Table 3. Association analysis in HLA

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs9268501	32376882	T/G	0.34	0.52	I / I	0.40 (0.34-0.48)	3.18E-24	0.50 (0.45-0.55)	1.89E-45	0.04	76	0.47 (0.42-0.53)	1.12E-67
rs6906730	32379445	T/C	0.34	0.52	I / I	0.40 (0.33-0.47)	1.34E-24	0.50 (0.45-0.55)	4.16E-45	0.03	80	0.47 (0.41-0.53)	1.19E-67
rs115339716	32383633	G/C	0.33	0.18	I / I	2.39 (1.97-2.90)	1.84E-18	2.29 (2.06-2.56)	5.94E-51	0.73	0	2.32 (2.03-2.65)	1.20E-67
rs116780814	32358942	T/A	0.24	0.42	I / I	0.42 (0.35-0.50)	4.52E-20	0.45 (0.40-0.50)	3.95E-49	0.54	0	0.44 (0.38-0.50)	1.79E-67
rs139903235	32237508	A/G	0.37	0.21	I / I	2.02 (1.69-2.42)	1.98E-14	2.31 (2.08-2.57)	1.71E-55	0.21	37	2.23 (1.96-2.52)	2.09E-67
rs114298976	32377116	C/G	0.34	0.52	I / I	0.40 (0.34-0.48)	3.35E-24	0.50 (0.45-0.55)	3.39E-45	0.04	77	0.47 (0.42-0.53)	2.16E-67
rs116707546	32377061	C/T	0.34	0.52	I / I	0.40 (0.34-0.48)	3.35E-24	0.50 (0.45-0.55)	3.39E-45	0.04	77	0.47 (0.42-0.53)	2.16E-67
rs3763314	32376618	C/T	0.34	0.52	I / I	0.40 (0.34-0.48)	3.40E-24	0.50 (0.45-0.55)	3.40E-45	0.04	77	0.47 (0.42-0.53)	2.18E-67
rs5007263	32378982	A/G	0.34	0.52	I / O	0.40 (0.34-0.48)	3.90E-24	0.50 (0.45-0.55)	3.01E-45	0.04	76	0.47 (0.42-0.53)	2.20E-67
rs112833847	32583122	G/C	0.38	0.23	I / I	2.16 (1.79-2.60)	4.45E-16	2.26 (2.04-2.51)	2.65E-53	0.67	0	2.23 (1.97-2.53)	2.45E-67
rs5007258	32379239	A/G	0.34	0.52	I / I	0.40 (0.34-0.48)	3.11E-24	0.50 (0.45-0.55)	4.09E-45	0.04	77	0.47 (0.42-0.53)	2.46E-67
rs5007265	32378866	T/G	0.34	0.52	I / O	0.40 (0.34-0.48)	3.35E-24	0.50 (0.45-0.55)	4.00E-45	0.04	77	0.47 (0.42-0.53)	2.58E-67
rs5007260	32379047	G/A	0.34	0.52	I / I	0.40 (0.34-0.48)	2.84E-24	0.50 (0.45-0.55)	6.02E-45	0.03	78	0.47 (0.42-0.53)	3.41E-67
rs9268513	32378787	T/C	0.34	0.52	I / I	0.40 (0.34-0.48)	3.49E-24	0.50 (0.45-0.55)	5.15E-45	0.04	77	0.47 (0.42-0.53)	3.48E-67
rs5007261	32379031	G/A	0.34	0.52	I / I	0.40 (0.34-0.48)	3.35E-24	0.50 (0.45-0.55)	5.40E-45	0.04	77	0.47 (0.42-0.53)	3.53E-67
rs5007259	32379101	T/C	0.34	0.52	I / O	0.40 (0.34-0.48)	3.35E-24	0.50 (0.45-0.55)	5.42E-45	0.04	77	0.47 (0.42-0.53)	3.54E-67
rs5007266	32378834	T/C	0.34	0.52	I / I	0.40 (0.34-0.48)	3.36E-24	0.50 (0.45-0.55)	6.22E-45	0.04	77	0.47 (0.42-0.53)	4.09E-67
rs5007262	32379011	A/G	0.34	0.52	I / I	0.40 (0.34-0.48)	3.58E-24	0.50 (0.45-0.55)	5.86E-45	0.04	77	0.47 (0.42-0.53)	4.10E-67
rs3129887	32410691	G/A	0.33	0.18	I / O	2.38 (1.97-2.89)	5.83E-19	2.28 (2.05-2.55)	7.11E-50	0.70	0	2.31 (2.03-2.64)	4.30E-67
rs114298033	32584440	C/T	0.38	0.23	I / I	2.15 (1.78-2.58)	7.04E-16	2.26 (2.04-2.50)	2.90E-53	0.65	0	2.23 (1.96-2.53)	4.57E-67
rs3095326	30725841	C/T	0.24	0.12	I / O	2.63 (2.12-3.26)	6.73E-19	2.52 (2.23-2.85)	1.34E-49	0.73	0	2.55 (2.20-2.96)	9.25E-67
rs2143462	32335204	G/A	0.32	0.18	I / O	2.19 (1.80-2.65)	1.95E-15	2.37 (2.12-2.64)	3.94E-53	0.48	0	2.31 (2.03-2.64)	1.89E-66
rs3129973	30721143	C/T	0.24	0.12	I / O	2.63 (2.12-3.25)	7.30E-19	2.52 (2.23-2.84)	3.58E-49	0.72	0	2.55 (2.20-2.95)	2.65E-66
rs3817973	32361111	C/T	0.26	0.44	I / O	0.42 (0.35-0.51)	4.24E-20	0.47 (0.42-0.52)	7.17E-48	0.36	0	0.45 (0.40-0.51)	3.00E-66
rs2076529	32363955	T/C	0.26	0.44	I / O	0.42 (0.35-0.51)	4.24E-20	0.47 (0.42-0.52)	9.58E-48	0.34	0	0.46 (0.40-0.52)	4.01E-66
rs537160	31916400	G/A	0.51	0.34	O / O	2.28 (1.93-2.70)	1.43E-21	2.01 (1.82-2.21)	4.84E-46	0.20	39	2.08 (1.85-2.34)	7.89E-66
rs4424066	32354428	A/G	0.26	0.44	I / O	0.42 (0.35-0.51)	4.24E-20	0.47 (0.42-0.52)	2.28E-47	0.33	0	0.46 (0.40-0.52)	9.54E-66
rs674313	32578082	C/T	0.39	0.24	O / I	2.16 (1.80-2.59)	1.72E-16	2.22 (2.00-2.46)	3.59E-51	0.80	0	2.20 (1.94-2.49)	1.00E-65
rs3129974	30723169	A/G	0.24	0.12	I / I	2.66 (2.14-3.30)	5.65E-19	2.49 (2.20-2.82)	2.91E-48	0.61	0	2.54 (2.19-2.95)	1.63E-65
chr6:32392268:I	32392268	A/AT	0.33	0.18	I / I	2.58 (2.12-3.15)	8.24E-21	2.26 (2.02-2.53)	2.82E-46	0.26	21	2.35 (2.05-2.69)	2.36E-65
rs139597191	30722267	C/A	0.24	0.12	I / I	2.67 (2.15-3.31)	4.25E-19	2.49 (2.20-2.81)	6.33E-48	0.58	0	2.54 (2.19-2.95)	2.64E-65
rs3115557	32239651	C/T	0.37	0.21	I / O	2.02 (1.68-2.42)	3.12E-14	2.22 (2.01-2.46)	7.74E-53	0.37	0	2.16 (1.91-2.45)	8.97E-65
rs9268176	32274079	C/T	0.37	0.21	I / O	2.02 (1.68-2.42)	3.12E-14	2.22 (2.00-2.46)	7.90E-53	0.37	0	2.16 (1.91-2.45)	9.10E-65
rs115058997	32279816	G/A	0.37	0.21	I / I	2.01 (1.68-2.41)	5.49E-14	2.23 (2.01-2.47)	6.30E-53	0.33	0	2.16 (1.91-2.45)	1.43E-64
rs3132931	32235895	T/G	0.37	0.21	I / O	2.02 (1.68-2.42)	3.38E-14	2.21 (2.00-2.45)	1.65E-52	0.39	0	2.15 (1.90-2.44)	2.00E-64
rs115851975	32223418	C/T	0.37	0.21	I / I	2.01 (1.68-2.41)	3.93E-14	2.21 (2.00-2.45)	2.16E-52	0.38	0	2.15 (1.90-2.44)	3.12E-64
rs9268207	32280462	C/T	0.37	0.21	I / I	2.02 (1.68-2.42)	3.12E-14	2.21 (1.99-2.44)	3.38E-52	0.41	0	2.15 (1.90-2.44)	3.59E-64
rs142502522	32230344	T/A	0.37	0.21	I / I	2.00 (1.67-2.40)	6.59E-14	2.21 (2.00-2.45)	1.59E-52	0.35	0	2.15 (1.90-2.44)	4.25E-64
rs115365372	32415080	G/A	0.36	0.21	I / I	2.41 (2.00-2.90)	1.70E-20	2.13 (1.91-2.36)	2.74E-45	0.25	25	2.20 (1.94-2.50)	4.90E-64
rs3891176	32634318	C/A	0.35	0.20	I / I	1.98 (1.65-2.38)	3.18E-13	2.37 (2.12-2.65)	2.22E-53	0.10	64	2.25 (1.98-2.57)	4.93E-64
rs144261627	32237748	G/A	0.37	0.21	I / I	2.02 (1.69-2.42)	2.77E-14	2.20 (1.99-2.44)	5.88E-52	0.42	0	2.15 (1.90-2.43)	5.29E-64
rs3129985	30762542	C/T	0.25	0.12	I / O	2.58 (2.08-3.19)	2.61E-18	2.44 (2.16-2.75)	2.19E-47	0.66	0	2.48 (2.14-2.87)	5.67E-64
rs3130673	30746519	G/T	0.25	0.12	I / O	2.58 (2.09-3.20)	2.40E-18	2.43 (2.15-2.74)	4.25E-47	0.62	0	2.47 (2.14-2.86)	1.00E-63
chr6:32253524:D	32253524	AG/A	0.37	0.21	I / I	2.01 (1.68-2.41)	4.64E-14	2.20 (1.99-2.44)	7.18E-52	0.39	0	2.14 (1.89-2.43)	1.17E-63
rs3130641	30764081	C/T	0.25	0.12	I / O	2.59 (2.09-3.20)	2.01E-18	2.42 (2.15-2.73)	8.56E-47	0.60	0	2.47 (2.13-2.86)	1.68E-63
rs3129812	30337974	G/A	0.22	0.10	I / O	2.61 (2.09-3.25)	2.04E-17	2.59 (2.27-2.94)	7.94E-48	0.95	0	2.59 (2.22-3.02)	1.74E-63
rs3130351	30328192	C/T	0.22	0.10	I / O	2.66 (2.13-3.32)	3.46E-18	2.56 (2.25-2.90)	5.21E-47	0.75	0	2.59 (2.22-3.02)	1.77E-63
rs3131060	30763291	G/A	0.25	0.12	I / O	2.59 (2.09-3.20)	2.02E-18	2.42 (2.14-2.73)	1.19E-46	0.58	0	2.46 (2.13-2.85)	2.33E-63
chr6:32268795:I	32268795	A/ATTGT	0.37	0.22	I / I	1.99 (1.66-2.38)	5.69E-14	2.19 (1.98-2.43)	1.31E-51	0.35	0	2.13 (1.89-2.41)	2.52E-63
rs3891174	32634584	C/G	0.35	0.20	I / I	1.99 (1.66-2.39)	2.27E-13	2.37 (2.12-2.65)	2.19E-52	0.11	62	2.26 (1.98-2.57)	2.79E-63
rs114323122	30762238	A/G	0.25	0.12	I / I	2.58 (2.09-3.20)	2.18E-18	2.41 (2.14-2.72)	1.57E-46	0.58	0	2.46 (2.12-2.85)	3.30E-63
rs115602769	30758848	T/A	0.25	0.12	I / I	2.57 (2.08-3.18)	3.33E-18	2.41 (2.14-2.72)	1.42E-46	0.60	0	2.46 (2.12-2.84)	4.59E-63
rs148072391	30761132	C/T	0.25	0.12	I / I	2.59 (2.10-3.21)	1.81E-18	2.41 (2.14-2.72)	3.02E-46	0.57	0	2.46 (2.13-2.85)	5.27E-63
rs3129815	30340528	G/A	0.22	0.10	I / O	2.62 (2.11-3.27)	7.37E-18	2.56 (2.25-2.91)	8.17E-47	0.84	0	2.58 (2.21-3.01)	6.00E-63
rs3130340	32244627	T/C	0.38	0.22	I / O	1.97 (1.65-2.35)	7.22E-14	2.18 (1.97-2.41)	2.38E-51	0.33	0	2.12 (1.87-2.39)	6.02E-63
rs116777428	30327196	G/A	0.22	0.10	I / I	2.63 (2.11-3.27)	8.43E-18	2.56 (2.25-2.91)	7.53E-47	0.85	0	2.58 (2.21-3.01)	6.36E-63
rs116265156	30760190	C/T	0.25	0.12	I / I	2.56 (2.07-3.17)	5.19E-18	2.42 (2.14-2.73)	1.32E-46	0.65	0	2.46 (2.12-2.84)	6.73E-63
rs140735808	30759489	A/G	0.25	0.12	I / I	2.57 (2.08-3.18)	3.78E-18	2.41 (2.14-2.72)	1.85E-46	0.61	0	2.45 (2.12-2.84)	6.81E-63
rs116485842	30760907	T/C	0.24	0.12	I / I	2.59 (2.09-3.20)	2.12E-18	2.41 (2.14-2.72)	3.55E-46	0.57	0	2.46 (2.12-2.85)	7.25E-63
rs3131055	30761487	T/C	0.25	0.12	I / I	2.59 (2.09-3.20)	2.05E-18	2.41 (2.13-2.71)	3.67E-46	0.56	0	2.46 (2.12-2.84)	7.25E-63
rs115436129	30327194	G/A	0.22	0.10	I / I	2.63 (2.11-3.27)	8.43E-18	2.55 (2.24-2.90)	8.72E-47	0.82	0	2.57 (2.20-3.00)	7.35E-63
rs139214286	30759335	T/C	0.25	0.12	I / I	2.57 (2.08-3.18)	3.78E-18	2.41 (2.14-2.72)	2.06E-46	0.61	0	2.45 (2.12-2.84)	7.58E-63
rs377763	32199144	C/A	0.36	0.21	I / O	2.18 (1.81-2.64)	6.06E-16	2.20 (1.98-2.45)	9.53E-49	0.93	0	2.20 (1.93-2.50)	8.21E-63
rs9275511	32674329	G/A	0.30	0.47	I / I	0.45 (0.37-0.53)	1.23E-18	0.49 (0.44-0.54)	7.00E-46	0.42	0	0.47 (0.42-0.54)	8.25E-63
chr6:30760781:I	30760781	A/AC	0.24	0.12	I / I	2.59 (2.09-3.20)	2.12E-18	2.41 (2.13-2.72)	4.25E-46	0.57	0	2.46 (2.12-2.85)	8.68E-63
chr6:30758648:D	30758648	indel/A	0.25	0.12	I / I	2.58 (2.08-3.19)	2.55E-18	2.40 (2.13-2.71)	3.73E-46	0.57	0	2.45 (2.12-2.84)	9.18E-63
rs116503526	30758664	A/C	0.25	0.12	I / I	2.58 (2.08-3.19)	2.55E-18	2.40 (2.13-2.71)	3.73E-46	0.57	0	2.45 (2.12-2.84)	9.18E-63
rs3131050	30760025	T/C	0.25	0.12	I / O	2.56 (2.07-3.17)	4.10E-18	2.41 (2.13-2.72)	2.35E-46	0.61	0	2.45 (2.12-2.84)	9.36E-63
rs1018430	32281688	C/T	0.38	0.23	I / O	1.97 (1.65-2.35)	7.22E-14	2.17 (1.96-2.40)	4.15E-51	0.34	0	2.11 (1.87-2.39)	1.01E-62
rs138701803	32231407	G/A	0.37	0.21	I / I	1.98 (1.65-2.37)	1.40E-13	2.20 (1.98-2.43)	1.86E-51	0.33	0	2.13 (1.88-2.41)	1.06E-62

Supplementary Table 4: Association of HLA classical alleles with Sjögren's syndrome.

HLA allele	Allele frequency[a]		Dataset 1		Dataset 2		Meta-analysis	
	Case	Control	OR (95% CI)	*P*	OR (95% CI)	*P*	OR (95% CI)	*P*
HLA-DQB1*0201	0.30	0.13	3.14 (2.51-3.92)	7.82E-24	3.46 (3.03-3.95)	4.53E-74	3.36 (2.86-3.94)	1.38E-95
HLA-DQA1*0501	0.30	0.13	3.11 (2.48-3.89)	3.38E-23	3.45 (3.02-3.95)	6.87E-73	3.34 (2.85-3.93)	8.50E-94
HLA-B*0801	0.31	0.13	3.49 (2.76-4.40)	1.13E-25	3.18 (2.78-3.64)	6.87E-63	3.27 (2.77-3.86)	1.09E-86
HLA-C*0701	0.32	0.16	2.74 (2.23-3.36)	7.18E-22	2.71 (2.41-3.05)	2.95E-61	2.72 (2.35-3.14)	3.67E-81
HLA-DRB1*0301	0.34	0.16	2.99 (2.34-3.82)	2.29E-18	3.37 (2.91-3.91)	2.87E-58	3.25 (2.72-3.88)	2.19E-74
HLA-A*0101	0.27	0.17	1.88 (1.53-2.30)	1.31E-09	1.89 (1.68-2.12)	6.46E-27	1.88 (1.64-2.17)	6.74E-35
HLA-DQB1*0302	0.06	0.12	0.45 (0.32-0.63)	4.02E-06	0.44 (0.36-0.54)	7.19E-16	0.44 (0.35-0.57)	1.79E-20
HLA-DQA1*0101	0.06	0.12	0.44 (0.31-0.63)	4.61E-06	0.46 (0.38-0.56)	3.68E-15	0.45 (0.36-0.58)	9.78E-20
HLA-DPB1*0101	0.13	0.06	1.96 (1.44-2.68)	2.25E-05	2.12 (1.75-2.56)	5.87E-15	2.07 (1.65-2.60)	8.42E-19
HLA-DQA1*0301	0.05	0.10	0.44 (0.30-0.64)	1.74E-05	0.42 (0.33-0.52)	3.45E-14	0.42 (0.32-0.56)	3.44E-18
HLA-DRB1*0101	0.04	0.11	0.33 (0.21-0.53)	2.84E-06	0.40 (0.31-0.51)	8.90E-13	0.38 (0.28-0.52)	1.30E-17
HLA-DQB1*0501	0.07	0.13	0.47 (0.34-0.66)	9.74E-06	0.52 (0.44-0.62)	8.11E-13	0.51 (0.40-0.63)	4.03E-17
HLA-DRB1*0401	0.04	0.09	0.30 (0.19-0.48)	4.95E-07	0.43 (0.33-0.56)	2.97E-10	0.39 (0.28-0.53)	9.92E-16
HLA-DQB1*0602	0.20	0.14	1.97 (1.58-2.45)	1.91E-09	1.35 (1.19-1.53)	5.66E-06	1.51 (1.29-1.77)	1.34E-12
HLA-DQA1*0201	0.09	0.14	0.55 (0.41-0.74)	8.92E-05	0.64 (0.54-0.76)	2.34E-07	0.61 (0.50-0.75)	9.74E-11
HLA-DRB1*0701	0.10	0.16	0.54 (0.39-0.74)	1.04E-04	0.63 (0.53-0.76)	5.45E-07	0.60 (0.48-0.75)	2.63E-10
HLA-C*0304	0.06	0.09	0.65 (0.47-0.90)	9.33E-03	0.56 (0.46-0.69)	1.13E-08	0.59 (0.47-0.75)	5.57E-10
HLA-DRB1*1501	0.24	0.19	1.89 (1.50-2.38)	7.06E-08	1.26 (1.10-1.45)	8.33E-04	1.43 (1.21-1.68)	8.54E-09
HLA-B*1501	0.05	0.08	0.35 (0.22-0.55)	5.16E-06	0.68 (0.54-0.84)	3.91E-04	0.55 (0.41-0.73)	4.09E-08

a. Allele frequency was calculated in combined datasets 1 and 2.

Supplementary Table 5: MHC-RFX5 hypergeometric analysis for enrichment in DS1.

a.

Total number of variants in MHC from DS1	Number of variants overlapping with RFX5 binding site from DS1	Total number of significant variants in MHC from DS1	Number of significant variants overlapping with RFX5 binding site from DS1	OR	*P*
37906	664	9169	216	1.52	9.25×10^{-7}

b.

	Overlap with RFX5 binding site	Not overlap with RFX5 binding site	Total
Selected variants	**216**	9169-216=**8953**	9196
Non-selected variants	664-216=**448**	37906-9196-448=**28289**	28737
Total	664	37242	37906

Supplementary Table 6: Results from *cis*-eQTL analyses in Sjögren's syndrome-associated regions.

eQTL in region	SNP	Probe ID	*P*	FDR
HLA-H	rs113258639	ILMN_1666078	9.69E-46	1.35E-43
HLA-DRB6	rs114846898	ILMN_2066060	4.84E-33	2.57E-31
HLA-C	rs116682067	ILMN_1721113	1.17E-18	1.35E-17
HLA-DPB1	rs3128917	ILMN_1749070	3.23E-15	3.23E-14
HLA-DQA1	rs112038669	ILMN_1808405	1.37E-13	1.27E-12
HLA-G	rs113258639	ILMN_1656670	3.51E-12	2.22E-11
HLA-A	rs113258639	ILMN_1671054	8.31E-12	5.02E-11
IL12A	rs4680536	ILMN_1671353	5.95E-03	2.04E-02
IL12A	rs485497	ILMN_1671353	2.74E-02	3.86E-02
BLK	rs2409781	ILMN_1668277	7.49E-05	7.84E-03
BLK	rs2736345	ILMN_1668277	2.55E-03	3.63E-02
FAM167A	rs4840568	ILMN_1687213	1.19E-20	1.94E-18
TNIP1	rs73272842	ILMN_1703650	2.53E-04	2.80E-03
TNIP1	rs6579837	ILMN_1703650	5.98E-03	8.63E-03

Supplementary Table 7. Association analysis in *IRF5*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs4728141	128567032	T/C	0.54	0.47	I / -	1.34 (1.13-1.58)	7.18E-04	-	-	-	-	-	-
rs3757387	128576086	T/C	0.54	0.45	I / I	1.31 (1.11-1.54)	1.49E-03	1.50 (1.37-1.64)	7.50E-18	0.16	50	1.44 (1.29-1.62)	2.73E-19
chr7:128575797:D	128575797	indel/T	0.54	0.45	I / I	1.31 (1.11-1.54)	1.49E-03	1.50 (1.37-1.65)	7.64E-18	0.15	51	1.44 (1.29-1.62)	2.77E-19
rs3778754	128575552	C/G	0.56	0.47	I / I	1.30 (1.10-1.53)	2.04E-03	1.49 (1.36-1.64)	2.90E-17	0.15	52	1.44 (1.28-1.61)	1.39E-18
rs3823536	128579666	G/A	0.55	0.47	I / I	1.29 (1.09-1.52)	3.04E-03	1.48 (1.35-1.62)	2.02E-16	0.16	50	1.42 (1.27-1.59)	1.35E-17
rs3778752	128580047	G/T	0.55	0.46	I / I	1.30 (1.09-1.54)	2.80E-03	1.47 (1.34-1.62)	9.39E-16	0.20	39	1.42 (1.26-1.59)	4.70E-17
rs79775079	128580048	A/T	0.55	0.46	I / I	1.30 (1.09-1.54)	2.80E-03	1.47 (1.34-1.62)	9.39E-16	0.20	39	1.42 (1.26-1.59)	4.70E-17
rs4728142	128573967	G/A	0.53	0.44	O / O	1.29 (1.09-1.52)	2.85E-03	1.46 (1.33-1.60)	2.05E-15	0.20	39	1.40 (1.25-1.57)	9.75E-17
rs17339836	128681062	C/T	0.18	0.12	O / O	1.65 (1.32-2.06)	8.53E-06	1.55 (1.37-1.75)	5.73E-12	0.62	0	1.58 (1.36-1.84)	2.43E-16
rs17338998	128618559	C/T	0.18	0.12	I / I	1.64 (1.32-2.05)	9.51E-06	1.55 (1.37-1.75)	5.70E-12	0.64	0	1.57 (1.35-1.83)	2.67E-16
rs12706861	128616582	C/T	0.18	0.12	I / I	1.64 (1.32-2.05)	9.51E-06	1.55 (1.37-1.75)	5.88E-12	0.63	0	1.57 (1.35-1.83)	2.76E-16
rs12539741	128596805	C/T	0.18	0.12	O / O	1.64 (1.32-2.05)	9.62E-06	1.55 (1.36-1.75)	7.26E-12	0.63	0	1.57 (1.35-1.83)	3.45E-16
rs71581958	128665542	C/T	0.18	0.12	O / O	1.65 (1.32-2.06)	8.52E-06	1.54 (1.36-1.75)	9.03E-12	0.60	0	1.57 (1.35-1.83)	3.82E-16
rs12535158	128625019	C/T	0.18	0.12	O / O	1.65 (1.32-2.06)	8.49E-06	1.54 (1.36-1.75)	9.37E-12	0.60	0	1.57 (1.35-1.83)	3.96E-16
rs12536266	128611035	G/A	0.18	0.12	I / I	1.64 (1.32-2.05)	9.51E-06	1.54 (1.36-1.75)	8.59E-12	0.61	0	1.57 (1.35-1.83)	4.04E-16
rs34725944	128641653	T/C	0.18	0.12	O / O	1.64 (1.32-2.05)	9.62E-06	1.54 (1.36-1.75)	8.72E-12	0.62	0	1.57 (1.35-1.83)	4.14E-16
chr7:128622088:I	128622088	C/CT	0.18	0.12	I / I	1.64 (1.32-2.05)	9.51E-06	1.54 (1.36-1.75)	1.02E-11	0.61	0	1.57 (1.35-1.83)	4.79E-16
rs12531054	128644251	G/T	0.18	0.12	O / O	1.64 (1.32-2.05)	9.62E-06	1.54 (1.36-1.74)	1.06E-11	0.61	0	1.57 (1.35-1.82)	5.03E-16
chr7:128633243:D	128633243	GT/G	0.18	0.12	I / I	1.64 (1.32-2.05)	9.51E-06	1.54 (1.36-1.74)	1.09E-11	0.61	0	1.57 (1.35-1.83)	5.11E-16
rs10488631	128594183	T/C	0.18	0.12	O / O	1.64 (1.32-2.05)	9.65E-06	1.54 (1.36-1.74)	1.13E-11	0.61	0	1.57 (1.35-1.82)	5.36E-16
rs34871361	128671086	C/T	0.18	0.12	I / I	1.65 (1.32-2.06)	8.52E-06	1.54 (1.36-1.74)	1.38E-11	0.58	0	1.57 (1.35-1.82)	5.85E-16
rs2070197	128589000	T/C	0.18	0.12	I / I	1.64 (1.32-2.05)	9.62E-06	1.54 (1.36-1.74)	1.31E-11	0.60	0	1.57 (1.35-1.82)	6.22E-16
rs62478615	128684316	G/C	0.18	0.12	I / I	1.65 (1.32-2.06)	8.67E-06	1.54 (1.36-1.74)	1.45E-11	0.58	0	1.57 (1.35-1.82)	6.25E-16
rs12531711	128617466	A/G	0.18	0.12	I / I	1.64 (1.32-2.05)	9.51E-06	1.53 (1.36-1.74)	1.56E-11	0.59	0	1.57 (1.35-1.82)	7.36E-16
rs35188261	128683539	G/A	0.18	0.12	O / O	1.66 (1.33-2.06)	6.88E-06	1.53 (1.35-1.73)	2.30E-11	0.53	0	1.56 (1.34-1.82)	8.06E-16
rs35000415	128585616	C/T	0.17	0.12	O / O	1.65 (1.33-2.06)	7.35E-06	1.53 (1.35-1.74)	2.21E-11	0.56	0	1.57 (1.34-1.82)	8.22E-16
rs117473643	128698186	G/C	0.17	0.12	I / I	1.64 (1.31-2.04)	1.15E-05	1.53 (1.35-1.74)	1.88E-11	0.60	0	1.56 (1.34-1.82)	1.06E-15
rs117944677	128698185	A/T	0.17	0.12	I / I	1.64 (1.31-2.04)	1.15E-05	1.53 (1.35-1.74)	1.88E-11	0.60	0	1.56 (1.34-1.82)	1.06E-15
rs36073657	128651522	C/T	0.17	0.12	I / I	1.64 (1.32-2.05)	9.62E-06	1.53 (1.35-1.73)	2.21E-11	0.58	0	1.56 (1.34-1.82)	1.06E-15
rs13246321	128701331	T/C	0.17	0.12	O / I	1.63 (1.31-2.03)	1.41E-05	1.53 (1.35-1.74)	1.80E-11	0.63	0	1.56 (1.34-1.82)	1.23E-15
rs34748780	128700153	A/G	0.17	0.12	I / I	1.63 (1.31-2.03)	1.40E-05	1.53 (1.35-1.74)	1.88E-11	0.63	0	1.56 (1.34-1.81)	1.27E-15
rs13238352	128647942	C/T	0.17	0.12	I / I	1.64 (1.32-2.05)	9.62E-06	1.53 (1.35-1.73)	2.79E-11	0.57	0	1.56 (1.34-1.82)	1.33E-15
rs4731532	128572766	A/G	0.43	0.51	O / O	0.78 (0.66-0.92)	3.58E-03	0.70 (0.64-0.77)	2.99E-14	0.25	25	0.72 (0.64-0.81)	1.41E-15
rs13227075	128643297	T/C	0.17	0.12	I / I	1.64 (1.32-2.05)	9.51E-06	1.53 (1.35-1.73)	3.00E-11	0.56	0	1.56 (1.34-1.81)	1.42E-15
rs13239597	128695983	C/A	0.17	0.12	I / I	1.64 (1.31-2.04)	1.13E-05	1.52 (1.34-1.72)	5.75E-11	0.56	0	1.55 (1.33-1.81)	3.23E-15
chr7:128588434:I	128588434	T/TG	0.18	0.12	I / I	1.63 (1.31-2.03)	1.05E-05	1.50 (1.32-1.69)	1.76E-10	0.49	0	1.53 (1.32-1.78)	9.40E-15
rs34420397	128710302	C/A	0.18	0.12	I / I	1.66 (1.33-2.07)	7.15E-06	1.49 (1.31-1.68)	3.81E-10	0.40	0	1.53 (1.32-1.78)	1.47E-14
rs17340351	128708797	T/A	0.18	0.12	I / I	1.62 (1.30-2.02)	1.59E-05	1.50 (1.32-1.69)	1.90E-10	0.52	0	1.53 (1.32-1.78)	1.48E-14
rs17424921	128708122	G/C	0.18	0.12	I / I	1.62 (1.30-2.02)	1.59E-05	1.49 (1.32-1.69)	2.44E-10	0.51	0	1.53 (1.31-1.78)	1.91E-14
rs13242075	128708939	G/A	0.18	0.12	I / I	1.62 (1.30-2.02)	1.59E-05	1.49 (1.32-1.69)	2.54E-10	0.51	0	1.53 (1.31-1.78)	1.99E-14
chr7:128709884:I	128709884	C/CCCCA	0.18	0.12	I / I	1.64 (1.31-2.04)	1.10E-05	1.48 (1.31-1.68)	4.10E-10	0.44	0	1.53 (1.31-1.77)	2.32E-14
rs2004640	128578301	T/G	0.41	0.48	I / I	0.80 (0.67-0.94)	7.96E-03	0.70 (0.64-0.77)	2.62E-13	0.21	36	0.73 (0.65-0.82)	2.88E-14
rs11761199	128581835	A/G	0.53	0.46	O / O	1.21 (1.02-1.42)	2.46E-02	1.40 (1.27-1.53)	8.96E-13	0.13	57	1.34 (1.20-1.50)	4.29E-13
rs80086012	128711874	C/T	0.16	0.11	I / I	1.61 (1.28-2.02)	4.68E-05	1.43 (1.25-1.63)	1.08E-07	0.37	0	1.48 (1.26-1.73)	2.66E-11
rs35354193	128727794	G/A	0.18	0.13	I / I	1.41 (1.13-1.75)	2.49E-03	1.45 (1.28-1.64)	6.89E-09	0.83	0	1.43 (1.23-1.67)	7.31E-11
rs12536672	128717523	C/A	0.19	0.14	I / I	1.41 (1.14-1.74)	1.70E-03	1.42 (1.26-1.60)	1.20E-08	0.94	0	1.42 (1.22-1.64)	8.22E-11
rs59110799	128716007	G/T	0.19	0.14	O / O	1.41 (1.14-1.75)	1.60E-03	1.42 (1.26-1.60)	1.44E-08	0.97	0	1.42 (1.22-1.64)	9.25E-11
rs71581969	128722237	C/A	0.19	0.14	I / I	1.40 (1.13-1.73)	2.34E-03	1.42 (1.26-1.60)	1.20E-08	0.90	0	1.41 (1.22-1.64)	1.15E-10
chr7:128717234:D	128717234	AAT/A	0.19	0.14	I / I	1.41 (1.14-1.75)	1.58E-03	1.41 (1.25-1.59)	2.60E-08	0.99	0	1.41 (1.22-1.63)	1.61E-10
rs34865778	128717305	G/A	0.19	0.14	I / I	1.41 (1.14-1.75)	1.58E-03	1.41 (1.25-1.59)	2.60E-08	0.99	0	1.41 (1.22-1.63)	1.61E-10
rs12536719	128717740	C/T	0.19	0.14	I / I	1.41 (1.14-1.75)	1.58E-03	1.41 (1.25-1.59)	2.84E-08	0.98	0	1.41 (1.22-1.63)	1.75E-10
rs17340542	128720045	T/C	0.19	0.14	O / O	1.39 (1.12-1.72)	2.67E-03	1.42 (1.25-1.60)	1.64E-08	0.89	0	1.41 (1.21-1.63)	1.79E-10
rs66540114	128720295	G/A	0.19	0.14	I / I	1.39 (1.12-1.73)	2.49E-03	1.41 (1.25-1.59)	2.06E-08	0.91	0	1.41 (1.21-1.63)	2.06E-10
rs13237546	128720433	G/A	0.19	0.14	I / I	1.40 (1.12-1.73)	2.43E-03	1.41 (1.25-1.59)	2.48E-08	0.94	0	1.41 (1.21-1.63)	2.40E-10
rs34350562	128718708	A/G	0.19	0.14	I / I	1.39 (1.12-1.72)	2.82E-03	1.41 (1.25-1.59)	2.33E-08	0.91	0	1.40 (1.21-1.63)	2.64E-10
rs13232316	128715299	T/A	0.19	0.14	I / I	1.41 (1.14-1.75)	1.58E-03	1.40 (1.24-1.58)	4.37E-08	0.95	0	1.40 (1.21-1.63)	2.66E-10
rs35429892	128713630	G/A	0.18	0.14	I / I	1.42 (1.15-1.76)	1.28E-03	1.40 (1.24-1.58)	5.47E-08	0.90	0	1.41 (1.21-1.63)	2.69E-10
rs35414340	128723194	C/T	0.19	0.14	I / I	1.41 (1.14-1.75)	1.83E-03	1.40 (1.24-1.58)	3.82E-08	0.98	0	1.40 (1.21-1.63)	2.72E-10
rs13241591	128714746	A/G	0.19	0.14	I / I	1.41 (1.14-1.75)	1.49E-03	1.40 (1.24-1.58)	5.41E-08	0.93	0	1.40 (1.21-1.63)	3.09E-10
rs13229034	128714843	T/C	0.19	0.14	I / I	1.42 (1.15-1.76)	1.35E-03	1.40 (1.24-1.58)	6.18E-08	0.91	0	1.40 (1.21-1.63)	3.21E-10
rs34644138	128720967	A/G	0.19	0.14	O / I	1.39 (1.12-1.73)	2.46E-03	1.40 (1.24-1.58)	3.63E-08	0.95	0	1.40 (1.21-1.62)	3.49E-10
rs71581967	128717169	G/A	0.19	0.15	I / I	1.35 (1.10-1.67)	4.89E-03	1.36 (1.21-1.54)	3.25E-07	0.95	0	1.36 (1.18-1.57)	5.80E-09
rs113945951	128718178	T/C	0.19	0.15	I / I	1.35 (1.09-1.66)	5.40E-03	1.36 (1.21-1.54)	3.39E-07	0.93	0	1.36 (1.18-1.57)	6.67E-09
rs13240595	128731777	C/A	0.19	0.14	O / O	1.37 (1.10-1.69)	4.06E-03	1.35 (1.20-1.52)	7.99E-07	0.93	0	1.36 (1.17-1.57)	1.14E-08
rs17425212	128721724	C/T	0.19	0.15	O / O	1.32 (1.07-1.64)	9.52E-03	1.36 (1.21-1.54)	3.49E-07	0.82	0	1.35 (1.17-1.56)	1.24E-08
rs7801838	128573994	C/T	0.25	0.30	I / I	0.88 (0.73-1.06)	1.69E-01	0.73 (0.66-0.82)	1.11E-08	0.10	63	0.77 (0.68-0.88)	2.55E-08
rs4731530	128562578	C/T	0.42	0.47	O / O	0.79 (0.67-0.93)	4.02E-03	0.80 (0.73-0.88)	2.65E-06	0.86	0	0.80 (0.71-0.89)	3.66E-08
rs12706860	128570026	C/G	0.28	0.34	I / I	0.91 (0.76-1.09)	2.95E-01	0.74 (0.67-0.82)	6.43E-09	0.05	74	0.78 (0.69-0.89)	4.41E-08
rs3757385	128577304	G/T	0.31	0.36	O / O	0.86 (0.73-1.03)	1.01E-01	0.76 (0.69-0.84)	7.64E-08	0.23	31	0.79 (0.70-0.89)	5.82E-08
rs13237475	128572482	C/T	0.26	0.32	I / I	0.89 (0.74-1.07)	2.09E-01	0.75 (0.67-0.83)	3.00E-08	0.10	63	0.78 (0.69-0.89)	8.12E-08

Supplementary Table 7. Association analysis in *IRF5*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs34288126	128735438	G/A	0.17	0.13	O / O	1.32 (1.06-1.64)	1.30E-02	1.35 (1.19-1.53)	2.15E-06	0.86	0	1.34 (1.15-1.56)	9.57E-08
rs3757388	128576023	A/G	0.31	0.37	I / I	0.86 (0.72-1.02)	7.88E-02	0.77 (0.70-0.85)	2.19E-07	0.32	0	0.80 (0.71-0.90)	1.02E-07
rs754284	128571478	C/G	0.27	0.32	I / I	0.89 (0.74-1.07)	2.24E-01	0.75 (0.68-0.83)	3.68E-08	0.10	63	0.79 (0.70-0.89)	1.09E-07
rs35939202	128572040	G/A	0.27	0.32	O / O	0.89 (0.75-1.07)	2.24E-01	0.75 (0.67-0.83)	3.80E-08	0.10	64	0.79 (0.69-0.89)	1.14E-07
chr7:128570575:I	128570575	G/GA	0.27	0.32	I / I	0.91 (0.76-1.09)	2.89E-01	0.75 (0.67-0.83)	2.56E-08	0.07	70	0.79 (0.69-0.89)	1.29E-07
rs3807135	128577617	C/T	0.31	0.37	O / I	0.86 (0.72-1.02)	7.94E-02	0.77 (0.70-0.85)	2.89E-07	0.33	0	0.80 (0.71-0.90)	1.31E-07
rs11982901	128566754	C/T	0.27	0.32	I / I	0.91 (0.76-1.09)	3.17E-01	0.74 (0.67-0.83)	2.26E-08	0.06	73	0.79 (0.70-0.89)	1.41E-07
rs66720828	128567535	G/C	0.27	0.32	I / I	0.91 (0.76-1.09)	3.08E-01	0.75 (0.68-0.83)	3.16E-08	0.06	71	0.79 (0.70-0.90)	1.74E-07
rs13245639	128567810	C/T	0.27	0.32	I / I	0.91 (0.76-1.09)	3.09E-01	0.75 (0.68-0.83)	4.12E-08	0.07	70	0.79 (0.70-0.90)	2.15E-07
rs7783384	128681297	C/T	0.33	0.38	I / I	0.82 (0.70-0.98)	2.56E-02	0.79 (0.72-0.87)	2.90E-06	0.71	0	0.80 (0.71-0.90)	2.62E-07
rs729302	128568960	A/C	0.27	0.32	O / O	0.91 (0.76-1.09)	3.31E-01	0.75 (0.68-0.83)	4.97E-08	0.06	71	0.80 (0.70-0.90)	2.83E-07
rs73238196	128567968	G/C	0.27	0.32	I / I	0.91 (0.76-1.09)	3.08E-01	0.76 (0.68-0.84)	8.00E-08	0.08	68	0.80 (0.70-0.90)	3.62E-07
rs4731541	128678236	G/C	0.32	0.37	I / I	0.82 (0.69-0.97)	2.37E-02	0.80 (0.73-0.88)	6.78E-06	0.80	0	0.81 (0.72-0.91)	5.31E-07
rs34891352	128567718	C/T	0.28	0.33	I / I	0.93 (0.77-1.11)	4.08E-01	0.75 (0.68-0.84)	1.01E-07	0.06	73	0.80 (0.71-0.91)	7.61E-07
rs35611012	128564825	C/T	0.26	0.31	I / I	0.91 (0.76-1.09)	3.27E-01	0.76 (0.68-0.84)	2.14E-07	0.08	67	0.80 (0.71-0.91)	9.05E-07
chr7:128665751:I	128665751	GC/G	0.33	0.38	I / I	0.84 (0.71-1.00)	5.24E-02	0.80 (0.72-0.88)	5.73E-06	0.58	0	0.81 (0.72-0.91)	1.10E-06
rs4731536	128640293	T/C	0.34	0.39	O / O	0.83 (0.70-0.98)	3.01E-02	0.81 (0.73-0.89)	1.18E-05	0.80	0	0.81 (0.72-0.91)	1.16E-06
chr7:128665753:I	128665753	CA/C	0.33	0.38	I / I	0.83 (0.70-0.98)	2.86E-02	0.81 (0.73-0.89)	1.28E-05	0.82	0	0.81 (0.72-0.91)	1.18E-06
rs12155080	128658739	C/G	0.33	0.38	I / I	0.82 (0.69-0.97)	2.42E-02	0.81 (0.74-0.89)	1.68E-05	0.89	0	0.81 (0.72-0.91)	1.28E-06
rs11767711	128651832	T/C	0.34	0.39	O / O	0.83 (0.70-0.98)	3.00E-02	0.81 (0.74-0.89)	1.56E-05	0.82	0	0.82 (0.73-0.92)	1.49E-06
rs11763684	128637994	C/T	0.34	0.39	I / I	0.84 (0.71-0.99)	3.78E-02	0.81 (0.73-0.89)	1.31E-05	0.73	0	0.82 (0.73-0.92)	1.62E-06
rs2272347	128619415	A/T	0.33	0.38	I / I	0.83 (0.70-0.98)	2.88E-02	0.81 (0.74-0.89)	1.91E-05	0.85	0	0.82 (0.73-0.92)	1.72E-06
rs7796963	128629001	C/T	0.33	0.38	I / I	0.83 (0.70-0.98)	2.99E-02	0.81 (0.74-0.90)	2.30E-05	0.86	0	0.82 (0.73-0.92)	2.13E-06
rs13242262	128591364	T/A	0.34	0.38	I / I	0.83 (0.70-0.98)	3.04E-02	0.81 (0.74-0.89)	2.30E-05	0.85	0	0.82 (0.73-0.92)	2.17E-06
rs10954213	128589427	A/G	0.34	0.38	O / O	0.83 (0.70-0.98)	2.91E-02	0.82 (0.74-0.90)	3.63E-05	0.90	0	0.82 (0.73-0.92)	3.20E-06
rs6965542	128655918	T/C	0.34	0.39	I / I	0.83 (0.70-0.98)	2.81E-02	0.82 (0.75-0.90)	3.83E-05	0.94	0	0.82 (0.73-0.92)	3.24E-06
rs78366570	128738502	A/G	0.14	0.11	I / I	1.27 (1.00-1.62)	5.16E-02	1.33 (1.17-1.52)	2.32E-05	0.73	0	1.31 (1.12-1.55)	3.85E-06
rs17339773	128677052	T/A	0.04	0.02	I / I	1.75 (1.08-2.83)	2.27E-02	1.70 (1.31-2.20)	6.21E-05	0.92	0	1.71 (1.24-2.36)	4.16E-06
rs113253472	128738923	A/C	0.14	0.11	I / I	1.27 (1.00-1.62)	5.16E-02	1.33 (1.16-1.51)	3.46E-05	0.76	0	1.31 (1.11-1.54)	5.56E-06
rs35598937	128713658	G/C	0.25	0.21	I / I	1.36 (1.13-1.64)	1.17E-03	1.19 (1.07-1.33)	1.16E-03	0.23	32	1.24 (1.09-1.41)	7.54E-06
rs6968508	128563778	C/G	0.11	0.14	I / I	0.73 (0.56-0.94)	1.54E-02	0.77 (0.66-0.88)	2.60E-04	0.74	0	0.76 (0.63-0.90)	1.18E-05
rs11976775	128691990	G/A	0.19	0.22	O / I	0.77 (0.62-0.94)	1.27E-02	0.81 (0.72-0.91)	3.52E-04	0.66	0	0.80 (0.69-0.92)	1.35E-05
rs6961014	128692710	G/C	0.19	0.22	I / I	0.78 (0.64-0.96)	1.79E-02	0.81 (0.72-0.91)	3.18E-04	0.79	0	0.80 (0.70-0.92)	1.65E-05
rs12540468	128722800	G/A	0.26	0.22	I / I	1.29 (1.07-1.55)	6.68E-03	1.20 (1.08-1.33)	7.36E-04	0.49	0	1.22 (1.08-1.39)	1.70E-05
rs34990543	128564879	C/T	0.11	0.14	I / I	0.74 (0.57-0.95)	1.84E-02	0.77 (0.67-0.89)	3.36E-04	0.77	0	0.76 (0.64-0.90)	1.79E-05
rs71581970	128723327	G/A	0.26	0.22	I / I	1.29 (1.07-1.55)	7.17E-03	1.20 (1.08-1.33)	8.49E-04	0.49	0	1.22 (1.08-1.39)	2.09E-05
rs6968225	128563607	C/G	0.11	0.14	I / I	0.75 (0.58-0.96)	2.52E-02	0.77 (0.67-0.89)	2.97E-04	0.86	0	0.76 (0.64-0.91)	2.10E-05
rs13222807	128735744	T/C	0.19	0.16	O / O	1.23 (1.00-1.51)	5.13E-02	1.26 (1.12-1.41)	1.48E-04	0.86	0	1.25 (1.08-1.44)	2.14E-05
rs6976410	128718027	G/C	0.25	0.22	I / I	1.34 (1.11-1.61)	2.18E-03	1.18 (1.06-1.31)	2.00E-03	0.26	22	1.22 (1.08-1.39)	2.16E-05
rs3757386	128577297	C/T	0.09	0.12	O / I	0.83 (0.64-1.07)	1.56E-01	0.72 (0.62-0.84)	3.91E-05	0.38	0	0.75 (0.62-0.90)	2.26E-05
rs1476193	128702410	A/C	0.20	0.23	I / I	0.80 (0.65-0.97)	2.60E-02	0.81 (0.72-0.91)	3.13E-04	0.88	0	0.81 (0.70-0.93)	2.27E-05
rs6960994	128692657	T/C	0.20	0.23	O / O	0.77 (0.63-0.95)	1.33E-02	0.82 (0.73-0.92)	5.68E-04	0.64	0	0.81 (0.70-0.93)	2.29E-05
chr7:128608939:D	128608939	G/GA	0.30	0.34	I / I	0.83 (0.69-0.99)	3.42E-02	0.83 (0.75-0.92)	2.61E-04	0.95	0	0.83 (0.73-0.94)	2.47E-05
rs13225818	128736014	T/C	0.19	0.16	O / O	1.22 (0.99-1.50)	5.84E-02	1.25 (1.12-1.41)	1.54E-04	0.83	0	1.24 (1.08-1.43)	2.54E-05
chr7:128577319:D	128577319	GGT/G	0.09	0.12	I / I	0.82 (0.63-1.07)	1.49E-01	0.73 (0.62-0.85)	5.03E-05	0.41	0	0.75 (0.62-0.91)	2.66E-05
rs10279821	128683547	C/T	0.29	0.33	I / I	0.85 (0.71-1.01)	6.23E-02	0.83 (0.75-0.91)	1.55E-04	0.82	0	0.83 (0.74-0.94)	2.72E-05
rs3807134	128577338	T/C	0.09	0.12	O / O	0.82 (0.63-1.07)	1.49E-01	0.73 (0.62-0.85)	5.55E-05	0.41	0	0.75 (0.63-0.91)	2.90E-05
rs17340646	128722514	T/G	0.26	0.22	O / O	1.29 (1.07-1.55)	7.86E-03	1.19 (1.07-1.33)	1.10E-03	0.49	0	1.22 (1.07-1.39)	2.96E-05
rs2242028	128694976	T/C	0.19	0.22	I / I	0.79 (0.65-0.97)	2.25E-02	0.82 (0.73-0.91)	5.08E-04	0.79	0	0.81 (0.70-0.93)	3.22E-05
rs62478580	128599933	G/T	0.30	0.34	I / I	0.85 (0.71-1.01)	6.40E-02	0.83 (0.75-0.91)	1.91E-04	0.84	0	0.83 (0.74-0.94)	3.41E-05
rs13221560	128663175	G/A	0.30	0.34	I / I	0.85 (0.71-1.01)	6.92E-02	0.83 (0.75-0.91)	1.87E-04	0.81	0	0.83 (0.74-0.94)	3.63E-05
rs6467224	128688456	C/T	0.29	0.33	I / I	0.87 (0.73-1.03)	1.13E-01	0.82 (0.74-0.91)	1.07E-04	0.59	0	0.83 (0.74-0.94)	3.72E-05
rs6973975	128675549	A/G	0.30	0.34	I / I	0.85 (0.71-1.01)	6.99E-02	0.83 (0.75-0.92)	1.97E-04	0.81	0	0.84 (0.74-0.94)	3.85E-05
rs921403	128676724	A/T	0.30	0.34	I / I	0.86 (0.72-1.02)	8.29E-02	0.83 (0.75-0.91)	1.64E-04	0.74	0	0.84 (0.74-0.94)	3.89E-05
rs3778749	128617811	C/T	0.30	0.34	I / I	0.83 (0.69-0.99)	3.97E-02	0.84 (0.76-0.92)	4.07E-04	0.93	0	0.83 (0.74-0.94)	4.35E-05
rs1874327	128585376	T/A	0.29	0.33	I / I	0.84 (0.70-1.00)	4.73E-02	0.84 (0.76-0.93)	4.87E-04	0.97	0	0.84 (0.74-0.95)	6.11E-05
rs56088330	128737958	T/A	0.50	0.46	I / I	1.03 (0.87-1.21)	7.47E-01	1.24 (1.13-1.36)	6.37E-06	0.06	72	1.17 (1.05-1.31)	6.48E-05
rs3857852	128657277	C/T	0.30	0.34	I / I	0.84 (0.71-1.01)	5.96E-02	0.84 (0.76-0.93)	4.92E-04	0.96	0	0.84 (0.74-0.95)	7.72E-05
rs11760442	128656120	C/A	0.30	0.34	I / I	0.84 (0.71-1.01)	5.94E-02	0.84 (0.76-0.93)	5.23E-04	0.97	0	0.84 (0.75-0.95)	8.15E-05
rs10954214	128589633	T/C	0.30	0.34	O / O	0.82 (0.69-0.98)	3.29E-02	0.85 (0.77-0.93)	9.27E-04	0.79	0	0.84 (0.74-0.95)	8.17E-05
rs12532542	128667412	C/T	0.30	0.34	I / I	0.85 (0.71-1.01)	6.40E-02	0.84 (0.76-0.93)	5.03E-04	0.94	0	0.84 (0.75-0.95)	8.44E-05
rs7800687	128593719	G/C	0.30	0.34	I / I	0.84 (0.71-1.01)	6.01E-02	0.84 (0.76-0.93)	6.00E-04	0.97	0	0.84 (0.75-0.95)	9.39E-05
rs6467223	128674666	G/A	0.30	0.34	O / O	0.86 (0.72-1.03)	1.00E-01	0.83 (0.76-0.92)	3.62E-04	0.75	0	0.84 (0.75-0.95)	9.86E-05
rs3925323	128592241	G/A	0.30	0.34	I / I	0.85 (0.71-1.01)	7.21E-02	0.84 (0.76-0.93)	5.57E-04	0.91	0	0.84 (0.75-0.95)	1.05E-04
rs12537496	128712868	G/A	0.26	0.23	I / I	1.32 (1.09-1.58)	3.40E-03	1.16 (1.04-1.29)	6.39E-03	0.24	28	1.20 (1.06-1.37)	1.09E-04
rs2402941	128563014	G/A	0.12	0.14	O / O	0.73 (0.57-0.94)	1.35E-02	0.81 (0.71-0.93)	2.61E-03	0.49	0	0.79 (0.67-0.93)	1.12E-04
rs11767954	128699679	T/A	0.19	0.23	I / I	0.79 (0.64-0.97)	2.20E-02	0.83 (0.74-0.94)	1.83E-03	0.64	0	0.82 (0.72-0.94)	1.15E-04
rs6948928	128623097	C/T	0.30	0.34	I / I	0.85 (0.71-1.01)	6.32E-02	0.84 (0.76-0.93)	7.21E-04	0.98	0	0.84 (0.75-0.95)	1.17E-04
rs1072767	128673205	A/G	0.30	0.34	O / O	0.85 (0.71-1.01)	7.34E-02	0.84 (0.76-0.93)	6.67E-04	0.93	0	0.85 (0.75-0.95)	1.26E-04
rs35994853	128738262	C/T	0.50	0.46	O / O	1.02 (0.86-1.20)	8.15E-01	1.23 (1.12-1.34)	1.29E-05	0.06	73	1.16 (1.04-1.30)	1.34E-04

Supplementary Table 7. Association analysis in *IRF5*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs3778750	128617089	T/G	0.30	0.34	I / I	0.85 (0.71-1.01)	6.33E-02	0.85 (0.77-0.93)	8.49E-04	1.00	0	0.85 (0.75-0.95)	1.37E-04
rs3847099	128656831	T/C	0.30	0.34	O / O	0.85 (0.72-1.02)	7.87E-02	0.84 (0.77-0.93)	7.40E-04	0.92	0	0.85 (0.75-0.96)	1.49E-04
rs2280714	128594725	T/C	0.30	0.34	O / O	0.84 (0.71-1.01)	6.15E-02	0.85 (0.77-0.94)	9.68E-04	0.98	0	0.85 (0.75-0.96)	1.51E-04
rs13227095	128723943	T/C	0.26	0.23	O / O	1.25 (1.04-1.50)	1.82E-02	1.17 (1.05-1.30)	3.19E-03	0.56	0	1.19 (1.05-1.35)	1.74E-04
rs7789423	128621204	G/A	0.30	0.34	O / O	0.85 (0.71-1.01)	6.30E-02	0.85 (0.77-0.94)	1.10E-03	0.97	0	0.85 (0.75-0.96)	1.76E-04
rs13222837	128738964	A/T	0.50	0.45	I / I	1.01 (0.86-1.20)	8.58E-01	1.22 (1.11-1.34)	2.07E-05	0.06	73	1.16 (1.04-1.30)	2.16E-04
rs7799991	128738941	A/T	0.50	0.45	I / I	1.01 (0.86-1.20)	8.58E-01	1.22 (1.11-1.34)	2.07E-05	0.06	73	1.16 (1.04-1.30)	2.16E-04
chr7:128730939:I	128730939	G/GTCAC	0.33	0.30	I / I	1.23 (1.03-1.46)	2.13E-02	1.15 (1.05-1.27)	3.82E-03	0.55	0	1.17 (1.04-1.32)	2.38E-04
rs13226546	128739949	C/A	0.51	0.47	I / I	1.03 (0.87-1.22)	7.40E-01	1.22 (1.11-1.34)	3.86E-05	0.09	66	1.16 (1.03-1.30)	2.51E-04
rs4473954	128728754	A/T	0.33	0.29	I / I	1.21 (1.01-1.44)	3.32E-02	1.16 (1.05-1.27)	3.41E-03	0.66	0	1.17 (1.04-1.32)	3.03E-04
rs71581972	128723334	T/C	0.26	0.23	I / I	1.24 (1.03-1.49)	2.27E-02	1.16 (1.05-1.29)	4.72E-03	0.57	0	1.18 (1.04-1.34)	3.13E-04
rs1874330	128575224	T/C	0.16	0.19	I / I	0.80 (0.64-1.00)	4.97E-02	0.83 (0.73-0.94)	2.54E-03	0.82	0	0.82 (0.71-0.95)	3.18E-04
rs34673027	128739025	C/A	0.49	0.45	O / I	1.04 (0.88-1.22)	6.75E-01	1.21 (1.10-1.32)	7.26E-05	0.12	59	1.15 (1.03-1.29)	3.41E-04
rs11768806	128573128	C/T	0.14	0.17	O / O	0.79 (0.63-0.99)	3.91E-02	0.83 (0.73-0.94)	3.65E-03	0.72	0	0.81 (0.70-0.95)	3.72E-04
rs2402940	128570742	C/T	0.14	0.17	I / I	0.78 (0.62-0.98)	3.05E-02	0.83 (0.73-0.94)	4.53E-03	0.61	0	0.82 (0.70-0.95)	3.79E-04
rs73238199	128575651	C/T	0.07	0.09	O / O	0.84 (0.62-1.14)	2.69E-01	0.74 (0.62-0.88)	6.51E-04	0.45	0	0.77 (0.62-0.95)	5.11E-04
rs140339347	128566806	T/A	0.01	0.02	I / I	0.89 (0.48-1.65)	7.10E-01	0.43 (0.28-0.66)	1.11E-04	0.06	72	0.53 (0.33-0.86)	5.23E-04
rs2242029	128695279	G/A	0.15	0.18	O / I	0.79 (0.63-0.98)	3.41E-02	0.84 (0.74-0.95)	5.68E-03	0.63	0	0.82 (0.71-0.96)	5.23E-04
rs754281	128572180	C/T	0.15	0.17	O / O	0.76 (0.61-0.96)	2.15E-02	0.84 (0.74-0.96)	9.34E-03	0.45	0	0.82 (0.70-0.96)	6.19E-04
rs7805352	128703350	C/T	0.15	0.17	I / I	0.78 (0.62-0.98)	2.96E-02	0.84 (0.74-0.96)	7.97E-03	0.55	0	0.82 (0.70-0.96)	6.65E-04
rs12155244	128710988	C/T	0.17	0.20	I / I	0.83 (0.68-1.03)	9.33E-02	0.83 (0.74-0.94)	3.52E-03	1.00	0	0.83 (0.72-0.97)	7.68E-04
rs4268073	128564932	C/T	0.16	0.19	O / I	0.98 (0.79-1.22)	8.49E-01	0.79 (0.70-0.90)	2.56E-04	0.10	64	0.84 (0.72-0.98)	1.36E-03
rs28864742	128698257	T/C	0.16	0.18	I / I	0.80 (0.64-1.00)	4.54E-02	0.86 (0.76-0.97)	1.39E-02	0.59	0	0.84 (0.72-0.98)	1.64E-03
rs73721684	128577014	G/A	0.01	0.02	O / I	0.59 (0.32-1.10)	9.53E-02	0.60 (0.41-0.88)	8.38E-03	0.96	0	0.60 (0.38-0.93)	1.81E-03
rs6964194	128726026	C/A	0.37	0.34	I / I	1.17 (0.99-1.38)	6.58E-02	1.12 (1.02-1.23)	1.68E-02	0.67	0	1.14 (1.01-1.27)	2.67E-03
rs6959965	128725722	C/T	0.37	0.34	I / I	1.17 (0.99-1.38)	6.58E-02	1.12 (1.02-1.23)	1.74E-02	0.66	0	1.13 (1.01-1.27)	2.77E-03
rs6959557	128725550	A/G	0.37	0.34	O / I	1.17 (0.99-1.38)	6.58E-02	1.12 (1.02-1.23)	1.80E-02	0.66	0	1.13 (1.01-1.27)	2.87E-03
rs12706862	128725325	A/G	0.37	0.34	O / O	1.17 (0.99-1.39)	6.22E-02	1.12 (1.02-1.23)	2.00E-02	0.63	0	1.13 (1.01-1.27)	3.06E-03
rs6959820	128725689	A/G	0.37	0.34	O / I	1.17 (0.99-1.38)	6.58E-02	1.12 (1.02-1.23)	2.16E-02	0.64	0	1.13 (1.01-1.27)	3.46E-03
rs77065770	128569099	G/A	0.04	0.05	I / I	0.81 (0.54-1.20)	2.88E-01	0.72 (0.56-0.91)	6.14E-03	0.61	0	0.74 (0.56-0.98)	3.90E-03
rs73238193	128562446	A/G	0.29	0.32	O / O	0.95 (0.80-1.13)	5.66E-01	0.86 (0.77-0.95)	2.57E-03	0.31	2	0.88 (0.78-1.00)	4.25E-03
rs76575414	128574466	T/C	0.04	0.05	I / I	0.82 (0.54-1.22)	3.23E-01	0.71 (0.56-0.91)	6.02E-03	0.58	0	0.74 (0.56-0.99)	4.34E-03
rs74883380	128569930	T/C	0.04	0.05	I / I	0.81 (0.55-1.21)	3.10E-01	0.72 (0.56-0.91)	6.73E-03	0.60	0	0.74 (0.56-0.99)	4.57E-03
rs111236877	128572399	C/T	0.04	0.05	I / I	0.82 (0.54-1.22)	3.23E-01	0.72 (0.57-0.91)	6.93E-03	0.60	0	0.74 (0.56-0.99)	4.91E-03
rs56303857	128564235	C/T	0.04	0.05	O / O	0.76 (0.51-1.13)	1.71E-01	0.75 (0.60-0.95)	1.53E-02	0.96	0	0.75 (0.57-0.99)	5.39E-03
rs4728150	128731795	A/G	0.24	0.27	O / O	0.98 (0.81-1.18)	8.15E-01	0.84 (0.76-0.94)	1.82E-03	0.18	44	0.88 (0.77-1.00)	5.67E-03
rs11770889	128730083	G/A	0.18	0.20	I / I	0.94 (0.77-1.16)	5.83E-01	0.84 (0.75-0.94)	3.68E-03	0.33	0	0.87 (0.75-1.00)	5.91E-03
rs7791525	128732013	G/A	0.41	0.44	O / O	0.90 (0.76-1.06)	1.96E-01	0.89 (0.81-0.98)	1.48E-02	0.95	0	0.89 (0.80-1.00)	5.92E-03
rs142866741	128576573	C/A	0.04	0.05	I / I	0.82 (0.55-1.22)	3.25E-01	0.73 (0.57-0.93)	9.37E-03	0.63	0	0.75 (0.57-1.00)	6.45E-03
rs6953165	128578210	C/G	0.04	0.05	I / I	0.82 (0.55-1.22)	3.25E-01	0.73 (0.58-0.93)	1.04E-02	0.65	0	0.75 (0.57-1.00)	7.07E-03
rs74317073	128578483	T/C	0.04	0.05	I / I	0.82 (0.55-1.23)	3.47E-01	0.73 (0.58-0.93)	1.02E-02	0.62	0	0.76 (0.57-1.01)	7.49E-03
rs75434450	128580426	C/T	0.04	0.05	I / I	0.82 (0.54-1.25)	3.58E-01	0.73 (0.57-0.93)	9.96E-03	0.62	0	0.75 (0.56-1.01)	7.56E-03
rs6975315	128582485	G/A	0.01	0.02	I / I	0.60 (0.32-1.13)	1.15E-01	0.67 (0.47-0.96)	3.06E-02	0.77	0	0.65 (0.42-1.01)	7.60E-03
rs55807509	128697857	T/C	0.40	0.37	I / I	1.11 (0.95-1.31)	1.98E-01	1.12 (1.02-1.22)	2.11E-02	0.98	0	1.12 (1.00-1.25)	8.35E-03
chr7:128730026:D	128730026	CT/C	0.38	0.35	I / I	1.17 (0.99-1.38)	7.11E-02	1.10 (1.00-1.21)	4.77E-02	0.54	0	1.12 (1.00-1.25)	8.38E-03
rs12672081	128634360	C/T	0.04	0.05	I / I	0.82 (0.54-1.25)	3.58E-01	0.74 (0.58-0.94)	1.29E-02	0.65	0	0.76 (0.57-1.02)	9.46E-03
rs3993439	128679934	G/C	0.02	0.02	I / I	0.60 (0.32-1.12)	1.12E-01	0.69 (0.49-0.98)	3.92E-02	0.70	0	0.67 (0.44-1.02)	9.54E-03
rs142584143	128656246	C/G	0.04	0.05	I / I	0.82 (0.54-1.25)	3.58E-01	0.74 (0.58-0.94)	1.35E-02	0.66	0	0.76 (0.57-1.02)	9.85E-03
rs2290231	128626557	A/G	0.04	0.05	O / O	0.82 (0.54-1.25)	3.55E-01	0.74 (0.58-0.94)	1.41E-02	0.67	0	0.76 (0.57-1.02)	1.01E-02
rs75437801	128646300	T/C	0.04	0.05	I / I	0.82 (0.54-1.25)	3.58E-01	0.74 (0.58-0.94)	1.41E-02	0.66	0	0.76 (0.57-1.02)	1.03E-02
rs74973211	128647394	T/C	0.04	0.05	I / I	0.82 (0.54-1.25)	3.58E-01	0.74 (0.58-0.94)	1.43E-02	0.67	0	0.76 (0.57-1.02)	1.04E-02
rs142681586	128671110	G/A	0.04	0.05	I / I	0.82 (0.54-1.25)	3.58E-01	0.74 (0.58-0.94)	1.44E-02	0.67	0	0.76 (0.57-1.02)	1.05E-02
rs75456523	128668952	A/G	0.04	0.05	I / I	0.82 (0.54-1.25)	3.58E-01	0.74 (0.58-0.94)	1.44E-02	0.67	0	0.76 (0.57-1.02)	1.05E-02
rs148715708	128651541	C/T	0.04	0.05	I / I	0.82 (0.54-1.25)	3.58E-01	0.74 (0.58-0.94)	1.47E-02	0.67	0	0.76 (0.57-1.02)	1.06E-02
rs139623125	128652145	C/T	0.04	0.05	I / I	0.82 (0.54-1.25)	3.58E-01	0.74 (0.58-0.94)	1.49E-02	0.67	0	0.76 (0.57-1.02)	1.08E-02
rs145696656	128674681	C/T	0.04	0.05	I / I	0.84 (0.55-1.27)	4.00E-01	0.74 (0.58-0.94)	1.32E-02	0.61	0	0.76 (0.57-1.02)	1.09E-02
rs75279435	128689077	T/C	0.04	0.05	I / I	0.84 (0.56-1.27)	4.09E-01	0.74 (0.58-0.94)	1.31E-02	0.59	0	0.77 (0.57-1.02)	1.10E-02
rs73461593	128586760	C/T	0.01	0.02	O / I	0.64 (0.32-1.27)	2.02E-01	0.58 (0.36-0.94)	2.80E-02	0.82	0	0.60 (0.35-1.03)	1.11E-02
rs6467225	128710287	G/A	0.14	0.16	I / I	0.83 (0.65-1.04)	1.06E-01	0.88 (0.77-1.00)	4.77E-02	0.65	0	0.86 (0.74-1.01)	1.12E-02
chr7:128615714:D	128615714	GAAC/G	0.04	0.05	I / I	0.80 (0.52-1.22)	2.92E-01	0.75 (0.59-0.96)	1.97E-02	0.82	0	0.77 (0.57-1.02)	1.12E-02
rs55906661	128685463	T/C	0.04	0.05	I / I	0.83 (0.55-1.26)	3.87E-01	0.74 (0.58-0.94)	1.44E-02	0.63	0	0.77 (0.57-1.02)	1.13E-02
rs4728148	128731560	T/C	0.19	0.21	O / O	0.98 (0.81-1.21)	8.84E-01	0.84 (0.75-0.95)	4.03E-03	0.19	41	0.88 (0.77-1.01)	1.20E-02
rs144980742	128578135	C/A	0.04	0.05	I / I	0.79 (0.52-1.21)	2.82E-01	0.76 (0.60-0.96)	2.21E-02	0.86	0	0.77 (0.57-1.03)	1.20E-02
rs74542576	128601772	C/A	0.04	0.05	I / I	0.82 (0.54-1.25)	3.58E-01	0.75 (0.59-0.95)	1.71E-02	0.69	0	0.77 (0.58-1.03)	1.22E-02
rs61559743	128728310	C/T	0.04	0.05	I / I	0.83 (0.55-1.25)	3.70E-01	0.75 (0.59-0.95)	1.69E-02	0.69	0	0.77 (0.58-1.03)	1.25E-02
chr7:128618098:I	128618098	C/CA	0.04	0.05	I / I	0.82 (0.54-1.25)	3.58E-01	0.75 (0.59-0.95)	1.77E-02	0.70	0	0.77 (0.58-1.03)	1.25E-02
rs6980198	128693996	T/C	0.02	0.02	O / O	0.59 (0.32-1.10)	9.61E-02	0.72 (0.51-1.01)	5.73E-02	0.58	0	0.68 (0.45-1.03)	1.26E-02
chr7:128649959:I	128649959	G/GAA	0.04	0.05	I / I	0.82 (0.54-1.25)	3.58E-01	0.75 (0.59-0.95)	1.79E-02	0.70	0	0.77 (0.58-1.03)	1.26E-02
rs4731542	128730606	C/A	0.19	0.21	O / O	0.95 (0.78-1.17)	6.43E-01	0.86 (0.76-0.96)	7.98E-03	0.36	0	0.88 (0.77-1.01)	1.27E-02
rs55900917	128654030	G/A	0.04	0.05	O / O	0.82 (0.54-1.24)	3.42E-01	0.75 (0.59-0.95)	1.89E-02	0.74	0	0.77 (0.58-1.03)	1.27E-02

Supplementary Table 7. Association analysis in *IRF5*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs960633	128560761	G/T	0.31	0.29	O / O	1.04 (0.88-1.25)	6.26E-01	1.14 (1.03-1.26)	8.40E-03	0.40	0	1.11 (0.99-1.25)	1.27E-02
rs55706405	128692260	G/A	0.04	0.05	O / O	0.81 (0.53-1.23)	3.17E-01	0.76 (0.60-0.96)	2.07E-02	0.78	0	0.77 (0.58-1.03)	1.28E-02
rs7455711	128702426	A/G	0.36	0.34	I / I	1.11 (0.94-1.31)	2.14E-01	1.11 (1.01-1.22)	3.15E-02	1.00	0	1.11 (0.99-1.25)	1.31E-02
rs111666147	128704463	G/C	0.15	0.17	I / I	0.99 (0.80-1.23)	9.39E-01	0.83 (0.73-0.94)	3.95E-03	0.16	49	0.87 (0.75-1.02)	1.31E-02
rs76344592	128702110	G/A	0.04	0.05	I / I	0.85 (0.56-1.29)	4.34E-01	0.74 (0.58-0.94)	1.48E-02	0.59	0	0.77 (0.58-1.03)	1.32E-02
rs56351500	128590488	A/G	0.04	0.05	O / I	0.82 (0.54-1.24)	3.35E-01	0.75 (0.59-0.96)	2.05E-02	0.75	0	0.77 (0.58-1.03)	1.33E-02
rs79890422	128688590	T/C	0.04	0.05	I / I	0.83 (0.55-1.26)	3.86E-01	0.75 (0.59-0.95)	1.76E-02	0.67	0	0.77 (0.58-1.03)	1.35E-02
rs75282194	128588475	C/A	0.04	0.05	I / I	0.82 (0.54-1.24)	3.35E-01	0.76 (0.60-0.96)	2.08E-02	0.75	0	0.77 (0.58-1.03)	1.35E-02
rs76408499	128681072	A/G	0.04	0.05	I / I	0.83 (0.55-1.26)	3.87E-01	0.75 (0.59-0.95)	1.77E-02	0.67	0	0.77 (0.58-1.03)	1.36E-02
rs79772075	128681106	T/C	0.04	0.05	I / I	0.83 (0.55-1.26)	3.87E-01	0.75 (0.59-0.95)	1.77E-02	0.67	0	0.77 (0.58-1.03)	1.36E-02
rs80049896	128679133	G/A	0.04	0.05	I / I	0.83 (0.55-1.26)	3.87E-01	0.75 (0.59-0.95)	1.77E-02	0.67	0	0.77 (0.58-1.03)	1.36E-02
chr7:128675286:I	128675286	C/indel	0.04	0.05	I / I	0.83 (0.55-1.26)	3.87E-01	0.75 (0.59-0.95)	1.79E-02	0.67	0	0.77 (0.58-1.03)	1.37E-02
rs4731543	128730612	C/T	0.19	0.21	O / O	0.92 (0.75-1.13)	4.41E-01	0.87 (0.77-0.97)	1.56E-02	0.61	0	0.88 (0.77-1.02)	1.40E-02
rs76076677	128705040	A/G	0.04	0.05	I / I	0.85 (0.56-1.29)	4.34E-01	0.74 (0.58-0.95)	1.60E-02	0.60	0	0.77 (0.58-1.03)	1.41E-02
rs767004	128714846	A/C	0.04	0.05	I / I	0.91 (0.61-1.34)	6.17E-01	0.73 (0.58-0.93)	1.02E-02	0.37	0	0.78 (0.59-1.03)	1.46E-02
rs7790824	128737274	G/A	0.39	0.42	O / O	0.95 (0.80-1.12)	5.39E-01	0.89 (0.81-0.98)	1.35E-02	0.49	0	0.91 (0.81-1.01)	1.56E-02
rs11770861	128730177	C/T	0.19	0.21	O / O	0.94 (0.76-1.15)	5.19E-01	0.87 (0.77-0.97)	1.52E-02	0.52	0	0.89 (0.77-1.02)	1.65E-02
rs111764833	128732414	A/G	0.06	0.08	I / I	1.07 (0.79-1.44)	6.62E-01	0.74 (0.61-0.90)	1.90E-03	0.04	76	0.82 (0.66-1.02)	1.66E-02
rs11538884	128612552	C/T	0.04	0.05	I / I	0.81 (0.53-1.23)	3.16E-01	0.77 (0.61-0.97)	2.80E-02	0.84	0	0.78 (0.58-1.04)	1.67E-02
rs3817555	128619521	G/A	0.04	0.05	O / O	0.82 (0.54-1.24)	3.35E-01	0.77 (0.60-0.97)	2.66E-02	0.80	0	0.78 (0.59-1.04)	1.68E-02
rs56321638	128590733	C/T	0.04	0.05	I / I	0.82 (0.54-1.25)	3.56E-01	0.76 (0.60-0.97)	2.54E-02	0.76	0	0.78 (0.58-1.04)	1.71E-02
rs6953731	128731188	G/C	0.19	0.20	I / I	0.98 (0.80-1.20)	8.63E-01	0.85 (0.76-0.96)	6.80E-03	0.23	30	0.89 (0.77-1.02)	1.71E-02
rs139294369	128705730	T/A	0.02	0.02	I / I	1.26 (0.72-2.19)	4.13E-01	1.47 (1.06-2.03)	2.15E-02	0.64	0	1.40 (0.95-2.08)	1.72E-02
rs730798	128730535	G/A	0.19	0.21	O / O	0.95 (0.78-1.16)	6.11E-01	0.86 (0.77-0.97)	1.29E-02	0.43	0	0.89 (0.77-1.02)	1.75E-02
rs10247548	128554251	C/T	0.01	0.01	I / I	0.21 (0.05-0.91)	3.63E-02	0.68 (0.41-1.13)	1.39E-01	0.14	55	0.49 (0.23-1.06)	1.79E-02
rs6953800	128731391	C/T	0.19	0.21	O / O	0.98 (0.80-1.20)	8.47E-01	0.85 (0.76-0.96)	7.68E-03	0.25	25	0.89 (0.77-1.02)	1.83E-02
chr7:128730961:D	128730961	GA/G	0.19	0.21	I / I	0.96 (0.79-1.18)	7.12E-01	0.86 (0.77-0.97)	1.12E-02	0.35	0	0.89 (0.77-1.02)	1.91E-02
rs6954102	128731387	G/A	0.19	0.21	O / I	0.98 (0.80-1.20)	8.62E-01	0.86 (0.76-0.96)	7.99E-03	0.25	26	0.89 (0.77-1.02)	1.93E-02
rs12673511	128590921	G/A	0.04	0.05	O / O	0.82 (0.54-1.25)	3.52E-01	0.77 (0.61-0.97)	2.95E-02	0.80	0	0.78 (0.59-1.04)	1.94E-02
rs6973571	128731327	T/C	0.19	0.21	I / I	0.96 (0.78-1.18)	7.08E-01	0.86 (0.77-0.97)	1.21E-02	0.36	0	0.89 (0.77-1.02)	2.00E-02
rs6953648	128731371	A/G	0.19	0.21	I / I	0.98 (0.80-1.19)	8.10E-01	0.86 (0.77-0.96)	9.76E-03	0.29	12	0.89 (0.77-1.02)	2.05E-02
rs3757384	128695646	C/A	0.04	0.05	O / O	0.83 (0.55-1.26)	3.87E-01	0.77 (0.61-0.97)	2.84E-02	0.75	0	0.79 (0.59-1.05)	2.06E-02
rs6968563	128577731	T/C	0.04	0.05	O / O	0.82 (0.55-1.22)	3.24E-01	0.78 (0.62-0.98)	3.44E-02	0.84	0	0.79 (0.60-1.04)	2.06E-02
rs6963790	128698168	G/A	0.02	0.02	I / I	0.60 (0.32-1.12)	1.09E-01	0.74 (0.53-1.05)	8.97E-02	0.55	0	0.70 (0.46-1.07)	2.21E-02
rs56126947	128726468	C/T	0.07	0.08	I / I	1.04 (0.78-1.40)	7.70E-01	0.76 (0.63-0.92)	4.00E-03	0.07	69	0.83 (0.67-1.03)	2.26E-02
rs142400064	128588610	T/G	0.01	0.02	I / I	0.55 (0.27-1.13)	1.05E-01	0.71 (0.47-1.06)	9.53E-02	0.56	0	0.66 (0.40-1.08)	2.29E-02
rs73467232	128722656	T/G	0.04	0.05	I / I	0.94 (0.63-1.42)	7.84E-01	0.74 (0.58-0.94)	1.22E-02	0.30	8	0.79 (0.59-1.05)	2.32E-02
rs6953497	128731316	A/G	0.19	0.21	I / I	0.98 (0.80-1.20)	8.46E-01	0.86 (0.77-0.97)	1.10E-02	0.28	15	0.89 (0.78-1.03)	2.40E-02
rs150351454	128687077	A/G	0.01	0.02	I / I	0.55 (0.27-1.13)	1.05E-01	0.72 (0.48-1.07)	1.00E-01	0.54	0	0.67 (0.41-1.08)	2.42E-02
rs111681097	128567105	A/C	0.01	0.01	I / I	0.83 (0.37-1.85)	6.44E-01	0.54 (0.32-0.90)	1.87E-02	0.37	0	0.61 (0.33-1.10)	2.52E-02
rs34632345	128603415	C/A	0.14	0.15	I / I	0.83 (0.66-1.05)	1.21E-01	0.90 (0.79-1.02)	9.71E-02	0.58	0	0.88 (0.75-1.03)	2.58E-02
rs60811897	128737399	G/T	0.04	0.05	O / O	0.97 (0.66-1.42)	8.57E-01	0.75 (0.60-0.94)	1.25E-02	0.26	20	0.80 (0.61-1.06)	2.71E-02
rs35163364	128732786	C/T	0.40	0.43	I / I	0.92 (0.78-1.09)	3.35E-01	0.91 (0.83-1.00)	4.54E-02	0.89	0	0.91 (0.81-1.02)	2.73E-02
rs73467230	128722340	G/T	0.04	0.05	O / O	0.94 (0.63-1.40)	7.48E-01	0.75 (0.59-0.95)	1.63E-02	0.34	0	0.80 (0.60-1.06)	2.74E-02
rs117232856	128620564	G/A	0.01	0.02	I / I	0.55 (0.27-1.13)	1.05E-01	0.73 (0.49-1.08)	1.19E-01	0.51	0	0.67 (0.41-1.10)	2.89E-02
rs77237876	128625989	A/G	0.01	0.02	I / I	0.55 (0.27-1.13)	1.05E-01	0.73 (0.49-1.08)	1.19E-01	0.51	0	0.67 (0.41-1.10)	2.89E-02
rs7783840	128711699	T/C	0.20	0.22	O / O	0.98 (0.80-1.19)	8.14E-01	0.87 (0.78-0.97)	1.53E-02	0.32	0	0.90 (0.78-1.03)	2.94E-02
chr7:128734189:I	128734189	G/GA	0.39	0.42	I / I	0.94 (0.79-1.11)	4.49E-01	0.91 (0.82-1.00)	4.28E-02	0.73	0	0.91 (0.81-1.03)	3.41E-02
rs113045281	128652306	C/T	0.07	0.08	I / I	0.90 (0.66-1.24)	5.27E-01	0.83 (0.69-0.99)	3.57E-02	0.62	0	0.85 (0.68-1.05)	3.44E-02
rs59863842	128726665	G/A	0.03	0.04	I / I	0.89 (0.58-1.38)	6.13E-01	0.76 (0.59-0.98)	3.16E-02	0.52	0	0.80 (0.59-1.08)	3.66E-02
rs17339221	128625914	A/G	0.14	0.16	O / O	0.96 (0.77-1.21)	7.58E-01	0.86 (0.75-0.98)	2.46E-02	0.39	0	0.89 (0.76-1.04)	3.87E-02
rs6966125	128598525	C/G	0.14	0.16	I / I	0.83 (0.66-1.05)	1.19E-01	0.91 (0.80-1.03)	1.51E-01	0.50	0	0.89 (0.75-1.04)	4.06E-02
rs117420760	128586737	G/A	0.01	0.01	I / I	0.74 (0.35-1.56)	4.33E-01	0.64 (0.40-1.01)	5.48E-02	0.72	0	0.66 (0.39-1.14)	4.11E-02
rs73240322	128646939	C/T	0.05	0.06	O / O	0.87 (0.61-1.24)	4.33E-01	0.82 (0.67-1.00)	5.65E-02	0.79	0	0.83 (0.65-1.07)	4.21E-02
rs73228765	128699523	T/C	0.14	0.16	O / O	0.97 (0.77-1.21)	7.79E-01	0.86 (0.76-0.98)	2.64E-02	0.38	0	0.89 (0.76-1.04)	4.23E-02
rs58012608	128726050	G/A	0.03	0.04	I / I	0.89 (0.58-1.36)	5.80E-01	0.77 (0.60-0.99)	4.06E-02	0.58	0	0.80 (0.59-1.08)	4.26E-02
rs73228764	128698815	T/C	0.14	0.16	O / O	0.97 (0.77-1.21)	7.79E-01	0.86 (0.76-0.98)	2.73E-02	0.39	0	0.89 (0.76-1.04)	4.35E-02
rs118038021	128609874	C/T	0.01	0.02	I / I	0.82 (0.44-1.53)	5.37E-01	0.64 (0.42-0.99)	4.61E-02	0.53	0	0.69 (0.42-1.12)	4.38E-02
rs4728149	128731693	A/G	0.04	0.05	O / I	0.99 (0.68-1.45)	9.67E-01	0.77 (0.61-0.96)	2.04E-02	0.25	24	0.82 (0.63-1.08)	4.71E-02
rs1495460	128554964	C/T	0.01	0.01	I / I	0.21 (0.05-0.91)	3.67E-02	0.78 (0.49-1.26)	3.08E-01	0.10	64	0.54 (0.26-1.15)	4.81E-02
rs60319853	128727020	T/A	0.03	0.04	I / I	0.89 (0.58-1.36)	5.80E-01	0.78 (0.61-1.00)	4.77E-02	0.61	0	0.81 (0.60-1.09)	4.87E-02
rs12673075	128736219	G/A	0.04	0.05	I / I	0.98 (0.66-1.44)	9.08E-01	0.77 (0.62-0.97)	2.44E-02	0.30	7	0.83 (0.63-1.08)	4.91E-02
rs1154330	128625788	A/G	0.14	0.16	O / O	0.97 (0.77-1.22)	8.19E-01	0.87 (0.76-0.99)	3.14E-02	0.38	0	0.90 (0.76-1.05)	5.19E-02
rs41274158	128629993	A/G	0.14	0.16	O / O	0.96 (0.77-1.21)	7.51E-01	0.87 (0.76-0.99)	3.66E-02	0.45	0	0.90 (0.76-1.05)	5.25E-02
rs73467261	128738568	G/A	0.04	0.05	O / I	0.97 (0.66-1.43)	8.89E-01	0.78 (0.62-0.97)	2.80E-02	0.32	0	0.83 (0.63-1.08)	5.30E-02
rs143884303	128627723	C/A	0.01	0.01	I / I	0.72 (0.35-1.51)	3.90E-01	0.67 (0.43-1.05)	8.18E-02	0.87	0	0.69 (0.41-1.17)	5.36E-02
rs4731544	128732201	A/G	0.39	0.41	O / O	0.92 (0.78-1.08)	3.01E-01	0.93 (0.84-1.02)	1.03E-01	0.92	0	0.92 (0.82-1.03)	5.37E-02
rs62478618	128713672	A/G	0.02	0.01	I / I	1.62 (0.95-2.77)	7.50E-02	1.23 (0.86-1.75)	2.49E-01	0.40	0	1.33 (0.89-2.00)	5.44E-02
rs55738239	128735773	A/C	0.02	0.02	O / O	0.72 (0.39-1.34)	3.02E-01	0.77 (0.56-1.06)	1.08E-01	0.86	0	0.76 (0.51-1.13)	5.63E-02
rs35797491	128708849	C/T	0.16	0.17	I / I	1.02 (0.82-1.27)	8.50E-01	0.86 (0.76-0.98)	1.84E-02	0.18	43	0.90 (0.78-1.05)	5.73E-02

Supplementary Table 7. Association analysis in *IRF5*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs76524817	128730920	G/A	0.02	0.02	I / I	0.57 (0.29-1.14)	1.10E-01	0.81 (0.58-1.14)	2.20E-01	0.37	0	0.73 (0.47-1.14)	5.89E-02
rs79288514	128582658	C/T	0.10	0.12	I / I	1.06 (0.82-1.37)	6.46E-01	0.83 (0.71-0.96)	1.22E-02	0.10	63	0.89 (0.74-1.06)	6.05E-02
rs147338724	128733075	G/A	0.01	0.02	I / I	0.51 (0.24-1.08)	7.73E-02	0.80 (0.54-1.19)	2.69E-01	0.29	11	0.70 (0.43-1.15)	6.07E-02
rs1609544	128550030	G/A	0.15	0.17	I / I	0.94 (0.75-1.17)	5.75E-01	0.89 (0.78-1.01)	6.50E-02	0.68	0	0.90 (0.77-1.05)	6.25E-02
chr7:128614691:D	128614691	indel/G	0.10	0.11	I / I	1.07 (0.83-1.39)	5.90E-01	0.82 (0.71-0.96)	1.12E-02	0.08	67	0.89 (0.74-1.06)	6.26E-02
rs77607989	128677292	T/C	0.10	0.12	I / I	1.08 (0.84-1.39)	5.55E-01	0.82 (0.71-0.96)	1.09E-02	0.07	69	0.89 (0.74-1.06)	6.54E-02
rs75230752	128680432	C/T	0.10	0.12	I / I	1.08 (0.84-1.39)	5.54E-01	0.82 (0.71-0.96)	1.10E-02	0.07	69	0.89 (0.74-1.06)	6.58E-02
rs79260940	128680362	T/C	0.10	0.12	I / I	1.08 (0.84-1.39)	5.54E-01	0.82 (0.71-0.96)	1.10E-02	0.07	69	0.89 (0.74-1.06)	6.58E-02
rs74494428	128673892	G/A	0.10	0.12	I / I	1.08 (0.84-1.40)	5.41E-01	0.82 (0.71-0.96)	1.07E-02	0.07	70	0.89 (0.74-1.06)	6.63E-02
rs7792282	128549568	A/G	0.17	0.18	I / I	0.90 (0.72-1.12)	3.36E-01	0.91 (0.81-1.02)	1.19E-01	0.92	0	0.91 (0.78-1.05)	6.68E-02
rs111720106	128725386	G/A	0.06	0.07	I / I	1.08 (0.80-1.47)	6.17E-01	0.78 (0.64-0.95)	1.36E-02	0.08	67	0.86 (0.68-1.08)	6.85E-02
rs56357552	128726884	T/C	0.14	0.15	I / I	0.98 (0.78-1.22)	8.28E-01	0.87 (0.77-1.00)	4.42E-02	0.41	0	0.90 (0.77-1.06)	6.90E-02
rs149554457	128704760	A/G	0.01	0.01	I / I	0.62 (0.26-1.51)	2.91E-01	0.72 (0.46-1.11)	1.38E-01	0.78	0	0.69 (0.39-1.21)	6.91E-02
rs6957529	128605460	T/C	0.10	0.12	O / I	1.08 (0.84-1.40)	5.35E-01	0.83 (0.71-0.96)	1.12E-02	0.07	69	0.89 (0.75-1.07)	6.91E-02
rs76696583	128690164	G/A	0.10	0.12	I / I	1.09 (0.85-1.41)	5.01E-01	0.82 (0.71-0.96)	1.04E-02	0.06	71	0.89 (0.75-1.07)	6.97E-02
rs112659365	128601764	T/G	0.07	0.08	I / I	0.97 (0.71-1.33)	8.40E-01	0.83 (0.69-1.00)	4.50E-02	0.41	0	0.87 (0.70-1.08)	7.12E-02
rs62481981	128568792	G/A	0.02	0.01	O / O	1.68 (0.91-3.08)	9.51E-02	1.24 (0.84-1.81)	2.80E-01	0.40	0	1.35 (0.86-2.10)	7.15E-02
rs4731545	128732262	C/G	0.39	0.41	I / I	0.92 (0.78-1.09)	3.31E-01	0.93 (0.85-1.02)	1.30E-01	0.92	0	0.93 (0.83-1.04)	7.19E-02
rs112868952	128686929	G/A	0.10	0.12	I / I	1.08 (0.84-1.40)	5.44E-01	0.83 (0.71-0.96)	1.25E-02	0.08	68	0.89 (0.75-1.07)	7.28E-02
rs56413809	128735832	G/A	0.02	0.02	O / O	0.73 (0.39-1.34)	3.06E-01	0.79 (0.57-1.08)	1.44E-01	0.81	0	0.77 (0.52-1.15)	7.47E-02
rs74983746	128658957	G/C	0.10	0.12	I / I	1.08 (0.84-1.40)	5.40E-01	0.83 (0.71-0.96)	1.28E-02	0.08	68	0.89 (0.75-1.07)	7.48E-02
rs56340663	128724019	T/C	0.07	0.08	O / O	1.02 (0.76-1.38)	8.79E-01	0.82 (0.69-0.98)	2.99E-02	0.21	35	0.87 (0.70-1.08)	7.85E-02
rs80159318	128593092	A/G	0.10	0.12	I / I	1.08 (0.84-1.40)	5.33E-01	0.83 (0.72-0.96)	1.38E-02	0.08	68	0.90 (0.75-1.07)	7.95E-02
rs76576038	128602191	G/A	0.10	0.12	I / I	1.09 (0.85-1.41)	4.96E-01	0.83 (0.71-0.96)	1.26E-02	0.07	71	0.90 (0.75-1.07)	7.97E-02
chr7:128621026:I	128621026	G/GA	0.10	0.12	I / I	1.07 (0.83-1.38)	6.08E-01	0.83 (0.72-0.97)	1.66E-02	0.10	63	0.89 (0.75-1.07)	7.98E-02
rs139355497	128671836	A/G	0.02	0.01	I / I	1.59 (0.85-3.00)	1.50E-01	1.24 (0.86-1.78)	2.49E-01	0.50	0	1.33 (0.86-2.06)	8.15E-02
rs77264666	128584130	A/G	0.10	0.12	I / I	1.08 (0.84-1.39)	5.54E-01	0.83 (0.72-0.97)	1.58E-02	0.08	66	0.90 (0.75-1.07)	8.40E-02
rs1495461	128551740	T/C	0.31	0.30	O / O	0.96 (0.80-1.14)	6.26E-01	1.12 (1.02-1.24)	1.94E-02	0.12	59	1.07 (0.95-1.21)	8.56E-02
rs74573030	128599823	C/T	0.10	0.12	I / I	1.10 (0.85-1.42)	4.81E-01	0.83 (0.72-0.96)	1.35E-02	0.06	71	0.90 (0.75-1.07)	8.58E-02
rs148115945	128675613	T/C	0.01	0.01	I / I	0.73 (0.31-1.67)	4.50E-01	0.71 (0.45-1.10)	1.22E-01	0.96	0	0.71 (0.41-1.23)	8.67E-02
rs77416878	128591409	C/T	0.10	0.12	I / I	1.08 (0.84-1.40)	5.33E-01	0.83 (0.72-0.97)	1.58E-02	0.08	67	0.90 (0.75-1.07)	8.67E-02
rs76623628	128653136	C/A	0.01	0.01	I / I	0.73 (0.31-1.67)	4.50E-01	0.71 (0.46-1.10)	1.25E-01	0.96	0	0.71 (0.41-1.24)	8.86E-02
rs190286711	128602306	C/G	0.01	0.01	I / I	0.62 (0.27-1.41)	2.54E-01	0.74 (0.46-1.18)	2.00E-01	0.72	0	0.70 (0.40-1.24)	9.06E-02
rs113092708	128627677	C/G	0.01	0.02	I / I	1.08 (0.58-2.00)	8.09E-01	0.63 (0.42-0.96)	3.19E-02	0.16	49	0.74 (0.46-1.18)	9.12E-02
rs7786945	128548463	A/C	0.16	0.17	O / O	0.92 (0.74-1.15)	4.75E-01	0.91 (0.80-1.03)	1.25E-01	0.90	0	0.91 (0.78-1.06)	9.29E-02
rs12668956	128730951	A/G	0.14	0.15	I / I	0.96 (0.77-1.20)	7.23E-01	0.89 (0.78-1.01)	7.93E-02	0.58	0	0.91 (0.78-1.06)	9.41E-02
chr7:128739169:D	128739169	TC/T	0.06	0.07	I / I	1.11 (0.81-1.51)	5.12E-01	0.80 (0.66-0.96)	1.74E-02	0.07	69	0.87 (0.70-1.09)	9.55E-02
rs78053700	128739073	A/G	0.06	0.07	I / I	1.11 (0.81-1.51)	5.12E-01	0.80 (0.66-0.96)	1.74E-02	0.07	69	0.87 (0.70-1.09)	9.55E-02
rs112636534	128579130	A/T	0.01	0.01	I / I	0.94 (0.46-1.92)	8.76E-01	0.66 (0.43-1.03)	6.54E-02	0.41	0	0.73 (0.44-1.23)	1.00E-01
chr7:128548254:I	128548254	G/GA	0.16	0.17	I / I	0.91 (0.73-1.14)	4.26E-01	0.91 (0.81-1.03)	1.57E-01	0.99	0	0.91 (0.78-1.06)	1.05E-01
rs55902134	128543117	C/A	0.15	0.15	I / I	0.94 (0.75-1.19)	6.29E-01	0.90 (0.79-1.02)	1.10E-01	0.72	0	0.91 (0.78-1.07)	1.07E-01
rs77349349	128609492	G/A	0.01	0.01	I / I	0.78 (0.34-1.80)	5.61E-01	0.71 (0.46-1.10)	1.25E-01	0.84	0	0.73 (0.42-1.26)	1.07E-01
rs57989815	128720824	G/A	0.07	0.08	O / I	1.07 (0.79-1.45)	6.63E-01	0.82 (0.68-0.98)	3.03E-02	0.14	54	0.88 (0.71-1.10)	1.09E-01
rs74482612	128718715	C/A	0.06	0.07	I / I	1.19 (0.87-1.62)	2.80E-01	0.77 (0.63-0.94)	1.12E-02	0.02	81	0.87 (0.69-1.10)	1.17E-01
rs62481971	128541726	G/T	0.15	0.15	I / I	0.94 (0.75-1.19)	6.10E-01	0.90 (0.79-1.03)	1.28E-01	0.76	0	0.91 (0.78-1.07)	1.19E-01
rs6972002	128539728	C/A	0.15	0.15	I / I	0.95 (0.75-1.20)	6.61E-01	0.90 (0.79-1.03)	1.20E-01	0.71	0	0.92 (0.78-1.07)	1.21E-01
rs56144153	128544133	G/T	0.15	0.15	I / I	0.95 (0.76-1.20)	6.78E-01	0.90 (0.79-1.03)	1.20E-01	0.69	0	0.92 (0.78-1.07)	1.25E-01
rs113893409	128720447	G/A	0.06	0.07	I / I	1.17 (0.86-1.60)	3.20E-01	0.78 (0.64-0.95)	1.49E-02	0.03	78	0.88 (0.70-1.10)	1.26E-01
rs55708261	128712874	G/A	0.06	0.07	O / I	1.18 (0.86-1.62)	3.02E-01	0.78 (0.63-0.95)	1.42E-02	0.03	79	0.88 (0.69-1.11)	1.28E-01
rs117366486	128598361	C/T	0.02	0.03	I / I	0.99 (0.60-1.64)	9.69E-01	0.75 (0.54-1.03)	7.81E-02	0.36	0	0.81 (0.56-1.18)	1.31E-01
rs191053873	128598363	A/T	0.02	0.03	I / I	0.99 (0.60-1.64)	9.69E-01	0.75 (0.54-1.03)	7.81E-02	0.36	0	0.81 (0.56-1.18)	1.31E-01
rs60591364	128549328	T/A	0.16	0.17	I / I	0.91 (0.73-1.14)	4.27E-01	0.93 (0.82-1.05)	2.28E-01	0.91	0	0.92 (0.79-1.07)	1.49E-01
rs56155376	128736596	G/A	0.07	0.08	O / O	1.16 (0.86-1.57)	3.30E-01	0.80 (0.67-0.97)	2.06E-02	0.04	76	0.89 (0.72-1.11)	1.49E-01
rs56332811	128545467	C/T	0.14	0.15	I / I	0.95 (0.75-1.20)	6.50E-01	0.91 (0.80-1.04)	1.57E-01	0.77	0	0.92 (0.78-1.08)	1.50E-01
rs3807305	128581133	G/A	0.01	0.02	O / I	0.94 (0.46-1.91)	8.66E-01	0.71 (0.47-1.08)	1.11E-01	0.50	0	0.77 (0.46-1.27)	1.50E-01
rs62478621	128717467	C/A	0.05	0.06	I / I	1.00 (0.71-1.40)	9.83E-01	0.84 (0.68-1.03)	9.11E-02	0.39	0	0.88 (0.69-1.12)	1.51E-01
rs55780035	128716440	T/C	0.05	0.06	O / I	1.03 (0.74-1.45)	8.47E-01	0.83 (0.67-1.01)	6.86E-02	0.26	20	0.88 (0.69-1.12)	1.52E-01
rs3778747	128617930	G/A	0.01	0.02	I / I	1.14 (0.61-2.11)	6.87E-01	0.65 (0.43-1.00)	5.19E-02	0.15	52	0.77 (0.47-1.24)	1.52E-01
rs35383832	128540221	C/T	0.16	0.17	I / I	0.91 (0.72-1.14)	3.99E-01	0.93 (0.82-1.05)	2.48E-01	0.85	0	0.92 (0.79-1.08)	1.54E-01
rs6978651	128646116	C/A	0.01	0.02	I / I	1.13 (0.61-2.10)	6.94E-01	0.66 (0.43-1.01)	5.43E-02	0.16	50	0.77 (0.47-1.24)	1.55E-01
chr7:128549021:D	128549021	TG/T	0.16	0.17	I / I	0.91 (0.72-1.14)	3.98E-01	0.93 (0.82-1.05)	2.52E-01	0.85	0	0.92 (0.79-1.08)	1.56E-01
rs56395315	128715269	G/C	0.06	0.07	I / I	1.17 (0.86-1.61)	3.19E-01	0.80 (0.66-0.97)	2.11E-02	0.04	76	0.89 (0.71-1.12)	1.56E-01
rs73461567	128573445	G/A	0.01	0.02	O / I	0.85 (0.42-1.71)	6.41E-01	0.75 (0.50-1.13)	1.68E-01	0.77	0	0.78 (0.48-1.27)	1.57E-01
rs6948542	128547512	G/A	0.16	0.17	I / I	0.91 (0.73-1.14)	4.30E-01	0.93 (0.82-1.05)	2.42E-01	0.90	0	0.92 (0.79-1.08)	1.58E-01
rs118116254	128704401	T/A	0.03	0.02	I / I	0.91 (0.55-1.50)	7.04E-01	1.32 (0.99-1.75)	5.97E-02	0.21	38	1.19 (0.84-1.68)	1.63E-01
rs6467218	128548954	G/A	0.16	0.17	I / I	0.91 (0.73-1.14)	4.27E-01	0.93 (0.82-1.05)	2.51E-01	0.88	0	0.93 (0.79-1.08)	1.63E-01
rs73463042	128622060	G/C	0.01	0.02	I / I	1.17 (0.63-2.17)	6.23E-01	0.65 (0.43-1.00)	5.08E-02	0.13	56	0.77 (0.48-1.25)	1.64E-01
rs73465005	128685427	G/A	0.01	0.02	I / I	1.13 (0.61-2.10)	6.94E-01	0.66 (0.43-1.01)	5.88E-02	0.16	49	0.77 (0.48-1.25)	1.64E-01
rs11770935	128730247	G/A	0.12	0.12	O / O	0.88 (0.68-1.14)	3.38E-01	0.93 (0.81-1.07)	2.99E-01	0.73	0	0.92 (0.77-1.09)	1.65E-01
rs6467216	128545728	C/T	0.16	0.17	I / I	0.93 (0.74-1.17)	5.38E-01	0.92 (0.81-1.05)	2.10E-01	0.95	0	0.93 (0.79-1.08)	1.65E-01

Supplementary Table 7. Association analysis in *IRF5*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs73463022	128608211	A/G	0.01	0.02	O / I	1.11 (0.60-2.05)	7.49E-01	0.67 (0.44-1.03)	6.59E-02	0.19	41	0.78 (0.48-1.25)	1.65E-01
rs73463020	128607524	C/T	0.01	0.02	O / I	1.11 (0.60-2.06)	7.40E-01	0.67 (0.44-1.03)	6.59E-02	0.19	42	0.78 (0.48-1.25)	1.67E-01
rs6965815	128655922	G/C	0.01	0.02	I / I	1.13 (0.61-2.10)	6.94E-01	0.66 (0.43-1.02)	6.05E-02	0.16	48	0.77 (0.48-1.25)	1.67E-01
chr7:128548212:D	128548212	AAGAG/A	0.16	0.17	I / I	0.91 (0.73-1.14)	4.27E-01	0.93 (0.82-1.05)	2.61E-01	0.87	0	0.93 (0.80-1.08)	1.70E-01
rs188494528	128712183	C/A	0.03	0.02	I / I	1.22 (0.73-2.06)	4.51E-01	1.19 (0.89-1.59)	2.54E-01	0.92	0	1.20 (0.84-1.71)	1.71E-01
rs73228783	128735988	C/T	0.05	0.05	O / O	0.71 (0.49-1.03)	6.96E-02	0.95 (0.77-1.17)	6.35E-01	0.17	46	0.88 (0.68-1.13)	1.72E-01
rs142449971	128680126	C/T	0.01	0.02	I / I	1.17 (0.63-2.17)	6.30E-01	0.66 (0.42-1.01)	5.70E-02	0.14	55	0.77 (0.47-1.26)	1.75E-01
rs79756405	128679754	A/C	0.01	0.02	I / I	1.17 (0.63-2.17)	6.30E-01	0.66 (0.42-1.01)	5.70E-02	0.14	55	0.77 (0.47-1.26)	1.75E-01
rs3807300	128694091	T/C	0.01	0.02	I / I	1.17 (0.63-2.17)	6.30E-01	0.66 (0.43-1.02)	6.06E-02	0.14	54	0.77 (0.48-1.26)	1.83E-01
rs75709678	128550577	C/T	0.15	0.16	I / I	0.94 (0.75-1.18)	5.70E-01	0.92 (0.81-1.05)	2.27E-01	0.93	0	0.93 (0.79-1.08)	1.85E-01
rs113826021	128674822	G/T	0.01	0.02	I / I	1.13 (0.61-2.10)	6.94E-01	0.67 (0.44-1.03)	7.12E-02	0.18	45	0.78 (0.48-1.26)	1.87E-01
chr7:128592301:D	128592301	GCTCC/G	0.48	0.49	I / I	0.91 (0.78-1.07)	2.78E-01	0.96 (0.88-1.05)	3.83E-01	0.61	0	0.95 (0.85-1.06)	1.88E-01
rs6974779	128545060	A/G	0.16	0.17	I / I	0.91 (0.73-1.14)	4.25E-01	0.94 (0.83-1.06)	2.96E-01	0.84	0	0.93 (0.80-1.08)	1.90E-01
rs1609545	128550894	G/A	0.16	0.17	I / I	0.93 (0.74-1.16)	5.04E-01	0.93 (0.82-1.05)	2.67E-01	0.96	0	0.93 (0.80-1.08)	1.95E-01
rs6975246	128545143	G/A	0.16	0.17	I / I	0.91 (0.73-1.14)	4.25E-01	0.94 (0.83-1.06)	3.05E-01	0.83	0	0.93 (0.80-1.08)	1.96E-01
rs6955736	128543678	C/T	0.16	0.17	I / I	0.91 (0.73-1.14)	4.26E-01	0.94 (0.83-1.06)	3.05E-01	0.84	0	0.93 (0.80-1.08)	1.97E-01
rs73463017	128603690	A/T	0.01	0.02	I / I	1.13 (0.61-2.10)	6.94E-01	0.68 (0.45-1.04)	7.64E-02	0.19	43	0.79 (0.49-1.27)	1.97E-01
rs140709207	128598359	G/A	0.02	0.02	I / I	1.11 (0.63-1.95)	7.16E-01	0.73 (0.51-1.04)	8.07E-02	0.21	36	0.82 (0.54-1.24)	1.99E-01
rs73461568	128574005	C/T	0.01	0.02	I / I	0.92 (0.45-1.86)	8.14E-01	0.75 (0.50-1.13)	1.75E-01	0.64	0	0.80 (0.49-1.31)	2.03E-01
rs55702815	128712925	T/C	0.01	0.01	O / O	0.69 (0.32-1.50)	3.52E-01	0.83 (0.56-1.24)	3.65E-01	0.67	0	0.79 (0.48-1.30)	2.07E-01
rs117298737	128624772	T/C	0.03	0.03	I / I	1.66 (1.05-2.64)	3.02E-02	1.02 (0.78-1.33)	9.00E-01	0.07	70	1.17 (0.85-1.61)	2.08E-01
rs11975930	128542982	G/A	0.16	0.17	I / I	0.91 (0.73-1.14)	4.21E-01	0.94 (0.83-1.06)	3.30E-01	0.81	0	0.93 (0.80-1.09)	2.10E-01
rs148940572	128675068	C/T	0.05	0.05	I / I	1.01 (0.70-1.45)	9.74E-01	0.85 (0.69-1.05)	1.42E-01	0.45	0	0.90 (0.70-1.15)	2.20E-01
rs118058775	128592034	C/T	0.03	0.03	I / I	1.63 (1.03-2.58)	3.72E-02	1.02 (0.78-1.33)	8.94E-01	0.08	67	1.16 (0.84-1.60)	2.22E-01
rs148435172	128718170	C/T	0.06	0.07	I / I	1.17 (0.85-1.60)	3.37E-01	0.82 (0.68-1.00)	4.50E-02	0.06	71	0.91 (0.72-1.14)	2.36E-01
rs11763959	128641906	G/A	0.46	0.47	I / I	0.91 (0.78-1.07)	2.76E-01	0.97 (0.88-1.06)	4.79E-01	0.55	0	0.95 (0.85-1.06)	2.39E-01
rs77729114	128729699	A/C	0.01	0.02	I / I	0.62 (0.29-1.33)	2.21E-01	0.89 (0.61-1.29)	5.34E-01	0.41	0	0.80 (0.49-1.31)	2.39E-01
rs6955705	128557370	T/C	0.17	0.18	O / O	0.99 (0.80-1.23)	9.46E-01	0.92 (0.82-1.04)	1.83E-01	0.55	0	0.94 (0.81-1.09)	2.44E-01
rs73463067	128653785	G/A	0.01	0.02	O / O	1.11 (0.60-2.05)	7.47E-01	0.72 (0.48-1.08)	1.15E-01	0.25	23	0.81 (0.51-1.30)	2.45E-01
rs73238181	128542211	G/A	0.01	0.01	I / I	1.64 (0.88-3.06)	1.18E-01	1.09 (0.69-1.70)	7.18E-01	0.29	11	1.22 (0.74-2.00)	2.55E-01
rs8043	128607384	G/A	0.48	0.50	O / O	0.94 (0.80-1.11)	4.62E-01	0.96 (0.88-1.05)	3.80E-01	0.83	0	0.95 (0.85-1.07)	2.57E-01
rs117490852	128611550	A/G	0.03	0.03	I / I	1.63 (1.03-2.58)	3.72E-02	1.00 (0.77-1.31)	9.79E-01	0.07	69	1.15 (0.83-1.59)	2.58E-01
rs10269317	128735579	C/G	0.41	0.42	I / I	0.94 (0.80-1.11)	4.73E-01	0.96 (0.88-1.05)	4.07E-01	0.82	0	0.96 (0.85-1.07)	2.79E-01
rs60857028	128647735	T/C	0.01	0.02	O / O	1.11 (0.60-2.05)	7.49E-01	0.74 (0.49-1.10)	1.39E-01	0.28	14	0.83 (0.52-1.31)	2.79E-01
rs73461581	128581211	A/G	0.01	0.02	O / I	1.16 (0.62-2.15)	6.41E-01	0.72 (0.48-1.08)	1.16E-01	0.21	36	0.82 (0.52-1.32)	2.79E-01
rs73461582	128581330	T/C	0.01	0.02	O / I	1.16 (0.62-2.16)	6.38E-01	0.72 (0.48-1.08)	1.16E-01	0.21	37	0.83 (0.52-1.32)	2.80E-01
rs3857851	128592137	C/T	0.49	0.50	I / I	0.92 (0.79-1.08)	3.35E-01	0.97 (0.89-1.06)	5.04E-01	0.61	0	0.96 (0.86-1.07)	2.81E-01
rs17167001	128692627	T/C	0.03	0.02	I / I	1.15 (0.68-1.96)	5.98E-01	1.15 (0.86-1.53)	3.52E-01	0.99	0	1.15 (0.80-1.64)	2.85E-01
rs111731993	128600342	T/C	0.03	0.02	I / I	1.16 (0.68-1.97)	5.89E-01	1.15 (0.86-1.53)	3.60E-01	0.97	0	1.15 (0.80-1.65)	2.88E-01
rs78939067	128600127	G/T	0.03	0.02	I / I	1.16 (0.68-1.97)	5.89E-01	1.15 (0.86-1.53)	3.63E-01	0.97	0	1.15 (0.80-1.64)	2.90E-01
rs185387940	128604412	C/T	0.03	0.02	I / I	1.16 (0.68-1.97)	5.85E-01	1.14 (0.86-1.53)	3.65E-01	0.97	0	1.15 (0.80-1.64)	2.91E-01
rs112438598	128616001	A/C	0.03	0.02	I / I	1.13 (0.67-1.93)	6.41E-01	1.15 (0.86-1.54)	3.43E-01	0.96	0	1.15 (0.80-1.64)	2.93E-01
rs7788977	128624427	A/T	0.03	0.02	I / I	1.13 (0.67-1.93)	6.41E-01	1.15 (0.86-1.54)	3.43E-01	0.96	0	1.15 (0.80-1.64)	2.93E-01
rs1597552	128651000	T/C	0.49	0.50	O / O	0.93 (0.79-1.09)	3.56E-01	0.97 (0.89-1.06)	5.12E-01	0.63	0	0.96 (0.86-1.07)	2.95E-01
rs11770589	128589488	G/A	0.49	0.50	O / O	0.93 (0.79-1.09)	3.46E-01	0.97 (0.89-1.06)	5.31E-01	0.61	0	0.96 (0.86-1.07)	3.02E-01
rs79495221	128647411	T/C	0.03	0.02	I / I	1.13 (0.67-1.93)	6.41E-01	1.15 (0.86-1.53)	3.57E-01	0.97	0	1.14 (0.80-1.64)	3.04E-01
rs76832933	128648719	C/A	0.03	0.02	I / I	1.13 (0.67-1.93)	6.41E-01	1.15 (0.86-1.53)	3.57E-01	0.97	0	1.14 (0.80-1.64)	3.04E-01
rs2172876	128603292	G/C	0.49	0.50	I / I	0.93 (0.79-1.09)	3.64E-01	0.97 (0.89-1.06)	5.21E-01	0.64	0	0.96 (0.86-1.07)	3.05E-01
rs11766016	128697697	A/C	0.03	0.02	I / I	1.15 (0.68-1.96)	5.98E-01	1.14 (0.85-1.52)	3.84E-01	0.97	0	1.14 (0.80-1.63)	3.09E-01
rs6946318	128619661	C/T	0.49	0.50	O / O	0.93 (0.79-1.09)	3.86E-01	0.97 (0.89-1.06)	5.14E-01	0.67	0	0.96 (0.86-1.07)	3.11E-01
rs11767834	128581276	C/T	0.02	0.02	I / I	1.18 (0.69-2.01)	5.39E-01	1.13 (0.84-1.53)	4.20E-01	0.89	0	1.15 (0.79-1.65)	3.13E-01
rs55908117	128549912	C/G	0.14	0.15	I / I	0.99 (0.78-1.26)	9.47E-01	0.93 (0.81-1.06)	2.55E-01	0.62	0	0.94 (0.80-1.11)	3.17E-01
rs117731401	128674018	A/G	0.03	0.03	I / I	1.66 (1.05-2.63)	3.05E-02	0.98 (0.74-1.28)	8.58E-01	0.05	74	1.13 (0.82-1.57)	3.18E-01
rs56362836	128675454	C/G	0.03	0.03	I / I	1.66 (1.05-2.63)	3.05E-02	0.98 (0.74-1.28)	8.58E-01	0.05	74	1.13 (0.82-1.57)	3.18E-01
chr7:128707922:D	128707922	CT/C	0.02	0.02	I / I	1.38 (0.79-2.38)	2.55E-01	0.70 (0.48-1.02)	6.05E-02	0.05	75	0.85 (0.56-1.29)	3.24E-01
rs75095369	128605103	T/A	0.03	0.02	I / I	1.16 (0.68-1.97)	5.89E-01	1.13 (0.84-1.51)	4.11E-01	0.94	0	1.14 (0.79-1.63)	3.25E-01
rs3896309	128654206	G/C	0.49	0.50	I / I	0.93 (0.79-1.09)	3.55E-01	0.97 (0.89-1.07)	5.65E-01	0.60	0	0.96 (0.86-1.07)	3.27E-01
rs6948875	128602158	A/G	0.48	0.49	I / I	0.94 (0.80-1.11)	4.88E-01	0.97 (0.88-1.06)	4.92E-01	0.79	0	0.96 (0.86-1.08)	3.42E-01
rs2167273	128689413	C/T	0.44	0.46	O / O	0.91 (0.78-1.07)	2.58E-01	0.98 (0.90-1.07)	6.85E-01	0.43	0	0.96 (0.86-1.07)	3.44E-01
rs2305324	128641226	G/C	0.45	0.46	I / I	0.91 (0.77-1.07)	2.43E-01	0.98 (0.90-1.08)	7.17E-01	0.40	0	0.96 (0.86-1.07)	3.53E-01
rs76068573	128682230	T/C	0.03	0.02	I / I	1.13 (0.67-1.93)	6.41E-01	1.13 (0.84-1.51)	4.22E-01	0.98	0	1.13 (0.79-1.62)	3.54E-01
rs6957206	128561455	C/T	0.11	0.12	O / O	0.94 (0.73-1.21)	6.29E-01	0.94 (0.82-1.09)	4.33E-01	0.97	0	0.94 (0.79-1.12)	3.57E-01
rs11766495	128701006	T/G	0.03	0.02	O / O	1.03 (0.60-1.79)	9.04E-01	1.16 (0.87-1.54)	3.20E-01	0.72	0	1.12 (0.78-1.61)	3.64E-01
rs147649789	128532141	G/C	0.01	0.01	I / I	0.67 (0.29-1.52)	3.40E-01	0.90 (0.57-1.41)	6.41E-01	0.54	0	0.83 (0.48-1.44)	3.67E-01
rs76293322	128708337	C/A	0.02	0.02	I / I	1.31 (0.76-2.27)	3.26E-01	0.73 (0.51-1.05)	9.40E-02	0.08	67	0.86 (0.57-1.31)	3.70E-01
rs11770317	128629471	G/C	0.49	0.50	I / I	0.93 (0.79-1.09)	3.76E-01	0.98 (0.89-1.07)	6.46E-01	0.59	0	0.97 (0.86-1.08)	3.90E-01
rs79813542	128532912	C/A	0.01	0.01	I / I	1.56 (0.86-2.82)	1.43E-01	1.02 (0.67-1.56)	9.30E-01	0.25	23	1.15 (0.72-1.85)	3.93E-01
rs147429183	128627343	C/T	0.02	0.02	I / I	1.14 (0.67-1.93)	6.34E-01	1.11 (0.83-1.50)	4.81E-01	0.94	0	1.12 (0.78-1.61)	3.96E-01
chr7:128633053:D	128633053	GCTTT/G	0.46	0.47	I / I	0.93 (0.79-1.09)	3.72E-01	0.98 (0.89-1.07)	6.66E-01	0.57	0	0.96 (0.86-1.08)	4.00E-01
rs1874332	128614613	C/T	0.49	0.50	O / O	0.93 (0.79-1.09)	3.71E-01	0.98 (0.90-1.07)	6.74E-01	0.57	0	0.97 (0.87-1.08)	4.06E-01

Supplementary Table 7. Association analysis in *IRF5*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs78516009	128712446	T/C	0.01	0.01	I / I	0.83 (0.36-1.93)	6.69E-01	0.85 (0.54-1.33)	4.78E-01	0.97	0	0.85 (0.48-1.48)	4.07E-01
rs35918581	128737016	T/C	0.11	0.10	O / O	1.06 (0.81-1.38)	6.70E-01	1.05 (0.91-1.22)	4.82E-01	0.97	0	1.06 (0.88-1.27)	4.11E-01
rs11765050	128643240	G/A	0.49	0.50	I / I	0.93 (0.79-1.09)	3.55E-01	0.98 (0.90-1.08)	7.00E-01	0.54	0	0.97 (0.87-1.08)	4.14E-01
rs138457246	128655797	G/A	0.02	0.02	I / I	1.14 (0.67-1.93)	6.34E-01	1.11 (0.82-1.49)	5.07E-01	0.93	0	1.11 (0.78-1.60)	4.15E-01
rs73240327	128666956	C/T	0.47	0.48	I / I	0.92 (0.79-1.08)	3.17E-01	0.99 (0.90-1.08)	7.84E-01	0.46	0	0.97 (0.87-1.08)	4.45E-01
rs146817911	128701364	T/C	0.02	0.02	I / I	1.16 (0.68-1.97)	5.85E-01	1.08 (0.81-1.46)	5.90E-01	0.83	0	1.11 (0.77-1.59)	4.55E-01
rs10269439	128735690	A/G	0.30	0.31	O / O	0.94 (0.79-1.12)	4.92E-01	0.98 (0.89-1.08)	6.70E-01	0.70	0	0.97 (0.86-1.09)	4.68E-01
rs55670991	128712725	G/C	0.01	0.01	I / I	0.87 (0.39-1.92)	7.27E-01	0.87 (0.56-1.34)	5.32E-01	1.00	0	0.87 (0.51-1.49)	4.75E-01
rs112193169	128709098	G/A	0.02	0.02	I / I	1.31 (0.76-2.26)	3.31E-01	0.77 (0.54-1.10)	1.47E-01	0.11	61	0.89 (0.59-1.35)	4.75E-01
rs78987170	128739719	C/T	0.10	0.10	I / I	1.08 (0.82-1.42)	5.78E-01	1.04 (0.89-1.21)	6.22E-01	0.81	0	1.05 (0.87-1.26)	4.75E-01
chr7:128558331:D	128558331	TCA/T	0.17	0.17	I / I	1.04 (0.84-1.30)	7.14E-01	0.94 (0.83-1.06)	2.91E-01	0.41	0	0.96 (0.83-1.12)	4.81E-01
rs59147352	128672915	G/A	0.47	0.48	I / I	0.92 (0.78-1.08)	3.07E-01	0.99 (0.91-1.09)	8.73E-01	0.42	0	0.97 (0.87-1.08)	4.98E-01
rs71581979	128736841	G/T	0.11	0.10	I / I	1.06 (0.81-1.38)	6.93E-01	1.04 (0.90-1.21)	5.89E-01	0.93	0	1.05 (0.87-1.26)	5.05E-01
rs7795215	128710419	C/T	0.02	0.02	I / I	1.36 (0.79-2.31)	2.66E-01	0.77 (0.54-1.09)	1.43E-01	0.08	67	0.90 (0.60-1.35)	5.16E-01
rs139027246	128733113	G/A	0.02	0.02	I / I	1.80 (1.07-3.04)	2.73E-02	0.90 (0.66-1.24)	5.28E-01	0.03	80	1.10 (0.75-1.60)	5.24E-01
rs6467227	128736327	A/G	0.31	0.32	I / I	0.93 (0.78-1.11)	4.36E-01	0.99 (0.89-1.09)	7.95E-01	0.58	0	0.97 (0.86-1.10)	5.26E-01
rs59929392	128735456	G/A	0.31	0.31	O / I	0.94 (0.79-1.12)	4.80E-01	0.99 (0.89-1.09)	8.02E-01	0.62	0	0.97 (0.86-1.10)	5.56E-01
rs116831933	128710316	T/G	0.02	0.02	I / I	1.38 (0.81-2.36)	2.38E-01	0.78 (0.55-1.10)	1.57E-01	0.08	68	0.91 (0.61-1.37)	5.68E-01
rs7795065	128710330	C/T	0.02	0.02	I / I	1.38 (0.81-2.36)	2.38E-01	0.78 (0.55-1.10)	1.58E-01	0.08	68	0.91 (0.61-1.37)	5.70E-01
rs117158823	128545490	A/G	0.02	0.02	I / I	1.58 (0.85-2.94)	1.51E-01	0.95 (0.66-1.39)	8.08E-01	0.17	46	1.10 (0.70-1.72)	5.77E-01
rs143708303	128732777	C/G	0.21	0.22	I / I	0.87 (0.71-1.06)	1.62E-01	1.01 (0.91-1.13)	8.03E-01	0.18	45	0.97 (0.85-1.11)	5.95E-01
rs142029795	128578392	G/A	0.03	0.03	I / I	1.00 (0.61-1.64)	9.99E-01	1.09 (0.82-1.47)	5.43E-01	0.75	0	1.07 (0.75-1.51)	6.06E-01
rs59526485	128732622	C/T	0.22	0.22	I / I	0.87 (0.71-1.06)	1.77E-01	1.01 (0.91-1.13)	8.06E-01	0.19	41	0.97 (0.85-1.11)	6.11E-01
rs142712949	128533421	G/C	0.02	0.02	I / I	1.34 (0.69-2.56)	3.86E-01	1.01 (0.69-1.47)	9.57E-01	0.47	0	1.09 (0.69-1.72)	6.13E-01
rs17167079	128709171	C/T	0.02	0.02	O / O	1.35 (0.81-2.26)	2.54E-01	0.80 (0.57-1.13)	2.04E-01	0.10	64	0.93 (0.63-1.37)	6.38E-01
rs139749257	128565245	T/C	0.03	0.03	I / I	0.97 (0.60-1.57)	9.08E-01	1.09 (0.82-1.44)	5.65E-01	0.70	0	1.05 (0.75-1.48)	6.70E-01
rs10488630	128593948	A/G	0.37	0.37	O / O	0.88 (0.75-1.05)	1.55E-01	1.07 (0.97-1.17)	1.72E-01	0.06	72	1.01 (0.90-1.14)	6.88E-01
rs58527765	128735048	G/A	0.05	0.05	I / I	1.02 (0.70-1.48)	9.21E-01	1.04 (0.85-1.27)	6.90E-01	0.92	0	1.03 (0.81-1.33)	6.96E-01
rs17424179	128657995	G/A	0.03	0.04	O / O	1.09 (0.70-1.69)	7.13E-01	0.92 (0.71-1.18)	4.99E-01	0.51	0	0.96 (0.71-1.31)	7.06E-01
rs62478619	128714870	A/G	0.08	0.08	O / O	1.25 (0.95-1.64)	1.05E-01	0.95 (0.80-1.13)	5.65E-01	0.09	65	1.03 (0.84-1.25)	7.08E-01
rs193079748	128648408	C/A	0.03	0.03	I / I	1.12 (0.68-1.85)	6.48E-01	1.01 (0.76-1.36)	9.23E-01	0.73	0	1.04 (0.74-1.48)	7.45E-01
rs182717814	128598440	G/A	0.01	0.02	I / I	1.41 (0.78-2.57)	2.58E-01	0.78 (0.51-1.21)	2.74E-01	0.12	59	0.93 (0.57-1.50)	7.51E-01
rs140619406	128659865	T/C	0.03	0.02	I / I	1.03 (0.62-1.73)	8.99E-01	1.03 (0.77-1.39)	8.22E-01	1.00	0	1.03 (0.72-1.48)	7.96E-01
rs7794772	128710210	A/T	0.04	0.04	I / I	1.27 (0.87-1.86)	2.22E-01	0.95 (0.75-1.19)	6.36E-01	0.20	40	1.03 (0.78-1.35)	8.04E-01
rs7800715	128704453	C/G	0.35	0.35	I / I	0.87 (0.73-1.03)	1.06E-01	1.07 (0.97-1.17)	1.92E-01	0.04	76	1.01 (0.89-1.13)	8.08E-01
rs79470459	128718582	G/A	0.02	0.02	I / I	0.95 (0.51-1.76)	8.64E-01	1.06 (0.77-1.46)	7.10E-01	0.75	0	1.03 (0.69-1.54)	8.23E-01
rs2305323	128633722	T/C	0.34	0.34	I / I	0.87 (0.73-1.03)	1.17E-01	1.06 (0.96-1.16)	2.64E-01	0.06	73	1.00 (0.89-1.12)	9.10E-01
chr7:128631031:D	128631031	CA/C	0.34	0.34	I / I	0.87 (0.73-1.03)	1.04E-01	1.06 (0.96-1.16)	2.64E-01	0.05	74	1.00 (0.89-1.12)	9.36E-01
rs3958094	128635267	G/A	0.34	0.34	I / I	0.87 (0.73-1.03)	1.02E-01	1.05 (0.96-1.16)	2.70E-01	0.05	74	1.00 (0.89-1.12)	9.49E-01
rs11773774	128638032	C/T	0.34	0.34	I / I	0.87 (0.73-1.03)	1.16E-01	1.05 (0.96-1.16)	3.08E-01	0.06	71	1.00 (0.89-1.12)	9.77E-01
rs1874328	128585104	A/G	0.39	0.39	O / O	0.90 (0.76-1.06)	2.14E-01	1.04 (0.95-1.14)	4.28E-01	0.14	54	1.00 (0.89-1.12)	9.92E-01

Supplementary Table 8. Association analysis in *STAT4*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs10553577	191955189	TATA/T	0.30	0.23	I / I	1.38 (1.15-1.65)	5.13E-04	1.45 (1.31-1.61)	2.30E-12	0.63	0	1.43 (1.26-1.62)	6.80E-15
rs4853458	191959489	G/A	0.30	0.23	I / I	1.41 (1.18-1.69)	1.49E-04	1.41 (1.28-1.56)	2.81E-11	0.99	0	1.41 (1.25-1.60)	1.95E-14
rs7582694	191970120	G/C	0.30	0.23	I / I	1.40 (1.17-1.68)	2.14E-04	1.40 (1.26-1.55)	1.33E-10	0.97	0	1.40 (1.24-1.58)	1.27E-13
rs10181656	191969879	C/G	0.30	0.23	I / I	1.41 (1.18-1.68)	1.60E-04	1.39 (1.26-1.54)	1.91E-10	0.91	0	1.40 (1.23-1.58)	1.36E-13
rs7568275	191966452	C/G	0.29	0.23	I / I	1.41 (1.18-1.68)	1.85E-04	1.40 (1.26-1.55)	1.74E-10	0.95	0	1.40 (1.24-1.58)	1.43E-13
rs139605600	191960109	A/T	0.30	0.23	I / I	1.40 (1.18-1.68)	1.73E-04	1.38 (1.25-1.53)	5.39E-10	0.86	0	1.39 (1.23-1.57)	4.04E-13
rs4853459	191962096	C/T	0.30	0.23	I / I	1.39 (1.16-1.66)	3.05E-04	1.38 (1.24-1.53)	7.35E-10	0.95	0	1.38 (1.22-1.56)	9.64E-13
rs12612769	191953998	A/C	0.24	0.18	I / I	1.39 (1.15-1.69)	6.49E-04	1.37 (1.23-1.53)	2.27E-08	0.88	0	1.38 (1.21-1.57)	5.85E-11
rs13389408	191933283	T/C	0.13	0.09	I / I	1.56 (1.23-1.99)	2.80E-04	1.40 (1.22-1.62)	4.51E-06	0.46	0	1.45 (1.22-1.72)	6.02E-09
rs3024859	191925424	C/T	0.24	0.19	I / I	1.35 (1.12-1.64)	1.85E-03	1.31 (1.17-1.46)	1.29E-06	0.78	0	1.32 (1.16-1.51)	8.66E-09
rs13426947	191933254	G/A	0.24	0.19	O / O	1.34 (1.11-1.62)	2.44E-03	1.31 (1.18-1.47)	1.09E-06	0.85	0	1.32 (1.16-1.51)	9.45E-09
chr2:191916526:D	191916526	AC/A	0.24	0.19	I / I	1.29 (1.07-1.56)	8.52E-03	1.31 (1.17-1.46)	1.64E-06	0.92	0	1.30 (1.14-1.49)	4.81E-08
rs12465689	191912540	C/T	0.24	0.20	I / I	1.32 (1.10-1.60)	3.43E-03	1.29 (1.16-1.44)	4.37E-06	0.81	0	1.30 (1.14-1.48)	5.16E-08
rs16833214	191913642	A/G	0.24	0.20	I / I	1.33 (1.10-1.60)	2.97E-03	1.29 (1.15-1.44)	5.69E-06	0.77	0	1.30 (1.14-1.48)	5.87E-08
rs11893432	191921874	C/G	0.24	0.20	I / I	1.31 (1.09-1.59)	4.56E-03	1.29 (1.16-1.44)	4.97E-06	0.87	0	1.30 (1.14-1.48)	7.65E-08
rs79385886	191961970	T/G	0.13	0.17	I / I	0.77 (0.62-0.97)	2.50E-02	0.73 (0.64-0.84)	3.60E-06	0.68	0	0.74 (0.64-0.87)	3.12E-07
rs6434435	191953864	G/A	0.14	0.17	I / I	0.78 (0.62-0.98)	2.96E-02	0.74 (0.65-0.84)	5.82E-06	0.67	0	0.75 (0.64-0.88)	5.86E-07
chr2:191951361:D	191951361	indel/G	0.12	0.16	I / I	0.77 (0.61-0.96)	2.29E-02	0.73 (0.63-0.84)	7.80E-06	0.71	0	0.74 (0.63-0.87)	5.91E-07
rs148150767	191959933	T/C	0.37	0.32	I / I	1.21 (1.03-1.44)	2.34E-02	1.24 (1.13-1.37)	8.28E-06	0.81	0	1.23 (1.10-1.39)	6.33E-07
rs7601754	191940451	A/G	0.14	0.18	O / O	0.76 (0.61-0.95)	1.62E-02	0.75 (0.66-0.86)	1.34E-05	0.92	0	0.76 (0.65-0.88)	6.87E-07
rs10931480	191954047	A/G	0.14	0.18	O / I	0.77 (0.62-0.96)	1.99E-02	0.76 (0.66-0.86)	2.13E-05	0.89	0	0.76 (0.65-0.89)	1.31E-06
rs3024912	191893087	A/C	0.26	0.22	O / O	1.25 (1.04-1.49)	1.46E-02	1.24 (1.12-1.38)	6.13E-05	0.96	0	1.24 (1.10-1.41)	2.70E-06
rs16833260	191971565	C/G	0.37	0.33	I / I	1.24 (1.05-1.46)	1.28E-02	1.20 (1.09-1.32)	1.38E-04	0.78	0	1.21 (1.08-1.36)	5.33E-06
rs7566808	191971155	A/G	0.37	0.33	I / I	1.23 (1.04-1.46)	1.41E-02	1.20 (1.09-1.32)	2.00E-04	0.77	0	1.21 (1.08-1.36)	8.38E-06
rs1517351	191896045	T/G	0.23	0.19	I / I	1.24 (1.03-1.49)	2.39E-02	1.22 (1.09-1.36)	4.75E-04	0.88	0	1.22 (1.07-1.40)	3.17E-05
rs3024918	191891763	A/G	0.15	0.18	O / O	0.85 (0.68-1.07)	1.66E-01	0.79 (0.70-0.89)	1.90E-04	0.57	0	0.81 (0.69-0.94)	9.77E-05
rs3024919	191891571	G/T	0.15	0.18	I / I	0.83 (0.66-1.04)	1.13E-01	0.80 (0.71-0.90)	3.53E-04	0.77	0	0.81 (0.69-0.94)	1.09E-04
rs1996400	191907527	C/T	0.07	0.05	I / I	1.13 (0.78-1.64)	5.16E-01	1.48 (1.23-1.79)	3.29E-05	0.20	38	1.37 (1.08-1.75)	1.12E-04
rs6749371	191902184	A/T	0.04	0.06	I / I	0.79 (0.56-1.12)	1.83E-01	0.65 (0.52-0.82)	2.00E-04	0.37	0	0.69 (0.53-0.89)	1.16E-04
rs3024879	191904556	G/A	0.07	0.05	I / I	1.12 (0.77-1.63)	5.50E-01	1.48 (1.23-1.78)	3.62E-05	0.19	41	1.37 (1.08-1.74)	1.36E-04
rs55646736	191931960	G/C	0.06	0.04	I / I	1.21 (0.83-1.78)	3.20E-01	1.46 (1.21-1.77)	1.10E-04	0.39	0	1.39 (1.09-1.78)	1.43E-04
rs12693593	191964323	A/C	0.07	0.09	I / I	0.76 (0.56-1.02)	6.92E-02	0.74 (0.62-0.89)	1.13E-03	0.91	0	0.75 (0.61-0.92)	1.97E-04
rs3024851	191928822	A/T	0.04	0.06	I / I	0.76 (0.52-1.11)	1.58E-01	0.67 (0.53-0.84)	5.36E-04	0.56	0	0.69 (0.53-0.91)	2.29E-04
rs11676659	191919354	A/G	0.04	0.06	I / I	0.78 (0.54-1.13)	1.92E-01	0.66 (0.53-0.83)	4.25E-04	0.47	0	0.69 (0.53-0.91)	2.35E-04
rs6715106	191913034	A/G	0.04	0.06	O / O	0.77 (0.53-1.11)	1.58E-01	0.68 (0.54-0.85)	5.84E-04	0.57	0	0.70 (0.54-0.91)	2.49E-04
rs3771326	191915738	G/A	0.04	0.06	O / I	0.78 (0.54-1.14)	1.96E-01	0.66 (0.53-0.84)	4.65E-04	0.47	0	0.70 (0.53-0.91)	2.60E-04
rs11686127	191918031	C/T	0.04	0.06	O / O	0.77 (0.53-1.12)	1.79E-01	0.68 (0.54-0.85)	7.19E-04	0.55	0	0.70 (0.54-0.92)	3.44E-04
rs1400656	191935033	A/G	0.04	0.06	I / I	0.72 (0.48-1.06)	9.83E-02	0.69 (0.55-0.87)	1.58E-03	0.88	0	0.70 (0.53-0.92)	3.78E-04
rs13010752	191946603	T/A	0.07	0.09	I / I	0.80 (0.58-1.09)	1.56E-01	0.75 (0.63-0.89)	1.00E-03	0.73	0	0.76 (0.61-0.94)	4.00E-04
rs72913147	191906581	A/G	0.06	0.05	O / I	1.17 (0.81-1.68)	4.19E-01	1.42 (1.18-1.72)	2.56E-04	0.35	0	1.34 (1.06-1.71)	4.21E-04
rs4853541	191920322	G/A	0.04	0.06	I / I	0.81 (0.56-1.18)	2.73E-01	0.67 (0.54-0.84)	5.56E-04	0.39	0	0.71 (0.54-0.93)	4.53E-04
rs1400654	191915673	A/T	0.04	0.06	I / I	0.81 (0.56-1.17)	2.66E-01	0.68 (0.54-0.85)	6.49E-04	0.41	0	0.71 (0.55-0.93)	5.03E-04
rs148921410	191960409	C/T	0.07	0.09	I / I	0.81 (0.59-1.12)	1.99E-01	0.74 (0.62-0.89)	9.96E-04	0.64	0	0.76 (0.62-0.95)	5.18E-04
rs1818625	191923026	C/T	0.28	0.26	I / I	1.22 (1.02-1.46)	2.77E-02	1.15 (1.04-1.28)	6.61E-03	0.57	0	1.17 (1.03-1.33)	5.18E-04
rs7574608	191909864	A/T	0.04	0.06	I / I	0.77 (0.53-1.12)	1.77E-01	0.69 (0.55-0.86)	1.20E-03	0.61	0	0.71 (0.54-0.93)	5.36E-04
rs1400655	191915715	C/G	0.04	0.06	I / I	0.81 (0.56-1.17)	2.69E-01	0.68 (0.54-0.85)	7.29E-04	0.42	0	0.72 (0.55-0.93)	5.62E-04
rs150250623	191962323	T/G	0.07	0.08	I / I	0.83 (0.60-1.13)	2.35E-01	0.74 (0.62-0.89)	9.00E-04	0.57	0	0.77 (0.62-0.95)	5.74E-04
chr2:191956130:D	191956130	AG/A	0.07	0.09	I / I	0.81 (0.59-1.11)	1.93E-01	0.75 (0.63-0.89)	1.28E-03	0.67	0	0.77 (0.62-0.95)	6.29E-04
rs16833239	191940260	G/A	0.06	0.08	I / I	0.75 (0.55-1.02)	6.79E-02	0.76 (0.63-0.92)	4.13E-03	0.92	0	0.76 (0.61-0.95)	6.74E-04
rs3024861	191924606	A/T	0.29	0.26	I / I	1.23 (1.03-1.47)	2.24E-02	1.14 (1.03-1.26)	1.05E-02	0.47	0	1.17 (1.03-1.32)	7.22E-04
chr2:191906456:D	191906456	AG/A	0.08	0.10	I / I	0.85 (0.63-1.15)	3.02E-01	0.76 (0.64-0.89)	9.59E-04	0.50	0	0.78 (0.64-0.96)	8.18E-04
rs11893508	191921799	A/G	0.05	0.06	I / I	0.83 (0.58-1.18)	3.07E-01	0.70 (0.57-0.86)	9.65E-04	0.41	0	0.73 (0.57-0.94)	8.40E-04
rs35067237	191910743	C/G	0.08	0.10	I / I	0.84 (0.62-1.15)	2.78E-01	0.76 (0.65-0.90)	1.15E-03	0.56	0	0.78 (0.64-0.96)	8.65E-04
rs3024866	191922841	A/G	0.29	0.26	O / O	1.22 (1.02-1.46)	2.70E-02	1.14 (1.03-1.26)	1.14E-02	0.50	0	1.16 (1.03-1.32)	9.01E-04
rs66911790	191904670	G/C	0.08	0.10	I / I	0.87 (0.64-1.17)	3.46E-01	0.76 (0.64-0.89)	9.68E-04	0.45	0	0.79 (0.64-0.96)	9.80E-04
rs13401064	191970330	C/G	0.07	0.09	I / I	0.75 (0.56-1.01)	6.28E-02	0.78 (0.65-0.93)	6.76E-03	0.84	0	0.77 (0.62-0.96)	1.03E-03
rs62179913	191892308	C/T	0.06	0.08	O / O	0.89 (0.65-1.23)	4.81E-01	0.73 (0.61-0.87)	6.15E-04	0.28	13	0.77 (0.62-0.96)	1.05E-03
rs12999858	191911847	G/T	0.08	0.10	I / O	0.85 (0.63-1.15)	3.00E-01	0.76 (0.65-0.90)	1.31E-03	0.53	0	0.79 (0.64-0.97)	1.07E-03
rs9789710	191957413	G/A	0.07	0.09	I / I	0.76 (0.56-1.03)	7.45E-02	0.78 (0.65-0.93)	6.14E-03	0.90	0	0.77 (0.62-0.96)	1.08E-03
rs13390936	191954816	A/T	0.07	0.09	I / I	0.77 (0.57-1.04)	8.62E-02	0.78 (0.65-0.94)	8.04E-03	0.91	0	0.78 (0.63-0.97)	1.59E-03
rs16833238	191939499	A/T	0.08	0.10	I / I	0.84 (0.62-1.13)	2.46E-01	0.78 (0.67-0.92)	3.41E-03	0.70	0	0.80 (0.65-0.98)	1.95E-03
rs72913168	191922355	C/T	0.08	0.10	I / I	0.84 (0.62-1.12)	2.34E-01	0.79 (0.67-0.92)	3.62E-03	0.72	0	0.80 (0.66-0.98)	1.96E-03
rs72913200	191952118	G/A	0.05	0.04	I / I	1.20 (0.79-1.82)	4.03E-01	1.37 (1.11-1.69)	3.21E-03	0.57	0	1.32 (1.01-1.73)	3.28E-03
rs3024847	191930290	A/T	0.43	0.40	I / I	1.15 (0.98-1.36)	8.85E-02	1.12 (1.02-1.23)	1.65E-02	0.75	0	1.13 (1.01-1.26)	3.32E-03
rs72913198	191949632	G/C	0.05	0.04	I / I	1.18 (0.78-1.80)	4.37E-01	1.37 (1.11-1.69)	3.21E-03	0.53	0	1.32 (1.00-1.72)	3.62E-03
rs13017460	191932556	G/A	0.43	0.40	O / O	1.16 (0.98-1.36)	8.21E-02	1.12 (1.02-1.22)	1.99E-02	0.70	0	1.13 (1.01-1.26)	3.78E-03
rs11693480	191957695	A/C	0.44	0.41	I / I	1.12 (0.95-1.32)	1.67E-01	1.13 (1.03-1.24)	1.12E-02	0.96	0	1.12 (1.01-1.26)	3.93E-03
rs6736175	191946322	T/C	0.44	0.41	I / I	1.10 (0.94-1.30)	2.32E-01	1.13 (1.03-1.24)	8.01E-03	0.79	0	1.12 (1.01-1.26)	3.96E-03

Supplementary Table 8. Association analysis in *STAT4*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs16833215	191913799	A/G	0.33	0.30	O / O	1.21 (1.02-1.43)	3.22E-02	1.10 (0.99-1.21)	6.40E-02	0.34	0	1.13 (1.00-1.27)	6.78E-03
rs12469996	191912532	T/C	0.33	0.30	I / I	1.20 (1.01-1.43)	3.84E-02	1.10 (0.99-1.21)	6.46E-02	0.38	0	1.13 (1.00-1.27)	7.67E-03
rs34946552	191910563	A/T	0.44	0.41	I / I	1.15 (0.97-1.35)	1.00E-01	1.10 (1.01-1.21)	3.65E-02	0.68	0	1.12 (1.00-1.25)	8.17E-03
rs149218447	191963305	G/A	0.04	0.03	I / I	1.21 (0.76-1.93)	4.17E-01	1.35 (1.07-1.69)	9.64E-03	0.68	0	1.31 (0.98-1.75)	8.69E-03
rs72913156	191913357	C/A	0.44	0.41	I / I	1.15 (0.98-1.36)	9.62E-02	1.10 (1.00-1.21)	4.00E-02	0.65	0	1.11 (1.00-1.25)	8.70E-03
rs3024877	191904889	C/T	0.33	0.30	O / O	1.20 (1.01-1.43)	3.41E-02	1.09 (0.99-1.20)	8.97E-02	0.31	1	1.12 (0.99-1.26)	1.04E-02
rs2459611	191939187	T/C	0.09	0.10	O / O	0.86 (0.65-1.15)	3.02E-01	0.83 (0.71-0.97)	1.87E-02	0.83	0	0.84 (0.69-1.02)	1.11E-02
rs4434028	191907655	A/G	0.46	0.44	I / I	1.16 (0.99-1.37)	7.13E-02	1.08 (0.99-1.19)	9.81E-02	0.45	0	1.10 (0.99-1.23)	1.82E-02
rs3024904	191895202	T/A	0.09	0.11	I / I	0.96 (0.73-1.25)	7.46E-01	0.82 (0.71-0.96)	1.24E-02	0.34	0	0.86 (0.71-1.03)	2.20E-02
rs3024897	191896564	G/C	0.09	0.11	I / I	0.95 (0.73-1.25)	7.22E-01	0.83 (0.71-0.96)	1.51E-02	0.37	0	0.86 (0.72-1.04)	2.45E-02
rs3024903	191895607	C/T	0.10	0.11	I / I	0.96 (0.73-1.25)	7.46E-01	0.83 (0.71-0.96)	1.46E-02	0.35	0	0.86 (0.72-1.04)	2.49E-02
rs3024908	191894141	T/C	0.10	0.11	O / O	0.98 (0.75-1.27)	8.66E-01	0.83 (0.71-0.96)	1.37E-02	0.28	15	0.87 (0.72-1.04)	2.95E-02
rs2464997	191940578	T/G	0.04	0.03	I / I	1.05 (0.63-1.74)	8.54E-01	1.26 (0.99-1.61)	6.23E-02	0.52	0	1.20 (0.87-1.65)	9.35E-02
rs925847	191897540	C/T	0.28	0.27	O / O	1.15 (0.96-1.37)	1.27E-01	1.05 (0.95-1.17)	3.27E-01	0.40	0	1.08 (0.95-1.22)	1.00E-01
rs4853457	191933689	A/T	0.37	0.36	I / I	1.13 (0.96-1.34)	1.42E-01	1.04 (0.95-1.15)	3.82E-01	0.39	0	1.07 (0.95-1.20)	1.28E-01
rs4254532	191979178	A/G	0.40	0.39	I / I	1.24 (1.05-1.46)	1.08E-02	1.00 (0.92-1.10)	9.09E-01	0.03	79	1.07 (0.95-1.19)	1.46E-01
chr2:192001749:D	192001749	G/GA	0.40	0.39	I / I	1.21 (1.03-1.43)	2.24E-02	1.00 (0.91-1.10)	9.76E-01	0.05	75	1.06 (0.94-1.18)	2.16E-01
rs3024936	191895376	G/C	0.03	0.03	I / I	1.15 (0.74-1.79)	5.34E-01	1.15 (0.89-1.49)	2.95E-01	1.00	0	1.15 (0.84-1.57)	2.23E-01
rs4583497	191990106	G/C	0.39	0.37	I / I	1.21 (1.02-1.42)	2.53E-02	1.00 (0.91-1.09)	9.52E-01	0.05	74	1.05 (0.94-1.18)	2.54E-01
chr2:192001443:D	192001443	C/CTCTA	0.39	0.38	I / I	1.22 (1.04-1.44)	1.73E-02	0.99 (0.90-1.09)	8.63E-01	0.03	79	1.05 (0.94-1.18)	2.64E-01
rs6709270	191994603	G/A	0.38	0.37	I / I	1.21 (1.03-1.43)	2.31E-02	0.99 (0.91-1.09)	9.02E-01	0.04	76	1.05 (0.94-1.18)	2.70E-01
rs4596007	191990043	C/A	0.39	0.37	I / I	1.21 (1.03-1.43)	2.04E-02	0.99 (0.90-1.09)	8.66E-01	0.04	77	1.05 (0.94-1.18)	2.76E-01
rs10804037	191991891	A/C	0.39	0.37	I / I	1.21 (1.03-1.43)	2.18E-02	0.99 (0.90-1.09)	8.76E-01	0.04	77	1.05 (0.94-1.18)	2.77E-01
rs6712821	191995361	T/C	0.39	0.37	O / O	1.23 (1.04-1.45)	1.36E-02	0.99 (0.90-1.08)	7.74E-01	0.02	81	1.05 (0.94-1.18)	2.86E-01
rs7423529	192003031	C/T	0.39	0.38	I / I	1.21 (1.03-1.43)	2.31E-02	0.99 (0.90-1.08)	8.06E-01	0.04	77	1.05 (0.93-1.17)	3.17E-01
rs4853545	192004445	T/C	0.40	0.38	I / I	1.21 (1.02-1.42)	2.80E-02	0.99 (0.90-1.09)	8.37E-01	0.04	75	1.05 (0.93-1.17)	3.19E-01
rs10197066	191985459	T/G	0.38	0.37	I / I	1.21 (1.03-1.43)	2.20E-02	0.99 (0.90-1.08)	7.80E-01	0.03	78	1.05 (0.93-1.17)	3.26E-01
rs62181460	192003126	T/A	0.39	0.38	I / I	1.21 (1.02-1.43)	2.47E-02	0.99 (0.90-1.08)	7.97E-01	0.04	77	1.05 (0.93-1.17)	3.29E-01
rs10931482	191988629	C/T	0.38	0.37	I / I	1.21 (1.03-1.43)	2.04E-02	0.99 (0.90-1.08)	7.60E-01	0.03	79	1.05 (0.93-1.17)	3.30E-01
rs114724940	191973189	C/T	0.01	0.01	I / I	1.18 (0.58-2.37)	6.49E-01	1.20 (0.79-1.83)	3.96E-01	0.96	0	1.19 (0.72-1.97)	3.36E-01
rs4997835	191992611	T/C	0.38	0.37	I / I	1.21 (1.03-1.43)	2.18E-02	0.99 (0.90-1.08)	7.56E-01	0.03	78	1.04 (0.93-1.17)	3.39E-01
rs2356349	192002158	G/C	0.39	0.38	I / I	1.20 (1.02-1.42)	2.80E-02	0.99 (0.90-1.08)	7.93E-01	0.04	76	1.04 (0.93-1.17)	3.44E-01
rs12995923	191994100	A/G	0.38	0.37	I / I	1.21 (1.02-1.42)	2.57E-02	0.99 (0.90-1.08)	7.73E-01	0.04	77	1.04 (0.93-1.17)	3.46E-01
rs6434442	192001249	T/C	0.39	0.38	I / I	1.21 (1.02-1.42)	2.63E-02	0.99 (0.90-1.08)	7.78E-01	0.04	77	1.04 (0.93-1.17)	3.47E-01
rs7579720	191986673	T/A	0.38	0.37	I / I	1.21 (1.02-1.42)	2.48E-02	0.99 (0.90-1.08)	7.64E-01	0.04	77	1.04 (0.93-1.17)	3.47E-01
rs6715714	191992160	C/T	0.38	0.37	I / I	1.21 (1.03-1.43)	2.22E-02	0.98 (0.90-1.08)	7.44E-01	0.03	78	1.04 (0.93-1.17)	3.48E-01
rs1584945	191998552	T/C	0.39	0.38	I / I	1.21 (1.03-1.43)	2.19E-02	0.98 (0.90-1.08)	7.38E-01	0.03	79	1.04 (0.93-1.17)	3.50E-01
rs4341967	191984286	T/A	0.38	0.37	I / I	1.21 (1.02-1.42)	2.48E-02	0.99 (0.90-1.08)	7.59E-01	0.04	77	1.04 (0.93-1.17)	3.50E-01
rs4853544	191991232	C/G	0.38	0.37	I / I	1.22 (1.03-1.43)	1.96E-02	0.98 (0.90-1.08)	7.16E-01	0.03	80	1.04 (0.93-1.17)	3.50E-01
rs4549119	191990362	A/C	0.38	0.37	I / I	1.21 (1.03-1.43)	2.04E-02	0.98 (0.90-1.08)	7.21E-01	0.03	79	1.04 (0.93-1.17)	3.52E-01
rs4622765	191990645	T/A	0.38	0.37	I / I	1.22 (1.03-1.43)	1.96E-02	0.98 (0.90-1.08)	7.11E-01	0.03	80	1.04 (0.93-1.17)	3.54E-01
rs6434441	192000082	A/G	0.39	0.38	I / I	1.20 (1.02-1.42)	2.71E-02	0.99 (0.90-1.08)	7.64E-01	0.04	77	1.04 (0.93-1.17)	3.58E-01
rs4602251	191991665	T/C	0.38	0.37	I / I	1.22 (1.03-1.43)	1.96E-02	0.98 (0.89-1.08)	7.01E-01	0.03	80	1.04 (0.93-1.17)	3.59E-01
rs4261749	191991642	C/T	0.38	0.37	I / I	1.21 (1.03-1.43)	2.08E-02	0.98 (0.89-1.08)	7.00E-01	0.03	79	1.04 (0.93-1.17)	3.66E-01
rs6434443	192001995	C/G	0.39	0.38	I / I	1.20 (1.01-1.41)	3.30E-02	0.99 (0.90-1.08)	7.82E-01	0.05	75	1.04 (0.93-1.17)	3.68E-01
rs2356350	192002538	A/G	0.41	0.40	I / I	1.20 (1.01-1.41)	3.27E-02	0.99 (0.90-1.08)	7.85E-01	0.05	75	1.04 (0.93-1.17)	3.70E-01
rs4853542	191976602	G/A	0.38	0.37	I / I	1.21 (1.02-1.42)	2.64E-02	0.98 (0.90-1.08)	7.36E-01	0.04	77	1.04 (0.93-1.17)	3.71E-01
rs10193465	191975226	C/T	0.38	0.37	I / I	1.20 (1.02-1.42)	2.79E-02	0.98 (0.90-1.08)	7.37E-01	0.04	77	1.04 (0.93-1.17)	3.78E-01
chr2:192000747:D	192000747	A/AAC	0.39	0.38	I / I	1.19 (1.01-1.40)	3.96E-02	0.99 (0.90-1.08)	7.98E-01	0.06	73	1.04 (0.93-1.17)	3.81E-01
rs1551442	191996262	A/G	0.38	0.37	O / O	1.20 (1.02-1.41)	3.12E-02	0.98 (0.90-1.08)	7.40E-01	0.04	76	1.04 (0.93-1.16)	3.87E-01
rs7566274	192000919	A/C	0.39	0.38	I / I	1.20 (1.02-1.41)	3.20E-02	0.98 (0.90-1.08)	7.43E-01	0.04	76	1.04 (0.93-1.16)	3.89E-01
rs1020658	191996138	C/G	0.38	0.37	I / I	1.20 (1.02-1.42)	2.81E-02	0.98 (0.89-1.08)	6.92E-01	0.04	78	1.04 (0.93-1.16)	4.05E-01
chr2:191995682:I	191995682	AG/A	0.38	0.37	I / I	1.20 (1.02-1.42)	2.67E-02	0.98 (0.89-1.07)	6.57E-01	0.03	78	1.04 (0.93-1.16)	4.22E-01
rs9967792	191974435	C/T	0.38	0.37	I / I	1.21 (1.02-1.42)	2.60E-02	0.98 (0.89-1.07)	6.47E-01	0.03	79	1.04 (0.93-1.16)	4.28E-01
rs1551441	191996132	A/G	0.38	0.37	O / I	1.18 (1.00-1.39)	4.63E-02	0.98 (0.89-1.07)	6.23E-01	0.05	74	1.03 (0.92-1.15)	5.20E-01
rs112305041	191890120	T/C	0.02	0.02	I / I	1.12 (0.69-1.82)	6.44E-01	0.82 (0.57-1.20)	3.12E-01	0.33	0	0.90 (0.60-1.35)	5.42E-01
rs1551443	191996518	C/T	0.38	0.37	O / O	1.19 (1.01-1.40)	3.78E-02	0.96 (0.88-1.06)	4.18E-01	0.03	79	1.02 (0.91-1.15)	6.73E-01
rs34932513	191954459	G/T	0.02	0.02	I / I	0.71 (0.40-1.28)	2.57E-01	1.04 (0.73-1.50)	8.15E-01	0.28	15	0.94 (0.61-1.43)	6.86E-01
chr2:191967577:I	191967577	C/CTG	0.02	0.02	I / I	0.74 (0.41-1.32)	3.08E-01	1.04 (0.73-1.50)	8.15E-01	0.32	0	0.95 (0.62-1.45)	7.31E-01
rs7573832	191915208	A/G	0.15	0.15	O / O	0.94 (0.74-1.20)	6.30E-01	1.00 (0.88-1.13)	9.65E-01	0.68	0	0.98 (0.84-1.15)	7.69E-01
rs16833220	191917344	C/G	0.14	0.14	I / I	0.94 (0.74-1.20)	6.33E-01	1.00 (0.88-1.13)	9.92E-01	0.68	0	0.98 (0.84-1.15)	7.93E-01
rs16833224	191918132	G/C	0.14	0.14	I / I	0.94 (0.74-1.20)	6.33E-01	1.00 (0.88-1.13)	9.92E-01	0.68	0	0.98 (0.84-1.15)	7.93E-01
rs3024865	191923543	G/C	0.14	0.14	I / I	0.96 (0.75-1.23)	7.45E-01	1.00 (0.88-1.13)	9.57E-01	0.79	0	0.99 (0.84-1.16)	8.27E-01
rs75356866	191982479	C/T	0.01	0.01	I / I	0.85 (0.44-1.66)	6.39E-01	1.02 (0.68-1.54)	9.22E-01	0.65	0	0.97 (0.60-1.57)	8.70E-01
rs3024898	191896354	C/T	0.03	0.02	I / I	0.56 (0.27-1.15)	1.13E-01	1.18 (0.90-1.54)	2.37E-01	0.06	72	0.95 (0.64-1.42)	8.74E-01
rs71414919	191908557	G/A	0.02	0.02	I / I	0.80 (0.45-1.45)	4.68E-01	1.06 (0.74-1.53)	7.30E-01	0.42	0	0.98 (0.64-1.50)	9.26E-01
chr2:191893880:D	191893880	AT/A	0.03	0.02	I / I	0.55 (0.27-1.12)	9.72E-02	1.16 (0.89-1.52)	2.74E-01	0.05	73	0.94 (0.63-1.39)	9.64E-01

Supplementary Table 9. Association analysis in *IL12A*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs485497	159719132	G/A	0.54	0.48	O / O	1.32 (1.12-1.55)	9.47E-04	1.30 (1.18-1.42)	3.15E-08	0.87	0	1.30 (1.16-1.46)	1.17E-10
rs583911	159710390	A/G	0.48	0.42	I / I	1.29 (1.10-1.52)	2.16E-03	1.26 (1.15-1.38)	1.28E-06	0.78	0	1.27 (1.13-1.42)	9.88E-09
rs668998	159715551	A/G	0.48	0.42	O / O	1.30 (1.10-1.53)	1.70E-03	1.25 (1.14-1.37)	2.02E-06	0.70	0	1.26 (1.13-1.41)	1.25E-08
rs11391651	159701545	CA/C	0.48	0.42	I / I	1.29 (1.10-1.52)	1.86E-03	1.24 (1.13-1.36)	4.07E-06	0.66	0	1.26 (1.12-1.41)	2.74E-08
rs582054	159710001	T/A	0.48	0.42	I / I	1.29 (1.10-1.52)	2.10E-03	1.24 (1.13-1.36)	4.28E-06	0.68	0	1.25 (1.12-1.40)	3.23E-08
rs582537	159710098	C/A	0.48	0.42	I / I	1.29 (1.10-1.52)	2.10E-03	1.24 (1.13-1.36)	5.31E-06	0.66	0	1.25 (1.12-1.40)	4.00E-08
rs647801	159707519	G/A	0.48	0.43	I / I	1.29 (1.09-1.52)	2.48E-03	1.24 (1.13-1.36)	5.00E-06	0.69	0	1.25 (1.12-1.40)	4.38E-08
rs4680536	159720271	A/G	0.39	0.44	O / O	0.76 (0.65-0.89)	8.37E-04	0.84 (0.77-0.92)	2.89E-04	0.28	14	0.82 (0.73-0.91)	1.26E-06
rs9858816	159702290	T/C	0.36	0.40	I / I	0.83 (0.70-0.98)	2.90E-02	0.81 (0.74-0.89)	1.67E-05	0.80	0	0.82 (0.73-0.92)	1.53E-06
rs2243143	159714802	G/A	0.36	0.40	O / O	0.83 (0.70-0.98)	2.92E-02	0.81 (0.74-0.89)	2.04E-05	0.83	0	0.82 (0.73-0.92)	1.86E-06
rs2243138	159714350	A/T	0.36	0.40	I / I	0.83 (0.70-0.98)	2.77E-02	0.81 (0.74-0.90)	2.20E-05	0.85	0	0.82 (0.73-0.92)	1.89E-06
rs2243149	159715712	C/T	0.36	0.40	I / I	0.83 (0.70-0.98)	2.64E-02	0.82 (0.74-0.90)	2.34E-05	0.88	0	0.82 (0.73-0.92)	1.91E-06
rs2243135	159712993	G/C	0.36	0.40	I / I	0.83 (0.70-0.98)	2.76E-02	0.81 (0.74-0.90)	2.25E-05	0.86	0	0.82 (0.73-0.92)	1.93E-06
rs11927521	159717085	A/G	0.36	0.40	I / I	0.83 (0.70-0.98)	2.64E-02	0.82 (0.74-0.90)	2.97E-05	0.90	0	0.82 (0.73-0.92)	2.39E-06
rs2243147	159715386	A/G	0.36	0.40	I / I	0.83 (0.70-0.98)	2.54E-02	0.82 (0.75-0.90)	4.58E-05	0.95	0	0.82 (0.73-0.92)	3.47E-06
chr3:159704703:I	159704703	A/AT	0.36	0.40	I / I	0.83 (0.70-0.98)	2.82E-02	0.82 (0.75-0.91)	6.30E-05	0.93	0	0.83 (0.73-0.93)	5.22E-06
chr3:159714095:I	159714095	G/GA	0.36	0.40	I / I	0.84 (0.71-0.99)	3.75E-02	0.82 (0.75-0.90)	6.19E-05	0.86	0	0.83 (0.74-0.93)	6.87E-06
rs545232	159732031	C/T	0.38	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.84 (0.77-0.93)	4.59E-04	0.48	0	0.83 (0.74-0.93)	7.13E-06
rs7615589	159707186	G/A	0.26	0.29	I / I	0.83 (0.69-0.99)	3.91E-02	0.81 (0.73-0.90)	7.00E-05	0.82	0	0.81 (0.72-0.92)	8.01E-06
rs2243140	159714547	T/C	0.25	0.29	I / I	0.82 (0.69-0.99)	3.50E-02	0.81 (0.73-0.90)	8.12E-05	0.87	0	0.81 (0.72-0.92)	8.26E-06
rs4679867	159723903	T/A	0.38	0.42	I / I	0.78 (0.67-0.92)	3.20E-03	0.85 (0.77-0.93)	7.40E-04	0.39	0	0.83 (0.74-0.93)	9.64E-06
rs2243146	159715257	A/G	0.25	0.29	I / I	0.82 (0.69-0.98)	3.21E-02	0.81 (0.73-0.90)	1.21E-04	0.94	0	0.82 (0.72-0.93)	1.11E-05
rs62270438	159717323	C/T	0.26	0.29	I / I	0.82 (0.69-0.99)	3.39E-02	0.81 (0.73-0.90)	1.23E-04	0.92	0	0.82 (0.72-0.93)	1.19E-05
rs4580600	159736391	A/G	0.38	0.43	I / I	0.79 (0.67-0.93)	4.60E-03	0.85 (0.77-0.93)	7.12E-04	0.44	0	0.83 (0.74-0.93)	1.23E-05
chr3:159734192:I	159734192	A/ACTGG	0.38	0.42	I / I	0.78 (0.67-0.92)	3.22E-03	0.86 (0.78-0.94)	1.09E-03	0.36	0	0.83 (0.74-0.93)	1.47E-05
chr3:159734187:I	159734187	A/AT	0.38	0.42	I / I	0.78 (0.67-0.92)	3.18E-03	0.86 (0.78-0.94)	1.25E-03	0.34	0	0.84 (0.75-0.94)	1.69E-05
rs2243148	159715411	T/C	0.26	0.29	I / I	0.82 (0.69-0.98)	3.21E-02	0.82 (0.74-0.91)	1.91E-04	0.98	0	0.82 (0.72-0.93)	1.72E-05
rs10575904	159729918	TATTA/T	0.38	0.42	I / I	0.79 (0.67-0.93)	5.14E-03	0.85 (0.78-0.94)	9.93E-04	0.44	0	0.84 (0.75-0.94)	1.89E-05
rs629209	159728713	C/G	0.38	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.18E-03	0.39	0	0.84 (0.75-0.94)	1.96E-05
rs2647931	159737076	G/A	0.38	0.42	I / I	0.79 (0.67-0.93)	4.11E-03	0.86 (0.78-0.94)	1.25E-03	0.38	0	0.84 (0.75-0.94)	2.06E-05
rs480913	159729580	T/G	0.38	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.28E-03	0.38	0	0.84 (0.75-0.94)	2.15E-05
rs2936303	159730954	G/A	0.38	0.42	I / I	0.79 (0.67-0.93)	4.19E-03	0.86 (0.78-0.94)	1.31E-03	0.38	0	0.84 (0.75-0.94)	2.18E-05
rs6808498	159730679	T/A	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.30E-03	0.38	0	0.84 (0.75-0.94)	2.19E-05
rs6771363	159730682	A/G	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.30E-03	0.38	0	0.84 (0.75-0.94)	2.19E-05
rs6808518	159730738	T/A	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.31E-03	0.38	0	0.84 (0.75-0.94)	2.19E-05
rs586094	159729548	T/G	0.38	0.42	I / I	0.79 (0.67-0.93)	4.08E-03	0.86 (0.78-0.94)	1.35E-03	0.37	0	0.84 (0.75-0.94)	2.22E-05
rs2914116	159731300	A/T	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.37E-03	0.38	0	0.84 (0.75-0.94)	2.30E-05
rs547875	159732300	G/C	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.39E-03	0.38	0	0.84 (0.75-0.94)	2.34E-05
rs548018	159732345	A/G	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.40E-03	0.38	0	0.84 (0.75-0.94)	2.36E-05
rs669003	159731885	A/G	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.41E-03	0.37	0	0.84 (0.75-0.94)	2.37E-05
rs545143	159731995	C/T	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.41E-03	0.37	0	0.84 (0.75-0.94)	2.37E-05
rs9845010	159731532	A/G	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.41E-03	0.37	0	0.84 (0.75-0.94)	2.38E-05
rs11716424	159734310	A/G	0.38	0.42	I / I	0.79 (0.67-0.93)	4.38E-03	0.86 (0.78-0.94)	1.39E-03	0.38	0	0.84 (0.75-0.94)	2.42E-05
rs1651081	159732502	A/T	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.44E-03	0.37	0	0.84 (0.75-0.94)	2.43E-05
chr3:159735234:D	159735234	CT/C	0.39	0.43	I / I	0.79 (0.67-0.93)	4.88E-03	0.86 (0.78-0.94)	1.31E-03	0.40	0	0.84 (0.75-0.94)	2.47E-05
rs589446	159733527	G/T	0.38	0.42	I / I	0.79 (0.67-0.93)	4.72E-03	0.86 (0.78-0.94)	1.35E-03	0.40	0	0.84 (0.75-0.94)	2.48E-05
rs9290051	159731235	G/T	0.38	0.42	I / I	0.79 (0.67-0.93)	4.76E-03	0.86 (0.78-0.94)	1.37E-03	0.40	0	0.84 (0.75-0.94)	2.54E-05
rs7640862	159731221	G/T	0.38	0.42	I / I	0.79 (0.67-0.93)	4.76E-03	0.86 (0.78-0.94)	1.41E-03	0.40	0	0.84 (0.75-0.94)	2.62E-05
chr3:159732808:D	159732808	indel/A	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.54E-03	0.37	0	0.84 (0.75-0.94)	2.62E-05
rs63332460	159732840	C/T	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.54E-03	0.37	0	0.84 (0.75-0.94)	2.62E-05
rs6441289	159732882	T/C	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.54E-03	0.37	0	0.84 (0.75-0.94)	2.62E-05
rs6441290	159732892	T/C	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.54E-03	0.37	0	0.84 (0.75-0.94)	2.62E-05
rs588998	159733446	A/G	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.54E-03	0.37	0	0.84 (0.75-0.94)	2.62E-05
rs589545	159733600	G/A	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.94)	1.54E-03	0.37	0	0.84 (0.75-0.94)	2.62E-05
rs485789	159730148	G/T	0.38	0.42	I / I	0.79 (0.67-0.93)	4.72E-03	0.86 (0.78-0.94)	1.45E-03	0.39	0	0.84 (0.75-0.94)	2.69E-05
rs11708713	159734286	G/A	0.39	0.42	I / I	0.79 (0.67-0.93)	5.29E-03	0.86 (0.78-0.94)	1.36E-03	0.41	0	0.84 (0.75-0.94)	2.73E-05
rs523886	159734858	G/A	0.39	0.42	I / I	0.79 (0.67-0.93)	4.11E-03	0.86 (0.78-0.94)	1.63E-03	0.36	0	0.84 (0.75-0.94)	2.75E-05
rs62270441	159737535	G/T	0.39	0.42	I / I	0.79 (0.67-0.93)	4.11E-03	0.86 (0.78-0.94)	1.64E-03	0.36	0	0.84 (0.75-0.94)	2.77E-05
rs491966	159733692	T/C	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.95)	1.65E-03	0.36	0	0.84 (0.75-0.94)	2.82E-05
rs11716451	159734349	A/G	0.38	0.42	I / I	0.79 (0.67-0.93)	4.38E-03	0.86 (0.78-0.94)	1.61E-03	0.37	0	0.84 (0.75-0.94)	2.84E-05
rs600519	159730417	G/A	0.39	0.42	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.95)	1.68E-03	0.36	0	0.84 (0.75-0.94)	2.89E-05
rs2647930	159736893	T/C	0.39	0.42	I / I	0.79 (0.67-0.93)	4.11E-03	0.86 (0.78-0.95)	1.71E-03	0.36	0	0.84 (0.75-0.94)	2.89E-05
rs485499	159745863	T/C	0.38	0.42	I / I	0.79 (0.67-0.93)	3.97E-03	0.86 (0.78-0.95)	1.86E-03	0.35	0	0.84 (0.75-0.94)	3.11E-05
rs579079	159733428	C/T	0.39	0.43	I / I	0.79 (0.67-0.93)	4.21E-03	0.86 (0.78-0.95)	1.81E-03	0.36	0	0.84 (0.75-0.94)	3.12E-05
rs564799	159728987	C/T	0.38	0.42	O / O	0.79 (0.67-0.93)	4.46E-03	0.86 (0.79-0.95)	2.12E-03	0.36	0	0.84 (0.75-0.94)	3.86E-05
chr3:159735125:I	159735125	A/ATT	0.38	0.42	I / I	0.80 (0.68-0.94)	6.54E-03	0.86 (0.78-0.94)	1.66E-03	0.43	0	0.84 (0.75-0.94)	3.98E-05
rs2936302	159731054	G/C	0.38	0.42	I / I	0.80 (0.68-0.94)	6.19E-03	0.86 (0.78-0.95)	1.79E-03	0.42	0	0.84 (0.75-0.94)	4.11E-05
chr3:159732641:I	159732641	G/GA	0.38	0.42	I / I	0.80 (0.68-0.94)	6.00E-03	0.86 (0.78-0.95)	1.84E-03	0.41	0	0.84 (0.75-0.94)	4.15E-05
chr3:159735130:D	159735130	TTC/T	0.38	0.42	I / I	0.78 (0.67-0.93)	3.91E-03	0.87 (0.79-0.95)	2.77E-03	0.30	5	0.84 (0.75-0.94)	4.78E-05
rs526734	159735169	C/T	0.38	0.42	I / I	0.81 (0.68-0.95)	9.63E-03	0.87 (0.79-0.95)	2.90E-03	0.45	0	0.85 (0.76-0.95)	9.70E-05

Supplementary Table 9. Association analysis in *IL12A*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs9852519	159720628	C/T	0.40	0.36	I / I	1.16 (0.98-1.37)	8.40E-02	1.17 (1.06-1.28)	1.24E-03	0.95	0	1.17 (1.04-1.31)	2.57E-04
rs9881959	159721847	T/C	0.40	0.37	I / I	1.15 (0.97-1.36)	9.99E-02	1.16 (1.05-1.27)	2.37E-03	0.95	0	1.16 (1.03-1.30)	5.63E-04
rs13065738	159720559	G/T	0.39	0.36	I / I	1.16 (0.97-1.37)	9.61E-02	1.14 (1.04-1.26)	5.70E-03	0.92	0	1.15 (1.02-1.29)	1.25E-03
rs2279741	159744261	G/A	0.42	0.39	I / I	1.12 (0.95-1.32)	1.84E-01	1.13 (1.03-1.24)	9.19E-03	0.91	0	1.13 (1.01-1.26)	3.57E-03
rs10433458	159726252	C/T	0.41	0.38	I / I	1.12 (0.95-1.33)	1.66E-01	1.13 (1.02-1.24)	1.35E-02	0.97	0	1.13 (1.00-1.26)	4.69E-03
rs13096549	159742913	C/A	0.41	0.38	I / I	1.09 (0.92-1.30)	2.93E-01	1.11 (1.01-1.22)	3.34E-02	0.91	0	1.10 (0.98-1.24)	1.82E-02
rs2647927	159747686	G/A	0.18	0.16	I / I	1.26 (1.02-1.55)	3.12E-02	1.08 (0.96-1.23)	2.04E-01	0.22	32	1.13 (0.98-1.31)	2.63E-02
rs13086832	159692282	T/A	0.14	0.16	I / I	0.89 (0.71-1.12)	3.19E-01	0.88 (0.77-1.00)	5.70E-02	0.92	0	0.88 (0.76-1.03)	3.22E-02
rs13064168	159692206	C/A	0.14	0.16	I / I	0.89 (0.72-1.12)	3.26E-01	0.88 (0.78-1.00)	6.01E-02	0.92	0	0.89 (0.76-1.04)	3.45E-02
rs2914118	159744173	T/G	0.19	0.17	I / I	1.24 (1.01-1.52)	3.85E-02	1.07 (0.95-1.20)	2.94E-01	0.21	36	1.11 (0.96-1.28)	4.67E-02
rs2936298	159743883	G/A	0.19	0.17	O / O	1.24 (1.01-1.52)	4.00E-02	1.06 (0.94-1.20)	3.11E-01	0.21	37	1.11 (0.96-1.28)	5.13E-02
rs598638	159720817	G/A	0.19	0.17	O / O	1.24 (1.01-1.51)	3.79E-02	1.06 (0.94-1.20)	3.35E-01	0.20	39	1.11 (0.96-1.28)	5.48E-02
rs17826053	159717629	T/G	0.13	0.15	I / I	0.82 (0.65-1.04)	9.61E-02	0.92 (0.80-1.05)	2.30E-01	0.40	0	0.89 (0.76-1.05)	5.72E-02
rs640039	159713846	T/C	0.13	0.15	I / I	0.82 (0.65-1.04)	9.62E-02	0.92 (0.81-1.06)	2.48E-01	0.39	0	0.89 (0.76-1.05)	6.26E-02
rs2647926	159743231	T/C	0.19	0.18	O / O	1.24 (1.01-1.51)	3.57E-02	1.05 (0.93-1.18)	4.54E-01	0.15	51	1.10 (0.95-1.26)	8.01E-02
rs662959	159701231	G/A	0.13	0.15	O / O	0.84 (0.67-1.06)	1.44E-01	0.92 (0.81-1.06)	2.52E-01	0.49	0	0.90 (0.76-1.06)	8.06E-02
rs2914119	159744438	T/C	0.20	0.19	I / I	1.24 (1.02-1.51)	3.37E-02	1.04 (0.93-1.17)	4.78E-01	0.14	54	1.09 (0.95-1.26)	8.37E-02
rs635602	159741829	G/A	0.18	0.17	I / I	1.26 (1.02-1.54)	3.08E-02	1.04 (0.92-1.18)	4.93E-01	0.13	56	1.10 (0.95-1.27)	8.39E-02
rs2936301	159744440	T/C	0.20	0.19	I / I	1.24 (1.02-1.51)	3.37E-02	1.04 (0.93-1.17)	4.97E-01	0.14	55	1.09 (0.95-1.26)	8.84E-02
rs2279742	159744352	T/C	0.20	0.19	I / I	1.24 (1.02-1.51)	3.33E-02	1.04 (0.92-1.17)	5.26E-01	0.13	56	1.09 (0.95-1.26)	9.52E-02
rs2936300	159744277	T/C	0.20	0.19	I / I	1.23 (1.01-1.50)	4.11E-02	1.04 (0.93-1.17)	5.04E-01	0.16	50	1.09 (0.95-1.25)	9.83E-02
rs2936299	159744171	G/A	0.20	0.19	I / I	1.23 (1.01-1.50)	4.15E-02	1.04 (0.93-1.17)	5.09E-01	0.16	50	1.09 (0.95-1.25)	1.00E-01
rs9833507	159692221	T/C	0.02	0.02	I / I	1.27 (0.71-2.29)	4.26E-01	1.26 (0.92-1.74)	1.50E-01	0.99	0	1.26 (0.85-1.88)	1.01E-01
rs600614	159742286	A/G	0.20	0.19	I / I	1.23 (1.01-1.49)	4.23E-02	1.04 (0.93-1.17)	5.12E-01	0.16	50	1.09 (0.95-1.25)	1.02E-01
rs507927	159738697	G/A	0.20	0.19	I / I	1.23 (1.01-1.50)	4.23E-02	1.04 (0.92-1.17)	5.29E-01	0.15	51	1.09 (0.95-1.25)	1.07E-01
rs507822	159738657	C/T	0.19	0.18	I / I	1.24 (1.01-1.51)	3.66E-02	1.03 (0.92-1.16)	5.91E-01	0.13	57	1.09 (0.94-1.25)	1.18E-01
rs475825	159710328	G/C	0.16	0.17	I / I	0.86 (0.69-1.08)	1.91E-01	0.94 (0.83-1.06)	3.05E-01	0.53	0	0.92 (0.79-1.07)	1.18E-01
rs505190	159741439	A/T	0.19	0.18	I / I	1.24 (1.01-1.51)	3.66E-02	1.03 (0.92-1.16)	5.94E-01	0.13	57	1.09 (0.94-1.25)	1.18E-01
rs78664442	159704806	C/T	0.04	0.05	I / I	0.85 (0.59-1.22)	3.69E-01	0.86 (0.69-1.09)	2.14E-01	0.92	0	0.86 (0.66-1.12)	1.26E-01
rs6778021	159739624	G/C	0.20	0.19	I / I	1.23 (1.01-1.50)	4.23E-02	1.03 (0.92-1.16)	5.99E-01	0.14	54	1.08 (0.94-1.25)	1.28E-01
rs638274	159741259	A/C	0.20	0.19	I / I	1.23 (1.01-1.50)	4.23E-02	1.03 (0.92-1.16)	6.03E-01	0.14	54	1.08 (0.94-1.25)	1.29E-01
rs6441282	159699077	G/T	0.44	0.46	O / O	1.00 (0.85-1.18)	9.85E-01	0.92 (0.84-1.01)	8.06E-02	0.37	0	0.94 (0.84-1.05)	1.42E-01
rs13061089	159737430	G/A	0.19	0.18	I / I	1.25 (1.02-1.53)	2.94E-02	1.02 (0.91-1.15)	7.26E-01	0.09	65	1.08 (0.94-1.25)	1.46E-01
rs2243131	159712058	A/C	0.16	0.17	I / I	0.86 (0.69-1.08)	1.91E-01	0.95 (0.83-1.07)	3.83E-01	0.48	0	0.92 (0.79-1.07)	1.52E-01
chr3:159727840:D	159727840	G/GTGCT	0.20	0.19	I / I	1.22 (1.00-1.48)	5.00E-02	1.01 (0.90-1.14)	8.04E-01	0.12	59	1.07 (0.93-1.23)	2.10E-01
chr3:159727856:D	159727856	T/TTGC	0.20	0.19	I / I	1.21 (0.99-1.47)	5.84E-02	1.01 (0.90-1.14)	8.02E-01	0.14	55	1.07 (0.93-1.23)	2.23E-01
rs1651080	159727990	C/T	0.19	0.19	I / I	1.25 (1.03-1.53)	2.66E-02	1.00 (0.89-1.13)	9.68E-01	0.06	72	1.07 (0.93-1.23)	2.25E-01
rs2366409	159696107	A/G	0.33	0.34	I / I	1.01 (0.85-1.19)	9.18E-01	0.93 (0.85-1.03)	1.59E-01	0.43	0	0.95 (0.85-1.07)	2.55E-01
rs2243141	159714559	C/T	0.10	0.11	I / I	0.96 (0.75-1.25)	7.85E-01	0.92 (0.79-1.06)	2.42E-01	0.73	0	0.93 (0.78-1.11)	2.56E-01
rs75978097	159745670	T/A	0.01	0.01	I / I	1.06 (0.55-2.02)	8.68E-01	0.73 (0.48-1.12)	1.51E-01	0.35	0	0.81 (0.50-1.32)	2.59E-01
rs60462166	159746118	C/T	0.01	0.01	I / I	1.06 (0.55-2.02)	8.68E-01	0.73 (0.48-1.12)	1.51E-01	0.35	0	0.81 (0.50-1.32)	2.59E-01
chr3:159747219:D	159747219	ATTTG/A	0.01	0.01	I / I	1.23 (0.61-2.47)	5.70E-01	0.65 (0.40-1.07)	9.27E-02	0.15	52	0.78 (0.45-1.36)	2.62E-01
rs2243136	159713087	T/C	0.11	0.11	I / I	0.96 (0.75-1.25)	7.79E-01	0.92 (0.80-1.07)	2.73E-01	0.76	0	0.93 (0.78-1.12)	2.82E-01
rs78481160	159698170	C/T	0.02	0.01	I / I	1.14 (0.59-2.23)	6.95E-01	1.20 (0.84-1.71)	3.10E-01	0.90	0	1.18 (0.76-1.84)	2.85E-01
rs115879932	159747372	A/C	0.01	0.01	I / I	1.23 (0.61-2.48)	5.63E-01	0.66 (0.40-1.09)	1.05E-01	0.16	50	0.79 (0.45-1.38)	2.87E-01
rs117030823	159747373	A/C	0.01	0.01	I / I	1.23 (0.61-2.48)	5.63E-01	0.66 (0.40-1.09)	1.05E-01	0.16	50	0.79 (0.45-1.38)	2.87E-01
rs9811792	159696998	T/C	0.46	0.45	O / O	1.04 (0.88-1.22)	6.59E-01	1.04 (0.95-1.15)	3.43E-01	0.94	0	1.04 (0.93-1.17)	2.99E-01
rs141707000	159747610	T/C	0.01	0.01	I / I	1.23 (0.61-2.48)	5.63E-01	0.67 (0.41-1.10)	1.16E-01	0.17	48	0.80 (0.46-1.39)	3.06E-01
rs13322713	159717451	T/C	0.10	0.11	I / I	0.94 (0.72-1.24)	6.73E-01	0.93 (0.81-1.08)	3.57E-01	0.94	0	0.94 (0.78-1.12)	3.15E-01
rs35394674	159717106	A/G	0.03	0.02	I / I	1.12 (0.64-1.96)	6.79E-01	1.14 (0.86-1.51)	3.70E-01	0.97	0	1.13 (0.79-1.63)	3.27E-01
rs2243115	159706280	T/G	0.11	0.11	O / O	0.96 (0.75-1.25)	7.84E-01	0.93 (0.80-1.08)	3.29E-01	0.81	0	0.94 (0.79-1.12)	3.31E-01
rs4608735	159717008	A/C	0.11	0.11	I / I	0.96 (0.75-1.25)	7.79E-01	0.93 (0.81-1.08)	3.41E-01	0.82	0	0.94 (0.79-1.12)	3.40E-01
rs890914	159701807	T/C	0.11	0.11	I / I	0.96 (0.75-1.25)	7.84E-01	0.93 (0.80-1.08)	3.42E-01	0.82	0	0.94 (0.79-1.12)	3.42E-01
chr3:159746778:I	159746778	T/TG	0.01	0.01	I / I	1.10 (0.55-2.19)	7.95E-01	0.75 (0.48-1.17)	2.05E-01	0.37	0	0.84 (0.50-1.40)	3.50E-01
rs13319484	159702325	G/A	0.11	0.11	I / I	0.96 (0.75-1.25)	7.84E-01	0.94 (0.81-1.08)	3.71E-01	0.84	0	0.94 (0.79-1.13)	3.67E-01
chr3:159744574:D	159744574	GC/G	0.01	0.01	I / I	1.12 (0.58-2.15)	7.39E-01	0.76 (0.49-1.17)	2.10E-01	0.33	0	0.85 (0.52-1.39)	3.76E-01
chr3:159698698:D	159698698	CT/C	0.11	0.11	I / I	0.95 (0.75-1.22)	7.14E-01	0.94 (0.81-1.09)	4.32E-01	0.93	0	0.95 (0.79-1.13)	3.90E-01
rs17289236	159738134	G/A	0.01	0.01	O / O	1.08 (0.58-2.01)	8.18E-01	0.78 (0.52-1.19)	2.51E-01	0.41	0	0.86 (0.53-1.38)	3.96E-01
rs7653097	159690853	T/C	0.10	0.10	O / O	1.02 (0.78-1.33)	8.96E-01	1.07 (0.92-1.25)	3.62E-01	0.74	0	1.06 (0.88-1.27)	4.00E-01
rs678793	159700115	A/G	0.10	0.11	I / I	0.92 (0.71-1.19)	5.29E-01	0.96 (0.82-1.12)	5.81E-01	0.79	0	0.95 (0.79-1.14)	4.23E-01
rs2243130	159710992	G/A	0.03	0.02	I / I	1.12 (0.64-1.96)	6.79E-01	1.10 (0.83-1.47)	4.95E-01	0.96	0	1.11 (0.77-1.60)	4.25E-01
rs116732492	159736462	G/T	0.01	0.01	I / I	1.06 (0.55-2.02)	8.67E-01	0.80 (0.53-1.22)	2.99E-01	0.48	0	0.87 (0.54-1.40)	4.29E-01
chr3:159742706:I	159742706	A/AAAC	0.01	0.01	I / I	1.06 (0.55-2.02)	8.67E-01	0.80 (0.53-1.22)	2.99E-01	0.48	0	0.87 (0.54-1.40)	4.29E-01
rs16830960	159701894	A/G	0.03	0.02	I / I	1.12 (0.64-1.96)	6.79E-01	1.10 (0.82-1.47)	5.20E-01	0.94	0	1.11 (0.77-1.59)	4.45E-01
rs17217081	159747098	A/G	0.01	0.01	I / I	1.23 (0.61-2.47)	5.70E-01	0.75 (0.47-1.18)	2.10E-01	0.24	26	0.86 (0.51-1.45)	4.47E-01
rs79227265	159723274	A/G	0.01	0.01	I / I	1.09 (0.57-2.09)	7.94E-01	0.80 (0.53-1.22)	3.03E-01	0.44	0	0.88 (0.54-1.42)	4.63E-01
rs2647929	159693570	C/T	0.44	0.43	I / I	1.02 (0.86-1.20)	8.38E-01	1.03 (0.94-1.14)	4.69E-01	0.85	0	1.03 (0.92-1.15)	4.70E-01
rs1014486	159691112	T/C	0.42	0.43	O / O	0.98 (0.84-1.16)	8.36E-01	0.97 (0.89-1.06)	5.24E-01	0.89	0	0.97 (0.87-1.09)	5.16E-01
rs6800657	159699372	A/G	0.11	0.12	I / I	0.96 (0.75-1.23)	7.59E-01	0.96 (0.83-1.12)	6.02E-01	1.00	0	0.96 (0.81-1.15)	5.45E-01
rs77071487	159739264	T/C	0.01	0.01	I / I	1.06 (0.55-2.02)	8.67E-01	0.84 (0.55-1.28)	4.18E-01	0.56	0	0.90 (0.55-1.45)	5.50E-01

Supplementary Table 9. Association analysis in *IL12A*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs76199938	159743596	C/A	0.01	0.02	I / I	1.06 (0.55-2.02)	8.67E-01	0.85 (0.57-1.26)	4.19E-01	0.57	0	0.90 (0.57-1.44)	5.52E-01
chr3:159697751:I	159697751	G/GT	0.18	0.18	I / I	1.13 (0.93-1.38)	2.20E-01	0.99 (0.88-1.11)	8.59E-01	0.25	24	1.03 (0.89-1.18)	6.16E-01
rs2243126	159709825	G/A	0.02	0.02	I / I	1.12 (0.64-1.96)	6.79E-01	1.04 (0.77-1.39)	8.04E-01	0.80	0	1.06 (0.73-1.53)	6.67E-01
rs532953	159690775	T/C	0.11	0.12	I / I	0.98 (0.76-1.25)	8.53E-01	0.97 (0.84-1.13)	7.11E-01	0.97	0	0.97 (0.82-1.16)	6.80E-01
rs61743970	159744609	C/T	0.02	0.02	I / I	1.00 (0.54-1.87)	9.88E-01	0.93 (0.66-1.29)	6.55E-01	0.82	0	0.95 (0.63-1.43)	7.10E-01
rs747825	159699519	G/T	0.18	0.18	I / I	1.11 (0.91-1.36)	3.10E-01	0.99 (0.88-1.11)	8.30E-01	0.32	0	1.02 (0.89-1.18)	7.21E-01
rs75396248	159728630	G/A	0.01	0.01	I / I	1.39 (0.66-2.93)	3.87E-01	0.89 (0.58-1.37)	6.06E-01	0.31	1	1.01 (0.60-1.70)	9.82E-01

Supplementary Table 10. Association analysis in *BLK*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs2736345	11352485	A/G	0.36	0.29	I / I	1.16 (0.97-1.37)	1.01E-01	1.37 (1.24-1.50)	2.76E-10	0.10	64	1.30 (1.16-1.47)	4.97E-10
rs2729935	11389783	C/A	0.41	0.35	I / I	1.28 (1.08-1.52)	4.02E-03	1.30 (1.19-1.43)	4.29E-08	0.89	0	1.30 (1.16-1.46)	6.85E-10
rs7844858	11392659	T/A	0.40	0.34	I / I	1.26 (1.06-1.49)	8.39E-03	1.31 (1.19-1.44)	2.99E-08	0.70	0	1.29 (1.15-1.45)	1.09E-09
rs2248696	11393803	T/C	0.41	0.35	I / I	1.28 (1.08-1.52)	3.90E-03	1.29 (1.18-1.42)	7.63E-08	0.94	0	1.29 (1.15-1.45)	1.14E-09
rs13277113	11349186	G/A	0.30	0.25	O / O	1.16 (0.97-1.39)	1.04E-01	1.37 (1.24-1.52)	8.20E-10	0.12	59	1.31 (1.16-1.48)	1.31E-09
chr8:11389739:D	11389739	G/GC	0.41	0.35	I / I	1.26 (1.06-1.50)	8.43E-03	1.30 (1.19-1.43)	4.09E-08	0.73	0	1.29 (1.15-1.45)	1.47E-09
rs4840565	11345545	G/C	0.33	0.27	I / I	1.17 (0.98-1.40)	8.06E-02	1.35 (1.23-1.49)	1.67E-09	0.16	50	1.30 (1.15-1.47)	1.58E-09
rs922483	11351912	C/T	0.34	0.28	O / O	1.15 (0.96-1.36)	1.24E-01	1.35 (1.23-1.49)	9.72E-10	0.10	63	1.29 (1.15-1.45)	2.01E-09
rs2249040	11390779	T/A	0.40	0.35	I / I	1.27 (1.07-1.51)	5.65E-03	1.29 (1.18-1.42)	9.28E-08	0.88	0	1.29 (1.15-1.44)	2.04E-09
rs2618435	11389980	G/A	0.39	0.34	I / I	1.26 (1.06-1.49)	9.28E-03	1.30 (1.19-1.43)	5.25E-08	0.71	0	1.29 (1.15-1.45)	2.06E-09
rs4840568	11351019	G/A	0.32	0.26	I / I	1.17 (0.98-1.40)	8.43E-02	1.35 (1.23-1.49)	2.14E-09	0.17	48	1.30 (1.15-1.47)	2.08E-09
rs9657551	11398183	A/G	0.39	0.34	I / I	1.25 (1.06-1.49)	9.85E-03	1.30 (1.18-1.43)	5.52E-08	0.71	0	1.29 (1.15-1.45)	2.28E-09
rs2248700	11393745	A/G	0.40	0.34	I / I	1.27 (1.07-1.51)	6.57E-03	1.29 (1.18-1.42)	1.04E-07	0.86	0	1.29 (1.14-1.44)	2.66E-09
rs2618437	11389931	A/G	0.40	0.35	I / I	1.28 (1.08-1.51)	5.04E-03	1.29 (1.17-1.42)	1.46E-07	0.93	0	1.28 (1.14-1.44)	2.77E-09
rs2618473	11344127	C/T	0.31	0.25	I / I	1.18 (0.98-1.41)	7.76E-02	1.35 (1.22-1.50)	3.90E-09	0.19	41	1.30 (1.15-1.47)	3.11E-09
rs2736340	11343973	C/T	0.30	0.25	O / O	1.14 (0.95-1.37)	1.45E-01	1.36 (1.24-1.51)	1.26E-09	0.10	64	1.30 (1.15-1.47)	3.27E-09
rs2409780	11337587	T/C	0.30	0.24	I / I	1.18 (0.98-1.41)	8.02E-02	1.36 (1.22-1.50)	4.14E-09	0.19	43	1.30 (1.15-1.47)	3.36E-09
rs2736338	11341883	A/C	0.30	0.24	I / I	1.17 (0.97-1.40)	9.73E-02	1.36 (1.23-1.50)	3.05E-09	0.16	49	1.30 (1.15-1.48)	3.37E-09
rs2736337	11341880	T/C	0.30	0.24	I / I	1.17 (0.97-1.41)	9.31E-02	1.36 (1.23-1.50)	3.34E-09	0.17	47	1.30 (1.15-1.47)	3.40E-09
rs2618444	11338370	A/C	0.30	0.24	I / I	1.18 (0.98-1.41)	8.00E-02	1.35 (1.22-1.50)	4.58E-09	0.19	41	1.30 (1.15-1.47)	3.64E-09
rs2736336	11341870	G/T	0.30	0.24	I / I	1.16 (0.97-1.40)	1.07E-01	1.36 (1.23-1.50)	2.86E-09	0.15	53	1.30 (1.15-1.47)	3.74E-09
rs4366049	11398504	A/G	0.41	0.36	I / I	1.27 (1.07-1.51)	6.03E-03	1.28 (1.17-1.41)	2.73E-07	0.94	0	1.28 (1.14-1.43)	6.06E-09
rs11250138	11323312	G/C	0.33	0.28	I / I	1.30 (1.09-1.55)	3.52E-03	1.28 (1.16-1.42)	7.62E-07	0.90	0	1.29 (1.14-1.46)	9.48E-09
rs34801597	11326493	G/A	0.33	0.27	I / I	1.28 (1.07-1.53)	7.69E-03	1.30 (1.17-1.44)	3.82E-07	0.87	0	1.29 (1.14-1.46)	1.07E-08
rs1478897	11395232	A/T	0.42	0.37	I / I	1.29 (1.09-1.53)	3.09E-03	1.26 (1.15-1.39)	1.10E-06	0.80	0	1.27 (1.13-1.43)	1.20E-08
rs2729934	11389858	C/G	0.42	0.36	I / I	1.26 (1.06-1.50)	7.15E-03	1.27 (1.16-1.39)	5.43E-07	0.96	0	1.27 (1.13-1.42)	1.40E-08
rs11250145	11389782	A/G	0.39	0.33	I / I	1.22 (1.03-1.45)	2.32E-02	1.29 (1.17-1.42)	1.50E-07	0.58	0	1.27 (1.13-1.43)	1.54E-08
rs9329246	11392880	T/C	0.39	0.34	I / I	1.23 (1.04-1.46)	1.76E-02	1.29 (1.17-1.42)	2.21E-07	0.67	0	1.27 (1.13-1.43)	1.60E-08
chr8:11392728:D	11392728	G/GAGAA	0.41	0.36	I / I	1.26 (1.06-1.50)	7.48E-03	1.27 (1.16-1.40)	7.05E-07	0.96	0	1.27 (1.13-1.42)	1.87E-08
rs10903339	11389784	A/G	0.38	0.33	I / I	1.24 (1.04-1.48)	1.64E-02	1.29 (1.17-1.42)	3.04E-07	0.70	0	1.27 (1.13-1.44)	1.98E-08
rs6998387	11293458	G/A	0.37	0.32	O / I	1.34 (1.13-1.59)	6.75E-04	1.23 (1.12-1.36)	2.65E-05	0.38	0	1.26 (1.12-1.42)	7.96E-08
rs11250144	11386276	G/C	0.33	0.28	I / I	1.12 (0.94-1.34)	1.99E-01	1.32 (1.20-1.46)	3.31E-08	0.12	59	1.26 (1.12-1.42)	8.10E-08
rs17153419	11394233	A/G	0.34	0.29	O / O	1.10 (0.92-1.31)	3.01E-01	1.32 (1.19-1.45)	3.31E-08	0.08	68	1.25 (1.11-1.41)	1.70E-07
rs2003422	11303137	G/C	0.37	0.32	I / I	1.33 (1.12-1.57)	9.33E-04	1.22 (1.11-1.34)	4.71E-05	0.39	0	1.25 (1.11-1.40)	1.92E-07
rs3989103	11306846	G/A	0.37	0.32	I / I	1.35 (1.14-1.60)	6.42E-04	1.22 (1.10-1.34)	6.32E-05	0.31	5	1.25 (1.11-1.41)	1.97E-07
rs11250136	11307469	G/A	0.37	0.32	I / I	1.34 (1.13-1.58)	9.09E-04	1.22 (1.11-1.34)	5.63E-05	0.36	0	1.25 (1.11-1.41)	2.29E-07
rs10088323	11300891	C/G	0.49	0.44	I / I	1.37 (1.17-1.62)	1.52E-04	1.19 (1.08-1.30)	2.65E-04	0.14	55	1.24 (1.11-1.39)	3.38E-07
rs55896564	11447093	A/G	0.51	0.46	I / I	1.25 (1.06-1.47)	6.37E-03	1.22 (1.11-1.33)	2.79E-05	0.76	0	1.23 (1.10-1.37)	5.76E-07
rs2409781	11359557	T/C	0.29	0.25	O / O	1.14 (0.96-1.37)	1.44E-01	1.30 (1.17-1.44)	6.31E-07	0.24	29	1.25 (1.11-1.42)	5.85E-07
rs10097870	11444516	G/A	0.50	0.46	O / O	1.20 (1.02-1.41)	2.44E-02	1.23 (1.12-1.35)	8.57E-06	0.80	0	1.22 (1.09-1.37)	6.83E-07
rs2898290	11433909	C/T	0.52	0.47	O / O	1.29 (1.09-1.51)	2.19E-03	1.20 (1.09-1.32)	9.19E-05	0.46	0	1.22 (1.09-1.37)	7.78E-07
rs4841564	11425809	T/G	0.44	0.48	I / I	0.74 (0.63-0.87)	3.01E-04	0.85 (0.77-0.93)	3.68E-04	0.16	49	0.81 (0.73-0.91)	7.90E-07
rs13270267	11444837	C/T	0.50	0.45	I / I	1.22 (1.04-1.43)	1.66E-02	1.22 (1.12-1.34)	1.60E-05	0.97	0	1.22 (1.09-1.37)	8.29E-07
rs9650661	11427133	G/T	0.44	0.48	I / I	0.74 (0.63-0.88)	3.98E-04	0.85 (0.77-0.93)	3.26E-04	0.18	44	0.82 (0.73-0.91)	8.35E-07
rs13280813	11425105	G/T	0.44	0.48	O / O	0.75 (0.64-0.88)	4.77E-04	0.85 (0.77-0.93)	3.21E-04	0.20	39	0.82 (0.73-0.91)	9.35E-07
rs1382563	11426790	G/C	0.44	0.48	I / I	0.74 (0.63-0.87)	3.66E-04	0.85 (0.77-0.93)	4.15E-04	0.17	48	0.82 (0.73-0.91)	1.04E-06
rs7001675	11296600	T/C	0.49	0.44	O / O	1.30 (1.11-1.53)	1.47E-03	1.19 (1.09-1.31)	1.65E-04	0.36	0	1.22 (1.09-1.37)	1.05E-06
rs7831039	11427637	A/T	0.44	0.48	I / I	0.75 (0.63-0.88)	4.64E-04	0.85 (0.77-0.93)	3.69E-04	0.19	43	0.82 (0.73-0.91)	1.07E-06
rs35161715	11308153	T/G	0.35	0.30	I / I	1.29 (1.08-1.53)	3.89E-03	1.22 (1.10-1.34)	8.04E-05	0.56	0	1.24 (1.10-1.39)	1.09E-06
rs2618471	11359020	C/G	0.30	0.26	I / I	1.14 (0.95-1.37)	1.55E-01	1.29 (1.16-1.43)	1.21E-06	0.26	22	1.25 (1.10-1.41)	1.12E-06
rs2898281	11358521	C/T	0.28	0.24	I / I	1.13 (0.94-1.36)	1.95E-01	1.30 (1.17-1.44)	9.06E-07	0.20	40	1.25 (1.10-1.42)	1.25E-06
chr8:11431558:D	11431558	T/TAC	0.52	0.47	I / I	1.28 (1.09-1.50)	2.87E-03	1.20 (1.09-1.31)	1.20E-04	0.48	0	1.22 (1.09-1.36)	1.28E-06
rs13256554	11432946	A/C	0.52	0.47	I / I	1.28 (1.09-1.51)	2.71E-03	1.20 (1.09-1.31)	1.27E-04	0.47	0	1.22 (1.09-1.36)	1.29E-06
rs11985709	11423083	A/C	0.44	0.48	I / I	0.75 (0.64-0.88)	4.93E-04	0.85 (0.77-0.93)	4.21E-04	0.19	42	0.82 (0.73-0.92)	1.31E-06
rs6983820	11306024	A/T	0.48	0.43	I / I	1.36 (1.15-1.60)	2.41E-04	1.17 (1.07-1.29)	6.82E-04	0.13	57	1.22 (1.09-1.37)	1.37E-06
rs9792175	11307118	C/A	0.48	0.43	I / I	1.34 (1.13-1.57)	4.99E-04	1.18 (1.08-1.29)	4.37E-04	0.20	40	1.22 (1.09-1.37)	1.38E-06
rs4841567	11440019	A/G	0.51	0.46	I / I	1.26 (1.07-1.49)	4.96E-03	1.20 (1.10-1.32)	8.59E-05	0.62	0	1.22 (1.09-1.36)	1.44E-06
rs11991139	11428395	C/T	0.44	0.48	O / O	0.74 (0.63-0.88)	4.11E-04	0.85 (0.78-0.93)	5.32E-04	0.16	49	0.82 (0.73-0.92)	1.49E-06
rs2409799	11435927	C/G	0.51	0.47	I / I	1.28 (1.09-1.51)	2.48E-03	1.19 (1.09-1.31)	1.67E-04	0.43	0	1.22 (1.09-1.36)	1.61E-06
rs2409798	11435564	T/C	0.51	0.47	I / I	1.28 (1.09-1.50)	2.74E-03	1.19 (1.09-1.31)	1.57E-04	0.46	0	1.22 (1.09-1.36)	1.64E-06
rs2409775	11306805	A/G	0.48	0.43	O / I	1.34 (1.14-1.57)	4.52E-04	1.18 (1.07-1.29)	5.98E-04	0.18	45	1.22 (1.09-1.36)	1.82E-06
rs11990277	11372085	T/C	0.29	0.25	I / I	1.17 (0.98-1.41)	8.30E-02	1.27 (1.15-1.41)	5.53E-06	0.47	0	1.24 (1.10-1.41)	1.83E-06
rs2127127	11434792	G/C	0.52	0.47	I / I	1.28 (1.09-1.50)	2.68E-03	1.19 (1.09-1.30)	1.81E-04	0.45	0	1.22 (1.09-1.36)	1.86E-06
rs1042701	11422045	G/A	0.44	0.48	I / I	0.75 (0.63-0.88)	4.73E-04	0.85 (0.78-0.93)	6.02E-04	0.17	47	0.82 (0.73-0.92)	1.89E-06
rs9792375	11302481	T/G	0.46	0.42	I / I	1.32 (1.12-1.55)	9.25E-04	1.18 (1.08-1.30)	4.00E-04	0.26	21	1.22 (1.09-1.36)	1.93E-06
rs7822958	11422442	C/A	0.44	0.48	O / I	0.75 (0.63-0.88)	4.30E-04	0.85 (0.78-0.93)	6.65E-04	0.16	50	0.82 (0.73-0.92)	1.98E-06
rs4841546	11374107	C/T	0.29	0.25	I / I	1.17 (0.97-1.40)	1.00E-01	1.27 (1.15-1.41)	4.60E-06	0.41	0	1.24 (1.09-1.41)	1.99E-06

Supplementary Table 10. Association analysis in *BLK*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs7843987	11422130	T/C	0.44	0.48	I / I	0.75 (0.63-0.88)	4.67E-04	0.85 (0.78-0.93)	6.40E-04	0.17	48	0.82 (0.73-0.92)	2.01E-06
rs9792166	11306974	G/C	0.34	0.30	I / I	1.31 (1.10-1.55)	2.41E-03	1.20 (1.09-1.32)	2.17E-04	0.41	0	1.23 (1.09-1.39)	2.08E-06
rs1600249	11359638	G/T	0.28	0.24	O / I	1.13 (0.94-1.36)	1.86E-01	1.29 (1.16-1.43)	1.80E-06	0.23	32	1.24 (1.09-1.41)	2.09E-06
rs4840560	11306444	G/A	0.48	0.43	I / I	1.34 (1.14-1.57)	4.63E-04	1.17 (1.07-1.29)	6.75E-04	0.17	46	1.22 (1.09-1.36)	2.12E-06
rs2409772	11306516	G/A	0.48	0.43	I / I	1.33 (1.14-1.57)	4.76E-04	1.17 (1.07-1.29)	7.46E-04	0.17	46	1.22 (1.09-1.36)	2.43E-06
chr8:11297181:I	11297181	G/GA	0.38	0.34	I / I	1.30 (1.10-1.53)	2.37E-03	1.20 (1.09-1.31)	2.58E-04	0.41	0	1.22 (1.09-1.37)	2.45E-06
rs7464263	11434176	T/A	0.51	0.47	I / I	1.26 (1.07-1.48)	4.53E-03	1.19 (1.09-1.31)	1.59E-04	0.54	0	1.21 (1.08-1.35)	2.51E-06
rs2248909	11392093	C/A	0.53	0.48	I / I	1.25 (1.06-1.47)	9.11E-03	1.20 (1.09-1.31)	9.01E-05	0.70	0	1.21 (1.08-1.36)	2.57E-06
rs35181953	11435049	A/G	0.51	0.47	I / I	1.28 (1.09-1.50)	2.75E-03	1.19 (1.08-1.30)	2.40E-04	0.43	0	1.21 (1.08-1.35)	2.58E-06
rs13248746	11311838	T/C	0.37	0.33	I / I	1.26 (1.06-1.49)	8.24E-03	1.21 (1.10-1.33)	1.04E-04	0.70	0	1.22 (1.09-1.37)	2.70E-06
rs2409797	11433780	C/T	0.51	0.46	I / I	1.25 (1.06-1.46)	7.29E-03	1.20 (1.09-1.31)	1.21E-04	0.66	0	1.21 (1.08-1.35)	2.85E-06
rs2280805	11363784	A/T	0.26	0.22	I / I	1.11 (0.92-1.34)	2.89E-01	1.30 (1.17-1.45)	1.18E-06	0.14	54	1.24 (1.09-1.42)	2.92E-06
rs11778830	11446868	C/T	0.46	0.42	I / I	1.14 (0.97-1.34)	1.05E-01	1.23 (1.12-1.35)	8.63E-06	0.42	0	1.21 (1.08-1.35)	3.61E-06
rs4841537	11307572	A/G	0.48	0.43	I / I	1.33 (1.13-1.56)	5.31E-04	1.17 (1.06-1.28)	1.03E-03	0.17	47	1.21 (1.08-1.36)	3.79E-06
rs11779875	11302445	T/C	0.38	0.34	O / I	1.27 (1.07-1.49)	4.74E-03	1.20 (1.09-1.31)	2.54E-04	0.54	0	1.22 (1.08-1.36)	4.18E-06
rs10108511	11435516	C/T	0.51	0.46	I / I	1.23 (1.04-1.44)	1.24E-02	1.20 (1.09-1.31)	1.19E-04	0.78	0	1.20 (1.08-1.35)	4.44E-06
rs11785710	11311023	G/A	0.49	0.44	I / I	1.34 (1.14-1.58)	4.69E-04	1.17 (1.06-1.28)	1.28E-03	0.14	53	1.21 (1.08-1.36)	4.55E-06
rs4841559	11416885	C/T	0.45	0.49	I / I	0.75 (0.64-0.89)	7.46E-04	0.86 (0.78-0.94)	9.78E-04	0.18	45	0.83 (0.74-0.93)	4.60E-06
chr8:11297071:D	11297071	GTTCTC/G	0.38	0.34	I / I	1.27 (1.08-1.50)	4.63E-03	1.19 (1.08-1.31)	3.03E-04	0.51	0	1.22 (1.08-1.36)	4.94E-06
rs36048422	11417144	T/C	0.45	0.49	I / I	0.76 (0.64-0.89)	8.08E-04	0.86 (0.78-0.94)	1.04E-03	0.18	45	0.83 (0.74-0.93)	5.26E-06
rs2409767	11303988	T/C	0.46	0.41	I / I	1.34 (1.14-1.58)	4.72E-04	1.16 (1.06-1.27)	1.56E-03	0.14	55	1.21 (1.08-1.35)	5.72E-06
chr8:11417016:D	11417016	ACT/A	0.45	0.49	I / I	0.75 (0.64-0.88)	6.39E-04	0.86 (0.79-0.94)	1.32E-03	0.15	51	0.83 (0.74-0.93)	5.79E-06
rs34190028	11417150	G/T	0.45	0.49	I / I	0.76 (0.64-0.89)	9.47E-04	0.86 (0.78-0.94)	1.04E-03	0.19	41	0.83 (0.74-0.93)	5.86E-06
rs2409774	11306764	C/G	0.49	0.44	I / I	1.33 (1.13-1.56)	6.36E-04	1.16 (1.06-1.27)	1.35E-03	0.16	48	1.21 (1.08-1.35)	5.90E-06
rs2248699	11393764	A/G	0.46	0.50	I / I	0.80 (0.68-0.94)	7.36E-03	0.84 (0.77-0.92)	2.47E-04	0.59	0	0.83 (0.74-0.93)	5.92E-06
rs4841534	11306682	T/C	0.48	0.43	I / I	1.33 (1.14-1.57)	4.76E-04	1.16 (1.06-1.27)	1.62E-03	0.14	53	1.21 (1.08-1.35)	5.95E-06
rs11250151	11446680	C/T	0.46	0.42	O / O	1.14 (0.97-1.34)	1.12E-01	1.23 (1.12-1.35)	1.38E-05	0.43	0	1.20 (1.07-1.34)	5.98E-06
rs1478891	11448328	G/C	0.39	0.34	I / I	1.14 (0.97-1.34)	1.21E-01	1.24 (1.12-1.36)	1.27E-05	0.41	0	1.21 (1.08-1.35)	6.15E-06
rs2409784	11396856	A/C	0.52	0.48	I / I	1.22 (1.04-1.44)	1.58E-02	1.20 (1.09-1.31)	1.35E-04	0.83	0	1.20 (1.08-1.35)	6.30E-06
rs2061830	11397457	G/C	0.46	0.51	I / I	0.81 (0.69-0.96)	1.20E-02	0.84 (0.77-0.92)	1.77E-04	0.74	0	0.83 (0.74-0.93)	6.45E-06
rs10105659	11256184	A/G	0.52	0.48	O / O	1.21 (1.03-1.42)	2.20E-02	1.20 (1.10-1.32)	1.03E-04	0.96	0	1.20 (1.08-1.35)	6.55E-06
chr8:11416836:D	11416836	TCA/T	0.44	0.48	I / I	0.74 (0.63-0.88)	4.47E-04	0.86 (0.79-0.95)	1.79E-03	0.11	60	0.83 (0.74-0.93)	6.64E-06
rs2245250	11400680	G/A	0.46	0.50	I / I	0.80 (0.68-0.95)	8.25E-03	0.84 (0.77-0.92)	2.57E-04	0.61	0	0.83 (0.74-0.93)	6.80E-06
rs2248325	11396874	A/G	0.46	0.50	I / I	0.81 (0.68-0.95)	8.80E-03	0.84 (0.77-0.92)	2.62E-04	0.62	0	0.83 (0.75-0.93)	7.32E-06
rs4841535	11306708	C/T	0.48	0.43	I / I	1.33 (1.14-1.57)	4.76E-04	1.16 (1.05-1.27)	2.04E-03	0.14	55	1.21 (1.08-1.35)	7.72E-06
rs10098664	11417493	T/C	0.53	0.49	I / I	1.29 (1.09-1.52)	2.34E-03	1.17 (1.07-1.28)	7.45E-04	0.31	3	1.20 (1.08-1.34)	7.78E-06
rs2245232	11400944	G/T	0.46	0.50	I / I	0.80 (0.68-0.95)	8.53E-03	0.84 (0.77-0.92)	2.86E-04	0.61	0	0.83 (0.74-0.93)	7.80E-06
rs11250150	11446637	A/G	0.46	0.42	I / I	1.14 (0.97-1.34)	1.07E-01	1.22 (1.11-1.34)	2.09E-05	0.48	0	1.20 (1.07-1.34)	8.08E-06
rs12386974	11400628	G/C	0.46	0.51	I / I	0.81 (0.69-0.96)	1.19E-02	0.84 (0.77-0.92)	2.31E-04	0.70	0	0.83 (0.75-0.93)	8.34E-06
rs2245357	11399484	A/T	0.46	0.50	I / I	0.80 (0.68-0.95)	8.28E-03	0.85 (0.77-0.93)	3.16E-04	0.59	0	0.83 (0.75-0.93)	8.41E-06
rs2248315	11397086	T/A	0.46	0.50	I / I	0.81 (0.69-0.95)	1.05E-02	0.84 (0.77-0.92)	2.60E-04	0.66	0	0.83 (0.75-0.93)	8.44E-06
rs10097252	11273560	G/C	0.52	0.48	I / I	1.26 (1.07-1.49)	4.77E-03	1.18 (1.07-1.29)	4.94E-04	0.46	0	1.20 (1.07-1.34)	8.61E-06
rs2409771	11304143	A/G	0.46	0.41	I / I	1.34 (1.14-1.58)	4.72E-04	1.16 (1.05-1.27)	2.22E-03	0.13	57	1.20 (1.08-1.35)	8.63E-06
rs2248316	11397073	A/C	0.46	0.50	I / I	0.81 (0.68-0.95)	8.80E-03	0.85 (0.77-0.93)	3.14E-04	0.61	0	0.83 (0.75-0.93)	8.83E-06
rs4841536	11307454	A/G	0.48	0.43	I / I	1.33 (1.14-1.57)	4.73E-04	1.16 (1.05-1.27)	2.37E-03	0.13	56	1.20 (1.08-1.35)	9.26E-06
rs11774572	11446800	T/C	0.46	0.42	I / I	1.14 (0.97-1.34)	1.05E-01	1.22 (1.11-1.34)	2.53E-05	0.49	0	1.20 (1.07-1.34)	9.33E-06
rs17153498	11446955	A/G	0.46	0.42	I / I	1.14 (0.97-1.34)	1.11E-01	1.22 (1.11-1.34)	2.41E-05	0.48	0	1.20 (1.07-1.34)	9.61E-06
rs2409770	11304116	T/C	0.46	0.41	I / I	1.34 (1.14-1.58)	4.72E-04	1.15 (1.05-1.26)	2.57E-03	0.12	59	1.20 (1.07-1.35)	1.03E-05
rs9693089	11298385	G/A	0.31	0.35	I / I	0.79 (0.66-0.94)	6.75E-03	0.84 (0.76-0.93)	4.69E-04	0.53	0	0.82 (0.73-0.93)	1.07E-05
rs2618434	11398865	A/G	0.46	0.50	O / O	0.81 (0.69-0.95)	1.01E-02	0.85 (0.77-0.93)	3.45E-04	0.63	0	0.84 (0.75-0.93)	1.09E-05
rs10503423	11287081	G/C	0.40	0.36	I / I	1.18 (0.99-1.40)	5.96E-02	1.21 (1.10-1.33)	6.12E-05	0.78	0	1.20 (1.07-1.35)	1.11E-05
rs13259219	11297277	C/T	0.30	0.34	O / O	0.80 (0.67-0.95)	9.88E-03	0.84 (0.76-0.92)	3.66E-04	0.64	0	0.82 (0.73-0.93)	1.13E-05
rs12549144	11422861	C/G	0.52	0.48	I / I	1.28 (1.09-1.50)	2.58E-03	1.17 (1.06-1.28)	1.05E-03	0.31	1	1.20 (1.07-1.34)	1.20E-05
rs10448146	11289024	T/C	0.42	0.38	I / I	1.17 (0.99-1.38)	6.27E-02	1.21 (1.10-1.32)	6.71E-05	0.74	0	1.20 (1.07-1.34)	1.27E-05
rs56051089	11447119	T/C	0.46	0.42	I / I	1.14 (0.97-1.34)	1.16E-01	1.22 (1.11-1.33)	3.19E-05	0.48	0	1.19 (1.07-1.34)	1.30E-05
rs10448145	11289769	T/G	0.42	0.38	O / O	1.18 (1.00-1.39)	5.39E-02	1.20 (1.10-1.32)	8.91E-05	0.81	0	1.20 (1.07-1.34)	1.40E-05
rs35619722	11310593	A/G	0.37	0.41	I / I	0.78 (0.66-0.92)	3.31E-03	0.85 (0.78-0.94)	1.04E-03	0.36	0	0.83 (0.74-0.93)	1.44E-05
rs2001707	11277433	T/C	0.42	0.46	I / I	0.82 (0.70-0.97)	1.91E-02	0.84 (0.77-0.92)	2.93E-04	0.82	0	0.84 (0.75-0.94)	1.61E-05
rs12677146	11450737	C/G	0.38	0.34	I / I	1.14 (0.97-1.35)	1.22E-01	1.22 (1.11-1.34)	4.13E-05	0.51	0	1.20 (1.07-1.35)	1.73E-05
rs11784897	11310442	G/A	0.37	0.41	I / I	0.78 (0.66-0.92)	3.29E-03	0.86 (0.78-0.94)	1.37E-03	0.33	0	0.83 (0.74-0.94)	1.95E-05
rs11780420	11446421	A/G	0.46	0.42	I / I	1.15 (0.98-1.36)	9.01E-02	1.21 (1.10-1.33)	7.04E-05	0.62	0	1.19 (1.06-1.33)	1.98E-05
rs17744726	11411823	G/A	0.26	0.30	O / I	0.74 (0.61-0.88)	9.50E-04	0.86 (0.77-0.95)	3.09E-03	0.15	52	0.82 (0.72-0.93)	1.99E-05
rs2409779	11311340	A/T	0.37	0.41	I / I	0.78 (0.66-0.92)	3.31E-03	0.86 (0.78-0.94)	1.53E-03	0.33	0	0.84 (0.74-0.94)	2.19E-05
rs74510602	11311339	A/C	0.37	0.41	I / I	0.78 (0.66-0.92)	3.42E-03	0.86 (0.78-0.94)	1.51E-03	0.33	0	0.84 (0.75-0.94)	2.21E-05
rs12549150	11422936	C/T	0.52	0.48	O / O	1.25 (1.06-1.46)	6.95E-03	1.17 (1.06-1.28)	9.18E-04	0.48	0	1.19 (1.06-1.33)	2.21E-05
rs35822699	11372443	C/G	0.28	0.32	I / I	0.79 (0.66-0.95)	1.05E-02	0.84 (0.76-0.93)	7.18E-04	0.59	0	0.83 (0.73-0.93)	2.38E-05
rs1382567	11350899	C/T	0.50	0.45	O / O	1.13 (0.96-1.32)	1.49E-01	1.21 (1.10-1.33)	4.51E-05	0.45	0	1.19 (1.06-1.32)	2.40E-05

Supplementary Table 10. Association analysis in *BLK*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs4841541	11311829	C/G	0.35	0.39	I / I	0.80 (0.68-0.95)	9.96E-03	0.85 (0.77-0.93)	7.72E-04	0.57	0	0.84 (0.74-0.94)	2.47E-05
rs4840570	11367730	G/T	0.28	0.32	I / I	0.82 (0.69-0.98)	2.54E-02	0.83 (0.75-0.92)	3.50E-04	0.86	0	0.83 (0.73-0.94)	2.48E-05
rs12549796	11289697	A/G	0.42	0.38	I / I	1.16 (0.98-1.37)	7.79E-02	1.20 (1.09-1.32)	1.08E-04	0.71	0	1.19 (1.06-1.33)	2.48E-05
rs4841556	11411543	A/T	0.26	0.30	I / I	0.74 (0.61-0.88)	1.02E-03	0.86 (0.78-0.95)	3.74E-03	0.15	53	0.82 (0.73-0.93)	2.62E-05
rs12541800	11423072	A/G	0.52	0.48	I / I	1.25 (1.07-1.47)	5.78E-03	1.16 (1.06-1.27)	1.23E-03	0.42	0	1.19 (1.06-1.33)	2.63E-05
rs2898279	11295251	G/C	0.30	0.34	I / I	0.78 (0.66-0.93)	5.74E-03	0.85 (0.77-0.94)	1.27E-03	0.40	0	0.83 (0.74-0.94)	2.69E-05
rs13439415	11310012	A/T	0.37	0.41	I / I	0.78 (0.66-0.92)	3.16E-03	0.86 (0.78-0.95)	1.96E-03	0.30	6	0.84 (0.75-0.94)	2.80E-05
chr8:11348053:I	11348053	CA/C	0.50	0.46	I / I	1.12 (0.95-1.31)	1.70E-01	1.21 (1.10-1.33)	4.52E-05	0.40	0	1.18 (1.06-1.32)	2.88E-05
rs7011778	11416171	C/T	0.42	0.38	O / O	1.30 (1.10-1.53)	1.78E-03	1.15 (1.05-1.26)	2.96E-03	0.20	38	1.19 (1.06-1.33)	2.94E-05
rs978804	11343673	T/C	0.50	0.46	O / O	1.12 (0.96-1.32)	1.60E-01	1.21 (1.10-1.33)	5.12E-05	0.43	0	1.18 (1.06-1.32)	2.96E-05
rs13272061	11352261	T/G	0.50	0.46	I / I	1.12 (0.95-1.32)	1.66E-01	1.21 (1.10-1.33)	4.92E-05	0.41	0	1.18 (1.06-1.32)	2.96E-05
rs4841562	11425077	C/T	0.41	0.38	O / I	1.28 (1.09-1.51)	2.88E-03	1.16 (1.05-1.27)	2.23E-03	0.28	16	1.19 (1.06-1.33)	2.98E-05
rs11785520	11268560	T/C	0.46	0.42	I / I	1.22 (1.04-1.44)	1.52E-02	1.17 (1.07-1.29)	6.63E-04	0.67	0	1.19 (1.06-1.33)	3.00E-05
rs13439487	11310529	T/G	0.37	0.41	I / I	0.78 (0.66-0.92)	3.29E-03	0.86 (0.78-0.95)	2.07E-03	0.30	6	0.84 (0.75-0.94)	3.07E-05
rs13274269	11449325	G/T	0.38	0.34	I / I	1.15 (0.97-1.36)	1.06E-01	1.21 (1.10-1.33)	9.60E-05	0.60	0	1.19 (1.06-1.34)	3.13E-05
rs1057750	11296091	A/G	0.30	0.34	I / I	0.80 (0.67-0.95)	1.16E-02	0.85 (0.77-0.93)	8.72E-04	0.58	0	0.83 (0.74-0.94)	3.16E-05
rs10098782	11417582	T/C	0.40	0.36	I / I	1.28 (1.08-1.51)	4.06E-03	1.16 (1.05-1.27)	2.01E-03	0.31	4	1.19 (1.06-1.34)	3.44E-05
rs57526558	11310568	T/G	0.37	0.41	I / I	0.78 (0.66-0.92)	3.31E-03	0.86 (0.79-0.95)	2.30E-03	0.30	8	0.84 (0.75-0.94)	3.47E-05
rs1600252	11345644	G/A	0.50	0.46	I / I	1.11 (0.95-1.31)	1.95E-01	1.21 (1.10-1.33)	4.73E-05	0.37	0	1.18 (1.06-1.32)	3.51E-05
rs2001463	11295511	G/A	0.29	0.33	I / I	0.79 (0.66-0.94)	9.72E-03	0.85 (0.77-0.94)	1.17E-03	0.50	0	0.83 (0.74-0.94)	3.73E-05
rs11786148	11423781	G/C	0.42	0.39	I / I	1.31 (1.11-1.55)	1.33E-03	1.14 (1.04-1.26)	4.37E-03	0.16	50	1.19 (1.06-1.33)	3.78E-05
rs978802	11343278	T/A	0.50	0.46	I / I	1.12 (0.95-1.31)	1.72E-01	1.21 (1.10-1.32)	6.62E-05	0.43	0	1.18 (1.06-1.32)	4.04E-05
rs6982763	11277560	A/T	0.43	0.39	I / I	1.23 (1.05-1.45)	1.12E-02	1.17 (1.06-1.28)	1.16E-03	0.56	0	1.19 (1.06-1.33)	4.11E-05
rs7830445	11302061	G/A	0.31	0.35	I / I	0.79 (0.66-0.94)	7.05E-03	0.86 (0.78-0.94)	1.65E-03	0.42	0	0.84 (0.74-0.94)	4.15E-05
rs1600250	11345425	C/A	0.50	0.46	I / I	1.11 (0.95-1.31)	1.95E-01	1.21 (1.10-1.32)	5.92E-05	0.39	0	1.18 (1.06-1.32)	4.26E-05
rs11774541	11270993	C/A	0.41	0.45	I / I	0.84 (0.71-0.99)	3.40E-02	0.85 (0.77-0.93)	5.24E-04	0.92	0	0.84 (0.75-0.95)	4.80E-05
rs7829381	11344573	G/A	0.49	0.46	I / I	1.12 (0.95-1.31)	1.73E-01	1.20 (1.10-1.32)	8.14E-05	0.44	0	1.18 (1.05-1.32)	4.84E-05
rs978803	11343475	G/A	0.49	0.46	O / O	1.12 (0.95-1.31)	1.76E-01	1.20 (1.10-1.32)	7.89E-05	0.43	0	1.18 (1.05-1.32)	4.84E-05
rs11250135	11278146	G/T	0.43	0.39	O / O	1.23 (1.04-1.44)	1.26E-02	1.17 (1.06-1.28)	1.27E-03	0.58	0	1.18 (1.06-1.32)	4.96E-05
rs10104336	11268344	A/G	0.45	0.42	I / I	1.20 (1.02-1.41)	2.98E-02	1.17 (1.07-1.29)	6.45E-04	0.84	0	1.18 (1.06-1.32)	5.24E-05
rs11250140	11346592	C/A	0.49	0.46	I / I	1.12 (0.95-1.31)	1.83E-01	1.20 (1.10-1.32)	8.24E-05	0.42	0	1.18 (1.05-1.32)	5.27E-05
rs35005793	11450472	G/A	0.38	0.34	I / I	1.14 (0.96-1.35)	1.28E-01	1.20 (1.09-1.32)	1.41E-04	0.59	0	1.19 (1.06-1.33)	5.43E-05
rs34163377	11450213	C/G	0.38	0.34	I / I	1.13 (0.95-1.34)	1.61E-01	1.21 (1.10-1.33)	1.04E-04	0.49	0	1.18 (1.06-1.33)	5.46E-05
chr8:11268623:D	11268623	C/CA	0.46	0.42	I / I	1.21 (1.03-1.43)	2.11E-02	1.17 (1.07-1.28)	9.94E-04	0.71	0	1.18 (1.06-1.32)	5.98E-05
rs2467520	11398953	T/C	0.46	0.50	I / I	0.81 (0.69-0.95)	1.07E-02	0.86 (0.79-0.95)	1.74E-03	0.49	0	0.85 (0.76-0.95)	6.11E-05
rs13275905	11273139	C/A	0.43	0.39	I / I	1.23 (1.04-1.44)	1.25E-02	1.16 (1.06-1.28)	1.59E-03	0.56	0	1.18 (1.06-1.32)	6.27E-05
rs11995206	11450133	G/A	0.45	0.41	I / I	1.13 (0.96-1.32)	1.51E-01	1.20 (1.09-1.31)	1.39E-04	0.52	0	1.18 (1.05-1.32)	6.63E-05
rs2250986	11422289	G/C	0.42	0.39	I / I	1.29 (1.09-1.53)	2.75E-03	1.14 (1.04-1.26)	4.67E-03	0.22	35	1.18 (1.06-1.33)	6.72E-05
rs4841558	11415597	T/C	0.42	0.38	I / I	1.28 (1.09-1.51)	2.85E-03	1.14 (1.04-1.25)	4.69E-03	0.22	32	1.18 (1.06-1.32)	6.87E-05
rs7007439	11415794	A/T	0.41	0.38	I / I	1.28 (1.09-1.51)	2.85E-03	1.14 (1.04-1.25)	5.08E-03	0.22	34	1.18 (1.05-1.32)	7.51E-05
rs2898280	11321292	A/G	0.53	0.49	O / O	1.12 (0.96-1.32)	1.51E-01	1.19 (1.09-1.30)	1.69E-04	0.54	0	1.17 (1.05-1.31)	7.85E-05
chr8:11275853:D	11275853	C/CA	0.43	0.40	I / I	1.22 (1.04-1.43)	1.61E-02	1.16 (1.06-1.27)	1.67E-03	0.61	0	1.18 (1.05-1.32)	8.09E-05
rs4841545	11369236	G/C	0.29	0.33	I / I	0.84 (0.70-1.00)	4.57E-02	0.84 (0.76-0.93)	6.89E-04	0.95	0	0.84 (0.74-0.95)	8.24E-05
rs28639872	11297387	C/T	0.32	0.36	I / I	0.81 (0.69-0.97)	1.81E-02	0.86 (0.78-0.94)	1.76E-03	0.61	0	0.84 (0.75-0.95)	9.37E-05
rs10097015	11421384	C/T	0.39	0.36	I / I	1.26 (1.07-1.49)	6.32E-03	1.15 (1.04-1.26)	3.94E-03	0.34	0	1.18 (1.05-1.32)	9.87E-05
rs7003840	11266131	C/T	0.44	0.40	O / O	1.20 (1.03-1.41)	2.26E-02	1.16 (1.06-1.27)	1.61E-03	0.70	0	1.17 (1.05-1.31)	1.03E-04
rs7814414	11415184	G/C	0.41	0.38	I / I	1.28 (1.09-1.51)	3.20E-03	1.14 (1.04-1.25)	6.26E-03	0.22	34	1.18 (1.05-1.32)	1.04E-04
rs12541802	11423142	A/G	0.41	0.38	I / I	1.27 (1.08-1.50)	4.47E-03	1.14 (1.04-1.25)	5.44E-03	0.26	21	1.18 (1.05-1.32)	1.11E-04
rs1042689	11421793	C/T	0.39	0.36	O / O	1.28 (1.08-1.51)	4.00E-03	1.14 (1.04-1.25)	5.91E-03	0.25	26	1.18 (1.05-1.32)	1.13E-04
rs899366	11430485	G/A	0.35	0.32	O / O	1.21 (1.02-1.43)	2.67E-02	1.17 (1.06-1.28)	1.75E-03	0.71	0	1.18 (1.05-1.32)	1.29E-04
rs7840433	11422170	G/A	0.39	0.36	I / I	1.25 (1.06-1.48)	8.80E-03	1.15 (1.04-1.26)	4.30E-03	0.37	0	1.18 (1.05-1.32)	1.38E-04
rs7836059	11272164	G/A	0.45	0.49	O / O	0.86 (0.73-1.00)	5.75E-02	0.86 (0.78-0.94)	9.45E-04	0.98	0	0.86 (0.77-0.96)	1.39E-04
rs11786737	11405336	C/T	0.28	0.32	I / I	0.79 (0.67-0.94)	9.42E-03	0.86 (0.78-0.95)	4.13E-03	0.41	0	0.84 (0.75-0.95)	1.40E-04
rs4841566	11432438	G/C	0.36	0.32	I / I	1.21 (1.02-1.43)	3.27E-02	1.17 (1.06-1.29)	1.69E-03	0.74	0	1.18 (1.05-1.33)	1.48E-04
rs11784016	11366670	C/T	0.28	0.32	I / I	0.82 (0.69-0.98)	2.77E-02	0.85 (0.77-0.94)	1.95E-03	0.70	0	0.84 (0.75-0.95)	1.49E-04
rs11782823	11260385	A/C	0.44	0.41	I / I	1.26 (1.07-1.49)	4.98E-03	1.14 (1.04-1.25)	6.71E-03	0.27	17	1.17 (1.05-1.31)	1.50E-04
rs35592057	11323532	C/G	0.18	0.21	I / I	0.81 (0.66-1.00)	5.30E-02	0.82 (0.73-0.93)	1.20E-03	0.92	0	0.82 (0.71-0.95)	1.62E-04
rs6985489	11266175	A/T	0.44	0.41	I / I	1.21 (1.03-1.42)	1.88E-02	1.15 (1.05-1.26)	2.92E-03	0.58	0	1.17 (1.04-1.31)	1.64E-04
rs4841563	11425081	G/T	0.38	0.35	I / I	1.25 (1.06-1.48)	8.59E-03	1.14 (1.04-1.26)	5.13E-03	0.36	0	1.17 (1.05-1.32)	1.64E-04
rs35353728	11432453	C/T	0.34	0.31	I / I	1.17 (0.98-1.39)	7.80E-02	1.18 (1.07-1.30)	8.35E-04	0.93	0	1.18 (1.04-1.32)	1.65E-04
rs10094320	11268077	C/T	0.44	0.41	I / I	1.21 (1.02-1.42)	2.35E-02	1.15 (1.05-1.26)	2.71E-03	0.64	0	1.17 (1.04-1.30)	1.81E-04
rs2409764	11281273	A/G	0.41	0.45	O / O	0.85 (0.72-0.99)	3.98E-02	0.86 (0.79-0.95)	1.85E-03	0.83	0	0.86 (0.77-0.96)	1.91E-04
rs2618443	11384556	C/T	0.49	0.45	O / I	1.13 (0.97-1.33)	1.25E-01	1.17 (1.07-1.29)	5.86E-04	0.70	0	1.16 (1.04-1.30)	1.94E-04
rs4581006	11305365	G/A	0.32	0.35	I / I	0.79 (0.66-0.94)	6.97E-03	0.88 (0.79-0.96)	6.86E-03	0.30	7	0.85 (0.75-0.96)	1.96E-04
rs6989817	11330364	C/A	0.41	0.45	O / I	0.91 (0.77-1.07)	2.41E-01	0.84 (0.77-0.92)	2.66E-04	0.43	0	0.86 (0.77-0.96)	2.07E-04
rs6993930	11330365	C/T	0.41	0.45	I / I	0.91 (0.77-1.07)	2.55E-01	0.84 (0.77-0.92)	2.71E-04	0.41	0	0.86 (0.77-0.96)	2.25E-04
rs10097005	11421358	C/A	0.39	0.36	I / I	1.28 (1.08-1.51)	3.90E-03	1.13 (1.03-1.24)	1.13E-02	0.20	39	1.17 (1.04-1.31)	2.32E-04

Supplementary Table 10. Association analysis in *BLK*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs7007712	11290802	C/T	0.29	0.32	O / I	0.89 (0.75-1.07)	2.14E-01	0.83 (0.75-0.92)	3.71E-04	0.49	0	0.85 (0.75-0.96)	2.38E-04
rs13255193	11309192	C/T	0.49	0.46	I / I	1.21 (1.03-1.42)	2.34E-02	1.15 (1.04-1.26)	3.81E-03	0.59	0	1.16 (1.04-1.30)	2.58E-04
rs11775640	11302630	C/A	0.17	0.20	I / I	0.77 (0.63-0.96)	1.80E-02	0.84 (0.75-0.95)	4.62E-03	0.49	0	0.82 (0.71-0.95)	2.58E-04
rs2003423	11303011	G/A	0.33	0.37	O / I	0.82 (0.69-0.97)	2.37E-02	0.87 (0.79-0.96)	3.89E-03	0.58	0	0.86 (0.76-0.96)	2.64E-04
rs4841550	11389224	G/C	0.43	0.46	I / I	0.84 (0.71-1.00)	4.49E-02	0.87 (0.79-0.95)	2.42E-03	0.78	0	0.86 (0.77-0.96)	2.78E-04
rs6999270	11256826	A/G	0.42	0.39	I / I	1.21 (1.03-1.43)	2.05E-02	1.15 (1.04-1.26)	4.65E-03	0.54	0	1.16 (1.04-1.30)	2.84E-04
rs9792397	11302721	C/T	0.33	0.37	I / I	0.82 (0.69-0.97)	2.19E-02	0.87 (0.79-0.96)	4.53E-03	0.55	0	0.86 (0.76-0.96)	2.91E-04
rs7350091	11267777	G/A	0.45	0.41	I / I	1.22 (1.03-1.43)	1.86E-02	1.14 (1.04-1.25)	5.12E-03	0.51	0	1.16 (1.04-1.30)	2.93E-04
rs35370321	11426400	T/G	0.39	0.36	I / I	1.26 (1.06-1.50)	7.25E-03	1.13 (1.03-1.24)	9.53E-03	0.27	18	1.17 (1.04-1.31)	2.94E-04
rs10100187	11257495	C/T	0.42	0.38	I / I	1.17 (1.00-1.38)	5.67E-02	1.16 (1.05-1.27)	2.11E-03	0.90	0	1.16 (1.04-1.30)	2.98E-04
rs2729940	11382367	G/A	0.46	0.42	O / O	1.13 (0.96-1.33)	1.40E-01	1.17 (1.07-1.28)	8.55E-04	0.71	0	1.16 (1.04-1.29)	3.08E-04
rs28485693	11300047	C/G	0.17	0.20	I / I	0.77 (0.62-0.95)	1.70E-02	0.85 (0.75-0.95)	5.86E-03	0.45	0	0.82 (0.71-0.95)	3.16E-04
rs2898289	11418385	G/A	0.38	0.35	I / I	1.22 (1.03-1.44)	2.19E-02	1.14 (1.04-1.26)	4.93E-03	0.53	0	1.16 (1.04-1.31)	3.19E-04
rs2279169	11421016	G/A	0.39	0.36	I / I	1.25 (1.06-1.48)	7.39E-03	1.13 (1.03-1.24)	1.02E-02	0.28	14	1.16 (1.04-1.30)	3.19E-04
rs35067819	11423537	G/A	0.38	0.35	I / I	1.25 (1.05-1.47)	9.52E-03	1.13 (1.03-1.24)	8.75E-03	0.33	0	1.16 (1.04-1.30)	3.20E-04
rs13262953	11420221	G/A	0.39	0.36	I / I	1.23 (1.04-1.45)	1.68E-02	1.14 (1.04-1.25)	6.23E-03	0.45	0	1.16 (1.04-1.30)	3.33E-04
rs11775779	11297707	T/C	0.17	0.20	I / I	0.78 (0.63-0.97)	2.33E-02	0.85 (0.75-0.95)	5.43E-03	0.52	0	0.83 (0.72-0.96)	3.71E-04
rs4841561	11418773	C/T	0.38	0.35	I / I	1.22 (1.03-1.44)	2.21E-02	1.14 (1.04-1.25)	5.76E-03	0.52	0	1.16 (1.04-1.30)	3.79E-04
rs11250148	11419852	T/C	0.39	0.36	O / O	1.24 (1.05-1.46)	1.12E-02	1.13 (1.03-1.24)	9.51E-03	0.34	0	1.16 (1.04-1.30)	3.93E-04
rs35433745	11305635	G/A	0.34	0.38	I / I	0.79 (0.67-0.94)	8.00E-03	0.88 (0.80-0.97)	1.17E-02	0.28	14	0.86 (0.76-0.96)	3.93E-04
rs35401006	11420104	C/G	0.39	0.36	I / I	1.24 (1.05-1.46)	1.22E-02	1.13 (1.03-1.24)	1.01E-02	0.35	0	1.16 (1.04-1.30)	4.47E-04
rs7823274	11299445	G/C	0.17	0.20	I / I	0.78 (0.63-0.97)	2.35E-02	0.85 (0.75-0.96)	6.55E-03	0.51	0	0.83 (0.72-0.96)	4.54E-04
rs13264369	11265444	G/C	0.42	0.39	I / I	1.14 (0.97-1.34)	1.18E-01	1.16 (1.06-1.27)	1.62E-03	0.84	0	1.15 (1.03-1.29)	4.63E-04
rs13275123	11265448	T/A	0.42	0.39	I / I	1.14 (0.97-1.34)	1.18E-01	1.16 (1.06-1.27)	1.62E-03	0.84	0	1.15 (1.03-1.29)	4.63E-04
rs4840563	11320152	T/C	0.22	0.25	O / O	0.82 (0.67-0.99)	3.92E-02	0.85 (0.77-0.95)	4.57E-03	0.69	0	0.84 (0.74-0.96)	4.69E-04
rs13266957	11265557	C/G	0.42	0.39	I / I	1.14 (0.96-1.34)	1.29E-01	1.16 (1.06-1.27)	1.50E-03	0.81	0	1.15 (1.03-1.29)	4.71E-04
rs55718444	11360081	G/C	0.08	0.06	I / I	1.48 (1.05-2.08)	2.50E-02	1.27 (1.07-1.51)	6.74E-03	0.44	0	1.33 (1.06-1.65)	4.93E-04
rs10109802	11419861	T/G	0.39	0.36	O / I	1.24 (1.05-1.46)	1.27E-02	1.13 (1.03-1.24)	1.12E-02	0.35	0	1.16 (1.03-1.30)	5.13E-04
rs2252797	11382659	C/G	0.34	0.38	I / I	0.89 (0.75-1.05)	1.57E-01	0.86 (0.78-0.95)	2.04E-03	0.75	0	0.87 (0.77-0.97)	7.67E-04
rs7016396	11358990	T/C	0.08	0.06	I / I	1.43 (1.01-2.02)	4.29E-02	1.27 (1.07-1.52)	7.12E-03	0.56	0	1.32 (1.05-1.65)	7.92E-04
rs145819712	11263622	T/G	0.45	0.41	I / I	1.21 (1.02-1.42)	2.49E-02	1.13 (1.03-1.24)	1.06E-02	0.49	0	1.15 (1.03-1.29)	7.93E-04
rs7832963	11262928	T/A	0.43	0.39	I / I	1.16 (0.98-1.37)	7.82E-02	1.15 (1.04-1.26)	4.39E-03	0.89	0	1.15 (1.03-1.29)	8.10E-04
rs2618445	11381187	G/C	0.34	0.38	I / I	0.89 (0.75-1.05)	1.79E-01	0.86 (0.78-0.95)	1.92E-03	0.71	0	0.87 (0.77-0.97)	8.30E-04
rs4840564	11320269	C/G	0.22	0.25	I / I	0.83 (0.68-1.00)	5.23E-02	0.86 (0.77-0.96)	7.52E-03	0.71	0	0.85 (0.75-0.97)	9.81E-04
rs17742757	11330341	T/C	0.44	0.47	I / I	0.93 (0.79-1.10)	3.92E-01	0.86 (0.78-0.94)	9.25E-04	0.38	0	0.88 (0.79-0.98)	1.08E-03
rs4841531	11293390	C/T	0.18	0.21	I / I	0.77 (0.62-0.95)	1.42E-02	0.87 (0.78-0.98)	2.09E-02	0.30	7	0.84 (0.73-0.97)	1.13E-03
rs34443092	11291773	C/G	0.19	0.22	I / I	0.86 (0.70-1.05)	1.33E-01	0.85 (0.76-0.95)	5.56E-03	0.95	0	0.85 (0.74-0.98)	1.65E-03
rs34699199	11260325	C/G	0.41	0.38	I / I	1.15 (0.97-1.36)	1.01E-01	1.14 (1.03-1.25)	9.04E-03	0.89	0	1.14 (1.02-1.28)	2.04E-03
rs28680779	11288040	A/C	0.17	0.20	I / I	0.89 (0.73-1.10)	2.94E-01	0.84 (0.74-0.94)	3.44E-03	0.58	0	0.85 (0.74-0.98)	2.40E-03
rs56302795	11293929	T/C	0.19	0.22	I / I	0.81 (0.66-0.99)	4.30E-02	0.88 (0.78-0.98)	2.40E-02	0.50	0	0.86 (0.75-0.99)	2.81E-03
rs12548884	11388499	C/T	0.30	0.32	I / I	0.80 (0.67-0.96)	1.47E-02	0.91 (0.82-1.00)	4.92E-02	0.23	30	0.87 (0.77-0.99)	3.05E-03
rs17799348	11333521	C/T	0.36	0.39	O / O	0.86 (0.73-1.02)	7.62E-02	0.89 (0.81-0.98)	1.78E-02	0.74	0	0.88 (0.79-0.99)	3.18E-03
rs4841554	11408935	A/G	0.30	0.33	I / I	0.83 (0.69-0.99)	3.58E-02	0.90 (0.82-0.99)	3.67E-02	0.41	0	0.88 (0.78-0.99)	3.93E-03
rs2249260	11388714	T/C	0.29	0.32	I / I	0.79 (0.66-0.95)	1.05E-02	0.91 (0.83-1.01)	7.56E-02	0.16	49	0.88 (0.78-0.99)	4.16E-03
rs2264306	11388449	G/A	0.29	0.32	O / O	0.80 (0.67-0.95)	1.31E-02	0.91 (0.83-1.01)	6.97E-02	0.19	41	0.88 (0.78-0.99)	4.29E-03
rs2264866	11388653	C/T	0.29	0.32	I / I	0.80 (0.67-0.96)	1.61E-02	0.91 (0.83-1.01)	7.22E-02	0.21	36	0.88 (0.78-0.99)	5.07E-03
rs62489089	11352664	C/A	0.03	0.02	I / I	0.96 (0.47-1.97)	9.10E-01	1.58 (1.21-2.08)	8.60E-04	0.20	38	1.38 (0.93-2.05)	5.64E-03
rs6995080	11277003	G/A	0.21	0.24	I / I	0.84 (0.69-1.03)	9.41E-02	0.88 (0.79-0.99)	2.99E-02	0.69	0	0.87 (0.76-1.00)	6.36E-03
rs11781057	11276641	G/A	0.20	0.22	I / I	0.88 (0.73-1.07)	2.10E-01	0.87 (0.78-0.98)	1.79E-02	0.90	0	0.87 (0.76-1.00)	7.50E-03
rs28377323	11330771	G/C	0.30	0.32	I / I	0.91 (0.76-1.08)	2.64E-01	0.88 (0.80-0.98)	1.48E-02	0.81	0	0.89 (0.79-1.00)	7.88E-03
rs34128921	11254365	C/T	0.35	0.37	I / I	0.93 (0.78-1.10)	3.89E-01	0.88 (0.79-0.97)	1.01E-02	0.59	0	0.89 (0.79-1.01)	8.45E-03
chr8:11274012:I	11274012	T/TAG	0.26	0.29	I / I	0.85 (0.71-1.02)	8.33E-02	0.90 (0.81-1.00)	4.36E-02	0.61	0	0.88 (0.78-1.00)	8.54E-03
chr8:11274013:I	11274013	A/AGC	0.26	0.29	I / I	0.85 (0.71-1.02)	8.33E-02	0.90 (0.81-1.00)	4.36E-02	0.61	0	0.88 (0.78-1.00)	8.54E-03
rs2001708	11277128	G/C	0.21	0.24	I / I	0.85 (0.70-1.04)	1.16E-01	0.89 (0.79-0.99)	3.53E-02	0.73	0	0.88 (0.77-1.01)	8.84E-03
rs74906907	11274310	T/C	0.20	0.22	I / I	0.87 (0.72-1.06)	1.78E-01	0.88 (0.78-0.98)	2.51E-02	0.98	0	0.88 (0.76-1.01)	8.97E-03
rs10099353	11273794	G/A	0.26	0.29	I / I	0.82 (0.68-0.99)	4.08E-02	0.91 (0.82-1.01)	8.13E-02	0.35	0	0.89 (0.78-1.01)	1.03E-02
rs7000458	11274389	A/C	0.28	0.30	I / I	0.86 (0.72-1.03)	1.08E-01	0.90 (0.82-1.00)	5.25E-02	0.65	0	0.89 (0.79-1.01)	1.26E-02
rs2002029	11276348	G/C	0.21	0.23	I / I	0.86 (0.71-1.05)	1.46E-01	0.89 (0.80-1.00)	4.38E-02	0.78	0	0.88 (0.77-1.01)	1.31E-02
rs11991127	11378740	A/G	0.11	0.13	I / I	0.92 (0.71-1.19)	5.28E-01	0.83 (0.72-0.96)	1.16E-02	0.51	0	0.86 (0.72-1.02)	1.33E-02
rs2306232	11405341	C/A	0.50	0.48	I / I	1.10 (0.93-1.29)	2.69E-01	1.11 (1.01-1.21)	2.72E-02	0.91	0	1.10 (0.99-1.23)	1.39E-02
rs6980803	11274401	C/G	0.28	0.30	I / I	0.85 (0.71-1.02)	8.14E-02	0.91 (0.82-1.01)	7.77E-02	0.51	0	0.89 (0.79-1.01)	1.55E-02
rs11987137	11404924	A/T	0.51	0.48	I / I	1.09 (0.93-1.29)	2.74E-01	1.11 (1.01-1.21)	3.02E-02	0.92	0	1.10 (0.99-1.23)	1.56E-02
rs7824640	11405057	A/G	0.52	0.49	I / I	1.11 (0.95-1.31)	1.94E-01	1.10 (1.00-1.20)	4.16E-02	0.89	0	1.10 (0.99-1.23)	1.57E-02
rs7820492	11404514	G/A	0.43	0.46	O / O	0.90 (0.76-1.05)	1.84E-01	0.91 (0.83-1.00)	4.74E-02	0.86	0	0.91 (0.81-1.01)	1.70E-02
rs7000625	11274471	A/T	0.28	0.30	I / I	0.87 (0.73-1.04)	1.31E-01	0.91 (0.82-1.01)	7.13E-02	0.67	0	0.90 (0.79-1.02)	1.98E-02
rs7017797	11274481	G/C	0.28	0.31	I / I	0.88 (0.74-1.05)	1.65E-01	0.91 (0.82-1.00)	6.30E-02	0.77	0	0.90 (0.80-1.02)	2.07E-02
rs145749545	11270300	G/T	0.01	0.01	I / I	0.65 (0.25-1.72)	3.86E-01	0.58 (0.36-0.95)	3.14E-02	0.84	0	0.60 (0.32-1.12)	2.23E-02

Supplementary Table 10. Association analysis in *BLK*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs3802235	11438244	G/A	0.02	0.02	I / I	2.02 (1.10-3.71)	2.36E-02	1.25 (0.89-1.75)	2.00E-01	0.18	46	1.43 (0.94-2.16)	2.24E-02
rs4841553	11406815	T/C	0.50	0.48	I / I	1.09 (0.93-1.28)	2.86E-01	1.10 (1.00-1.20)	4.37E-02	0.95	0	1.10 (0.98-1.22)	2.28E-02
rs3808499	11406900	T/C	0.50	0.47	I / I	1.09 (0.93-1.28)	2.95E-01	1.10 (1.00-1.20)	4.27E-02	0.94	0	1.10 (0.98-1.22)	2.29E-02
rs34078632	11407068	T/C	0.50	0.48	I / I	1.09 (0.93-1.29)	2.72E-01	1.10 (1.00-1.20)	4.61E-02	0.98	0	1.10 (0.98-1.22)	2.30E-02
rs61199332	11430641	C/T	0.03	0.02	I / I	1.84 (1.05-3.19)	3.17E-02	1.22 (0.91-1.64)	1.88E-01	0.20	38	1.37 (0.95-1.98)	2.42E-02
rs2736359	11372099	G/A	0.12	0.13	I / I	0.97 (0.76-1.24)	7.98E-01	0.84 (0.73-0.97)	1.47E-02	0.33	0	0.87 (0.74-1.04)	2.76E-02
chr8:11279385:I	11279385	G/GA	0.20	0.22	I / I	0.92 (0.75-1.11)	3.72E-01	0.89 (0.79-1.00)	4.38E-02	0.80	0	0.90 (0.78-1.03)	2.90E-02
rs2251056	11349576	A/C	0.15	0.16	O / O	0.95 (0.76-1.19)	6.63E-01	0.86 (0.76-0.98)	2.44E-02	0.47	0	0.89 (0.76-1.04)	3.24E-02
rs2250788	11352056	G/A	0.15	0.16	O / O	0.96 (0.77-1.21)	7.46E-01	0.86 (0.76-0.98)	2.16E-02	0.40	0	0.89 (0.76-1.04)	3.42E-02
rs2618480	11354107	C/T	0.15	0.16	I / I	0.96 (0.77-1.21)	7.44E-01	0.86 (0.76-0.98)	2.35E-02	0.40	0	0.89 (0.76-1.04)	3.64E-02
rs2618433	11324704	G/A	0.12	0.13	I / I	0.86 (0.67-1.10)	2.26E-01	0.89 (0.77-1.02)	8.80E-02	0.82	0	0.88 (0.74-1.04)	3.67E-02
rs2736344	11350678	C/T	0.15	0.16	O / O	0.96 (0.77-1.20)	7.21E-01	0.87 (0.76-0.98)	2.63E-02	0.43	0	0.89 (0.76-1.04)	3.83E-02
rs28604385	11433427	G/A	0.16	0.15	I / I	1.19 (0.95-1.49)	1.31E-01	1.10 (0.97-1.24)	1.41E-01	0.53	0	1.12 (0.96-1.31)	4.06E-02
rs78161669	11393200	C/T	0.02	0.02	I / I	0.72 (0.38-1.37)	3.23E-01	0.73 (0.52-1.03)	7.33E-02	0.98	0	0.73 (0.48-1.12)	4.11E-02
rs9694294	11350721	G/C	0.15	0.16	I / I	0.97 (0.78-1.22)	8.08E-01	0.86 (0.76-0.98)	2.47E-02	0.37	0	0.89 (0.77-1.04)	4.22E-02
rs6601592	11323281	C/G	0.12	0.13	I / I	0.88 (0.68-1.12)	2.91E-01	0.88 (0.77-1.02)	8.38E-02	0.95	0	0.88 (0.74-1.05)	4.28E-02
rs76275473	11282907	C/G	0.03	0.04	I / I	0.72 (0.44-1.19)	1.97E-01	0.81 (0.62-1.05)	1.14E-01	0.68	0	0.78 (0.57-1.09)	4.29E-02
rs2618432	11324482	T/C	0.12	0.13	I / I	0.88 (0.69-1.12)	3.00E-01	0.89 (0.77-1.02)	8.53E-02	0.96	0	0.88 (0.75-1.05)	4.46E-02
rs998682	11353052	G/A	0.15	0.16	I / I	0.97 (0.78-1.22)	8.23E-01	0.87 (0.76-0.98)	2.75E-02	0.37	0	0.90 (0.77-1.05)	4.69E-02
rs2254546	11343680	G/A	0.15	0.16	I / I	0.96 (0.77-1.21)	7.56E-01	0.87 (0.77-0.99)	3.21E-02	0.43	0	0.90 (0.77-1.05)	4.77E-02
rs2898282	11383200	T/A	0.11	0.12	I / I	0.94 (0.72-1.22)	6.43E-01	0.86 (0.75-0.99)	4.12E-02	0.57	0	0.88 (0.74-1.05)	4.80E-02
rs2736364	11385118	G/T	0.39	0.40	I / I	1.04 (0.89-1.23)	5.96E-01	0.88 (0.80-0.97)	7.88E-03	0.07	69	0.92 (0.82-1.03)	4.95E-02
rs2736360	11373467	G/A	0.12	0.13	O / O	0.98 (0.77-1.25)	8.66E-01	0.86 (0.74-0.98)	2.76E-02	0.35	0	0.89 (0.75-1.05)	5.05E-02
rs2618431	11324464	G/A	0.12	0.13	O / I	0.88 (0.69-1.12)	3.06E-01	0.89 (0.77-1.02)	9.79E-02	0.94	0	0.89 (0.75-1.05)	5.16E-02
rs1382566	11384841	G/C	0.12	0.13	I / I	0.99 (0.77-1.27)	9.31E-01	0.85 (0.74-0.98)	2.58E-02	0.31	4	0.89 (0.75-1.05)	5.28E-02
rs111706163	11432812	C/G	0.16	0.15	I / I	1.19 (0.95-1.49)	1.40E-01	1.09 (0.96-1.24)	1.74E-01	0.52	0	1.12 (0.96-1.30)	5.29E-02
rs2618475	11325750	G/C	0.12	0.13	I / I	0.88 (0.69-1.12)	3.09E-01	0.89 (0.77-1.02)	1.01E-01	0.94	0	0.89 (0.75-1.05)	5.34E-02
rs2736319	11324025	C/G	0.12	0.13	I / I	0.88 (0.69-1.13)	3.16E-01	0.89 (0.78-1.02)	1.05E-01	0.94	0	0.89 (0.75-1.05)	5.65E-02
chr8:11352827:I	11352827	CAG/C	0.15	0.16	I / I	0.98 (0.78-1.22)	8.27E-01	0.87 (0.77-0.99)	3.49E-02	0.40	0	0.90 (0.77-1.05)	5.69E-02
rs2021819	11384199	G/C	0.11	0.12	I / I	0.93 (0.72-1.20)	5.71E-01	0.87 (0.76-1.00)	5.95E-02	0.68	0	0.89 (0.75-1.06)	5.76E-02
rs17153245	11292247	A/G	0.02	0.02	I / I	1.38 (0.76-2.52)	2.88E-01	1.28 (0.94-1.76)	1.17E-01	0.83	0	1.31 (0.88-1.94)	5.86E-02
rs73209286	11374228	C/T	0.12	0.13	I / I	0.98 (0.76-1.25)	8.62E-01	0.86 (0.75-0.99)	3.40E-02	0.37	0	0.89 (0.75-1.06)	5.90E-02
rs35451117	11398335	C/A	0.12	0.13	I / I	0.98 (0.77-1.26)	8.88E-01	0.86 (0.75-0.99)	3.28E-02	0.35	0	0.89 (0.75-1.06)	5.96E-02
rs1478900	11347660	T/C	0.15	0.16	I / I	0.98 (0.78-1.23)	8.58E-01	0.87 (0.77-0.99)	3.59E-02	0.38	0	0.90 (0.77-1.05)	6.10E-02
rs117003123	11282816	G/A	0.03	0.04	I / I	0.73 (0.44-1.20)	2.13E-01	0.83 (0.64-1.07)	1.54E-01	0.66	0	0.80 (0.58-1.11)	6.17E-02
rs78234804	11450177	C/T	0.05	0.04	I / I	1.64 (1.14-2.34)	7.14E-03	1.06 (0.85-1.33)	6.10E-01	0.04	75	1.20 (0.92-1.56)	6.26E-02
rs1478895	11353335	C/G	0.15	0.16	I / I	0.96 (0.77-1.21)	7.41E-01	0.88 (0.77-1.00)	4.66E-02	0.49	0	0.90 (0.77-1.05)	6.27E-02
rs114832615	11432612	G/A	0.02	0.01	I / I	1.89 (1.00-3.57)	5.14E-02	1.20 (0.83-1.72)	3.31E-01	0.22	32	1.36 (0.88-2.11)	6.31E-02
rs6981704	11327372	G/C	0.20	0.21	I / I	0.88 (0.72-1.08)	2.18E-01	0.92 (0.82-1.03)	1.56E-01	0.71	0	0.91 (0.79-1.04)	6.36E-02
rs111965253	11362431	G/C	0.09	0.08	I / I	1.17 (0.86-1.59)	3.28E-01	1.13 (0.97-1.33)	1.18E-01	0.86	0	1.14 (0.94-1.40)	6.50E-02
rs73537757	11362512	T/C	0.09	0.08	I / I	1.17 (0.86-1.59)	3.28E-01	1.13 (0.97-1.33)	1.18E-01	0.86	0	1.14 (0.94-1.40)	6.50E-02
rs2618479	11355821	G/A	0.16	0.17	O / O	0.94 (0.76-1.18)	6.07E-01	0.89 (0.79-1.01)	6.68E-02	0.66	0	0.91 (0.78-1.05)	6.78E-02
rs77411380	11436354	C/T	0.02	0.01	I / I	1.92 (1.01-3.65)	4.62E-02	1.18 (0.82-1.69)	3.74E-01	0.19	41	1.35 (0.87-2.10)	7.05E-02
rs2250412	11354570	A/G	0.15	0.16	I / I	0.96 (0.77-1.21)	7.28E-01	0.88 (0.78-1.00)	5.69E-02	0.53	0	0.91 (0.78-1.06)	7.21E-02
rs73209290	11385007	G/A	0.11	0.13	I / I	0.99 (0.77-1.27)	9.28E-01	0.86 (0.75-1.00)	4.35E-02	0.36	0	0.90 (0.76-1.07)	7.83E-02
rs7835996	11290059	T/C	0.17	0.18	I / I	0.91 (0.73-1.12)	3.68E-01	0.91 (0.81-1.03)	1.30E-01	0.98	0	0.91 (0.79-1.05)	7.84E-02
rs7003814	11290955	G/A	0.11	0.12	I / I	0.88 (0.68-1.13)	3.04E-01	0.90 (0.78-1.04)	1.54E-01	0.84	0	0.89 (0.75-1.06)	7.94E-02
rs73209250	11314277	T/C	0.20	0.21	I / I	0.85 (0.69-1.04)	1.18E-01	0.94 (0.84-1.05)	2.88E-01	0.40	0	0.91 (0.79-1.05)	8.38E-02
rs2254660	11342986	G/C	0.15	0.16	I / I	0.97 (0.77-1.21)	7.61E-01	0.89 (0.78-1.01)	6.50E-02	0.52	0	0.91 (0.78-1.06)	8.46E-02
rs56003968	11312337	T/C	0.20	0.21	I / I	0.84 (0.68-1.03)	9.70E-02	0.94 (0.84-1.06)	3.21E-01	0.33	0	0.91 (0.79-1.05)	8.56E-02
rs7004267	11396974	T/A	0.12	0.13	I / I	0.99 (0.78-1.26)	9.58E-01	0.87 (0.76-1.00)	4.77E-02	0.35	0	0.90 (0.76-1.07)	8.82E-02
rs62489137	11393992	T/G	0.12	0.13	I / I	0.98 (0.77-1.25)	8.79E-01	0.87 (0.76-1.00)	5.70E-02	0.42	0	0.90 (0.76-1.07)	9.04E-02
rs6980978	11274554	C/T	0.36	0.37	O / O	0.93 (0.79-1.10)	4.26E-01	0.93 (0.85-1.02)	1.40E-01	0.97	0	0.93 (0.83-1.05)	9.45E-02
rs10481455	11291341	C/G	0.11	0.12	I / I	0.88 (0.68-1.14)	3.31E-01	0.91 (0.79-1.04)	1.76E-01	0.85	0	0.90 (0.76-1.07)	9.63E-02
rs112710642	11290682	C/G	0.17	0.18	I / I	0.92 (0.74-1.13)	4.16E-01	0.91 (0.81-1.03)	1.48E-01	0.99	0	0.91 (0.79-1.06)	9.77E-02
rs67909842	11293429	A/G	0.20	0.21	I / I	0.88 (0.72-1.07)	2.13E-01	0.93 (0.83-1.05)	2.41E-01	0.62	0	0.92 (0.80-1.05)	9.78E-02
rs73209254	11326506	A/C	0.20	0.21	I / I	0.90 (0.74-1.10)	3.00E-01	0.93 (0.83-1.04)	1.95E-01	0.80	0	0.92 (0.80-1.06)	9.93E-02
rs77803115	11441789	C/T	0.05	0.04	I / I	1.77 (1.23-2.56)	2.10E-03	1.00 (0.80-1.26)	9.89E-01	0.01	85	1.18 (0.90-1.54)	1.00E-01
rs56235592	11313208	T/C	0.20	0.21	I / I	0.85 (0.69-1.04)	1.19E-01	0.95 (0.84-1.06)	3.39E-01	0.37	0	0.92 (0.80-1.06)	1.02E-01
rs28700987	11313500	G/C	0.12	0.13	I / I	0.87 (0.68-1.11)	2.51E-01	0.92 (0.80-1.05)	2.26E-01	0.68	0	0.90 (0.76-1.07)	1.02E-01
rs936550	11410987	C/A	0.17	0.16	O / O	1.21 (0.97-1.51)	8.50E-02	1.05 (0.93-1.19)	3.97E-01	0.28	16	1.10 (0.94-1.27)	1.02E-01
rs62489140	11399098	C/T	0.12	0.13	I / I	0.98 (0.77-1.25)	8.77E-01	0.88 (0.77-1.01)	6.74E-02	0.44	0	0.91 (0.77-1.07)	1.03E-01
rs7014565	11396818	C/T	0.12	0.14	O / O	1.02 (0.81-1.30)	8.37E-01	0.87 (0.75-0.99)	3.98E-02	0.23	31	0.91 (0.77-1.07)	1.03E-01
rs2618478	11356002	A/C	0.15	0.16	I / I	0.93 (0.74-1.17)	5.32E-01	0.91 (0.80-1.03)	1.26E-01	0.84	0	0.91 (0.78-1.07)	1.03E-01
rs7839434	11325641	C/G	0.20	0.21	I / I	0.91 (0.74-1.11)	3.46E-01	0.92 (0.82-1.04)	1.83E-01	0.88	0	0.92 (0.80-1.06)	1.03E-01
rs73207496	11288485	T/G	0.20	0.21	I / I	0.88 (0.72-1.08)	2.23E-01	0.93 (0.83-1.05)	2.49E-01	0.63	0	0.92 (0.80-1.06)	1.04E-01
rs746411	11428699	T/C	0.14	0.13	I / I	1.09 (0.86-1.38)	4.76E-01	1.10 (0.97-1.26)	1.46E-01	0.93	0	1.10 (0.94-1.29)	1.07E-01

Supplementary Table 10. Association analysis in *BLK*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs28625526	11406242	C/A	0.04	0.04	I / I	1.33 (0.89-1.98)	1.64E-01	1.13 (0.89-1.43)	3.03E-01	0.50	0	1.18 (0.89-1.57)	1.07E-01
rs192643888	11424090	A/C	0.02	0.01	I / I	1.77 (0.92-3.40)	8.69E-02	1.17 (0.80-1.72)	4.10E-01	0.29	12	1.32 (0.83-2.08)	1.08E-01
rs2736328	11332247	G/A	0.10	0.11	O / O	0.98 (0.75-1.28)	8.83E-01	0.87 (0.75-1.01)	7.12E-02	0.46	0	0.90 (0.75-1.08)	1.08E-01
rs73209249	11313957	A/G	0.20	0.21	I / I	0.85 (0.69-1.04)	1.14E-01	0.95 (0.85-1.06)	3.65E-01	0.35	0	0.92 (0.80-1.06)	1.09E-01
rs1564267	11337887	C/T	0.15	0.16	I / I	0.97 (0.77-1.22)	7.92E-01	0.89 (0.79-1.01)	8.50E-02	0.56	0	0.91 (0.78-1.07)	1.09E-01
rs67539049	11307311	G/A	0.20	0.21	I / I	0.88 (0.72-1.08)	2.15E-01	0.94 (0.84-1.05)	2.70E-01	0.60	0	0.92 (0.80-1.06)	1.11E-01
rs67932868	11303445	G/A	0.20	0.21	I / I	0.88 (0.72-1.07)	1.99E-01	0.94 (0.84-1.05)	2.85E-01	0.56	0	0.92 (0.80-1.06)	1.12E-01
rs77487164	11326708	A/T	0.20	0.21	I / I	0.88 (0.72-1.08)	2.20E-01	0.94 (0.84-1.05)	2.69E-01	0.60	0	0.92 (0.80-1.06)	1.13E-01
rs56138616	11287550	A/G	0.20	0.21	I / I	0.88 (0.72-1.08)	2.19E-01	0.94 (0.84-1.05)	2.75E-01	0.60	0	0.92 (0.80-1.06)	1.15E-01
rs2306234	11414237	C/T	0.16	0.15	I / I	1.12 (0.89-1.40)	3.36E-01	1.08 (0.96-1.22)	2.09E-01	0.81	0	1.09 (0.94-1.27)	1.15E-01
rs62489135	11393329	A/C	0.12	0.13	I / I	1.00 (0.79-1.27)	9.97E-01	0.88 (0.77-1.01)	6.31E-02	0.36	0	0.91 (0.77-1.08)	1.16E-01
rs3021512	11301601	G/C	0.20	0.21	I / I	0.88 (0.72-1.07)	2.07E-01	0.94 (0.84-1.05)	2.96E-01	0.57	0	0.92 (0.80-1.06)	1.20E-01
rs12115021	11289685	A/G	0.17	0.18	O / O	0.91 (0.73-1.12)	3.68E-01	0.92 (0.82-1.04)	2.04E-01	0.88	0	0.92 (0.80-1.06)	1.20E-01
rs3021518	11296049	T/A	0.20	0.21	I / I	0.88 (0.72-1.08)	2.18E-01	0.94 (0.84-1.05)	3.02E-01	0.58	0	0.92 (0.81-1.06)	1.26E-01
rs4841530	11289146	C/A	0.12	0.13	O / O	0.86 (0.67-1.10)	2.29E-01	0.93 (0.81-1.06)	2.94E-01	0.58	0	0.91 (0.77-1.08)	1.26E-01
rs62489136	11393617	G/C	0.12	0.13	I / I	1.00 (0.79-1.27)	9.90E-01	0.88 (0.77-1.01)	6.99E-02	0.36	0	0.91 (0.77-1.08)	1.26E-01
rs67684445	11297327	C/T	0.20	0.21	I / I	0.88 (0.72-1.07)	1.95E-01	0.94 (0.84-1.06)	3.28E-01	0.52	0	0.92 (0.81-1.06)	1.29E-01
rs111689966	11389426	G/A	0.12	0.13	I / I	1.03 (0.81-1.31)	8.26E-01	0.87 (0.76-1.00)	5.39E-02	0.25	24	0.91 (0.77-1.08)	1.29E-01
rs6984212	11290966	T/C	0.13	0.14	O / O	0.85 (0.67-1.07)	1.73E-01	0.94 (0.82-1.07)	3.51E-01	0.46	0	0.91 (0.78-1.07)	1.30E-01
rs67350204	11300293	A/G	0.20	0.21	I / I	0.88 (0.72-1.07)	2.04E-01	0.94 (0.84-1.06)	3.24E-01	0.54	0	0.92 (0.80-1.06)	1.31E-01
rs12114115	11298606	G/A	0.13	0.14	I / I	0.90 (0.71-1.15)	3.94E-01	0.92 (0.80-1.05)	2.12E-01	0.89	0	0.91 (0.77-1.08)	1.31E-01
rs60320871	11297549	C/G	0.20	0.21	I / I	0.87 (0.71-1.07)	1.81E-01	0.95 (0.84-1.06)	3.47E-01	0.49	0	0.92 (0.80-1.06)	1.31E-01
rs7846252	11289053	C/T	0.12	0.13	I / I	0.86 (0.67-1.10)	2.21E-01	0.93 (0.81-1.07)	3.12E-01	0.55	0	0.91 (0.77-1.08)	1.32E-01
rs58373594	11390627	A/T	0.12	0.13	I / I	1.01 (0.80-1.29)	9.06E-01	0.88 (0.77-1.01)	6.41E-02	0.31	4	0.92 (0.77-1.08)	1.32E-01
rs28478078	11288481	A/C	0.02	0.02	I / I	1.27 (0.68-2.38)	4.60E-01	1.25 (0.90-1.75)	1.90E-01	0.97	0	1.26 (0.83-1.91)	1.33E-01
rs11776081	11431222	G/A	0.14	0.13	I / I	1.09 (0.86-1.38)	4.80E-01	1.09 (0.96-1.24)	1.89E-01	0.99	0	1.09 (0.93-1.28)	1.37E-01
rs66934548	11304050	C/A	0.20	0.21	I / I	0.88 (0.72-1.07)	1.99E-01	0.95 (0.84-1.06)	3.43E-01	0.52	0	0.93 (0.81-1.06)	1.37E-01
rs2618469	11359380	A/G	0.14	0.15	I / I	1.00 (0.79-1.25)	9.69E-01	0.89 (0.79-1.01)	8.44E-02	0.42	0	0.92 (0.79-1.08)	1.38E-01
rs2736353	11367038	T/C	0.14	0.15	I / I	1.03 (0.82-1.29)	7.85E-01	0.88 (0.78-1.00)	5.48E-02	0.23	29	0.92 (0.79-1.08)	1.38E-01
rs2252534	11384713	A/C	0.22	0.23	O / O	1.09 (0.91-1.31)	3.53E-01	0.88 (0.79-0.98)	2.05E-02	0.05	75	0.93 (0.82-1.06)	1.42E-01
rs73546312	11302709	G/A	0.20	0.21	I / I	0.88 (0.72-1.07)	1.99E-01	0.95 (0.85-1.06)	3.56E-01	0.51	0	0.93 (0.81-1.06)	1.43E-01
rs2736356	11370451	T/C	0.14	0.16	I / I	1.03 (0.83-1.29)	7.60E-01	0.88 (0.78-1.00)	5.50E-02	0.23	32	0.92 (0.79-1.08)	1.43E-01
rs67526040	11302996	G/A	0.20	0.21	I / I	0.88 (0.72-1.07)	1.99E-01	0.95 (0.85-1.06)	3.61E-01	0.51	0	0.93 (0.81-1.07)	1.45E-01
rs4240675	11297991	G/A	0.13	0.14	I / I	0.90 (0.70-1.14)	3.73E-01	0.92 (0.81-1.06)	2.47E-01	0.83	0	0.92 (0.78-1.08)	1.46E-01
rs2001462	11294810	C/T	0.20	0.21	I / I	0.89 (0.73-1.08)	2.41E-01	0.94 (0.84-1.06)	3.33E-01	0.59	0	0.93 (0.81-1.07)	1.49E-01
rs1382562	11426618	G/A	0.03	0.03	I / I	1.26 (0.80-1.97)	3.17E-01	1.16 (0.88-1.51)	2.86E-01	0.76	0	1.19 (0.86-1.63)	1.51E-01
rs6982606	11287122	T/G	0.13	0.14	I / I	0.88 (0.70-1.12)	3.09E-01	0.93 (0.81-1.06)	2.91E-01	0.72	0	0.92 (0.78-1.08)	1.51E-01
rs2736355	11369777	C/T	0.15	0.16	I / I	1.03 (0.82-1.28)	8.24E-01	0.89 (0.78-1.01)	6.69E-02	0.27	17	0.93 (0.79-1.08)	1.51E-01
chr8:11305843:D	11305843	AG/A	0.20	0.21	I / I	0.88 (0.72-1.07)	2.05E-01	0.95 (0.85-1.06)	3.70E-01	0.51	0	0.93 (0.81-1.07)	1.52E-01
rs57240873	11390781	C/G	0.12	0.13	I / I	1.02 (0.80-1.29)	8.80E-01	0.88 (0.77-1.01)	7.44E-02	0.31	3	0.92 (0.78-1.08)	1.52E-01
chr8:11321671:I	11321671	G/GC	0.20	0.21	I / I	0.87 (0.71-1.06)	1.64E-01	0.95 (0.85-1.07)	4.19E-01	0.42	0	0.93 (0.81-1.07)	1.55E-01
rs55764254	11294184	A/G	0.20	0.21	I / I	0.88 (0.72-1.07)	2.11E-01	0.95 (0.85-1.06)	3.74E-01	0.52	0	0.93 (0.81-1.07)	1.56E-01
rs77865852	11303336	A/G	0.20	0.21	I / I	0.88 (0.72-1.07)	2.08E-01	0.95 (0.85-1.06)	3.81E-01	0.51	0	0.93 (0.81-1.07)	1.58E-01
rs68063127	11303726	G/C	0.20	0.21	I / I	0.88 (0.72-1.07)	1.99E-01	0.95 (0.85-1.07)	3.92E-01	0.49	0	0.93 (0.81-1.07)	1.59E-01
rs75819332	11441234	G/T	0.04	0.04	I / I	1.78 (1.23-2.58)	2.18E-03	0.97 (0.77-1.23)	7.94E-01	0.01	87	1.15 (0.88-1.51)	1.60E-01
rs10102600	11285384	T/C	0.15	0.16	O / O	0.88 (0.70-1.10)	2.60E-01	0.94 (0.83-1.07)	3.43E-01	0.60	0	0.92 (0.79-1.08)	1.61E-01
rs2244234	11336467	G/T	0.14	0.16	I / I	0.95 (0.75-1.21)	6.88E-01	0.91 (0.80-1.04)	1.63E-01	0.76	0	0.92 (0.79-1.08)	1.63E-01
rs62490888	11418766	G/A	0.14	0.13	I / I	1.14 (0.90-1.43)	2.84E-01	1.07 (0.94-1.22)	3.29E-01	0.66	0	1.09 (0.93-1.28)	1.63E-01
rs2618446	11381148	A/C	0.21	0.23	I / I	1.06 (0.88-1.27)	5.68E-01	0.89 (0.80-1.00)	4.52E-02	0.13	56	0.94 (0.82-1.07)	1.64E-01
rs6601593	11326985	T/C	0.03	0.03	I / I	1.01 (0.60-1.70)	9.82E-01	1.23 (0.96-1.57)	1.06E-01	0.50	0	1.16 (0.84-1.61)	1.66E-01
rs73207493	11285733	C/T	0.20	0.21	I / I	0.89 (0.72-1.09)	2.52E-01	0.95 (0.85-1.06)	3.60E-01	0.58	0	0.93 (0.81-1.07)	1.67E-01
rs73195285	11405374	T/G	0.15	0.14	I / I	1.14 (0.90-1.43)	2.75E-01	1.06 (0.93-1.21)	3.45E-01	0.63	0	1.08 (0.93-1.27)	1.68E-01
rs56388647	11295084	T/C	0.20	0.21	I / I	0.88 (0.72-1.07)	2.11E-01	0.95 (0.85-1.07)	4.01E-01	0.50	0	0.93 (0.81-1.07)	1.69E-01
rs75153348	11364985	C/T	0.09	0.08	I / I	1.16 (0.85-1.59)	3.37E-01	1.09 (0.93-1.27)	3.06E-01	0.70	0	1.11 (0.91-1.35)	1.69E-01
rs4841540	11309507	G/T	0.13	0.14	I / I	0.89 (0.70-1.14)	3.64E-01	0.93 (0.81-1.06)	2.93E-01	0.78	0	0.92 (0.78-1.09)	1.70E-01
rs73209223	11304944	A/G	0.20	0.21	I / I	0.88 (0.72-1.07)	2.10E-01	0.95 (0.85-1.07)	4.05E-01	0.50	0	0.93 (0.81-1.07)	1.70E-01
rs10903338	11310290	C/T	0.13	0.14	O / O	0.87 (0.69-1.11)	2.60E-01	0.94 (0.82-1.07)	3.65E-01	0.59	0	0.92 (0.78-1.08)	1.72E-01
rs146329048	11293135	C/G	0.02	0.02	I / I	1.26 (0.67-2.36)	4.75E-01	1.22 (0.87-1.72)	2.46E-01	0.94	0	1.23 (0.81-1.88)	1.73E-01
rs7832089	11306003	C/A	0.20	0.21	I / I	0.88 (0.72-1.07)	2.01E-01	0.95 (0.85-1.07)	4.22E-01	0.48	0	0.93 (0.81-1.07)	1.74E-01
rs6981617	11397583	C/T	0.12	0.13	I / I	1.01 (0.80-1.29)	9.26E-01	0.89 (0.78-1.02)	9.71E-02	0.36	0	0.92 (0.78-1.09)	1.75E-01
rs2618456	11370733	C/G	0.14	0.15	I / I	1.03 (0.82-1.29)	7.88E-01	0.89 (0.78-1.01)	7.73E-02	0.27	18	0.93 (0.80-1.08)	1.76E-01
rs10107563	11427492	G/A	0.03	0.03	O / O	1.40 (0.92-2.13)	1.17E-01	1.09 (0.83-1.42)	5.52E-01	0.32	0	1.17 (0.85-1.60)	1.81E-01
rs77905676	11291293	G/A	0.02	0.02	I / I	1.26 (0.69-2.33)	4.53E-01	1.20 (0.87-1.67)	2.72E-01	0.89	0	1.22 (0.81-1.83)	1.84E-01
rs151035713	11313189	G/A	0.02	0.02	I / I	1.27 (0.70-2.30)	4.26E-01	1.20 (0.86-1.66)	2.85E-01	0.86	0	1.22 (0.81-1.82)	1.84E-01
rs80327577	11408820	C/T	0.02	0.01	I / I	1.29 (0.67-2.48)	4.48E-01	1.22 (0.85-1.76)	2.77E-01	0.89	0	1.24 (0.79-1.94)	1.86E-01
rs143175355	11389725	T/A	0.01	0.01	I / I	0.97 (0.47-1.99)	9.40E-01	0.71 (0.45-1.11)	1.30E-01	0.46	0	0.77 (0.46-1.31)	1.86E-01
rs62490890	11421254	C/T	0.14	0.13	I / I	1.12 (0.89-1.41)	3.46E-01	1.07 (0.93-1.22)	3.38E-01	0.73	0	1.08 (0.92-1.27)	1.90E-01

Supplementary Table 10. Association analysis in *BLK*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs10094362	11423381	T/G	0.14	0.13	I / I	1.08 (0.85-1.36)	5.44E-01	1.08 (0.95-1.23)	2.43E-01	0.97	0	1.08 (0.92-1.27)	1.90E-01
rs138388323	11449764	T/G	0.01	0.01	I / I	1.55 (0.80-3.02)	1.92E-01	1.15 (0.78-1.70)	4.76E-01	0.44	0	1.25 (0.79-2.00)	1.94E-01
rs77314514	11451467	G/A	0.04	0.04	I / I	1.63 (1.13-2.35)	8.94E-03	0.99 (0.78-1.25)	9.07E-01	0.02	80	1.14 (0.86-1.50)	1.97E-01
rs140788526	11287218	C/T	0.02	0.02	I / I	1.20 (0.63-2.30)	5.78E-01	1.23 (0.87-1.74)	2.41E-01	0.95	0	1.22 (0.79-1.88)	1.98E-01
rs7018402	11293035	C/A	0.13	0.14	I / I	0.89 (0.70-1.13)	3.29E-01	0.94 (0.82-1.07)	3.66E-01	0.68	0	0.92 (0.78-1.09)	1.99E-01
rs73663146	11303373	G/C	0.02	0.02	I / I	1.40 (0.79-2.47)	2.44E-01	1.13 (0.83-1.55)	4.33E-01	0.52	0	1.20 (0.82-1.77)	1.99E-01
chr8:11462827:D	11462827	AAAAAG/A	0.04	0.04	I / I	1.67 (1.17-2.39)	5.10E-03	0.97 (0.76-1.23)	8.07E-01	0.01	84	1.13 (0.86-1.49)	2.01E-01
rs114655325	11307238	C/T	0.02	0.02	I / I	1.29 (0.72-2.29)	3.91E-01	1.17 (0.85-1.60)	3.33E-01	0.77	0	1.20 (0.81-1.77)	2.02E-01
rs73663144	11298149	T/G	0.02	0.02	I / I	1.40 (0.79-2.46)	2.48E-01	1.13 (0.83-1.55)	4.34E-01	0.53	0	1.20 (0.82-1.76)	2.02E-01
rs2252729	11368219	G/A	0.15	0.16	I / I	1.04 (0.83-1.30)	7.27E-01	0.90 (0.79-1.02)	8.61E-02	0.25	25	0.93 (0.80-1.09)	2.04E-01
rs10093314	11426113	T/C	0.03	0.03	O / O	1.34 (0.88-2.04)	1.79E-01	1.09 (0.83-1.44)	5.12E-01	0.44	0	1.16 (0.85-1.59)	2.05E-01
rs142399055	11297695	G/A	0.02	0.02	I / I	1.28 (0.71-2.31)	4.13E-01	1.17 (0.85-1.61)	3.27E-01	0.79	0	1.20 (0.81-1.78)	2.06E-01
rs74317011	11389064	G/A	0.01	0.01	I / I	0.97 (0.47-2.00)	9.40E-01	0.72 (0.46-1.13)	1.50E-01	0.48	0	0.78 (0.46-1.32)	2.07E-01
rs76160649	11389077	G/T	0.01	0.01	I / I	0.97 (0.47-2.00)	9.40E-01	0.72 (0.46-1.13)	1.50E-01	0.48	0	0.78 (0.46-1.32)	2.07E-01
rs2618461	11365692	T/C	0.02	0.01	O / O	1.59 (0.86-2.94)	1.38E-01	1.12 (0.75-1.66)	5.78E-01	0.34	0	1.23 (0.78-1.95)	2.08E-01
rs78993441	11407039	A/C	0.01	0.02	I / I	1.03 (0.51-2.05)	9.40E-01	0.73 (0.48-1.09)	1.27E-01	0.40	0	0.80 (0.49-1.31)	2.10E-01
rs142135659	11285537	C/G	0.02	0.02	I / I	1.20 (0.63-2.30)	5.78E-01	1.22 (0.86-1.72)	2.61E-01	0.97	0	1.21 (0.79-1.87)	2.12E-01
rs117262908	11305770	G/C	0.02	0.02	I / I	0.75 (0.38-1.47)	4.05E-01	0.86 (0.62-1.18)	3.44E-01	0.73	0	0.83 (0.54-1.26)	2.14E-01
rs11781239	11271200	G/A	0.07	0.07	I / I	0.79 (0.56-1.12)	1.84E-01	0.94 (0.79-1.13)	5.29E-01	0.38	0	0.90 (0.72-1.13)	2.15E-01
rs11776201	11420898	A/G	0.03	0.02	I / I	1.26 (0.79-2.00)	3.33E-01	1.13 (0.85-1.51)	3.94E-01	0.71	0	1.17 (0.83-1.63)	2.16E-01
chr8:11285629:D	11285629	TA/T	0.31	0.32	I / I	0.93 (0.78-1.12)	4.47E-01	0.95 (0.86-1.05)	3.25E-01	0.85	0	0.95 (0.84-1.07)	2.16E-01
rs2618463	11364138	A/G	0.02	0.01	O / O	1.51 (0.82-2.79)	1.83E-01	1.13 (0.76-1.68)	5.37E-01	0.43	0	1.23 (0.78-1.94)	2.18E-01
rs146551707	11287245	G/T	0.02	0.02	I / I	1.20 (0.63-2.30)	5.78E-01	1.21 (0.86-1.71)	2.71E-01	0.98	0	1.21 (0.79-1.86)	2.20E-01
rs56004143	11304793	C/T	0.02	0.02	I / I	1.29 (0.73-2.30)	3.80E-01	1.16 (0.84-1.60)	3.76E-01	0.74	0	1.19 (0.80-1.77)	2.24E-01
rs11786268	11424192	C/T	0.14	0.13	I / I	1.06 (0.84-1.35)	6.02E-01	1.08 (0.94-1.23)	2.68E-01	0.93	0	1.07 (0.91-1.26)	2.24E-01
rs77519780	11294800	G/A	0.02	0.02	I / I	1.30 (0.71-2.41)	3.96E-01	1.15 (0.84-1.58)	3.77E-01	0.72	0	1.19 (0.80-1.78)	2.30E-01
rs10093575	11426322	C/T	0.14	0.13	I / I	1.08 (0.85-1.37)	5.31E-01	1.07 (0.94-1.23)	3.06E-01	0.96	0	1.07 (0.91-1.26)	2.31E-01
rs79034086	11388142	T/G	0.01	0.01	I / I	1.01 (0.49-2.08)	9.78E-01	0.72 (0.46-1.13)	1.52E-01	0.43	0	0.79 (0.47-1.34)	2.31E-01
rs114739497	11312479	C/A	0.02	0.02	I / I	1.24 (0.69-2.24)	4.72E-01	1.17 (0.85-1.60)	3.40E-01	0.85	0	1.19 (0.80-1.76)	2.34E-01
rs57738273	11290939	G/C	0.02	0.02	I / I	1.34 (0.72-2.48)	3.53E-01	1.15 (0.82-1.61)	4.13E-01	0.67	0	1.20 (0.79-1.82)	2.35E-01
rs60838274	11299076	G/A	0.02	0.02	I / I	1.40 (0.79-2.47)	2.44E-01	1.11 (0.81-1.53)	5.03E-01	0.49	0	1.19 (0.81-1.75)	2.36E-01
rs116028542	11312478	G/A	0.02	0.02	I / I	1.24 (0.69-2.24)	4.72E-01	1.17 (0.85-1.60)	3.44E-01	0.85	0	1.19 (0.80-1.76)	2.36E-01
rs17153280	11298491	T/A	0.02	0.02	I / I	1.40 (0.79-2.46)	2.48E-01	1.11 (0.81-1.53)	5.01E-01	0.49	0	1.19 (0.81-1.75)	2.37E-01
rs138332297	11296843	C/T	0.02	0.02	I / I	1.25 (0.69-2.25)	4.64E-01	1.16 (0.85-1.60)	3.48E-01	0.84	0	1.19 (0.80-1.76)	2.37E-01
rs2618457	11369177	G/A	0.15	0.16	I / I	1.04 (0.83-1.30)	7.57E-01	0.90 (0.79-1.02)	1.14E-01	0.29	9	0.94 (0.80-1.10)	2.39E-01
rs73531756	11467168	G/C	0.04	0.04	I / I	1.61 (1.10-2.36)	1.33E-02	0.98 (0.76-1.26)	8.61E-01	0.03	79	1.13 (0.85-1.51)	2.41E-01
rs138554715	11324048	C/T	0.02	0.02	I / I	1.24 (0.68-2.23)	4.82E-01	1.17 (0.84-1.63)	3.47E-01	0.88	0	1.19 (0.79-1.78)	2.42E-01
rs60493532	11304963	G/A	0.02	0.02	I / I	1.29 (0.72-2.29)	3.87E-01	1.14 (0.83-1.57)	4.04E-01	0.72	0	1.18 (0.80-1.75)	2.43E-01
rs4629826	11367037	G/C	0.09	0.08	I / I	1.16 (0.86-1.58)	3.26E-01	1.06 (0.91-1.24)	4.66E-01	0.60	0	1.09 (0.89-1.33)	2.55E-01
rs77738736	11466779	T/C	0.04	0.04	I / I	1.55 (1.08-2.23)	1.73E-02	0.98 (0.77-1.25)	8.74E-01	0.04	76	1.12 (0.85-1.48)	2.55E-01
rs117473353	11458190	G/A	0.04	0.04	I / I	1.57 (1.10-2.25)	1.28E-02	0.97 (0.76-1.24)	8.21E-01	0.03	79	1.12 (0.85-1.47)	2.56E-01
rs73197313	11423143	A/T	0.14	0.13	I / I	1.06 (0.83-1.34)	6.50E-01	1.07 (0.94-1.23)	2.92E-01	0.91	0	1.07 (0.91-1.26)	2.57E-01
rs61707317	11300061	A/T	0.02	0.02	I / I	1.40 (0.79-2.46)	2.49E-01	1.10 (0.81-1.51)	5.40E-01	0.48	0	1.18 (0.80-1.73)	2.58E-01
rs7002570	11393975	C/G	0.04	0.04	I / I	1.16 (0.79-1.69)	4.42E-01	0.79 (0.61-1.02)	6.92E-02	0.10	63	0.88 (0.66-1.18)	2.58E-01
rs79711489	11298819	C/T	0.02	0.02	I / I	1.25 (0.69-2.26)	4.55E-01	1.15 (0.84-1.58)	3.88E-01	0.80	0	1.18 (0.79-1.75)	2.59E-01
rs6998356	11293398	G/A	0.02	0.02	I / I	1.33 (0.74-2.42)	3.43E-01	1.13 (0.81-1.58)	4.62E-01	0.64	0	1.19 (0.79-1.78)	2.60E-01
rs12543308	11308793	G/C	0.14	0.15	I / I	0.89 (0.70-1.12)	3.13E-01	0.96 (0.84-1.09)	4.87E-01	0.58	0	0.93 (0.80-1.10)	2.61E-01
rs78789099	11405852	C/A	0.01	0.01	I / I	1.87 (0.99-3.55)	5.37E-02	1.02 (0.69-1.52)	9.15E-01	0.11	60	1.21 (0.76-1.93)	2.64E-01
rs11779184	11424085	G/T	0.14	0.13	I / I	1.07 (0.84-1.35)	5.95E-01	1.07 (0.94-1.22)	3.26E-01	0.98	0	1.07 (0.91-1.26)	2.65E-01
rs141618524	11290820	C/T	0.02	0.02	I / I	1.29 (0.69-2.43)	4.27E-01	1.15 (0.82-1.62)	4.14E-01	0.75	0	1.19 (0.78-1.82)	2.65E-01
rs74659020	11464700	G/C	0.04	0.04	I / I	1.60 (1.12-2.28)	1.04E-02	0.96 (0.76-1.22)	7.54E-01	0.02	81	1.11 (0.85-1.46)	2.70E-01
rs7017352	11402224	C/G	0.01	0.01	I / I	1.31 (0.64-2.66)	4.63E-01	1.18 (0.80-1.75)	4.03E-01	0.81	0	1.22 (0.75-1.97)	2.72E-01
rs79620884	11464241	C/T	0.04	0.04	I / I	1.57 (1.09-2.25)	1.45E-02	0.97 (0.76-1.24)	8.08E-01	0.03	79	1.11 (0.85-1.46)	2.72E-01
rs6601589	11310784	G/C	0.25	0.26	I / I	0.97 (0.80-1.17)	7.39E-01	0.94 (0.85-1.05)	2.85E-01	0.82	0	0.95 (0.84-1.08)	2.79E-01
rs77358795	11392510	C/T	0.01	0.01	I / I	0.97 (0.47-1.99)	9.38E-01	0.76 (0.49-1.18)	2.20E-01	0.56	0	0.81 (0.48-1.37)	2.79E-01
rs58004460	11313958	G/C	0.25	0.26	I / I	0.98 (0.81-1.18)	8.36E-01	0.94 (0.85-1.05)	2.56E-01	0.70	0	0.95 (0.84-1.08)	2.83E-01
rs74612972	11465518	T/G	0.04	0.04	I / I	1.60 (1.12-2.28)	1.06E-02	0.96 (0.75-1.22)	7.30E-01	0.02	81	1.11 (0.84-1.46)	2.84E-01
rs76806252	11465849	A/G	0.04	0.04	I / I	1.58 (1.10-2.26)	1.31E-02	0.96 (0.76-1.23)	7.65E-01	0.03	80	1.11 (0.84-1.46)	2.85E-01
rs10089219	11419592	T/C	0.03	0.03	I / I	1.26 (0.81-1.95)	3.10E-01	1.09 (0.83-1.44)	5.43E-01	0.59	0	1.13 (0.82-1.57)	2.92E-01
rs11776029	11268661	A/G	0.06	0.07	I / I	0.78 (0.55-1.11)	1.68E-01	0.97 (0.80-1.16)	7.11E-01	0.30	8	0.91 (0.72-1.15)	2.96E-01
rs146738087	11368329	C/A	0.01	0.01	I / I	1.41 (0.73-2.73)	3.10E-01	1.14 (0.75-1.73)	5.51E-01	0.59	0	1.21 (0.74-1.97)	2.96E-01
rs2409766	11303786	C/A	0.13	0.14	I / I	0.87 (0.69-1.11)	2.57E-01	0.97 (0.85-1.10)	6.06E-01	0.46	0	0.94 (0.80-1.10)	2.99E-01
rs11780298	11270305	G/A	0.07	0.07	I / I	0.80 (0.57-1.12)	1.99E-01	0.96 (0.81-1.15)	6.78E-01	0.35	0	0.91 (0.73-1.14)	3.02E-01
rs62490891	11422425	A/T	0.14	0.13	I / I	1.06 (0.84-1.35)	6.24E-01	1.06 (0.93-1.22)	3.66E-01	0.98	0	1.06 (0.90-1.25)	3.05E-01
rs75473987	11384537	T/C	0.01	0.02	I / I	0.84 (0.43-1.64)	6.01E-01	0.84 (0.56-1.25)	3.85E-01	0.99	0	0.84 (0.52-1.35)	3.11E-01
rs77714106	11435322	G/A	0.01	0.01	I / I	1.00 (0.47-2.13)	9.96E-01	0.74 (0.46-1.21)	2.34E-01	0.52	0	0.81 (0.46-1.42)	3.12E-01
rs62490893	11423518	G/A	0.14	0.13	I / I	1.06 (0.84-1.35)	6.01E-01	1.06 (0.93-1.21)	3.87E-01	0.97	0	1.06 (0.90-1.25)	3.12E-01

Supplementary Table 10. Association analysis in *BLK*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
chr8:11338267:D	11338267	TG/T	0.03	0.02	I / I	1.39 (0.85-2.30)	1.92E-01	1.06 (0.79-1.42)	7.07E-01	0.35	0	1.14 (0.80-1.63)	3.13E-01
rs2618460	11368325	A/C	0.03	0.04	I / I	0.98 (0.60-1.59)	9.26E-01	0.87 (0.68-1.11)	2.72E-01	0.68	0	0.90 (0.66-1.23)	3.27E-01
rs7007575	11330495	G/T	0.02	0.02	I / I	1.10 (0.59-2.04)	7.67E-01	1.16 (0.86-1.57)	3.33E-01	0.88	0	1.14 (0.77-1.69)	3.28E-01
rs4840561	11306460	A/G	0.13	0.14	I / I	0.88 (0.69-1.12)	2.96E-01	0.97 (0.85-1.10)	6.18E-01	0.50	0	0.94 (0.80-1.11)	3.28E-01
rs80012649	11462865	T/C	0.04	0.04	I / I	1.56 (1.09-2.23)	1.40E-02	0.95 (0.75-1.21)	6.90E-01	0.02	80	1.10 (0.83-1.44)	3.30E-01
rs4624992	11291597	G/A	0.02	0.02	O / O	1.23 (0.67-2.27)	4.99E-01	1.13 (0.81-1.57)	4.70E-01	0.80	0	1.16 (0.77-1.74)	3.31E-01
rs111697900	11318875	G/A	0.03	0.03	I / I	1.00 (0.61-1.65)	9.95E-01	1.16 (0.90-1.50)	2.58E-01	0.61	0	1.11 (0.80-1.54)	3.36E-01
rs732947	11429147	G/A	0.14	0.13	O / O	1.03 (0.82-1.31)	7.80E-01	1.07 (0.93-1.22)	3.41E-01	0.82	0	1.06 (0.90-1.24)	3.39E-01
rs143089210	11401503	G/A	0.02	0.03	I / I	1.15 (0.69-1.92)	6.00E-01	0.80 (0.60-1.08)	1.46E-01	0.24	28	0.89 (0.62-1.27)	3.40E-01
rs77031471	11459334	C/T	0.04	0.04	I / I	1.56 (1.09-2.22)	1.41E-02	0.95 (0.75-1.21)	6.72E-01	0.02	81	1.09 (0.83-1.44)	3.41E-01
rs74705617	11466907	A/G	0.04	0.04	I / I	1.55 (1.08-2.23)	1.73E-02	0.95 (0.74-1.22)	7.00E-01	0.03	79	1.10 (0.83-1.45)	3.44E-01
rs7824090	11322777	G/A	0.03	0.03	I / I	1.03 (0.63-1.68)	9.06E-01	1.14 (0.89-1.47)	2.99E-01	0.71	0	1.11 (0.81-1.53)	3.45E-01
rs75908053	11396257	G/A	0.01	0.01	I / I	1.07 (0.54-2.14)	8.44E-01	0.76 (0.49-1.18)	2.16E-01	0.41	0	0.83 (0.50-1.39)	3.45E-01
rs79939738	11384823	T/A	0.01	0.01	I / I	1.05 (0.51-2.16)	9.00E-01	0.76 (0.48-1.20)	2.34E-01	0.46	0	0.83 (0.49-1.41)	3.47E-01
rs78723545	11384595	C/T	0.01	0.01	I / I	1.05 (0.51-2.16)	9.02E-01	0.76 (0.48-1.20)	2.35E-01	0.46	0	0.83 (0.49-1.41)	3.47E-01
rs118031156	11456485	C/T	0.04	0.04	I / I	1.54 (1.08-2.21)	1.82E-02	0.95 (0.75-1.21)	7.05E-01	0.03	79	1.09 (0.83-1.44)	3.48E-01
rs2618448	11379041	A/C	0.17	0.18	I / I	0.99 (0.80-1.23)	9.33E-01	0.94 (0.83-1.06)	2.97E-01	0.66	0	0.95 (0.82-1.10)	3.53E-01
rs75458094	11462540	A/G	0.04	0.04	I / I	1.56 (1.09-2.23)	1.40E-02	0.94 (0.74-1.20)	6.39E-01	0.02	81	1.09 (0.83-1.43)	3.60E-01
rs58319820	11308496	C/A	0.22	0.23	I / I	0.90 (0.74-1.10)	3.18E-01	0.98 (0.87-1.09)	6.52E-01	0.51	0	0.95 (0.84-1.09)	3.62E-01
rs79846785	11383651	T/C	0.01	0.01	I / I	1.05 (0.51-2.16)	8.97E-01	0.77 (0.49-1.21)	2.49E-01	0.47	0	0.84 (0.49-1.42)	3.64E-01
rs115288303	11398304	G/C	0.01	0.01	I / I	1.07 (0.54-2.15)	8.40E-01	0.76 (0.49-1.19)	2.32E-01	0.42	0	0.84 (0.50-1.40)	3.65E-01
rs74333269	11398609	T/C	0.01	0.01	I / I	1.07 (0.54-2.15)	8.40E-01	0.76 (0.49-1.19)	2.32E-01	0.42	0	0.84 (0.50-1.40)	3.65E-01
rs75745277	11398604	G/C	0.01	0.01	I / I	1.07 (0.54-2.15)	8.40E-01	0.76 (0.49-1.19)	2.32E-01	0.42	0	0.84 (0.50-1.40)	3.65E-01
rs73207498	11289031	T/C	0.19	0.20	I / I	0.95 (0.78-1.17)	6.42E-01	0.96 (0.85-1.07)	4.37E-01	0.98	0	0.95 (0.83-1.10)	3.65E-01
rs74961098	11400479	C/A	0.01	0.01	I / I	1.07 (0.54-2.15)	8.40E-01	0.76 (0.49-1.19)	2.36E-01	0.42	0	0.84 (0.50-1.41)	3.69E-01
rs74383105	11457930	C/G	0.04	0.04	I / I	1.56 (1.09-2.23)	1.38E-02	0.94 (0.74-1.20)	6.21E-01	0.02	81	1.09 (0.83-1.43)	3.70E-01
rs73541742	11395719	A/G	0.01	0.01	I / I	1.07 (0.54-2.15)	8.40E-01	0.77 (0.50-1.19)	2.37E-01	0.42	0	0.85 (0.51-1.40)	3.71E-01
rs56284862	11461588	C/G	0.04	0.04	I / I	1.53 (1.07-2.20)	1.96E-02	0.95 (0.75-1.21)	6.76E-01	0.03	79	1.09 (0.83-1.43)	3.73E-01
rs2002030	11276542	T/C	0.07	0.07	O / O	0.86 (0.62-1.18)	3.48E-01	0.96 (0.80-1.15)	6.48E-01	0.55	0	0.93 (0.74-1.16)	3.76E-01
rs4841565	11428348	A/G	0.15	0.14	I / I	1.09 (0.87-1.37)	4.64E-01	1.04 (0.91-1.19)	5.69E-01	0.72	0	1.05 (0.90-1.24)	3.83E-01
rs147319341	11301733	G/A	0.01	0.01	I / I	0.97 (0.44-2.16)	9.42E-01	0.83 (0.57-1.21)	3.32E-01	0.73	0	0.87 (0.53-1.43)	3.90E-01
rs76938695	11380328	T/C	0.17	0.17	I / I	0.97 (0.78-1.21)	7.87E-01	0.95 (0.84-1.07)	3.98E-01	0.86	0	0.95 (0.82-1.11)	3.90E-01
rs7844834	11286146	C/A	0.31	0.32	O / O	0.96 (0.80-1.14)	6.19E-01	0.97 (0.88-1.07)	4.90E-01	0.92	0	0.96 (0.85-1.09)	3.96E-01
rs77743132	11380065	T/G	0.17	0.17	I / I	0.97 (0.78-1.20)	7.86E-01	0.95 (0.84-1.07)	4.06E-01	0.86	0	0.96 (0.82-1.11)	3.97E-01
rs75907152	11399802	T/C	0.01	0.01	I / I	0.95 (0.45-2.01)	8.86E-01	0.81 (0.51-1.28)	3.67E-01	0.73	0	0.85 (0.49-1.45)	4.01E-01
rs79058294	11379364	C/G	0.01	0.01	I / I	0.95 (0.45-2.03)	9.03E-01	0.81 (0.51-1.27)	3.60E-01	0.71	0	0.85 (0.49-1.45)	4.01E-01
rs75867350	11392537	A/C	0.01	0.01	I / I	0.95 (0.44-2.01)	8.85E-01	0.81 (0.51-1.28)	3.69E-01	0.73	0	0.85 (0.49-1.45)	4.02E-01
rs77286122	11274668	C/G	0.08	0.08	I / I	1.10 (0.81-1.48)	5.48E-01	1.05 (0.89-1.24)	5.44E-01	0.82	0	1.06 (0.87-1.31)	4.05E-01
rs56018504	11385751	G/A	0.15	0.16	I / I	0.96 (0.77-1.20)	7.36E-01	0.95 (0.84-1.08)	4.55E-01	0.94	0	0.96 (0.82-1.12)	4.17E-01
rs76578315	11406408	G/A	0.01	0.01	I / I	1.08 (0.52-2.24)	8.36E-01	1.18 (0.79-1.76)	4.15E-01	0.83	0	1.15 (0.70-1.89)	4.23E-01
rs2169889	11396914	T/C	0.02	0.02	I / I	1.12 (0.60-2.07)	7.30E-01	0.81 (0.57-1.16)	2.52E-01	0.38	0	0.89 (0.58-1.37)	4.30E-01
rs73195289	11408111	G/C	0.14	0.13	I / I	1.10 (0.87-1.39)	4.20E-01	1.03 (0.90-1.17)	6.82E-01	0.62	0	1.05 (0.89-1.23)	4.38E-01
rs3021511	11280885	A/G	0.08	0.08	O / O	1.09 (0.82-1.46)	5.35E-01	1.04 (0.89-1.23)	6.04E-01	0.78	0	1.06 (0.87-1.29)	4.42E-01
rs75100307	11429771	G/A	0.01	0.02	I / I	0.81 (0.42-1.54)	5.17E-01	0.90 (0.60-1.35)	6.21E-01	0.78	0	0.88 (0.55-1.40)	4.46E-01
rs138250696	11367357	T/C	0.01	0.02	I / I	1.33 (0.68-2.58)	4.06E-01	0.76 (0.52-1.11)	1.57E-01	0.16	50	0.89 (0.56-1.41)	4.47E-01
rs73195288	11408042	G/A	0.14	0.13	I / I	1.10 (0.87-1.40)	4.04E-01	1.02 (0.90-1.17)	7.10E-01	0.58	0	1.05 (0.89-1.23)	4.48E-01
rs28738823	11323362	C/A	0.03	0.03	I / I	0.99 (0.60-1.63)	9.76E-01	1.12 (0.87-1.44)	3.65E-01	0.66	0	1.08 (0.79-1.49)	4.51E-01
rs76470554	11388167	A/G	0.16	0.16	I / I	0.93 (0.74-1.17)	5.34E-01	0.97 (0.85-1.10)	6.23E-01	0.76	0	0.96 (0.82-1.12)	4.55E-01
rs73537729	11349950	C/G	0.03	0.03	I / I	1.11 (0.69-1.80)	6.68E-01	1.09 (0.82-1.45)	5.43E-01	0.95	0	1.10 (0.78-1.54)	4.57E-01
rs62490881	11415146	G/A	0.13	0.13	I / I	1.07 (0.84-1.36)	5.74E-01	1.04 (0.90-1.19)	6.12E-01	0.81	0	1.05 (0.89-1.23)	4.67E-01
rs145332865	11335518	A/G	0.01	0.01	I / I	0.67 (0.29-1.53)	3.45E-01	0.95 (0.64-1.40)	7.89E-01	0.46	0	0.86 (0.52-1.44)	4.67E-01
rs11782805	11260343	C/T	0.04	0.05	I / I	0.84 (0.55-1.27)	3.97E-01	0.96 (0.77-1.20)	7.45E-01	0.55	0	0.93 (0.70-1.22)	4.68E-01
rs59028919	11336216	G/A	0.02	0.02	I / I	1.40 (0.85-2.30)	1.90E-01	1.01 (0.74-1.36)	9.71E-01	0.27	17	1.10 (0.77-1.58)	4.69E-01
rs17153343	11349438	G/A	0.03	0.03	O / O	1.05 (0.65-1.69)	8.43E-01	1.11 (0.84-1.47)	4.65E-01	0.84	0	1.09 (0.78-1.53)	4.69E-01
rs56967170	11336173	A/C	0.02	0.02	I / I	1.39 (0.85-2.30)	1.93E-01	1.00 (0.74-1.36)	9.75E-01	0.27	17	1.10 (0.77-1.58)	4.74E-01
rs13264212	11309849	C/T	0.17	0.18	O / O	0.97 (0.78-1.20)	7.87E-01	0.96 (0.85-1.08)	5.08E-01	0.93	0	0.96 (0.83-1.12)	4.82E-01
rs11989613	11277314	A/G	0.08	0.07	I / I	1.06 (0.79-1.44)	6.92E-01	1.05 (0.89-1.24)	5.67E-01	0.94	0	1.05 (0.86-1.29)	4.87E-01
rs2448074	11470175	T/C	0.45	0.46	O / O	0.99 (0.84-1.16)	8.82E-01	0.97 (0.88-1.06)	4.71E-01	0.82	0	0.97 (0.87-1.09)	4.91E-01
rs922485	11408606	T/C	0.14	0.13	I / I	1.10 (0.87-1.40)	4.07E-01	1.02 (0.89-1.16)	7.72E-01	0.56	0	1.04 (0.89-1.23)	4.92E-01
rs77643841	11346963	G/T	0.02	0.02	I / I	1.27 (0.77-2.09)	3.42E-01	1.03 (0.77-1.39)	8.31E-01	0.48	0	1.10 (0.77-1.56)	4.93E-01
rs78373572	11411800	T/C	0.01	0.01	I / I	1.06 (0.51-2.19)	8.75E-01	0.81 (0.51-1.28)	3.66E-01	0.54	0	0.87 (0.51-1.49)	4.95E-01
rs73195287	11407013	G/C	0.14	0.14	I / I	1.11 (0.88-1.40)	3.89E-01	1.02 (0.89-1.16)	7.99E-01	0.53	0	1.04 (0.89-1.22)	5.01E-01
rs58209053	11336964	T/C	0.02	0.02	I / I	1.39 (0.85-2.30)	1.93E-01	0.99 (0.73-1.35)	9.64E-01	0.26	23	1.09 (0.76-1.56)	5.15E-01
rs10089185	11285609	A/C	0.09	0.09	O / O	0.97 (0.73-1.29)	8.47E-01	0.95 (0.81-1.11)	5.20E-01	0.88	0	0.96 (0.79-1.16)	5.17E-01
rs117005175	11297477	G/C	0.01	0.01	I / I	0.91 (0.42-1.98)	8.21E-01	0.87 (0.56-1.35)	5.35E-01	0.91	0	0.88 (0.52-1.50)	5.19E-01
rs11775511	11272079	C/T	0.08	0.08	O / O	0.83 (0.60-1.14)	2.48E-01	1.00 (0.84-1.18)	9.81E-01	0.31	2	0.95 (0.77-1.17)	5.26E-01
rs717717	11335377	G/C	0.02	0.02	I / I	1.40 (0.85-2.30)	1.90E-01	0.98 (0.72-1.34)	9.13E-01	0.24	27	1.08 (0.75-1.56)	5.47E-01

Supplementary Table 10. Association analysis in *BLK*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs77739684	11276706	G/A	0.07	0.08	I / I	1.05 (0.77-1.44)	7.43E-01	0.92 (0.77-1.10)	3.63E-01	0.47	0	0.96 (0.77-1.18)	5.49E-01
rs79135632	11429053	C/G	0.01	0.01	I / I	0.96 (0.45-2.04)	9.14E-01	0.87 (0.55-1.35)	5.26E-01	0.82	0	0.89 (0.52-1.52)	5.52E-01
rs2736327	11332036	A/C	0.03	0.03	I / I	0.85 (0.47-1.52)	5.74E-01	1.15 (0.88-1.51)	2.97E-01	0.34	0	1.06 (0.74-1.51)	5.56E-01
rs78202955	11275464	T/C	0.08	0.07	I / I	1.08 (0.80-1.46)	6.26E-01	1.03 (0.87-1.23)	6.97E-01	0.81	0	1.05 (0.85-1.29)	5.56E-01
rs117704274	11353586	A/G	0.01	0.01	I / I	1.15 (0.55-2.40)	7.07E-01	1.09 (0.74-1.62)	6.49E-01	0.91	0	1.11 (0.68-1.81)	5.58E-01
rs116966174	11320550	C/T	0.03	0.03	I / I	0.99 (0.60-1.62)	9.57E-01	1.10 (0.84-1.43)	4.76E-01	0.70	0	1.07 (0.77-1.48)	5.65E-01
rs74610623	11276562	T/C	0.08	0.07	I / I	1.06 (0.78-1.44)	7.01E-01	1.04 (0.88-1.23)	6.65E-01	0.90	0	1.04 (0.85-1.28)	5.68E-01
rs145604561	11373020	G/A	0.01	0.01	I / I	1.12 (0.53-2.35)	7.74E-01	0.84 (0.55-1.27)	4.04E-01	0.51	0	0.91 (0.54-1.51)	5.79E-01
rs78939349	11276854	G/A	0.08	0.07	I / I	1.06 (0.78-1.44)	7.02E-01	1.03 (0.87-1.23)	6.86E-01	0.89	0	1.04 (0.85-1.28)	5.86E-01
rs4841539	11309277	G/A	0.26	0.26	I / I	1.00 (0.83-1.20)	9.71E-01	0.97 (0.87-1.07)	5.36E-01	0.79	0	0.98 (0.86-1.11)	5.86E-01
rs80167929	11400650	G/A	0.01	0.02	I / I	1.11 (0.58-2.11)	7.46E-01	0.84 (0.56-1.26)	3.98E-01	0.47	0	0.91 (0.56-1.46)	5.86E-01
rs11250137	11310498	G/C	0.28	0.28	I / I	0.99 (0.83-1.19)	9.32E-01	0.97 (0.88-1.07)	5.64E-01	0.83	0	0.98 (0.86-1.10)	5.93E-01
rs6994605	11405437	A/G	0.01	0.02	I / I	1.04 (0.54-2.03)	9.01E-01	0.87 (0.59-1.28)	4.82E-01	0.65	0	0.92 (0.58-1.45)	5.95E-01
rs17153240	11292068	G/A	0.09	0.09	I / I	0.96 (0.73-1.28)	7.95E-01	0.96 (0.82-1.13)	6.54E-01	1.00	0	0.96 (0.79-1.17)	6.05E-01
rs11776411	11272866	C/G	0.08	0.08	I / I	0.82 (0.59-1.12)	2.15E-01	1.01 (0.86-1.20)	8.68E-01	0.24	27	0.95 (0.77-1.18)	6.05E-01
rs7005030	11369821	T/C	0.27	0.26	I / I	1.05 (0.88-1.27)	5.75E-01	1.01 (0.91-1.12)	8.00E-01	0.72	0	1.03 (0.90-1.16)	6.09E-01
rs11777648	11450443	C/T	0.07	0.06	I / I	0.98 (0.69-1.39)	9.03E-01	1.06 (0.89-1.27)	5.00E-01	0.68	0	1.04 (0.83-1.31)	6.13E-01
rs74573986	11310418	G/A	0.01	0.01	I / I	0.45 (0.16-1.29)	1.36E-01	1.07 (0.72-1.60)	7.31E-01	0.13	56	0.84 (0.47-1.51)	6.19E-01
rs76738826	11417632	A/C	0.12	0.12	I / I	1.05 (0.82-1.35)	6.94E-01	1.02 (0.89-1.18)	7.51E-01	0.85	0	1.03 (0.87-1.22)	6.33E-01
rs62490933	11447758	A/C	0.07	0.06	I / I	0.99 (0.70-1.41)	9.53E-01	1.05 (0.88-1.26)	5.65E-01	0.75	0	1.04 (0.83-1.30)	6.48E-01
rs79918215	11329932	T/G	0.01	0.01	I / I	1.10 (0.51-2.38)	8.01E-01	1.07 (0.74-1.56)	7.10E-01	0.95	0	1.08 (0.67-1.75)	6.54E-01
rs922484	11408401	T/C	0.14	0.14	O / O	1.09 (0.86-1.38)	4.59E-01	1.00 (0.88-1.15)	9.58E-01	0.54	0	1.03 (0.88-1.21)	6.61E-01
rs56255555	11272284	G/T	0.08	0.08	I / I	0.84 (0.61-1.16)	2.98E-01	1.01 (0.86-1.20)	8.86E-01	0.32	0	0.96 (0.78-1.19)	6.67E-01
rs117467361	11370618	C/T	0.01	0.01	I / I	1.25 (0.61-2.54)	5.44E-01	0.83 (0.55-1.27)	3.97E-01	0.34	0	0.93 (0.56-1.55)	6.93E-01
rs11775674	11272618	C/T	0.08	0.08	I / I	0.84 (0.61-1.16)	2.81E-01	1.02 (0.86-1.20)	8.34E-01	0.29	9	0.96 (0.78-1.19)	6.93E-01
rs56125952	11272312	T/A	0.08	0.08	I / I	0.84 (0.61-1.16)	2.81E-01	1.02 (0.86-1.20)	8.33E-01	0.29	9	0.96 (0.78-1.19)	6.94E-01
rs77072957	11373791	A/G	0.16	0.16	I / I	0.97 (0.77-1.20)	7.58E-01	0.98 (0.87-1.11)	8.04E-01	0.88	0	0.98 (0.84-1.14)	7.09E-01
rs191160522	11261494	A/C	0.01	0.01	I / I	0.73 (0.33-1.58)	4.23E-01	1.01 (0.67-1.53)	9.42E-01	0.46	0	0.92 (0.55-1.55)	7.16E-01
rs1478899	11347107	T/C	0.03	0.03	O / O	1.14 (0.75-1.72)	5.34E-01	1.00 (0.78-1.29)	9.78E-01	0.61	0	1.04 (0.77-1.40)	7.23E-01
rs144831397	11371962	G/T	0.01	0.01	I / I	1.25 (0.61-2.54)	5.45E-01	0.84 (0.55-1.29)	4.26E-01	0.35	0	0.94 (0.57-1.56)	7.24E-01
rs117025672	11273988	G/C	0.08	0.07	I / I	1.07 (0.79-1.45)	6.66E-01	1.01 (0.85-1.20)	8.88E-01	0.76	0	1.03 (0.83-1.27)	7.28E-01
rs2618450	11376790	G/A	0.27	0.27	O / O	1.06 (0.89-1.27)	4.94E-01	1.00 (0.90-1.11)	9.84E-01	0.55	0	1.02 (0.90-1.15)	7.29E-01
rs79145090	11295747	A/G	0.11	0.11	I / I	1.09 (0.85-1.40)	5.08E-01	0.94 (0.81-1.09)	4.13E-01	0.32	0	0.98 (0.82-1.17)	7.33E-01
rs73201416	11467688	A/G	0.02	0.02	I / I	0.95 (0.46-1.94)	8.80E-01	1.09 (0.76-1.58)	6.33E-01	0.72	0	1.05 (0.66-1.67)	7.47E-01
rs117127647	11259260	A/T	0.07	0.07	I / I	1.04 (0.76-1.42)	8.17E-01	1.02 (0.86-1.22)	8.24E-01	0.92	0	1.03 (0.83-1.27)	7.55E-01
rs56359406	11273275	G/T	0.08	0.08	I / I	0.82 (0.60-1.13)	2.21E-01	1.03 (0.88-1.22)	6.82E-01	0.20	38	0.97 (0.79-1.19)	7.62E-01
rs74509333	11316062	C/T	0.11	0.10	I / I	1.13 (0.87-1.45)	3.60E-01	0.98 (0.85-1.14)	8.28E-01	0.37	0	1.02 (0.85-1.22)	7.63E-01
rs150365200	11261981	G/C	0.07	0.07	I / I	1.04 (0.76-1.42)	8.12E-01	1.02 (0.85-1.22)	8.37E-01	0.92	0	1.02 (0.83-1.27)	7.64E-01
rs76368678	11322413	G/C	0.02	0.02	I / I	0.71 (0.35-1.42)	3.32E-01	1.05 (0.72-1.52)	7.99E-01	0.33	0	0.94 (0.59-1.49)	7.64E-01
rs62492460	11461785	G/A	0.06	0.06	I / I	1.16 (0.84-1.62)	3.69E-01	0.98 (0.80-1.19)	8.33E-01	0.38	0	1.03 (0.81-1.30)	7.64E-01
chr8:11461274:I	11461274	A/AG	0.06	0.06	I / I	1.16 (0.84-1.62)	3.69E-01	0.98 (0.80-1.19)	8.33E-01	0.38	0	1.03 (0.81-1.30)	7.65E-01
rs76658568	11307506	C/G	0.03	0.03	I / I	0.99 (0.63-1.56)	9.54E-01	0.96 (0.75-1.24)	7.58E-01	0.92	0	0.97 (0.71-1.32)	7.71E-01
rs56069917	11272179	C/T	0.08	0.08	I / I	0.84 (0.61-1.16)	3.01E-01	1.03 (0.87-1.21)	7.54E-01	0.29	11	0.97 (0.79-1.20)	7.77E-01
rs62490935	11452307	C/T	0.06	0.06	I / I	1.19 (0.86-1.66)	2.95E-01	0.97 (0.79-1.18)	7.41E-01	0.29	12	1.03 (0.81-1.30)	7.81E-01
chr8:11314403:D	11314403	TGGG/T	0.11	0.11	I / I	1.13 (0.88-1.45)	3.42E-01	0.98 (0.85-1.13)	7.86E-01	0.34	0	1.02 (0.86-1.21)	7.84E-01
rs62490934	11450828	T/A	0.07	0.07	I / I	0.96 (0.68-1.36)	8.22E-01	1.04 (0.87-1.24)	6.45E-01	0.68	0	1.02 (0.82-1.27)	7.86E-01
rs55888399	11273161	C/T	0.08	0.08	I / I	0.85 (0.61-1.16)	3.02E-01	1.03 (0.87-1.22)	7.42E-01	0.29	12	0.97 (0.79-1.20)	7.89E-01
rs74761252	11284156	G/A	0.07	0.07	I / I	1.02 (0.75-1.39)	9.16E-01	1.02 (0.85-1.23)	8.09E-01	0.97	0	1.02 (0.82-1.27)	7.94E-01
rs28668864	11297611	G/A	0.07	0.07	I / I	1.14 (0.86-1.52)	3.58E-01	0.92 (0.76-1.11)	3.76E-01	0.21	36	0.98 (0.79-1.21)	7.95E-01
rs76793305	11320768	G/A	0.02	0.02	I / I	0.70 (0.35-1.41)	3.25E-01	1.06 (0.73-1.53)	7.54E-01	0.31	3	0.94 (0.60-1.50)	7.96E-01
rs140708080	11276972	A/C	0.07	0.07	I / I	0.89 (0.64-1.23)	4.69E-01	1.01 (0.85-1.22)	8.70E-01	0.48	0	0.98 (0.78-1.22)	8.06E-01
rs75527179	11275997	G/A	0.07	0.07	I / I	0.93 (0.67-1.29)	6.44E-01	1.00 (0.84-1.20)	9.88E-01	0.68	0	0.98 (0.78-1.22)	8.16E-01
rs140607433	11271908	C/T	0.04	0.04	I / I	1.01 (0.67-1.51)	9.68E-01	0.96 (0.75-1.23)	7.64E-01	0.85	0	0.98 (0.73-1.30)	8.16E-01
rs115826830	11314785	T/G	0.11	0.11	I / I	1.10 (0.85-1.41)	4.77E-01	0.95 (0.82-1.10)	4.72E-01	0.33	0	0.99 (0.83-1.18)	8.16E-01
rs11783137	11448738	G/T	0.07	0.07	O / O	1.00 (0.72-1.40)	9.87E-01	0.97 (0.81-1.17)	7.79E-01	0.88	0	0.98 (0.79-1.23)	8.19E-01
rs28479369	11305586	C/T	0.11	0.11	I / I	1.08 (0.84-1.38)	5.46E-01	0.95 (0.82-1.10)	5.28E-01	0.40	0	0.99 (0.83-1.18)	8.31E-01
rs151258037	11271880	C/T	0.04	0.04	I / I	1.01 (0.67-1.51)	9.69E-01	0.97 (0.76-1.24)	7.94E-01	0.87	0	0.98 (0.73-1.31)	8.41E-01
rs2618466	11362698	T/C	0.02	0.02	O / I	1.51 (0.87-2.61)	1.41E-01	0.79 (0.52-1.18)	2.50E-01	0.06	71	0.95 (0.60-1.48)	8.49E-01
rs140934077	11261423	C/A	0.03	0.03	I / I	1.08 (0.68-1.71)	7.49E-01	1.00 (0.78-1.29)	9.87E-01	0.78	0	1.02 (0.75-1.40)	8.54E-01
rs74546638	11310999	C/G	0.11	0.11	I / I	1.08 (0.84-1.39)	5.47E-01	0.96 (0.83-1.11)	5.54E-01	0.41	0	0.99 (0.83-1.18)	8.56E-01
rs77097456	11281441	C/T	0.08	0.08	I / I	1.00 (0.74-1.36)	9.75E-01	1.02 (0.86-1.20)	8.53E-01	0.95	0	1.01 (0.82-1.25)	8.62E-01
rs11777247	11454989	C/T	0.06	0.06	I / I	1.16 (0.84-1.62)	3.71E-01	0.96 (0.79-1.17)	7.20E-01	0.34	0	1.02 (0.80-1.29)	8.62E-01
rs28561410	11305585	C/G	0.11	0.11	I / I	1.09 (0.85-1.40)	4.81E-01	0.95 (0.82-1.10)	5.18E-01	0.35	0	0.99 (0.83-1.18)	8.63E-01
rs76149735	11275960	A/T	0.07	0.07	I / I	0.92 (0.66-1.28)	6.34E-01	1.01 (0.84-1.21)	9.21E-01	0.64	0	0.98 (0.79-1.23)	8.66E-01
rs74604441	11278392	G/A	0.03	0.03	I / I	1.11 (0.70-1.76)	6.63E-01	0.99 (0.77-1.27)	9.37E-01	0.67	0	1.02 (0.75-1.39)	8.69E-01
rs62490959	11459006	C/A	0.06	0.06	I / I	1.16 (0.84-1.62)	3.69E-01	0.96 (0.79-1.17)	7.03E-01	0.33	0	1.02 (0.80-1.28)	8.76E-01
rs7008392	11287754	T/A	0.09	0.09	I / I	0.98 (0.75-1.30)	9.10E-01	0.99 (0.85-1.16)	9.11E-01	0.97	0	0.99 (0.82-1.20)	8.77E-01

Supplementary Table 10. Association analysis in *BLK*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs77388456	11305807	C/T	0.11	0.11	I / I	1.10 (0.86-1.42)	4.40E-01	0.95 (0.82-1.10)	5.14E-01	0.32	0	0.99 (0.83-1.18)	8.88E-01
rs4585710	11303828	C/T	0.11	0.11	I / I	1.10 (0.86-1.41)	4.35E-01	0.98 (0.85-1.13)	7.43E-01	0.40	0	1.01 (0.85-1.20)	8.91E-01
rs28606038	11294245	C/G	0.11	0.11	I / I	1.11 (0.86-1.42)	4.20E-01	0.95 (0.82-1.10)	5.13E-01	0.30	5	0.99 (0.83-1.18)	9.00E-01
rs145519807	11348225	A/G	0.01	0.01	I / I	1.12 (0.50-2.52)	7.74E-01	0.93 (0.63-1.40)	7.42E-01	0.69	0	0.99 (0.59-1.65)	9.00E-01
rs13438815	11305681	C/T	0.11	0.11	I / I	1.10 (0.86-1.41)	4.53E-01	0.96 (0.83-1.11)	5.43E-01	0.34	0	0.99 (0.84-1.18)	9.08E-01
rs5011845	11305322	C/T	0.11	0.11	I / I	1.11 (0.86-1.42)	4.30E-01	0.95 (0.82-1.11)	5.38E-01	0.32	0	1.00 (0.83-1.19)	9.18E-01
rs146519298	11346637	C/T	0.01	0.01	I / I	1.12 (0.50-2.50)	7.86E-01	0.94 (0.63-1.41)	7.80E-01	0.71	0	0.99 (0.59-1.66)	9.26E-01
rs117084385	11296546	T/C	0.04	0.04	I / I	0.89 (0.59-1.34)	5.69E-01	1.06 (0.83-1.35)	6.43E-01	0.47	0	1.01 (0.75-1.34)	9.28E-01
rs3021510	11280737	A/G	0.08	0.08	I / I	1.05 (0.77-1.42)	7.61E-01	0.99 (0.84-1.17)	9.32E-01	0.76	0	1.01 (0.82-1.23)	9.31E-01
rs10099562	11287148	T/C	0.09	0.09	I / I	0.98 (0.75-1.30)	9.11E-01	1.00 (0.85-1.17)	9.76E-01	0.93	0	0.99 (0.82-1.20)	9.32E-01
rs59228223	11277818	A/G	0.07	0.07	I / I	0.88 (0.64-1.23)	4.66E-01	1.05 (0.88-1.25)	5.98E-01	0.37	0	1.00 (0.80-1.25)	9.52E-01
rs13439101	11304486	C/A	0.11	0.11	I / I	1.10 (0.86-1.41)	4.56E-01	0.96 (0.83-1.11)	5.91E-01	0.36	0	1.00 (0.84-1.19)	9.52E-01
rs60114642	11277410	A/G	0.07	0.07	I / I	0.89 (0.64-1.23)	4.73E-01	1.05 (0.88-1.25)	6.06E-01	0.38	0	1.00 (0.80-1.25)	9.55E-01
rs77784152	11283959	G/C	0.03	0.03	I / I	1.02 (0.63-1.66)	9.26E-01	0.98 (0.75-1.28)	9.07E-01	0.89	0	1.00 (0.72-1.38)	9.60E-01
rs10111303	11304951	C/G	0.11	0.11	I / I	1.10 (0.86-1.41)	4.52E-01	0.96 (0.83-1.11)	5.97E-01	0.36	0	1.00 (0.84-1.19)	9.61E-01
rs187562695	11261961	G/T	0.05	0.05	I / I	0.86 (0.59-1.27)	4.58E-01	1.05 (0.86-1.29)	6.07E-01	0.37	0	1.00 (0.77-1.29)	9.67E-01
rs141849998	11261959	C/T	0.06	0.06	I / I	0.90 (0.63-1.28)	5.43E-01	1.04 (0.86-1.26)	6.71E-01	0.46	0	1.00 (0.79-1.27)	9.70E-01
rs2255227	11410538	T/C	0.01	0.01	I / I	1.01 (0.47-2.18)	9.69E-01	1.00 (0.64-1.57)	9.89E-01	0.98	0	1.01 (0.59-1.72)	9.74E-01
rs59668455	11274249	C/T	0.07	0.07	I / I	0.93 (0.66-1.29)	6.50E-01	1.03 (0.86-1.23)	7.54E-01	0.58	0	1.00 (0.80-1.25)	9.80E-01
rs59948694	11274240	G/T	0.07	0.07	I / I	0.93 (0.66-1.29)	6.50E-01	1.02 (0.86-1.23)	7.95E-01	0.60	0	1.00 (0.80-1.24)	9.84E-01
rs76154097	11367042	C/T	0.16	0.16	I / I	0.98 (0.79-1.23)	8.85E-01	1.01 (0.89-1.14)	9.30E-01	0.86	0	1.00 (0.86-1.16)	9.99E-01

Supplementary Table 11. Association analysis in *CXCR5*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs7119038	118738281	A/G	0.18	0.23	I / I	0.79 (0.64-0.98)	3.32E-02	0.72 (0.64-0.81)	6.33E-08	0.47	0	0.74 (0.64-0.86)	1.10E-08
rs11217033	118673706	T/C	0.17	0.21	I / I	0.80 (0.65-0.99)	4.34E-02	0.72 (0.64-0.81)	5.35E-08	0.35	0	0.74 (0.64-0.86)	1.33E-08
rs7481797	118745243	G/A	0.15	0.20	I / I	0.79 (0.63-0.99)	3.94E-02	0.72 (0.63-0.81)	1.21E-07	0.46	0	0.74 (0.63-0.86)	2.47E-08
rs7481819	118745278	T/C	0.15	0.20	I / I	0.79 (0.63-0.99)	4.11E-02	0.72 (0.63-0.81)	1.30E-07	0.46	0	0.74 (0.63-0.86)	2.78E-08
rs10790275	118745884	C/G	0.15	0.20	I / I	0.80 (0.64-1.00)	4.98E-02	0.72 (0.63-0.82)	2.38E-07	0.43	0	0.74 (0.64-0.86)	6.07E-08
rs11217020	118639353	G/A	0.17	0.21	I / I	0.81 (0.66-1.00)	5.37E-02	0.73 (0.65-0.82)	2.21E-07	0.38	0	0.75 (0.65-0.87)	6.20E-08
chr11:118740104:D	118740104	A/AT	0.15	0.20	I / I	0.81 (0.65-1.01)	6.54E-02	0.72 (0.63-0.81)	1.77E-07	0.32	0	0.74 (0.64-0.86)	6.78E-08
rs4936443	118740864	T/C	0.16	0.20	O / O	0.79 (0.63-0.98)	3.21E-02	0.74 (0.65-0.83)	5.03E-07	0.61	0	0.75 (0.65-0.87)	6.82E-08
rs11217074	118734000	T/C	0.16	0.20	I / I	0.80 (0.64-1.00)	4.59E-02	0.73 (0.65-0.82)	3.42E-07	0.49	0	0.75 (0.65-0.87)	7.41E-08
rs4938573	118741842	T/C	0.16	0.20	O / O	0.79 (0.64-0.99)	3.94E-02	0.73 (0.65-0.83)	4.45E-07	0.54	0	0.75 (0.65-0.87)	7.80E-08
rs7951740	118740418	C/G	0.16	0.20	I / I	0.80 (0.64-0.99)	4.39E-02	0.73 (0.65-0.83)	4.32E-07	0.50	0	0.75 (0.65-0.87)	8.69E-08
rs7119044	118738298	C/G	0.16	0.20	I / I	0.81 (0.65-1.01)	6.61E-02	0.73 (0.65-0.82)	2.94E-07	0.39	0	0.75 (0.65-0.87)	1.04E-07
rs4936444	118743338	C/T	0.16	0.20	I / I	0.82 (0.66-1.02)	7.10E-02	0.73 (0.65-0.82)	2.86E-07	0.37	0	0.75 (0.65-0.87)	1.11E-07
rs7122669	118739056	G/A	0.16	0.20	I / I	0.80 (0.65-1.00)	5.22E-02	0.73 (0.65-0.83)	4.44E-07	0.46	0	0.75 (0.65-0.87)	1.11E-07
rs11217058	118722149	G/A	0.16	0.20	I / I	0.78 (0.62-0.97)	2.78E-02	0.74 (0.66-0.84)	1.24E-06	0.71	0	0.75 (0.65-0.87)	1.30E-07
rs10790269	118729456	T/C	0.16	0.20	I / I	0.81 (0.65-1.01)	5.62E-02	0.74 (0.65-0.83)	5.24E-07	0.47	0	0.75 (0.65-0.88)	1.39E-07
rs10892296	118718729	C/T	0.15	0.19	I / I	0.78 (0.62-0.98)	3.40E-02	0.74 (0.65-0.83)	1.07E-06	0.64	0	0.75 (0.64-0.87)	1.44E-07
rs12365699	118743286	G/A	0.13	0.17	O / O	0.81 (0.65-1.03)	8.12E-02	0.71 (0.63-0.81)	3.17E-07	0.33	0	0.74 (0.63-0.87)	1.46E-07
rs17122453	118683564	G/A	0.17	0.22	I / I	0.80 (0.65-0.99)	4.17E-02	0.74 (0.66-0.84)	8.63E-07	0.53	0	0.76 (0.66-0.88)	1.52E-07
rs4936441	118725660	G/C	0.16	0.20	I / I	0.80 (0.64-0.99)	4.40E-02	0.74 (0.66-0.83)	8.77E-07	0.57	0	0.75 (0.65-0.88)	1.63E-07
rs74541740	118742800	G/A	0.16	0.20	I / I	0.80 (0.64-1.00)	5.07E-02	0.74 (0.66-0.83)	9.18E-07	0.52	0	0.76 (0.65-0.88)	2.03E-07
rs6421571	118743772	C/T	0.16	0.20	I / I	0.81 (0.65-1.01)	6.60E-02	0.74 (0.65-0.83)	6.50E-07	0.43	0	0.76 (0.65-0.88)	2.08E-07
rs10892294	118667357	G/C	0.17	0.21	I / I	0.81 (0.66-1.00)	4.84E-02	0.75 (0.66-0.84)	1.09E-06	0.51	0	0.76 (0.66-0.88)	2.23E-07
rs28409215	118679304	G/A	0.17	0.21	I / I	0.80 (0.65-0.99)	4.09E-02	0.75 (0.66-0.84)	1.40E-06	0.56	0	0.76 (0.66-0.88)	2.29E-07
rs10892293	118665575	A/T	0.17	0.21	I / I	0.80 (0.65-0.99)	4.38E-02	0.75 (0.66-0.84)	1.29E-06	0.55	0	0.76 (0.66-0.88)	2.30E-07
rs4938572	118740931	T/C	0.16	0.20	I / I	0.82 (0.66-1.02)	8.22E-02	0.73 (0.65-0.83)	6.06E-07	0.38	0	0.76 (0.65-0.88)	2.60E-07
rs7942535	118681464	T/C	0.17	0.21	I / I	0.79 (0.64-0.97)	2.74E-02	0.76 (0.67-0.85)	2.70E-06	0.75	0	0.76 (0.66-0.88)	2.62E-07
rs11217060	118723748	C/T	0.16	0.20	I / I	0.80 (0.64-1.01)	5.84E-02	0.74 (0.65-0.83)	1.05E-06	0.51	0	0.76 (0.65-0.88)	2.69E-07
rs75249660	118721565	G/A	0.16	0.20	I / I	0.77 (0.61-0.96)	2.24E-02	0.75 (0.67-0.85)	3.73E-06	0.87	0	0.76 (0.65-0.88)	2.84E-07
rs7125066	118721699	A/G	0.33	0.39	I / I	0.86 (0.72-1.02)	8.82E-02	0.78 (0.71-0.86)	6.68E-07	0.39	0	0.80 (0.71-0.90)	3.06E-07
rs9736016	118724894	T/A	0.34	0.39	I / I	0.85 (0.71-1.01)	6.11E-02	0.79 (0.72-0.87)	1.20E-06	0.51	0	0.81 (0.72-0.91)	3.17E-07
rs10892279	118611781	G/A	0.18	0.22	O / O	0.81 (0.66-1.00)	4.80E-02	0.75 (0.67-0.85)	1.63E-06	0.53	0	0.77 (0.67-0.89)	3.17E-07
rs11217041	118682350	A/G	0.18	0.22	I / I	0.80 (0.64-0.98)	3.49E-02	0.76 (0.67-0.85)	2.47E-06	0.67	0	0.77 (0.66-0.88)	3.17E-07
rs11217036	118675772	C/T	0.17	0.21	I / I	0.79 (0.64-0.98)	3.53E-02	0.75 (0.67-0.85)	2.49E-06	0.66	0	0.76 (0.66-0.88)	3.25E-07
rs11217032	118669605	T/A	0.17	0.21	I / I	0.81 (0.66-1.00)	4.85E-02	0.75 (0.67-0.84)	1.88E-06	0.54	0	0.77 (0.66-0.89)	3.65E-07
rs11217044	118696022	T/C	0.17	0.21	I / I	0.78 (0.62-0.96)	2.24E-02	0.76 (0.68-0.86)	4.94E-06	0.88	0	0.77 (0.66-0.88)	3.69E-07
rs11217042	118682528	G/A	0.18	0.22	I / I	0.80 (0.65-0.99)	3.82E-02	0.76 (0.67-0.85)	2.78E-06	0.66	0	0.77 (0.67-0.89)	3.92E-07
rs56043232	118648373	C/T	0.17	0.21	I / I	0.80 (0.65-0.99)	4.19E-02	0.75 (0.67-0.85)	2.64E-06	0.60	0	0.77 (0.67-0.89)	4.21E-07
chr11:118632321:D	118632321	indel/A	0.18	0.22	I / I	0.82 (0.66-1.00)	5.45E-02	0.75 (0.67-0.85)	1.91E-06	0.51	0	0.77 (0.67-0.89)	4.28E-07
rs7117313	118744396	G/C	0.16	0.20	I / I	0.83 (0.67-1.04)	1.07E-01	0.74 (0.65-0.83)	7.32E-07	0.32	0	0.76 (0.66-0.89)	4.38E-07
rs11217066	118726753	T/G	0.16	0.20	I / I	0.81 (0.65-1.01)	6.18E-02	0.75 (0.66-0.84)	1.70E-06	0.52	0	0.76 (0.66-0.89)	4.45E-07
rs10892290	118653503	G/T	0.17	0.21	I / I	0.82 (0.67-1.01)	6.75E-02	0.75 (0.66-0.84)	1.56E-06	0.44	0	0.77 (0.67-0.89)	4.65E-07
rs10892291	118653517	C/T	0.17	0.21	I / I	0.82 (0.67-1.01)	6.75E-02	0.75 (0.66-0.84)	1.56E-06	0.44	0	0.77 (0.67-0.89)	4.65E-07
rs55894437	118607417	C/T	0.18	0.22	I / I	0.81 (0.66-1.00)	5.03E-02	0.76 (0.67-0.85)	2.46E-06	0.54	0	0.77 (0.67-0.89)	4.92E-07
rs3889239	118619960	C/T	0.17	0.21	I / I	0.82 (0.67-1.02)	6.95E-02	0.75 (0.67-0.84)	1.64E-06	0.44	0	0.77 (0.67-0.89)	5.05E-07
rs56758835	118615340	G/A	0.17	0.21	I / I	0.82 (0.67-1.01)	6.69E-02	0.75 (0.67-0.84)	1.74E-06	0.44	0	0.77 (0.67-0.89)	5.09E-07
rs11217009	118615785	C/T	0.17	0.21	I / I	0.82 (0.67-1.01)	6.69E-02	0.75 (0.67-0.84)	1.77E-06	0.45	0	0.77 (0.67-0.89)	5.14E-07
rs76409436	118607871	G/A	0.18	0.22	I / I	0.82 (0.66-1.00)	5.38E-02	0.75 (0.67-0.85)	2.38E-06	0.53	0	0.77 (0.67-0.89)	5.15E-07
rs56267528	118607311	C/A	0.18	0.22	I / I	0.81 (0.66-1.00)	5.22E-02	0.76 (0.67-0.85)	2.48E-06	0.53	0	0.77 (0.67-0.89)	5.18E-07
rs11217038	118677355	G/A	0.17	0.21	I / I	0.80 (0.65-0.99)	4.34E-02	0.76 (0.67-0.85)	3.29E-06	0.61	0	0.77 (0.67-0.89)	5.30E-07
rs11217002	118607150	C/T	0.18	0.22	I / I	0.81 (0.66-1.00)	5.03E-02	0.76 (0.67-0.85)	2.71E-06	0.55	0	0.77 (0.67-0.89)	5.37E-07
rs7123726	118694547	T/C	0.16	0.20	I / I	0.77 (0.62-0.97)	2.34E-02	0.76 (0.67-0.86)	7.22E-06	0.91	0	0.76 (0.66-0.89)	5.52E-07
rs10892292	118655340	G/C	0.17	0.21	I / I	0.82 (0.67-1.01)	6.75E-02	0.75 (0.67-0.84)	1.96E-06	0.46	0	0.77 (0.67-0.89)	5.69E-07
rs874621	118655645	G/A	0.17	0.21	I / I	0.82 (0.67-1.01)	6.78E-02	0.75 (0.67-0.84)	2.00E-06	0.46	0	0.77 (0.67-0.89)	5.82E-07
rs10892289	118646003	C/T	0.17	0.21	I / I	0.81 (0.66-1.00)	5.35E-02	0.75 (0.67-0.85)	2.80E-06	0.54	0	0.77 (0.67-0.89)	5.91E-07
chr11:118608387:D	118608387	CTTTG/C	0.18	0.22	I / I	0.82 (0.66-1.00)	5.57E-02	0.76 (0.67-0.85)	2.79E-06	0.52	0	0.77 (0.67-0.89)	6.23E-07
rs11217006	118609790	G/A	0.18	0.22	I / I	0.82 (0.66-1.00)	5.28E-02	0.76 (0.68-0.85)	3.08E-06	0.55	0	0.77 (0.67-0.89)	6.34E-07
rs11826521	118610549	G/T	0.17	0.21	I / I	0.82 (0.67-1.01)	6.42E-02	0.75 (0.67-0.85)	2.62E-06	0.49	0	0.77 (0.67-0.89)	6.93E-07
rs73003215	118649512	G/A	0.18	0.22	I / I	0.81 (0.65-0.99)	4.21E-02	0.76 (0.68-0.85)	4.55E-06	0.63	0	0.77 (0.67-0.89)	6.97E-07
rs7945144	118608716	A/G	0.18	0.22	I / I	0.81 (0.66-1.00)	5.10E-02	0.76 (0.68-0.85)	3.62E-06	0.57	0	0.77 (0.67-0.89)	7.06E-07
rs10892288	118644694	A/G	0.17	0.21	I / I	0.81 (0.66-1.00)	5.35E-02	0.76 (0.67-0.85)	3.63E-06	0.56	0	0.77 (0.67-0.89)	7.46E-07
rs10892280	118611817	C/T	0.17	0.21	O / O	0.82 (0.67-1.01)	6.68E-02	0.75 (0.67-0.85)	2.79E-06	0.48	0	0.77 (0.67-0.89)	7.70E-07
rs10892283	118636980	A/G	0.17	0.21	I / I	0.81 (0.66-1.00)	5.35E-02	0.76 (0.67-0.85)	3.79E-06	0.57	0	0.77 (0.67-0.89)	7.74E-07
rs11217019	118636343	C/A	0.17	0.21	I / I	0.81 (0.66-1.00)	5.35E-02	0.76 (0.67-0.85)	3.79E-06	0.57	0	0.77 (0.67-0.89)	7.74E-07
rs12364971	118607794	T/G	0.18	0.22	I / I	0.81 (0.66-1.00)	5.05E-02	0.76 (0.68-0.85)	4.05E-06	0.57	0	0.77 (0.67-0.89)	7.74E-07
rs10892286	118642085	A/C	0.17	0.21	I / I	0.82 (0.67-1.01)	6.37E-02	0.76 (0.67-0.85)	3.13E-06	0.50	0	0.77 (0.67-0.89)	8.07E-07
rs1048024	118618776	A/T	0.17	0.21	I / I	0.82 (0.67-1.01)	6.66E-02	0.76 (0.67-0.85)	3.15E-06	0.49	0	0.77 (0.67-0.89)	8.55E-07
rs80065107	118682767	T/C	0.18	0.22	I / I	0.81 (0.65-1.00)	4.72E-02	0.76 (0.68-0.86)	5.21E-06	0.65	0	0.78 (0.67-0.89)	8.85E-07
rs2004781	118619253	C/T	0.17	0.21	I / I	0.82 (0.67-1.01)	6.93E-02	0.76 (0.67-0.85)	3.14E-06	0.48	0	0.77 (0.67-0.89)	8.94E-07
rs2155433	118612921	G/A	0.18	0.22	I / I	0.82 (0.66-1.00)	5.28E-02	0.76 (0.68-0.86)	4.56E-06	0.59	0	0.78 (0.67-0.90)	9.01E-07

Supplementary Table 11. Association analysis in *CXCR5*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs11217037	118677086	G/A	0.18	0.21	I / I	0.80 (0.65-0.99)	4.34E-02	0.76 (0.68-0.86)	6.09E-06	0.66	0	0.77 (0.67-0.89)	9.28E-07
rs6589685	118612197	T/C	0.18	0.22	I / I	0.82 (0.67-1.01)	6.01E-02	0.76 (0.68-0.86)	4.31E-06	0.55	0	0.78 (0.68-0.90)	9.95E-07
rs74676029	118628373	C/T	0.16	0.20	I / I	0.81 (0.65-1.01)	5.80E-02	0.75 (0.66-0.85)	4.58E-06	0.53	0	0.77 (0.66-0.89)	1.02E-06
rs10892287	118642999	T/C	0.17	0.21	I / I	0.82 (0.66-1.01)	5.86E-02	0.76 (0.68-0.86)	4.69E-06	0.56	0	0.78 (0.67-0.90)	1.05E-06
rs6589681	118606521	C/T	0.18	0.22	I / I	0.82 (0.67-1.01)	6.04E-02	0.76 (0.68-0.86)	4.69E-06	0.53	0	0.78 (0.67-0.90)	1.10E-06
rs57494551	118661398	C/T	0.17	0.21	I / I	0.82 (0.67-1.01)	6.72E-02	0.76 (0.67-0.85)	4.37E-06	0.51	0	0.78 (0.67-0.90)	1.16E-06
rs77209083	118607569	A/G	0.18	0.21	I / I	0.82 (0.67-1.01)	6.31E-02	0.77 (0.68-0.86)	8.85E-06	0.57	0	0.78 (0.68-0.90)	2.03E-06
rs11217001	118607046	G/A	0.18	0.21	I / I	0.82 (0.67-1.01)	6.31E-02	0.77 (0.68-0.86)	9.52E-06	0.58	0	0.78 (0.68-0.90)	2.17E-06
rs6589686	118612565	G/A	0.16	0.20	I / I	0.80 (0.64-1.00)	4.51E-02	0.77 (0.68-0.86)	1.67E-05	0.72	0	0.78 (0.67-0.90)	2.42E-06
chr11:118660641:D	118660641	indel/A	0.17	0.21	I / I	0.82 (0.66-1.01)	6.26E-02	0.77 (0.68-0.86)	1.17E-05	0.61	0	0.78 (0.68-0.90)	2.56E-06
chr11:118662993:D	118662993	TTAC/T	0.17	0.20	I / I	0.83 (0.67-1.03)	9.84E-02	0.76 (0.67-0.86)	7.46E-06	0.46	0	0.78 (0.67-0.90)	2.94E-06
chr11:118739395:D	118739395	AAG/A	0.41	0.36	I / I	1.16 (0.98-1.38)	7.94E-02	1.21 (1.10-1.33)	6.23E-05	0.68	0	1.20 (1.07-1.35)	1.52E-05
rs12790489	118729583	T/C	0.41	0.36	I / I	1.14 (0.97-1.36)	1.19E-01	1.22 (1.10-1.34)	5.59E-05	0.54	0	1.19 (1.06-1.34)	2.23E-05
rs7127565	118734521	A/T	0.41	0.36	I / I	1.16 (0.98-1.37)	8.71E-02	1.21 (1.10-1.33)	1.07E-04	0.68	0	1.19 (1.06-1.34)	2.79E-05
rs7929520	118730141	A/G	0.42	0.37	I / I	1.13 (0.95-1.34)	1.58E-01	1.21 (1.10-1.33)	5.01E-05	0.46	0	1.19 (1.06-1.33)	2.82E-05
rs10892300	118729210	C/T	0.41	0.37	I / I	1.13 (0.95-1.34)	1.62E-01	1.21 (1.10-1.33)	5.02E-05	0.46	0	1.19 (1.06-1.33)	2.93E-05
rs11217070	118729860	T/G	0.41	0.37	I / I	1.14 (0.96-1.35)	1.38E-01	1.21 (1.10-1.33)	6.58E-05	0.53	0	1.19 (1.06-1.33)	3.04E-05
rs4938571	118731488	G/A	0.41	0.37	I / I	1.13 (0.96-1.34)	1.45E-01	1.21 (1.10-1.33)	6.49E-05	0.50	0	1.19 (1.06-1.33)	3.22E-05
rs4936442	118728320	C/T	0.41	0.37	I / I	1.14 (0.97-1.36)	1.19E-01	1.20 (1.10-1.32)	1.01E-04	0.60	0	1.19 (1.06-1.33)	3.72E-05
rs57719838	118724723	T/C	0.41	0.37	I / I	1.15 (0.97-1.36)	1.19E-01	1.20 (1.09-1.32)	1.29E-04	0.63	0	1.18 (1.06-1.33)	4.60E-05
rs10790267	118727169	C/T	0.41	0.37	I / I	1.15 (0.97-1.37)	9.85E-02	1.20 (1.09-1.31)	1.65E-04	0.71	0	1.18 (1.06-1.33)	4.65E-05
rs34561290	118731599	C/T	0.41	0.37	I / I	1.13 (0.95-1.34)	1.61E-01	1.20 (1.10-1.32)	1.02E-04	0.51	0	1.18 (1.05-1.32)	5.42E-05
rs11217063	118725942	G/C	0.41	0.37	I / I	1.14 (0.96-1.35)	1.24E-01	1.20 (1.09-1.31)	1.63E-04	0.63	0	1.18 (1.05-1.32)	5.96E-05
chr11:118729012:D	118729012	AG/A	0.41	0.37	I / I	1.14 (0.96-1.35)	1.30E-01	1.20 (1.09-1.31)	1.70E-04	0.62	0	1.18 (1.05-1.32)	6.53E-05
rs11217065	118726647	T/C	0.41	0.37	I / I	1.14 (0.96-1.35)	1.25E-01	1.20 (1.09-1.31)	1.90E-04	0.64	0	1.18 (1.05-1.32)	6.95E-05
rs7945578	118725005	T/G	0.41	0.37	I / I	1.14 (0.96-1.35)	1.27E-01	1.19 (1.08-1.31)	2.91E-04	0.68	0	1.18 (1.05-1.32)	1.04E-04
rs7483509	118740180	G/A	0.41	0.36	I / I	1.13 (0.96-1.34)	1.51E-01	1.19 (1.08-1.31)	2.86E-04	0.60	0	1.17 (1.05-1.32)	1.25E-04
chr11:118582915:I	118582915	A/AGC	0.19	0.22	I / I	0.88 (0.72-1.08)	2.38E-01	0.80 (0.71-0.90)	1.91E-04	0.41	0	0.82 (0.72-0.95)	1.51E-04
rs11216972	118585826	C/T	0.20	0.23	I / I	0.87 (0.71-1.06)	1.58E-01	0.82 (0.73-0.92)	6.18E-04	0.63	0	0.83 (0.72-0.96)	2.63E-04
rs11216994	118603520	C/T	0.19	0.22	I / I	0.86 (0.70-1.06)	1.68E-01	0.83 (0.74-0.93)	1.01E-03	0.72	0	0.84 (0.73-0.96)	4.30E-04
rs11216995	118603526	G/A	0.19	0.22	I / I	0.86 (0.70-1.06)	1.68E-01	0.83 (0.74-0.93)	1.01E-03	0.72	0	0.84 (0.73-0.96)	4.30E-04
chr11:118582913:I	118582913	A/ACAG	0.20	0.23	I / I	0.89 (0.73-1.09)	2.71E-01	0.82 (0.73-0.92)	7.10E-04	0.47	0	0.84 (0.73-0.97)	5.52E-04
rs112561833	118603736	A/C	0.19	0.22	I / I	0.87 (0.70-1.07)	1.79E-01	0.83 (0.74-0.93)	1.44E-03	0.74	0	0.84 (0.73-0.97)	6.32E-04
rs10892271	118598544	G/A	0.19	0.22	I / I	0.86 (0.70-1.07)	1.73E-01	0.83 (0.74-0.93)	1.54E-03	0.75	0	0.84 (0.73-0.97)	6.53E-04
rs11216997	118604638	C/T	0.19	0.22	I / I	0.87 (0.70-1.07)	1.78E-01	0.83 (0.74-0.93)	1.54E-03	0.75	0	0.84 (0.73-0.97)	6.71E-04
rs497916	118758089	C/T	0.26	0.29	O / O	0.76 (0.63-0.92)	5.13E-03	0.89 (0.80-0.98)	2.40E-02	0.17	48	0.85 (0.75-0.97)	6.74E-04
chr11:118736237:I	118736237	CG/C	0.41	0.45	I / I	0.89 (0.75-1.05)	1.76E-01	0.86 (0.78-0.95)	1.85E-03	0.73	0	0.87 (0.78-0.98)	7.89E-04
rs12421790	118588952	C/T	0.18	0.21	I / I	0.86 (0.70-1.06)	1.66E-01	0.83 (0.74-0.94)	2.17E-03	0.79	0	0.84 (0.73-0.97)	8.53E-04
rs10892273	118602809	G/A	0.20	0.22	I / I	0.86 (0.70-1.06)	1.71E-01	0.84 (0.75-0.94)	2.12E-03	0.80	0	0.84 (0.73-0.97)	8.61E-04
rs11216985	118591776	C/T	0.19	0.21	I / I	0.87 (0.70-1.07)	1.87E-01	0.83 (0.74-0.93)	1.95E-03	0.74	0	0.84 (0.73-0.97)	8.78E-04
rs10892262	118587097	G/C	0.19	0.22	I / I	0.85 (0.69-1.05)	1.30E-01	0.84 (0.75-0.94)	3.00E-03	0.92	0	0.84 (0.73-0.97)	8.98E-04
rs10892260	118583525	A/C	0.21	0.24	I / I	0.86 (0.70-1.04)	1.28E-01	0.85 (0.76-0.95)	3.36E-03	0.91	0	0.85 (0.74-0.97)	9.91E-04
rs11216981	118590805	C/G	0.19	0.21	I / I	0.84 (0.68-1.05)	1.23E-01	0.84 (0.75-0.95)	3.59E-03	0.97	0	0.84 (0.73-0.97)	1.01E-03
rs10892258	118579865	G/A	0.21	0.24	I / I	0.87 (0.72-1.06)	1.63E-01	0.84 (0.75-0.94)	2.72E-03	0.79	0	0.85 (0.74-0.97)	1.03E-03
rs75582746	118588102	T/G	0.19	0.21	I / I	0.85 (0.69-1.05)	1.40E-01	0.84 (0.75-0.94)	3.41E-03	0.92	0	0.84 (0.73-0.97)	1.09E-03
rs10892263	118587319	T/C	0.19	0.21	I / I	0.86 (0.69-1.06)	1.54E-01	0.84 (0.75-0.94)	3.28E-03	0.87	0	0.84 (0.73-0.97)	1.16E-03
chr11:118602732:D	118602732	TG/T	0.20	0.22	I / I	0.86 (0.70-1.06)	1.70E-01	0.84 (0.75-0.94)	3.19E-03	0.84	0	0.85 (0.74-0.98)	1.24E-03
rs10892272	118602707	C/G	0.20	0.22	I / I	0.87 (0.70-1.07)	1.83E-01	0.84 (0.75-0.94)	3.14E-03	0.82	0	0.85 (0.74-0.98)	1.32E-03
rs11216956	118575326	G/A	0.21	0.24	I / I	0.88 (0.72-1.07)	1.90E-01	0.84 (0.76-0.94)	3.08E-03	0.74	0	0.85 (0.75-0.98)	1.36E-03
chr11:118577557:D	118577557	AT/A	0.21	0.24	I / I	0.87 (0.72-1.06)	1.65E-01	0.85 (0.76-0.95)	3.91E-03	0.83	0	0.86 (0.75-0.98)	1.46E-03
rs11216969	118584340	T/C	0.21	0.24	I / I	0.87 (0.71-1.05)	1.51E-01	0.85 (0.76-0.95)	4.32E-03	0.87	0	0.85 (0.75-0.98)	1.47E-03
rs10892257	118579327	G/A	0.21	0.24	I / I	0.87 (0.72-1.06)	1.71E-01	0.85 (0.76-0.95)	3.94E-03	0.82	0	0.86 (0.75-0.98)	1.52E-03
rs10892264	118590714	G/A	0.19	0.21	I / I	0.85 (0.68-1.05)	1.24E-01	0.85 (0.76-0.95)	5.49E-03	0.98	0	0.85 (0.73-0.98)	1.53E-03
rs10892256	118578705	G/A	0.21	0.24	I / I	0.87 (0.71-1.06)	1.58E-01	0.85 (0.76-0.95)	4.41E-03	0.86	0	0.86 (0.75-0.98)	1.57E-03
chr11:118580965:I	118580965	C/CTTTA	0.21	0.24	I / I	0.87 (0.72-1.06)	1.63E-01	0.85 (0.76-0.95)	4.29E-03	0.84	0	0.86 (0.75-0.98)	1.57E-03
rs11216961	118580338	C/G	0.21	0.24	I / I	0.87 (0.72-1.06)	1.63E-01	0.85 (0.76-0.95)	4.29E-03	0.84	0	0.86 (0.75-0.98)	1.57E-03
chr11:118581769:D	118581769	TTTTG/T	0.21	0.24	I / I	0.86 (0.71-1.05)	1.47E-01	0.85 (0.76-0.95)	4.81E-03	0.90	0	0.86 (0.75-0.98)	1.58E-03
rs11216964	118581895	G/A	0.21	0.24	I / I	0.87 (0.72-1.06)	1.63E-01	0.85 (0.76-0.95)	4.32E-03	0.85	0	0.86 (0.75-0.98)	1.58E-03
rs11216965	118582613	C/A	0.21	0.24	I / I	0.87 (0.72-1.06)	1.63E-01	0.85 (0.76-0.95)	4.32E-03	0.85	0	0.86 (0.75-0.98)	1.58E-03
rs10892259	118583002	G/A	0.21	0.24	I / I	0.87 (0.72-1.06)	1.63E-01	0.85 (0.76-0.95)	4.32E-03	0.84	0	0.86 (0.75-0.98)	1.58E-03
rs11216962	118580813	T/C	0.21	0.24	I / I	0.87 (0.71-1.05)	1.51E-01	0.85 (0.76-0.95)	5.24E-03	0.90	0	0.86 (0.75-0.98)	1.76E-03
rs11216963	118580814	G/A	0.21	0.24	I / I	0.87 (0.71-1.05)	1.51E-01	0.85 (0.76-0.95)	5.24E-03	0.90	0	0.86 (0.75-0.98)	1.76E-03
rs61901411	118665324	C/T	0.13	0.12	I / I	1.13 (0.88-1.45)	3.45E-01	1.24 (1.08-1.43)	2.35E-03	0.51	0	1.21 (1.02-1.43)	2.07E-03
rs3176912	118757788	G/A	0.03	0.02	I / I	1.17 (0.66-2.09)	5.89E-01	1.61 (1.21-2.13)	1.00E-03	0.34	0	1.47 (1.02-2.12)	2.09E-03
rs11216960	118577873	G/A	0.21	0.24	I / I	0.87 (0.71-1.06)	1.58E-01	0.86 (0.77-0.96)	6.77E-03	0.91	0	0.86 (0.75-0.99)	2.34E-03
rs613791	118764051	C/T	0.25	0.28	O / O	0.82 (0.68-0.99)	4.18E-02	0.89 (0.80-0.98)	2.22E-02	0.51	0	0.87 (0.76-0.99)	2.53E-03
rs598373	118664377	C/T	0.30	0.34	I / I	0.90 (0.76-1.07)	2.21E-01	0.87 (0.79-0.96)	5.28E-03	0.74	0	0.88 (0.78-0.99)	2.58E-03
rs581062	118624767	G/A	0.31	0.34	I / I	0.89 (0.75-1.05)	1.77E-01	0.88 (0.79-0.97)	7.62E-03	0.89	0	0.88 (0.78-0.99)	2.90E-03
rs2508916	118654651	C/G	0.31	0.34	I / I	0.89 (0.75-1.06)	2.05E-01	0.87 (0.79-0.96)	6.99E-03	0.82	0	0.88 (0.78-0.99)	3.10E-03
rs472641	118617544	A/G	0.31	0.34	O / O	0.89 (0.75-1.06)	1.80E-01	0.88 (0.79-0.97)	8.34E-03	0.89	0	0.88 (0.78-0.99)	3.21E-03

Supplementary Table 11. Association analysis in *CXCR5*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
chr11:118620859:D	118620859	AAAAT/A	0.45	0.42	I / I	1.08 (0.92-1.28)	3.35E-01	1.15 (1.04-1.26)	4.13E-03	0.57	0	1.13 (1.01-1.26)	3.27E-03
rs524590	118640063	A/T	0.31	0.34	I / I	0.89 (0.75-1.05)	1.69E-01	0.88 (0.80-0.97)	9.23E-03	0.93	0	0.88 (0.78-0.99)	3.32E-03
rs4938544	118665009	G/A	0.13	0.12	I / I	1.09 (0.85-1.40)	5.00E-01	1.24 (1.08-1.42)	2.65E-03	0.38	0	1.19 (1.01-1.42)	3.68E-03
rs540180	118653629	G/T	0.31	0.34	I / I	0.90 (0.76-1.07)	2.30E-01	0.88 (0.79-0.97)	7.52E-03	0.79	0	0.88 (0.78-0.99)	3.70E-03
rs487728	118621495	C/G	0.31	0.34	I / I	0.89 (0.75-1.06)	1.88E-01	0.88 (0.80-0.97)	9.60E-03	0.90	0	0.88 (0.78-0.99)	3.81E-03
chr11:118679465:D	118679465	C/CAACT	0.31	0.34	I / I	0.88 (0.74-1.05)	1.60E-01	0.88 (0.80-0.97)	1.14E-02	0.98	0	0.88 (0.78-0.99)	3.84E-03
rs516719	118679445	T/C	0.31	0.34	I / I	0.88 (0.74-1.05)	1.58E-01	0.88 (0.80-0.97)	1.17E-02	0.99	0	0.88 (0.78-0.99)	3.91E-03
rs1790189	118652326	T/G	0.31	0.34	I / I	0.89 (0.75-1.06)	2.03E-01	0.88 (0.80-0.97)	9.26E-03	0.86	0	0.88 (0.78-0.99)	3.96E-03
chr11:118642729:D	118642729	GT/G	0.44	0.41	I / I	1.07 (0.91-1.26)	4.02E-01	1.14 (1.04-1.25)	4.15E-03	0.50	0	1.12 (1.00-1.26)	4.05E-03
rs11217078	118750321	T/C	0.31	0.34	O / O	0.98 (0.83-1.17)	8.40E-01	0.85 (0.77-0.94)	1.09E-03	0.15	53	0.89 (0.79-1.00)	4.06E-03
rs473298	118679387	A/G	0.31	0.34	I / I	0.89 (0.74-1.05)	1.70E-01	0.88 (0.80-0.97)	1.21E-02	0.97	0	0.88 (0.78-0.99)	4.30E-03
rs477014	118678986	T/C	0.31	0.34	I / I	0.89 (0.74-1.05)	1.70E-01	0.88 (0.80-0.97)	1.26E-02	0.98	0	0.88 (0.78-1.00)	4.48E-03
rs582200	118668908	A/G	0.13	0.12	I / I	1.10 (0.86-1.41)	4.46E-01	1.22 (1.07-1.40)	4.14E-03	0.46	0	1.19 (1.00-1.41)	4.58E-03
chr11:118653803:D	118653803	A/AAAGT	0.31	0.34	I / I	0.89 (0.75-1.06)	2.05E-01	0.88 (0.80-0.97)	1.13E-02	0.88	0	0.88 (0.79-1.00)	4.82E-03
rs488219	118620697	T/C	0.45	0.41	O / O	1.07 (0.91-1.25)	4.42E-01	1.14 (1.04-1.25)	4.61E-03	0.47	0	1.12 (1.00-1.25)	5.01E-03
rs61901410	118661197	C/G	0.13	0.12	I / I	1.10 (0.86-1.40)	4.69E-01	1.22 (1.06-1.40)	4.41E-03	0.45	0	1.19 (1.00-1.40)	5.14E-03
chr11:118642006:D	118642006	TC/T	0.44	0.41	I / I	1.08 (0.91-1.27)	3.82E-01	1.14 (1.04-1.25)	6.00E-03	0.56	0	1.12 (1.00-1.25)	5.25E-03
rs591756	118678881	C/T	0.31	0.34	I / I	0.89 (0.74-1.05)	1.70E-01	0.89 (0.80-0.98)	1.49E-02	1.00	0	0.89 (0.79-1.00)	5.25E-03
rs2508570	118678609	G/A	0.31	0.34	I / I	0.89 (0.74-1.05)	1.70E-01	0.89 (0.80-0.98)	1.61E-02	0.99	0	0.89 (0.79-1.00)	5.63E-03
rs546393	118624250	T/C	0.45	0.41	I / I	1.07 (0.91-1.26)	3.89E-01	1.14 (1.04-1.25)	6.53E-03	0.56	0	1.12 (1.00-1.25)	5.75E-03
rs500254	118678780	A/G	0.13	0.12	I / I	1.10 (0.86-1.41)	4.39E-01	1.22 (1.06-1.40)	5.60E-03	0.50	0	1.18 (1.00-1.40)	5.79E-03
rs566733	118608625	C/G	0.45	0.41	I / I	1.07 (0.91-1.26)	4.04E-01	1.14 (1.04-1.25)	6.30E-03	0.54	0	1.12 (1.00-1.25)	5.85E-03
rs5006102	118662340	T/A	0.13	0.12	I / I	1.11 (0.87-1.42)	4.15E-01	1.21 (1.06-1.40)	6.19E-03	0.53	0	1.18 (1.00-1.40)	5.92E-03
rs4508234	118662203	C/G	0.13	0.12	I / I	1.11 (0.87-1.42)	4.17E-01	1.21 (1.05-1.39)	6.49E-03	0.53	0	1.18 (1.00-1.40)	6.19E-03
rs632124	118613235	T/A	0.45	0.41	I / I	1.07 (0.91-1.26)	4.14E-01	1.14 (1.03-1.24)	6.94E-03	0.54	0	1.12 (1.00-1.25)	6.51E-03
rs555639	118629031	G/A	0.45	0.41	I / I	1.07 (0.91-1.26)	4.02E-01	1.13 (1.03-1.24)	7.39E-03	0.55	0	1.12 (1.00-1.25)	6.64E-03
rs7933859	118662045	C/T	0.13	0.12	I / I	1.11 (0.87-1.42)	4.17E-01	1.21 (1.05-1.39)	7.06E-03	0.54	0	1.18 (1.00-1.40)	6.65E-03
rs543824	118762218	A/G	0.23	0.25	I / I	0.82 (0.67-0.99)	4.19E-02	0.90 (0.81-1.00)	5.44E-02	0.39	0	0.87 (0.77-1.00)	6.70E-03
rs675003	118677083	C/T	0.13	0.12	I / I	1.11 (0.86-1.42)	4.18E-01	1.21 (1.05-1.39)	7.44E-03	0.55	0	1.18 (1.00-1.40)	6.96E-03
rs567680	118608532	C/G	0.44	0.41	I / I	1.07 (0.91-1.25)	4.40E-01	1.14 (1.03-1.24)	7.16E-03	0.51	0	1.11 (1.00-1.25)	7.23E-03
rs11217004	118607622	G/A	0.44	0.41	I / I	1.07 (0.91-1.25)	4.39E-01	1.13 (1.03-1.24)	7.49E-03	0.52	0	1.11 (1.00-1.25)	7.48E-03
rs614554	118635151	T/C	0.44	0.41	I / I	1.07 (0.91-1.26)	4.12E-01	1.13 (1.03-1.24)	8.27E-03	0.55	0	1.11 (1.00-1.25)	7.53E-03
rs598207	118765267	G/C	0.26	0.28	I / I	0.83 (0.69-1.00)	5.11E-02	0.90 (0.81-1.00)	5.49E-02	0.44	0	0.88 (0.78-1.00)	7.74E-03
rs566416	118759610	T/G	0.23	0.25	O / O	0.82 (0.67-0.99)	4.11E-02	0.91 (0.81-1.01)	6.82E-02	0.36	0	0.88 (0.77-1.00)	8.52E-03
rs73005500	118697375	T/C	0.17	0.16	I / I	1.04 (0.83-1.30)	7.13E-01	1.20 (1.06-1.35)	4.05E-03	0.29	11	1.15 (0.99-1.34)	8.53E-03
rs607472	118680072	C/G	0.44	0.41	I / I	1.05 (0.89-1.24)	5.76E-01	1.14 (1.04-1.25)	6.73E-03	0.40	0	1.11 (0.99-1.24)	9.44E-03
rs1784543	118631653	A/T	0.44	0.41	I / I	1.07 (0.91-1.25)	4.40E-01	1.13 (1.03-1.24)	9.91E-03	0.55	0	1.11 (0.99-1.24)	9.47E-03
chr11:118690737:D	118690737	G/GTA	0.18	0.16	I / I	1.02 (0.82-1.28)	8.48E-01	1.20 (1.06-1.35)	3.32E-03	0.22	35	1.15 (0.99-1.33)	9.55E-03
rs555649	118651809	T/C	0.44	0.41	O / O	1.06 (0.90-1.25)	4.78E-01	1.13 (1.03-1.24)	8.93E-03	0.50	0	1.11 (0.99-1.24)	9.60E-03
rs607125	118617299	T/C	0.44	0.41	I / I	1.06 (0.90-1.25)	4.52E-01	1.13 (1.03-1.24)	1.02E-02	0.54	0	1.11 (0.99-1.24)	9.98E-03
rs6589690	118632893	G/A	0.13	0.12	I / I	1.10 (0.86-1.40)	4.64E-01	1.20 (1.04-1.38)	1.03E-02	0.53	0	1.17 (0.99-1.39)	1.05E-02
chr11:118667386:D	118667386	GTGAT/G	0.44	0.41	I / I	1.05 (0.89-1.24)	5.42E-01	1.13 (1.03-1.24)	8.45E-03	0.45	0	1.11 (0.99-1.24)	1.06E-02
rs12796102	118662028	C/T	0.44	0.41	I / I	1.05 (0.89-1.24)	5.32E-01	1.13 (1.03-1.24)	8.94E-03	0.45	0	1.11 (0.99-1.24)	1.09E-02
rs515707	118685481	C/T	0.18	0.16	I / I	1.02 (0.82-1.27)	8.56E-01	1.19 (1.06-1.35)	4.07E-03	0.23	32	1.14 (0.98-1.33)	1.13E-02
chr11:118647949:D	118647949	CAT/C	0.45	0.42	I / I	1.06 (0.90-1.25)	4.97E-01	1.13 (1.03-1.24)	1.04E-02	0.50	0	1.11 (0.99-1.24)	1.14E-02
rs113641235	118700264	C/T	0.17	0.16	I / I	1.03 (0.83-1.29)	7.61E-01	1.19 (1.05-1.34)	5.19E-03	0.28	14	1.14 (0.98-1.33)	1.14E-02
chr11:118647944:D	118647944	CCA/C	0.45	0.42	I / I	1.05 (0.89-1.24)	5.32E-01	1.13 (1.03-1.24)	9.89E-03	0.47	0	1.11 (0.99-1.24)	1.18E-02
rs10736495	118607090	G/C	0.13	0.12	I / I	1.11 (0.87-1.41)	4.22E-01	1.19 (1.04-1.37)	1.40E-02	0.60	0	1.17 (0.98-1.39)	1.21E-02
rs515523	118658075	A/G	0.44	0.41	I / I	1.05 (0.89-1.24)	5.62E-01	1.13 (1.03-1.24)	9.52E-03	0.44	0	1.11 (0.99-1.24)	1.23E-02
chr11:118661509:I	118661509	C/CG	0.44	0.41	I / I	1.04 (0.89-1.23)	5.98E-01	1.13 (1.03-1.24)	9.05E-03	0.41	0	1.11 (0.99-1.24)	1.28E-02
rs676925	118765688	C/G	0.24	0.26	I / I	0.87 (0.72-1.05)	1.34E-01	0.90 (0.81-1.00)	4.58E-02	0.75	0	0.89 (0.78-1.01)	1.28E-02
rs580079	118625609	T/C	0.14	0.13	I / I	1.06 (0.83-1.36)	6.30E-01	1.19 (1.05-1.36)	8.57E-03	0.41	0	1.15 (0.98-1.36)	1.31E-02
rs1784300	118679629	A/T	0.44	0.41	I / I	1.04 (0.88-1.23)	6.32E-01	1.13 (1.03-1.24)	8.83E-03	0.39	0	1.11 (0.99-1.24)	1.33E-02
chr11:118688574:D	118688574	CTTG/C	0.44	0.41	I / I	1.04 (0.88-1.23)	6.35E-01	1.13 (1.03-1.24)	9.51E-03	0.40	0	1.10 (0.99-1.24)	1.41E-02
chr11:118766356:I	118766356	C/CA	0.23	0.25	I / I	0.88 (0.73-1.07)	1.97E-01	0.89 (0.80-0.99)	3.90E-02	0.92	0	0.89 (0.78-1.01)	1.49E-02
rs2105782	118659896	T/C	0.44	0.41	I / I	1.06 (0.90-1.25)	5.00E-01	1.12 (1.02-1.23)	1.57E-02	0.54	0	1.10 (0.98-1.23)	1.63E-02
rs638514	118575693	T/C	0.43	0.40	I / I	1.06 (0.90-1.25)	4.89E-01	1.12 (1.02-1.23)	1.83E-02	0.59	0	1.10 (0.98-1.24)	1.79E-02
rs1790188	118661055	C/T	0.13	0.12	I / I	1.05 (0.82-1.34)	7.05E-01	1.19 (1.04-1.36)	1.24E-02	0.38	0	1.15 (0.97-1.36)	2.05E-02
rs1784295	118660932	G/A	0.13	0.12	I / I	1.04 (0.82-1.34)	7.32E-01	1.19 (1.04-1.37)	1.20E-02	0.36	0	1.15 (0.97-1.36)	2.09E-02
rs7104819	118769442	A/G	0.40	0.42	I / I	0.85 (0.72-1.01)	6.49E-02	0.93 (0.85-1.02)	1.25E-01	0.38	0	0.91 (0.81-1.02)	2.26E-02
rs6421569	118655775	C/A	0.13	0.12	I / I	1.06 (0.83-1.35)	6.45E-01	1.18 (1.03-1.36)	1.75E-02	0.44	0	1.15 (0.97-1.36)	2.40E-02
rs2508564	118699744	T/C	0.18	0.16	I / I	1.02 (0.82-1.27)	8.51E-01	1.17 (1.04-1.32)	1.15E-02	0.29	10	1.13 (0.97-1.31)	2.49E-02
rs485901	118622245	A/G	0.13	0.12	I / I	1.05 (0.83-1.35)	6.68E-01	1.18 (1.03-1.35)	1.74E-02	0.43	0	1.14 (0.97-1.35)	2.49E-02
rs73001406	118560857	G/A	0.21	0.23	I / I	0.96 (0.79-1.17)	6.86E-01	0.87 (0.78-0.98)	1.89E-02	0.40	0	0.90 (0.78-1.03)	2.76E-02
rs77731159	118691975	T/A	0.04	0.04	I / I	1.16 (0.76-1.77)	4.90E-01	1.29 (1.02-1.62)	3.37E-02	0.67	0	1.25 (0.94-1.66)	3.03E-02
rs494459	118574675	C/T	0.43	0.40	O / O	1.05 (0.89-1.23)	5.83E-01	1.11 (1.01-1.22)	2.81E-02	0.55	0	1.09 (0.98-1.22)	3.14E-02
rs496058	118580906	A/G	0.43	0.40	I / I	1.05 (0.89-1.23)	5.88E-01	1.11 (1.01-1.22)	2.89E-02	0.55	0	1.09 (0.97-1.22)	3.25E-02
rs640373	118698160	A/G	0.18	0.16	I / I	1.02 (0.82-1.27)	8.48E-01	1.16 (1.03-1.31)	1.65E-02	0.32	0	1.12 (0.96-1.30)	3.27E-02
rs576283	118573894	A/G	0.43	0.40	I / I	1.04 (0.88-1.22)	6.62E-01	1.11 (1.01-1.22)	2.54E-02	0.47	0	1.09 (0.97-1.22)	3.35E-02
rs548167	118648396	G/A	0.13	0.13	I / I	1.05 (0.82-1.34)	7.13E-01	1.17 (1.02-1.34)	2.28E-02	0.43	0	1.14 (0.96-1.34)	3.37E-02

Supplementary Table 11. Association analysis in *CXCR5*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
chr11:118553112:D	118553112	TAG/T	0.21	0.23	I / I	0.98 (0.80-1.19)	8.22E-01	0.87 (0.78-0.98)	1.80E-02	0.32	0	0.90 (0.79-1.03)	3.38E-02
rs75488969	118712509	C/T	0.09	0.09	I / I	1.08 (0.82-1.44)	5.74E-01	1.19 (1.02-1.40)	3.14E-02	0.57	0	1.16 (0.96-1.41)	3.39E-02
rs637563	118575479	A/G	0.43	0.40	I / I	1.04 (0.88-1.22)	6.52E-01	1.11 (1.01-1.22)	2.66E-02	0.48	0	1.09 (0.97-1.22)	3.42E-02
rs521910	118610629	G/A	0.13	0.12	O / O	1.05 (0.83-1.34)	6.73E-01	1.17 (1.02-1.34)	2.55E-02	0.47	0	1.13 (0.96-1.34)	3.44E-02
rs10892281	118614397	C/T	0.13	0.13	I / I	1.09 (0.86-1.40)	4.64E-01	1.15 (1.00-1.32)	4.24E-02	0.72	0	1.14 (0.96-1.34)	3.50E-02
rs530901	118575011	T/C	0.43	0.40	I / I	1.04 (0.88-1.22)	6.51E-01	1.11 (1.01-1.22)	2.79E-02	0.49	0	1.09 (0.97-1.22)	3.54E-02
rs526850	118605127	T/G	0.13	0.12	I / I	1.07 (0.84-1.37)	5.79E-01	1.16 (1.01-1.33)	3.30E-02	0.57	0	1.14 (0.96-1.34)	3.56E-02
rs1783937	118609736	G/A	0.13	0.12	I / I	1.06 (0.83-1.35)	6.36E-01	1.16 (1.01-1.34)	2.96E-02	0.52	0	1.13 (0.96-1.34)	3.63E-02
rs2186781	118605447	C/T	0.13	0.12	I / I	1.07 (0.84-1.37)	5.92E-01	1.16 (1.01-1.33)	3.40E-02	0.56	0	1.13 (0.96-1.34)	3.74E-02
rs475946	118629143	C/T	0.13	0.12	I / I	1.05 (0.82-1.34)	6.94E-01	1.17 (1.02-1.34)	2.74E-02	0.46	0	1.13 (0.96-1.34)	3.77E-02
rs2508929	118641451	T/G	0.13	0.12	I / I	1.06 (0.83-1.35)	6.59E-01	1.16 (1.01-1.34)	3.04E-02	0.50	0	1.13 (0.96-1.34)	3.86E-02
rs4938549	118701597	C/T	0.17	0.16	I / I	1.01 (0.81-1.27)	8.97E-01	1.16 (1.02-1.31)	1.84E-02	0.31	5	1.12 (0.96-1.30)	3.87E-02
rs4938550	118707171	A/G	0.17	0.16	I / I	1.01 (0.81-1.26)	9.43E-01	1.17 (1.03-1.32)	1.70E-02	0.27	18	1.12 (0.96-1.30)	3.98E-02
rs1961138	118619423	T/C	0.13	0.12	I / I	1.06 (0.83-1.35)	6.55E-01	1.16 (1.01-1.34)	3.18E-02	0.50	0	1.13 (0.96-1.34)	3.99E-02
rs493720	118604678	C/T	0.13	0.12	I / I	1.10 (0.86-1.40)	4.62E-01	1.15 (1.00-1.32)	5.00E-02	0.74	0	1.13 (0.96-1.34)	4.03E-02
rs10892252	118555692	A/G	0.21	0.23	I / I	0.97 (0.80-1.17)	7.21E-01	0.88 (0.79-0.99)	2.81E-02	0.43	0	0.91 (0.79-1.04)	4.04E-02
rs2510901	118699863	G/A	0.18	0.17	I / I	1.01 (0.81-1.27)	8.99E-01	1.15 (1.02-1.30)	1.95E-02	0.32	1	1.11 (0.96-1.29)	4.05E-02
rs6589687	118615660	A/T	0.13	0.12	I / I	1.07 (0.84-1.36)	5.94E-01	1.16 (1.01-1.33)	3.72E-02	0.58	0	1.13 (0.96-1.34)	4.05E-02
rs529717	118640081	G/A	0.13	0.12	I / I	1.05 (0.82-1.34)	6.91E-01	1.16 (1.01-1.34)	3.01E-02	0.48	0	1.13 (0.96-1.34)	4.06E-02
rs6421568	118655704	G/C	0.13	0.12	I / I	1.06 (0.83-1.35)	6.61E-01	1.16 (1.01-1.33)	3.27E-02	0.51	0	1.13 (0.96-1.34)	4.12E-02
rs2508915	118652781	G/C	0.14	0.13	I / I	1.03 (0.80-1.31)	8.36E-01	1.17 (1.02-1.34)	2.29E-02	0.35	0	1.13 (0.95-1.34)	4.16E-02
rs638893	118698537	A/G	0.17	0.16	I / I	1.02 (0.82-1.27)	8.48E-01	1.15 (1.02-1.30)	2.31E-02	0.35	0	1.11 (0.96-1.29)	4.26E-02
rs77841686	118762073	G/A	0.02	0.02	I / I	0.88 (0.51-1.51)	6.36E-01	0.69 (0.48-0.98)	3.73E-02	0.46	0	0.74 (0.49-1.11)	4.39E-02
rs640120	118618837	C/A	0.13	0.12	I / I	1.06 (0.83-1.36)	6.30E-01	1.16 (1.01-1.33)	3.78E-02	0.55	0	1.13 (0.95-1.33)	4.39E-02
rs534114	118702002	G/A	0.17	0.16	I / I	1.01 (0.81-1.26)	9.06E-01	1.16 (1.02-1.31)	2.15E-02	0.31	1	1.11 (0.96-1.29)	4.45E-02
rs1790187	118644213	G/A	0.13	0.12	I / I	1.05 (0.83-1.35)	6.73E-01	1.16 (1.01-1.33)	3.67E-02	0.51	0	1.13 (0.95-1.33)	4.64E-02
rs78041268	118763313	G/A	0.02	0.02	I / I	0.88 (0.51-1.51)	6.34E-01	0.69 (0.49-0.99)	4.24E-02	0.47	0	0.74 (0.49-1.11)	4.87E-02
rs530646	118701668	G/A	0.17	0.16	I / I	1.01 (0.81-1.27)	8.97E-01	1.15 (1.02-1.30)	2.57E-02	0.33	0	1.11 (0.95-1.29)	4.99E-02
chr11:118560953:I	118560953	G/GC	0.21	0.23	I / I	0.96 (0.79-1.17)	7.03E-01	0.89 (0.80-0.99)	4.02E-02	0.49	0	0.91 (0.80-1.04)	5.24E-02
rs480791	118704255	A/G	0.17	0.16	I / I	1.02 (0.82-1.27)	8.75E-01	1.15 (1.01-1.30)	2.91E-02	0.36	0	1.11 (0.95-1.29)	5.31E-02
rs2508571	118603983	C/T	0.43	0.40	I / I	1.04 (0.89-1.23)	6.00E-01	1.10 (1.00-1.20)	5.12E-02	0.62	0	1.08 (0.97-1.21)	5.34E-02
rs12808822	118702269	T/C	0.17	0.16	I / I	1.01 (0.81-1.27)	8.97E-01	1.15 (1.01-1.30)	2.81E-02	0.34	0	1.11 (0.95-1.29)	5.35E-02
rs496547	118576463	T/A	0.33	0.36	I / I	0.93 (0.78-1.10)	3.96E-01	0.92 (0.83-1.01)	8.60E-02	0.92	0	0.92 (0.82-1.04)	5.66E-02
chr11:118604704:I	118604704	GAAAC/G	0.13	0.12	I / I	1.09 (0.86-1.40)	4.68E-01	1.14 (0.99-1.31)	7.40E-02	0.80	0	1.12 (0.95-1.33)	5.76E-02
rs1170396	118703817	A/T	0.17	0.16	I / I	1.01 (0.81-1.27)	8.97E-01	1.14 (1.01-1.29)	3.16E-02	0.36	0	1.11 (0.95-1.29)	5.86E-02
rs2508921	118703484	C/T	0.17	0.16	I / I	1.01 (0.81-1.27)	8.97E-01	1.14 (1.01-1.29)	3.16E-02	0.36	0	1.11 (0.95-1.29)	5.86E-02
rs2277297	118550524	C/T	0.21	0.23	I / I	0.97 (0.80-1.18)	7.63E-01	0.89 (0.80-1.00)	4.16E-02	0.45	0	0.91 (0.80-1.04)	5.92E-02
rs76478216	118605352	T/C	0.02	0.03	I / I	0.63 (0.36-1.10)	1.07E-01	0.83 (0.62-1.12)	2.26E-01	0.40	0	0.77 (0.53-1.12)	6.01E-02
chr11:118550524:I	118550524	C/CT	0.21	0.23	I / I	0.97 (0.80-1.18)	7.97E-01	0.89 (0.79-1.00)	4.18E-02	0.42	0	0.91 (0.80-1.05)	6.28E-02
rs535996	118637666	C/T	0.13	0.13	I / I	1.02 (0.80-1.31)	8.69E-01	1.16 (1.01-1.33)	3.93E-02	0.39	0	1.12 (0.94-1.32)	6.67E-02
rs75438046	118767564	G/A	0.02	0.02	I / I	0.88 (0.51-1.51)	6.38E-01	0.71 (0.50-1.02)	6.21E-02	0.53	0	0.76 (0.50-1.14)	6.74E-02
rs529848	118591292	A/G	0.13	0.12	I / I	1.03 (0.81-1.33)	7.92E-01	1.15 (1.00-1.33)	4.67E-02	0.45	0	1.12 (0.94-1.33)	6.81E-02
rs113786535	118726340	C/T	0.17	0.16	I / I	1.00 (0.80-1.25)	9.72E-01	1.15 (1.01-1.30)	2.96E-02	0.28	14	1.10 (0.95-1.28)	6.82E-02
rs5023233	118568795	A/G	0.32	0.30	I / I	1.06 (0.89-1.27)	5.13E-01	1.09 (0.99-1.21)	8.66E-02	0.79	0	1.08 (0.96-1.22)	7.18E-02
rs7479114	118568813	C/T	0.32	0.30	I / I	1.05 (0.88-1.26)	5.62E-01	1.09 (0.99-1.21)	8.20E-02	0.73	0	1.08 (0.96-1.22)	7.47E-02
rs636736	118705145	A/G	0.17	0.17	O / O	1.00 (0.81-1.25)	9.85E-01	1.14 (1.01-1.28)	3.97E-02	0.33	0	1.10 (0.94-1.27)	7.96E-02
rs511451	118568639	C/T	0.32	0.30	I / I	1.06 (0.89-1.26)	4.95E-01	1.09 (0.98-1.20)	1.02E-01	0.82	0	1.08 (0.96-1.22)	8.02E-02
rs2277296	118550522	T/C	0.21	0.23	I / I	0.97 (0.80-1.18)	7.63E-01	0.90 (0.81-1.01)	6.32E-02	0.51	0	0.92 (0.80-1.05)	8.27E-02
rs649338	118705654	G/A	0.17	0.16	I / I	1.01 (0.81-1.26)	9.11E-01	1.13 (1.00-1.28)	4.80E-02	0.39	0	1.10 (0.94-1.28)	8.28E-02
rs566677	118598374	A/G	0.12	0.12	I / I	1.06 (0.83-1.37)	6.22E-01	1.13 (0.98-1.30)	9.46E-02	0.70	0	1.11 (0.93-1.32)	9.32E-02
rs7928228	118703001	C/T	0.18	0.17	I / I	1.00 (0.80-1.25)	9.88E-01	1.13 (1.00-1.28)	4.70E-02	0.34	0	1.09 (0.94-1.27)	9.33E-02
rs498912	118576997	T/C	0.12	0.11	I / I	1.08 (0.84-1.40)	5.38E-01	1.12 (0.97-1.29)	1.16E-01	0.81	0	1.11 (0.93-1.32)	9.68E-02
chr11:118570183:I	118570183	A/ATTTG	0.32	0.30	I / I	1.04 (0.88-1.25)	6.26E-01	1.09 (0.98-1.20)	1.01E-01	0.70	0	1.07 (0.95-1.21)	9.95E-02
rs79108568	118775524	T/G	0.02	0.02	I / I	1.07 (0.60-1.89)	8.20E-01	1.34 (0.97-1.84)	7.49E-02	0.50	0	1.26 (0.85-1.86)	1.03E-01
rs553188	118576762	C/T	0.12	0.11	O / O	1.07 (0.83-1.39)	5.83E-01	1.12 (0.97-1.29)	1.16E-01	0.77	0	1.11 (0.93-1.32)	1.04E-01
rs557990	118601363	C/T	0.13	0.12	I / I	1.06 (0.83-1.36)	6.24E-01	1.12 (0.98-1.29)	1.09E-01	0.72	0	1.10 (0.93-1.31)	1.05E-01
rs554456	118570062	T/C	0.33	0.31	I / I	1.03 (0.87-1.22)	7.40E-01	1.09 (0.99-1.20)	9.07E-02	0.59	0	1.07 (0.95-1.21)	1.07E-01
rs523604	118755738	A/G	0.44	0.46	O / O	0.99 (0.84-1.17)	9.25E-01	0.92 (0.84-1.01)	6.66E-02	0.42	0	0.94 (0.84-1.05)	1.09E-01
rs2187490	118713180	T/G	0.09	0.08	O / O	1.11 (0.83-1.48)	4.73E-01	1.12 (0.95-1.32)	1.65E-01	0.94	0	1.12 (0.92-1.36)	1.19E-01
rs544096	118594326	A/G	0.12	0.12	I / I	1.04 (0.81-1.33)	7.62E-01	1.12 (0.98-1.30)	1.02E-01	0.59	0	1.10 (0.93-1.31)	1.22E-01
rs11216949	118568668	C/T	0.33	0.31	I / I	1.04 (0.87-1.23)	6.88E-01	1.08 (0.98-1.19)	1.18E-01	0.67	0	1.07 (0.95-1.20)	1.24E-01
rs4393358	118569097	C/T	0.33	0.31	I / I	1.03 (0.87-1.22)	7.36E-01	1.08 (0.98-1.19)	1.09E-01	0.62	0	1.07 (0.95-1.20)	1.24E-01
rs149114341	118783424	G/A	0.02	0.02	I / I	0.93 (0.53-1.63)	8.04E-01	0.74 (0.52-1.06)	9.96E-02	0.50	0	0.79 (0.52-1.20)	1.27E-01
rs7123811	118569469	T/G	0.33	0.31	I / I	1.03 (0.87-1.22)	7.36E-01	1.08 (0.98-1.19)	1.12E-01	0.62	0	1.07 (0.95-1.20)	1.27E-01
rs7119222	118787213	T/C	0.01	0.01	I / I	0.27 (0.08-0.87)	2.82E-02	0.91 (0.58-1.42)	6.76E-01	0.06	72	0.64 (0.33-1.23)	1.27E-01
rs482889	118570098	G/T	0.33	0.31	I / I	1.03 (0.87-1.22)	7.19E-01	1.08 (0.98-1.19)	1.19E-01	0.64	0	1.07 (0.95-1.20)	1.30E-01
rs7479089	118568809	A/G	0.31	0.29	I / I	1.03 (0.86-1.23)	7.66E-01	1.08 (0.98-1.20)	1.13E-01	0.61	0	1.07 (0.95-1.21)	1.33E-01
rs11602400	118787897	A/C	0.01	0.01	I / I	0.27 (0.08-0.89)	3.17E-02	0.91 (0.58-1.42)	6.76E-01	0.06	71	0.64 (0.33-1.24)	1.33E-01
rs517445	118573535	A/G	0.33	0.31	I / I	1.03 (0.87-1.22)	7.16E-01	1.08 (0.98-1.19)	1.24E-01	0.66	0	1.07 (0.95-1.20)	1.35E-01
rs518354	118595718	T/C	0.12	0.12	I / I	1.03 (0.80-1.32)	8.14E-01	1.12 (0.98-1.29)	1.07E-01	0.56	0	1.10 (0.92-1.30)	1.36E-01

Supplementary Table 11. Association analysis in *CXCR5*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs61730467	118772160	G/A	0.02	0.02	I / I	1.03 (0.59-1.80)	9.07E-01	1.30 (0.96-1.77)	9.30E-02	0.47	0	1.22 (0.84-1.78)	1.38E-01
rs558781	118564397	G/T	0.33	0.31	I / I	1.07 (0.90-1.28)	4.14E-01	1.06 (0.96-1.17)	2.19E-01	0.91	0	1.07 (0.95-1.20)	1.40E-01
rs143605660	118707035	G/A	0.05	0.04	I / I	1.24 (0.83-1.86)	2.89E-01	1.13 (0.90-1.41)	2.87E-01	0.68	0	1.16 (0.88-1.52)	1.43E-01
rs519294	118573743	C/A	0.32	0.31	I / I	1.05 (0.88-1.24)	6.04E-01	1.07 (0.97-1.18)	1.63E-01	0.81	0	1.07 (0.95-1.20)	1.45E-01
rs657769	118571316	C/T	0.33	0.31	I / I	1.03 (0.87-1.22)	7.36E-01	1.08 (0.98-1.19)	1.31E-01	0.65	0	1.06 (0.95-1.20)	1.45E-01
rs4486664	118569067	A/C	0.33	0.31	O / I	1.02 (0.86-1.21)	7.93E-01	1.08 (0.98-1.19)	1.21E-01	0.59	0	1.06 (0.95-1.20)	1.46E-01
rs508640	118564413	A/G	0.33	0.31	I / I	1.07 (0.90-1.28)	4.26E-01	1.06 (0.96-1.17)	2.27E-01	0.92	0	1.07 (0.95-1.20)	1.48E-01
rs7107743	118569523	C/G	0.33	0.31	I / I	1.03 (0.87-1.22)	7.36E-01	1.08 (0.98-1.19)	1.35E-01	0.66	0	1.06 (0.95-1.20)	1.48E-01
rs541631	118571023	A/G	0.33	0.31	I / I	1.03 (0.87-1.22)	7.36E-01	1.08 (0.98-1.19)	1.36E-01	0.66	0	1.06 (0.95-1.20)	1.49E-01
rs544452	118571357	G/T	0.33	0.31	I / I	1.04 (0.88-1.24)	6.55E-01	1.07 (0.97-1.18)	1.55E-01	0.76	0	1.06 (0.95-1.20)	1.49E-01
rs7108144	118569694	G/A	0.33	0.31	I / I	1.03 (0.87-1.22)	7.37E-01	1.08 (0.98-1.19)	1.38E-01	0.66	0	1.06 (0.94-1.20)	1.51E-01
rs642224	118570919	G/A	0.33	0.31	I / I	1.03 (0.87-1.22)	7.36E-01	1.08 (0.98-1.19)	1.38E-01	0.66	0	1.06 (0.94-1.20)	1.51E-01
rs659564	118570914	C/A	0.33	0.31	I / I	1.03 (0.87-1.22)	7.36E-01	1.08 (0.98-1.19)	1.38E-01	0.66	0	1.06 (0.94-1.20)	1.51E-01
rs657539	118572021	C/T	0.33	0.31	I / I	1.04 (0.87-1.23)	6.80E-01	1.07 (0.97-1.18)	1.52E-01	0.73	0	1.06 (0.94-1.20)	1.52E-01
rs12793594	118569900	T/C	0.33	0.31	I / I	1.03 (0.87-1.22)	7.37E-01	1.08 (0.98-1.19)	1.39E-01	0.66	0	1.06 (0.94-1.20)	1.52E-01
rs658040	118572171	A/G	0.33	0.31	I / I	1.04 (0.88-1.23)	6.59E-01	1.07 (0.97-1.18)	1.59E-01	0.76	0	1.06 (0.94-1.20)	1.54E-01
rs6589707	118781710	C/A	0.01	0.01	I / I	0.30 (0.09-0.97)	4.45E-02	0.91 (0.59-1.41)	6.81E-01	0.08	67	0.66 (0.35-1.27)	1.57E-01
rs611733	118572760	C/T	0.33	0.31	I / I	1.03 (0.87-1.23)	6.90E-01	1.07 (0.97-1.18)	1.56E-01	0.72	0	1.06 (0.94-1.20)	1.57E-01
rs11217081	118769032	A/G	0.43	0.44	I / I	0.87 (0.74-1.03)	1.05E-01	0.97 (0.88-1.06)	5.18E-01	0.28	16	0.94 (0.84-1.05)	1.57E-01
rs523793	118570697	C/T	0.33	0.31	I / I	1.03 (0.87-1.22)	7.37E-01	1.07 (0.98-1.19)	1.45E-01	0.67	0	1.06 (0.94-1.20)	1.58E-01
rs11216947	118567218	G/A	0.33	0.32	I / I	1.05 (0.88-1.25)	5.77E-01	1.07 (0.97-1.18)	1.91E-01	0.87	0	1.06 (0.94-1.20)	1.60E-01
rs658676	118571123	C/T	0.33	0.31	I / I	1.03 (0.87-1.22)	7.36E-01	1.07 (0.97-1.18)	1.51E-01	0.68	0	1.06 (0.94-1.19)	1.63E-01
rs611217	118572611	C/T	0.33	0.31	I / I	1.03 (0.87-1.22)	7.15E-01	1.07 (0.97-1.18)	1.59E-01	0.70	0	1.06 (0.94-1.19)	1.65E-01
rs11217083	118770321	A/G	0.42	0.43	I / I	0.88 (0.75-1.04)	1.39E-01	0.97 (0.88-1.06)	4.89E-01	0.34	0	0.94 (0.84-1.06)	1.70E-01
chr11:118789500:D	118789500	TGA/T	0.01	0.01	I / I	0.28 (0.09-0.92)	3.66E-02	0.93 (0.59-1.49)	7.73E-01	0.07	70	0.66 (0.34-1.30)	1.74E-01
rs656287	118571790	A/G	0.33	0.31	I / I	1.03 (0.87-1.22)	7.36E-01	1.07 (0.97-1.18)	1.69E-01	0.70	0	1.06 (0.94-1.19)	1.79E-01
rs489126	118572747	G/A	0.33	0.31	I / I	1.03 (0.87-1.22)	7.22E-01	1.07 (0.97-1.18)	1.78E-01	0.72	0	1.06 (0.94-1.19)	1.83E-01
chr11:118704310:I	118704310	TAG/T	0.17	0.16	I / I	1.01 (0.81-1.27)	9.03E-01	1.10 (0.97-1.25)	1.37E-01	0.54	0	1.08 (0.92-1.25)	1.85E-01
rs74337439	118626825	G/A	0.02	0.03	I / I	0.66 (0.38-1.16)	1.53E-01	0.91 (0.67-1.23)	5.20E-01	0.34	0	0.83 (0.57-1.21)	1.92E-01
rs78502545	118615390	C/T	0.02	0.03	I / I	0.66 (0.38-1.16)	1.53E-01	0.91 (0.67-1.23)	5.43E-01	0.33	0	0.83 (0.57-1.21)	2.03E-01
rs6589674	118566039	A/G	0.33	0.32	I / I	1.04 (0.88-1.24)	6.30E-01	1.06 (0.96-1.17)	2.31E-01	0.87	0	1.06 (0.94-1.19)	2.03E-01
rs4938568	118721928	G/A	0.25	0.24	I / I	1.01 (0.83-1.22)	9.15E-01	1.08 (0.97-1.21)	1.52E-01	0.54	0	1.06 (0.93-1.21)	2.05E-01
rs76457018	118762701	G/A	0.13	0.12	I / I	1.16 (0.91-1.47)	2.34E-01	1.05 (0.92-1.21)	4.58E-01	0.52	0	1.08 (0.91-1.28)	2.07E-01
rs7130076	118566090	T/C	0.33	0.32	I / I	1.04 (0.88-1.24)	6.28E-01	1.06 (0.96-1.17)	2.52E-01	0.89	0	1.05 (0.94-1.19)	2.19E-01
chr11:118761879:I	118761879	T/TA	0.12	0.12	I / I	1.15 (0.90-1.46)	2.58E-01	1.05 (0.92-1.21)	4.67E-01	0.54	0	1.08 (0.91-1.28)	2.23E-01
rs11217059	118723087	C/T	0.24	0.24	I / I	0.99 (0.82-1.20)	9.52E-01	1.08 (0.97-1.21)	1.42E-01	0.44	0	1.06 (0.93-1.20)	2.25E-01
rs4938561	118718485	T/C	0.24	0.24	O / O	1.00 (0.82-1.21)	9.63E-01	1.08 (0.97-1.20)	1.45E-01	0.46	0	1.06 (0.93-1.20)	2.26E-01
rs76109832	118755946	C/T	0.04	0.04	I / I	1.12 (0.73-1.72)	6.07E-01	1.14 (0.90-1.43)	2.70E-01	0.95	0	1.13 (0.85-1.51)	2.27E-01
rs4938558	118717929	C/T	0.24	0.23	I / I	1.01 (0.83-1.22)	9.55E-01	1.08 (0.97-1.20)	1.66E-01	0.53	0	1.06 (0.93-1.21)	2.29E-01
rs7102433	118786829	A/G	0.01	0.01	I / I	0.19 (0.05-0.82)	2.55E-02	1.00 (0.65-1.53)	9.87E-01	0.03	78	0.63 (0.31-1.28)	2.29E-01
rs7116715	118719742	T/C	0.24	0.24	I / I	0.99 (0.82-1.20)	9.52E-01	1.08 (0.97-1.20)	1.46E-01	0.45	0	1.06 (0.93-1.20)	2.30E-01
rs11602869	118554448	G/A	0.33	0.32	I / I	1.05 (0.88-1.25)	5.77E-01	1.05 (0.96-1.16)	2.86E-01	0.97	0	1.05 (0.93-1.19)	2.30E-01
rs7126172	118567257	A/G	0.34	0.32	I / I	1.04 (0.87-1.23)	6.80E-01	1.06 (0.96-1.17)	2.50E-01	0.83	0	1.05 (0.94-1.18)	2.33E-01
rs10892298	118724336	T/C	0.24	0.24	I / I	0.99 (0.82-1.20)	9.28E-01	1.08 (0.97-1.21)	1.47E-01	0.43	0	1.06 (0.93-1.20)	2.39E-01
rs2156753	118718768	A/G	0.25	0.24	I / I	0.98 (0.80-1.19)	8.13E-01	1.09 (0.98-1.21)	1.25E-01	0.34	0	1.06 (0.92-1.20)	2.41E-01
chr11:118566809:D	118566809	indel/C	0.33	0.32	I / I	1.03 (0.87-1.23)	6.90E-01	1.06 (0.96-1.17)	2.58E-01	0.83	0	1.05 (0.93-1.18)	2.42E-01
rs7104519	118708266	G/T	0.24	0.23	I / I	1.00 (0.82-1.21)	9.63E-01	1.08 (0.97-1.20)	1.60E-01	0.47	0	1.06 (0.93-1.21)	2.44E-01
chr11:118721494:I	118721494	AT/A	0.24	0.24	I / I	0.99 (0.82-1.20)	9.32E-01	1.08 (0.97-1.20)	1.53E-01	0.44	0	1.06 (0.93-1.20)	2.44E-01
rs190112966	118781340	C/T	0.01	0.01	I / I	0.20 (0.05-0.82)	2.60E-02	1.01 (0.65-1.57)	9.77E-01	0.03	78	0.63 (0.31-1.31)	2.46E-01
rs7926599	118781530	G/C	0.01	0.01	I / I	0.20 (0.05-0.82)	2.61E-02	1.01 (0.65-1.57)	9.76E-01	0.03	78	0.63 (0.31-1.31)	2.47E-01
rs2156752	118718827	C/T	0.25	0.24	I / I	1.02 (0.84-1.24)	8.69E-01	1.07 (0.96-1.19)	2.06E-01	0.64	0	1.06 (0.93-1.21)	2.47E-01
rs2156750	118719254	T/C	0.24	0.24	I / I	0.99 (0.82-1.20)	9.52E-01	1.08 (0.97-1.20)	1.61E-01	0.46	0	1.05 (0.93-1.20)	2.47E-01
rs7105658	118712270	C/T	0.18	0.19	I / I	0.99 (0.81-1.22)	9.50E-01	0.92 (0.82-1.04)	1.90E-01	0.55	0	0.94 (0.82-1.09)	2.53E-01
rs2156749	118719405	C/G	0.24	0.24	I / I	0.99 (0.82-1.20)	9.52E-01	1.08 (0.97-1.20)	1.68E-01	0.47	0	1.05 (0.92-1.20)	2.55E-01
rs4474473	118553889	T/G	0.33	0.32	I / I	1.03 (0.86-1.23)	7.42E-01	1.06 (0.96-1.17)	2.59E-01	0.80	0	1.05 (0.93-1.18)	2.58E-01
rs11605069	118554436	T/G	0.33	0.31	I / I	1.04 (0.87-1.24)	6.95E-01	1.06 (0.96-1.17)	2.77E-01	0.85	0	1.05 (0.93-1.18)	2.58E-01
rs2187491	118718972	T/C	0.24	0.24	I / I	0.99 (0.82-1.20)	9.37E-01	1.08 (0.97-1.20)	1.69E-01	0.46	0	1.05 (0.92-1.20)	2.61E-01
rs2156751	118718856	A/G	0.24	0.24	I / I	1.00 (0.82-1.21)	9.92E-01	1.07 (0.97-1.20)	1.83E-01	0.52	0	1.05 (0.92-1.20)	2.62E-01
rs4936440	118720684	C/G	0.24	0.24	I / I	0.99 (0.82-1.20)	9.52E-01	1.08 (0.97-1.20)	1.76E-01	0.48	0	1.05 (0.92-1.20)	2.65E-01
rs643090	118567115	T/C	0.35	0.34	I / I	1.04 (0.88-1.23)	6.24E-01	1.05 (0.95-1.16)	3.15E-01	0.95	0	1.05 (0.93-1.18)	2.66E-01
rs4938566	118721189	A/T	0.24	0.24	I / I	0.99 (0.82-1.20)	9.52E-01	1.08 (0.97-1.20)	1.77E-01	0.48	0	1.05 (0.92-1.20)	2.67E-01
rs4938567	118721249	A/G	0.24	0.24	I / I	0.99 (0.82-1.20)	9.52E-01	1.08 (0.97-1.20)	1.77E-01	0.48	0	1.05 (0.92-1.20)	2.67E-01
rs184790848	118714099	C/T	0.02	0.03	I / I	0.66 (0.38-1.15)	1.42E-01	0.94 (0.70-1.27)	7.02E-01	0.27	19	0.85 (0.59-1.24)	2.70E-01
chr11:118727573:D	118727573	TC/T	0.24	0.23	I / I	1.00 (0.82-1.21)	9.96E-01	1.07 (0.96-1.20)	1.97E-01	0.53	0	1.05 (0.92-1.20)	2.76E-01
rs6589689	118622744	A/G	0.02	0.01	O / I	1.41 (0.79-2.53)	2.51E-01	1.12 (0.74-1.69)	5.80E-01	0.54	0	1.20 (0.76-1.90)	2.80E-01
rs58508419	118762102	G/A	0.01	0.01	I / I	0.10 (0.01-0.77)	2.69E-02	1.02 (0.67-1.56)	9.09E-01	0.03	79	0.54 (0.23-1.28)	2.81E-01
rs644867	118567545	A/G	0.34	0.32	I / I	1.02 (0.86-1.21)	8.17E-01	1.06 (0.96-1.17)	2.63E-01	0.72	0	1.05 (0.93-1.18)	2.85E-01
rs2156755	118726230	G/A	0.24	0.23	I / I	1.00 (0.82-1.21)	9.85E-01	1.07 (0.96-1.19)	2.02E-01	0.52	0	1.05 (0.92-1.20)	2.85E-01
rs7103314	118723537	A/G	0.24	0.24	I / I	0.99 (0.82-1.21)	9.53E-01	1.07 (0.96-1.19)	1.96E-01	0.50	0	1.05 (0.92-1.20)	2.87E-01
rs644498	118567486	T/C	0.34	0.32	I / I	1.02 (0.86-1.21)	7.87E-01	1.05 (0.96-1.16)	2.80E-01	0.77	0	1.05 (0.93-1.18)	2.90E-01

Supplementary Table 11. Association analysis in *CXCR5*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
chr11:118563703:I	118563703	G/GA	0.33	0.32	I / I	1.04 (0.88-1.24)	6.33E-01	1.05 (0.95-1.16)	3.42E-01	0.95	0	1.05 (0.93-1.18)	2.90E-01
rs11217062	118725420	G/A	0.24	0.23	I / I	1.00 (0.82-1.21)	9.85E-01	1.07 (0.96-1.19)	2.08E-01	0.53	0	1.05 (0.92-1.20)	2.91E-01
rs7119568	118723753	T/A	0.18	0.19	I / I	0.97 (0.79-1.20)	8.09E-01	0.94 (0.83-1.05)	2.82E-01	0.75	0	0.95 (0.82-1.09)	2.98E-01
rs117235696	118803193	T/G	0.03	0.03	I / I	1.01 (0.67-1.54)	9.50E-01	0.84 (0.63-1.10)	2.04E-01	0.45	0	0.88 (0.64-1.21)	2.99E-01
rs11600378	118803842	A/G	0.03	0.03	I / I	1.01 (0.67-1.54)	9.50E-01	0.84 (0.63-1.10)	2.05E-01	0.45	0	0.88 (0.64-1.21)	3.00E-01
rs2230321	118765087	C/T	0.01	0.01	O / O	0.09 (0.01-0.67)	1.87E-02	1.05 (0.70-1.59)	8.01E-01	0.02	82	0.53 (0.22-1.25)	3.00E-01
rs77638281	118811315	G/A	0.03	0.04	I / I	1.06 (0.71-1.59)	7.86E-01	0.82 (0.62-1.08)	1.61E-01	0.31	3	0.88 (0.64-1.21)	3.01E-01
rs73575405	118764117	G/A	0.01	0.01	I / I	0.10 (0.01-0.77)	2.68E-02	1.04 (0.69-1.57)	8.59E-01	0.03	79	0.54 (0.23-1.29)	3.05E-01
rs4938569	118721972	A/G	0.24	0.24	I / I	0.99 (0.82-1.20)	9.40E-01	1.07 (0.96-1.19)	2.09E-01	0.50	0	1.05 (0.92-1.20)	3.06E-01
rs11605265	118805144	G/A	0.03	0.03	I / I	1.01 (0.67-1.54)	9.50E-01	0.84 (0.63-1.11)	2.14E-01	0.46	0	0.89 (0.64-1.22)	3.09E-01
rs143711539	118804671	G/A	0.03	0.03	I / I	1.01 (0.67-1.54)	9.50E-01	0.84 (0.63-1.11)	2.15E-01	0.46	0	0.89 (0.64-1.22)	3.10E-01
rs76160025	118782802	C/T	0.02	0.02	I / I	0.81 (0.42-1.58)	5.39E-01	1.32 (0.93-1.86)	1.16E-01	0.20	38	1.15 (0.74-1.78)	3.16E-01
rs77916839	118798780	G/C	0.03	0.03	I / I	1.01 (0.66-1.54)	9.59E-01	0.84 (0.64-1.12)	2.31E-01	0.48	0	0.89 (0.64-1.22)	3.24E-01
rs492471	118689745	C/T	0.06	0.07	I / I	0.94 (0.68-1.30)	6.96E-01	0.91 (0.75-1.11)	3.59E-01	0.90	0	0.92 (0.73-1.16)	3.25E-01
rs659969	118549803	C/T	0.34	0.33	I / I	1.03 (0.87-1.22)	7.61E-01	1.05 (0.95-1.16)	3.34E-01	0.83	0	1.04 (0.93-1.17)	3.27E-01
rs610664	118556691	A/G	0.33	0.32	I / I	1.04 (0.87-1.23)	6.77E-01	1.04 (0.95-1.15)	3.71E-01	0.94	0	1.04 (0.93-1.17)	3.27E-01
rs11217068	118729283	C/T	0.18	0.19	I / I	1.00 (0.82-1.23)	9.60E-01	0.93 (0.83-1.05)	2.35E-01	0.52	0	0.95 (0.82-1.10)	3.28E-01
rs57231586	118761159	G/T	0.01	0.01	I / I	0.10 (0.01-0.74)	2.45E-02	1.06 (0.70-1.60)	7.92E-01	0.02	80	0.54 (0.23-1.29)	3.31E-01
rs9735317	118725383	C/T	0.17	0.18	I / I	0.97 (0.79-1.20)	8.04E-01	0.94 (0.84-1.06)	3.22E-01	0.79	0	0.95 (0.82-1.10)	3.31E-01
rs4938522	118548671	A/T	0.34	0.33	I / I	1.03 (0.87-1.22)	7.61E-01	1.05 (0.95-1.15)	3.45E-01	0.84	0	1.04 (0.93-1.17)	3.36E-01
rs4938523	118548838	G/T	0.34	0.33	I / I	1.03 (0.87-1.22)	7.61E-01	1.05 (0.95-1.15)	3.45E-01	0.84	0	1.04 (0.93-1.17)	3.36E-01
rs647878	118549459	G/A	0.34	0.33	I / I	1.03 (0.87-1.22)	7.61E-01	1.05 (0.95-1.15)	3.45E-01	0.84	0	1.04 (0.93-1.17)	3.36E-01
rs12276533	118724116	G/A	0.18	0.18	I / I	0.97 (0.79-1.20)	7.95E-01	0.94 (0.84-1.06)	3.38E-01	0.80	0	0.95 (0.82-1.10)	3.42E-01
rs571751	118556797	A/C	0.33	0.32	I / I	1.04 (0.87-1.23)	6.66E-01	1.04 (0.95-1.15)	3.95E-01	0.97	0	1.04 (0.93-1.17)	3.42E-01
rs113577950	118738512	T/A	0.24	0.23	I / I	1.00 (0.82-1.21)	9.87E-01	1.06 (0.96-1.19)	2.58E-01	0.57	0	1.04 (0.92-1.19)	3.43E-01
rs9971606	118779681	T/C	0.01	0.01	I / I	0.38 (0.13-1.08)	7.03E-02	1.00 (0.66-1.52)	9.82E-01	0.09	65	0.76 (0.42-1.38)	3.43E-01
rs643104	118567125	T/C	0.33	0.32	I / I	1.03 (0.86-1.22)	7.72E-01	1.05 (0.95-1.16)	3.51E-01	0.84	0	1.04 (0.93-1.17)	3.45E-01
rs514143	118558449	G/A	0.34	0.32	I / I	1.03 (0.87-1.22)	7.39E-01	1.05 (0.95-1.15)	3.67E-01	0.88	0	1.04 (0.93-1.17)	3.47E-01
rs692848	118559709	G/A	0.33	0.32	I / I	1.03 (0.86-1.22)	7.63E-01	1.05 (0.95-1.15)	3.58E-01	0.85	0	1.04 (0.92-1.17)	3.48E-01
rs11605658	118805220	C/T	0.03	0.03	I / I	1.05 (0.69-1.58)	8.34E-01	0.84 (0.63-1.11)	2.15E-01	0.39	0	0.89 (0.65-1.23)	3.49E-01
rs112965917	118725189	T/A	0.04	0.03	I / I	1.13 (0.75-1.70)	5.72E-01	1.10 (0.85-1.42)	4.59E-01	0.93	0	1.11 (0.82-1.50)	3.54E-01
rs478296	118567375	T/C	0.33	0.32	I / I	1.02 (0.86-1.21)	7.88E-01	1.05 (0.95-1.15)	3.57E-01	0.82	0	1.04 (0.92-1.17)	3.55E-01
rs118046730	118711376	T/C	0.02	0.03	I / I	0.66 (0.38-1.16)	1.47E-01	0.97 (0.72-1.31)	8.59E-01	0.23	30	0.87 (0.60-1.27)	3.57E-01
rs555356	118558078	G/T	0.34	0.32	I / I	1.03 (0.87-1.22)	7.39E-01	1.04 (0.95-1.15)	3.83E-01	0.89	0	1.04 (0.92-1.17)	3.60E-01
rs504206	118549253	A/G	0.34	0.32	I / I	1.02 (0.86-1.21)	8.44E-01	1.05 (0.95-1.16)	3.40E-01	0.77	0	1.04 (0.92-1.17)	3.61E-01
rs7114458	118566175	G/A	0.34	0.32	I / I	1.02 (0.86-1.21)	8.18E-01	1.05 (0.95-1.15)	3.56E-01	0.79	0	1.04 (0.92-1.17)	3.66E-01
rs625513	118555719	A/C	0.33	0.32	I / I	1.03 (0.87-1.22)	7.39E-01	1.04 (0.95-1.15)	3.92E-01	0.90	0	1.04 (0.92-1.17)	3.67E-01
rs693037	118553326	C/T	0.34	0.32	I / I	1.03 (0.87-1.22)	7.50E-01	1.04 (0.95-1.15)	3.91E-01	0.89	0	1.04 (0.92-1.17)	3.70E-01
rs538645	118711069	T/C	0.23	0.23	I / I	1.01 (0.83-1.23)	9.19E-01	1.06 (0.95-1.18)	3.22E-01	0.69	0	1.04 (0.91-1.19)	3.71E-01
rs642662	118567020	A/G	0.33	0.32	I / I	1.02 (0.86-1.22)	7.80E-01	1.04 (0.95-1.15)	3.80E-01	0.85	0	1.04 (0.92-1.17)	3.73E-01
rs486462	118559178	T/C	0.33	0.32	I / I	1.03 (0.87-1.22)	7.63E-01	1.04 (0.95-1.15)	3.88E-01	0.87	0	1.04 (0.92-1.17)	3.73E-01
rs58397111	118761591	C/T	0.01	0.01	I / I	0.10 (0.01-0.77)	2.69E-02	1.07 (0.71-1.62)	7.35E-01	0.03	80	0.56 (0.24-1.31)	3.74E-01
rs12277355	118729442	C/T	0.18	0.19	I / I	1.01 (0.82-1.23)	9.52E-01	0.94 (0.83-1.05)	2.77E-01	0.55	0	0.96 (0.83-1.10)	3.74E-01
rs11532015	118591765	G/A	0.24	0.25	I / I	1.02 (0.85-1.24)	8.10E-01	0.94 (0.84-1.04)	2.29E-01	0.42	0	0.96 (0.84-1.09)	3.75E-01
rs4331144	118554100	A/G	0.34	0.32	I / I	1.03 (0.87-1.22)	7.52E-01	1.04 (0.95-1.15)	3.97E-01	0.88	0	1.04 (0.92-1.17)	3.76E-01
rs585039	118563381	C/A	0.34	0.32	I / I	1.03 (0.87-1.22)	7.52E-01	1.04 (0.95-1.15)	3.98E-01	0.88	0	1.04 (0.92-1.17)	3.77E-01
rs11216942	118553488	C/A	0.34	0.32	I / I	1.03 (0.87-1.22)	7.52E-01	1.04 (0.95-1.15)	4.01E-01	0.89	0	1.04 (0.92-1.17)	3.79E-01
rs519848	118552715	G/A	0.34	0.32	I / I	1.03 (0.87-1.22)	7.54E-01	1.04 (0.95-1.15)	4.04E-01	0.89	0	1.04 (0.92-1.17)	3.83E-01
rs561845	118558827	A/G	0.34	0.32	I / I	1.03 (0.87-1.22)	7.58E-01	1.04 (0.95-1.15)	4.03E-01	0.88	0	1.04 (0.92-1.17)	3.83E-01
rs549370	118552842	C/A	0.34	0.32	I / I	1.03 (0.87-1.22)	7.52E-01	1.04 (0.95-1.15)	4.06E-01	0.89	0	1.04 (0.92-1.17)	3.84E-01
rs654792	118552996	G/T	0.34	0.32	I / I	1.03 (0.87-1.22)	7.52E-01	1.04 (0.95-1.15)	4.06E-01	0.89	0	1.04 (0.92-1.17)	3.84E-01
rs12794726	118566313	C/T	0.33	0.32	I / I	1.02 (0.86-1.21)	8.07E-01	1.04 (0.95-1.15)	3.83E-01	0.82	0	1.04 (0.92-1.17)	3.85E-01
rs478371	118565336	G/A	0.34	0.32	I / I	1.02 (0.86-1.21)	8.06E-01	1.04 (0.95-1.15)	3.83E-01	0.83	0	1.04 (0.92-1.17)	3.85E-01
rs7114216	118566234	A/G	0.34	0.32	I / I	1.02 (0.86-1.21)	8.06E-01	1.04 (0.95-1.15)	3.84E-01	0.83	0	1.04 (0.92-1.17)	3.85E-01
rs508579	118559084	G/C	0.34	0.32	I / I	1.03 (0.87-1.22)	7.58E-01	1.04 (0.95-1.15)	4.06E-01	0.88	0	1.04 (0.92-1.17)	3.85E-01
rs638301	118559003	A/G	0.34	0.32	I / I	1.03 (0.87-1.22)	7.58E-01	1.04 (0.95-1.15)	4.06E-01	0.88	0	1.04 (0.92-1.17)	3.85E-01
rs510408	118558901	G/C	0.34	0.32	I / I	1.03 (0.87-1.22)	7.58E-01	1.04 (0.95-1.15)	4.06E-01	0.88	0	1.04 (0.92-1.17)	3.85E-01
rs638805	118558889	G/T	0.34	0.32	I / I	1.03 (0.87-1.22)	7.58E-01	1.04 (0.95-1.15)	4.06E-01	0.88	0	1.04 (0.92-1.17)	3.85E-01
chr11:118552611:I	118552611	T/TTG	0.34	0.32	I / I	1.03 (0.87-1.22)	7.52E-01	1.04 (0.95-1.15)	4.09E-01	0.89	0	1.04 (0.92-1.17)	3.86E-01
rs533144	118559247	C/A	0.34	0.32	I / I	1.03 (0.87-1.22)	7.58E-01	1.04 (0.95-1.15)	4.08E-01	0.88	0	1.04 (0.92-1.17)	3.87E-01
rs525485	118555754	G/A	0.33	0.32	I / I	1.03 (0.87-1.22)	7.39E-01	1.04 (0.94-1.15)	4.17E-01	0.92	0	1.04 (0.92-1.17)	3.87E-01
rs558593	118562520	C/T	0.33	0.32	I / I	1.03 (0.87-1.22)	7.21E-01	1.04 (0.94-1.15)	4.27E-01	0.94	0	1.04 (0.92-1.17)	3.88E-01
rs12800792	118551730	T/A	0.33	0.32	I / I	1.02 (0.86-1.22)	8.02E-01	1.04 (0.95-1.15)	3.90E-01	0.83	0	1.04 (0.92-1.17)	3.89E-01
chr11:118558097:D	118558097	CCT/C	0.34	0.32	I / I	1.03 (0.87-1.22)	7.58E-01	1.04 (0.95-1.15)	4.12E-01	0.89	0	1.04 (0.92-1.17)	3.91E-01
rs516153	118564762	C/A	0.34	0.32	I / I	1.03 (0.87-1.22)	7.63E-01	1.04 (0.95-1.15)	4.10E-01	0.88	0	1.04 (0.92-1.17)	3.91E-01
rs6589695	118644323	G/C	0.02	0.03	I / I	1.12 (0.70-1.78)	6.47E-01	0.80 (0.57-1.12)	1.94E-01	0.26	21	0.88 (0.61-1.28)	3.94E-01
rs613377	118556084	C/T	0.34	0.32	I / I	1.03 (0.86-1.22)	7.70E-01	1.04 (0.94-1.15)	4.19E-01	0.88	0	1.04 (0.92-1.17)	4.01E-01
rs11606719	118782474	C/G	0.02	0.02	I / I	0.52 (0.24-1.11)	9.25E-02	1.01 (0.71-1.44)	9.42E-01	0.12	59	0.84 (0.52-1.34)	4.02E-01
rs542613	118567084	G/A	0.33	0.32	I / I	1.03 (0.87-1.22)	7.40E-01	1.04 (0.94-1.15)	4.36E-01	0.92	0	1.04 (0.92-1.17)	4.03E-01
rs471227	118564601	T/C	0.34	0.32	I / I	1.03 (0.87-1.22)	7.63E-01	1.04 (0.94-1.15)	4.27E-01	0.90	0	1.04 (0.92-1.17)	4.05E-01

Supplementary Table 11. Association analysis in *CXCR5*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs592280	118553218	T/C	0.34	0.32	I / I	1.03 (0.87-1.22)	7.52E-01	1.04 (0.94-1.15)	4.32E-01	0.91	0	1.04 (0.92-1.17)	4.05E-01
chr11:118551226:D	118551226	GA/G	0.34	0.32	I / I	1.02 (0.86-1.21)	8.11E-01	1.04 (0.95-1.15)	4.05E-01	0.84	0	1.04 (0.92-1.17)	4.05E-01
rs7118009	118707559	C/T	0.17	0.18	I / I	1.00 (0.81-1.23)	9.99E-01	0.94 (0.83-1.06)	3.27E-01	0.63	0	0.96 (0.83-1.11)	4.06E-01
rs546890	118557198	T/C	0.33	0.32	I / I	1.03 (0.87-1.22)	7.58E-01	1.04 (0.94-1.15)	4.32E-01	0.90	0	1.04 (0.92-1.17)	4.07E-01
rs2508573	118555383	C/T	0.43	0.42	I / I	0.99 (0.84-1.17)	9.15E-01	1.05 (0.96-1.15)	2.96E-01	0.55	0	1.03 (0.92-1.16)	4.07E-01
rs527475	118563239	G/A	0.33	0.32	I / I	1.03 (0.87-1.22)	7.52E-01	1.04 (0.94-1.15)	4.35E-01	0.92	0	1.04 (0.92-1.17)	4.07E-01
rs7924647	118728479	A/G	0.18	0.18	I / I	0.99 (0.80-1.22)	9.11E-01	0.95 (0.84-1.07)	3.65E-01	0.73	0	0.96 (0.83-1.11)	4.08E-01
rs656575	118549908	T/G	0.33	0.32	I / I	1.03 (0.87-1.22)	7.50E-01	1.04 (0.94-1.15)	4.39E-01	0.91	0	1.04 (0.92-1.17)	4.10E-01
rs12796373	118554939	G/A	0.34	0.32	I / I	1.03 (0.86-1.22)	7.69E-01	1.04 (0.94-1.15)	4.31E-01	0.89	0	1.04 (0.92-1.17)	4.10E-01
rs12285122	118733830	G/A	0.18	0.19	I / I	1.00 (0.82-1.23)	9.95E-01	0.94 (0.84-1.06)	3.32E-01	0.63	0	0.96 (0.83-1.11)	4.11E-01
rs12799314	118551597	G/A	0.34	0.32	I / I	1.02 (0.86-1.21)	8.11E-01	1.04 (0.95-1.15)	4.13E-01	0.85	0	1.04 (0.92-1.16)	4.12E-01
rs625918	118559542	C/T	0.33	0.32	I / I	1.01 (0.85-1.20)	8.76E-01	1.04 (0.95-1.15)	3.86E-01	0.77	0	1.04 (0.92-1.16)	4.14E-01
rs12272981	118709600	A/G	0.17	0.18	I / I	1.00 (0.81-1.23)	9.95E-01	0.94 (0.84-1.06)	3.37E-01	0.64	0	0.96 (0.83-1.11)	4.14E-01
rs7108905	118712427	C/G	0.17	0.18	I / I	1.00 (0.81-1.23)	9.89E-01	0.94 (0.84-1.06)	3.50E-01	0.65	0	0.96 (0.83-1.11)	4.24E-01
rs61900138	118782222	T/C	0.02	0.02	I / I	0.85 (0.42-1.73)	6.59E-01	1.21 (0.89-1.64)	2.24E-01	0.38	0	1.09 (0.72-1.66)	4.26E-01
rs507080	118549582	G/A	0.34	0.33	I / I	1.03 (0.87-1.22)	7.62E-01	1.04 (0.94-1.14)	4.59E-01	0.92	0	1.03 (0.92-1.16)	4.31E-01
rs519982	118565231	C/T	0.33	0.32	I / I	1.02 (0.86-1.22)	7.81E-01	1.04 (0.94-1.14)	4.51E-01	0.90	0	1.03 (0.92-1.16)	4.32E-01
rs1784298	118548665	T/C	0.34	0.33	I / I	1.03 (0.87-1.22)	7.61E-01	1.04 (0.94-1.14)	4.63E-01	0.92	0	1.03 (0.92-1.16)	4.34E-01
rs502601	118565679	G/A	0.33	0.32	I / I	1.02 (0.86-1.21)	8.21E-01	1.04 (0.94-1.15)	4.38E-01	0.85	0	1.03 (0.92-1.16)	4.37E-01
rs673770	118550601	T/G	0.34	0.32	O / O	1.03 (0.87-1.22)	7.58E-01	1.04 (0.94-1.14)	4.70E-01	0.93	0	1.03 (0.92-1.16)	4.38E-01
chr11:118563700:I	118563700	C/CG	0.33	0.32	I / I	1.02 (0.86-1.22)	7.82E-01	1.04 (0.94-1.15)	4.59E-01	0.89	0	1.03 (0.92-1.16)	4.38E-01
rs11216982	118590864	G/A	0.24	0.24	I / I	1.03 (0.85-1.25)	7.51E-01	0.94 (0.84-1.05)	2.67E-01	0.41	0	0.97 (0.85-1.10)	4.42E-01
rs28452542	118549291	C/T	0.34	0.33	I / I	1.02 (0.86-1.21)	8.05E-01	1.04 (0.94-1.14)	4.57E-01	0.88	0	1.03 (0.92-1.16)	4.47E-01
rs6589706	118747813	G/A	0.50	0.48	O / O	0.98 (0.84-1.16)	8.26E-01	1.05 (0.96-1.15)	3.00E-01	0.49	0	1.03 (0.92-1.15)	4.47E-01
rs12286723	118734640	C/T	0.18	0.19	O / O	1.01 (0.82-1.24)	9.16E-01	0.94 (0.84-1.06)	3.36E-01	0.57	0	0.96 (0.83-1.11)	4.48E-01
rs78755429	118777978	C/A	0.02	0.02	I / I	1.25 (0.71-2.21)	4.43E-01	1.07 (0.76-1.50)	6.89E-01	0.65	0	1.12 (0.75-1.68)	4.55E-01
rs7122511	118708786	C/A	0.17	0.18	I / I	1.00 (0.81-1.23)	9.94E-01	0.95 (0.84-1.07)	3.92E-01	0.67	0	0.96 (0.83-1.11)	4.67E-01
rs77921170	118708785	C/A	0.17	0.18	I / I	1.00 (0.81-1.23)	9.94E-01	0.95 (0.84-1.07)	3.92E-01	0.67	0	0.96 (0.83-1.11)	4.67E-01
rs545104	118591352	C/T	0.37	0.37	I / I	1.05 (0.89-1.25)	5.61E-01	1.02 (0.93-1.13)	6.45E-01	0.79	0	1.03 (0.92-1.16)	4.84E-01
rs79652716	118584498	C/T	0.35	0.35	I / I	1.08 (0.91-1.28)	3.73E-01	1.01 (0.92-1.11)	7.96E-01	0.52	0	1.03 (0.92-1.16)	4.88E-01
rs2186780	118605451	C/T	0.20	0.20	I / I	1.09 (0.89-1.33)	4.16E-01	1.02 (0.91-1.14)	7.59E-01	0.58	0	1.04 (0.90-1.19)	4.89E-01
rs7926282	118605914	A/C	0.20	0.20	I / I	1.09 (0.89-1.33)	4.16E-01	1.02 (0.91-1.14)	7.68E-01	0.57	0	1.04 (0.90-1.19)	4.95E-01
rs540800	118565651	G/A	0.43	0.43	O / O	1.00 (0.84-1.17)	9.58E-01	1.04 (0.95-1.14)	4.12E-01	0.66	0	1.03 (0.92-1.15)	5.04E-01
rs693306	118558333	A/G	0.33	0.32	I / I	1.03 (0.87-1.22)	7.58E-01	1.03 (0.93-1.13)	5.66E-01	0.98	0	1.03 (0.91-1.16)	5.16E-01
rs7122254	118553852	T/C	0.33	0.32	I / I	1.01 (0.85-1.20)	8.84E-01	1.03 (0.94-1.14)	5.00E-01	0.84	0	1.03 (0.91-1.16)	5.17E-01
rs4938524	118552074	G/T	0.33	0.32	I / I	1.03 (0.87-1.23)	7.01E-01	1.02 (0.93-1.13)	6.28E-01	0.93	0	1.03 (0.91-1.16)	5.39E-01
rs642530	118550756	T/C	0.33	0.32	I / I	1.03 (0.87-1.22)	7.62E-01	1.03 (0.93-1.13)	5.95E-01	1.00	0	1.03 (0.91-1.16)	5.41E-01
rs117361624	118568427	C/T	0.04	0.04	I / I	1.11 (0.72-1.72)	6.27E-01	1.05 (0.83-1.32)	6.88E-01	0.81	0	1.07 (0.80-1.42)	5.50E-01
rs6589673	118557483	A/C	0.02	0.02	I / I	1.17 (0.66-2.07)	5.85E-01	1.06 (0.76-1.48)	7.19E-01	0.77	0	1.09 (0.73-1.63)	5.51E-01
rs603486	118587347	C/T	0.37	0.37	I / I	1.05 (0.89-1.25)	5.32E-01	1.01 (0.92-1.12)	7.63E-01	0.70	0	1.03 (0.91-1.15)	5.56E-01
rs667982	118562767	T/C	0.33	0.32	I / I	1.03 (0.87-1.22)	7.53E-01	1.02 (0.93-1.13)	6.40E-01	0.97	0	1.03 (0.91-1.15)	5.73E-01
rs140110112	118629959	G/A	0.04	0.04	I / I	1.07 (0.70-1.63)	7.46E-01	1.05 (0.84-1.32)	6.59E-01	0.94	0	1.06 (0.80-1.40)	5.85E-01
chr11:118584623:D	118584623	A/AT	0.35	0.35	I / I	1.05 (0.89-1.25)	5.45E-01	1.01 (0.92-1.11)	8.28E-01	0.67	0	1.02 (0.91-1.15)	6.12E-01
rs146541591	118791180	T/C	0.02	0.02	I / I	1.60 (0.89-2.89)	1.17E-01	0.93 (0.66-1.30)	6.66E-01	0.12	60	1.08 (0.72-1.63)	6.39E-01
rs112799932	118585146	T/G	0.24	0.24	I / I	1.05 (0.87-1.27)	6.18E-01	0.95 (0.86-1.06)	3.93E-01	0.40	0	0.98 (0.86-1.12)	6.47E-01
rs3916585	118812922	C/G	0.15	0.15	I / I	0.86 (0.68-1.09)	2.10E-01	1.02 (0.89-1.16)	7.80E-01	0.22	34	0.97 (0.83-1.14)	6.59E-01
rs150543079	118800061	G/T	0.04	0.04	I / I	0.80 (0.52-1.23)	3.04E-01	1.15 (0.90-1.46)	2.53E-01	0.14	53	1.04 (0.77-1.39)	6.80E-01
rs112996178	118609598	C/T	0.23	0.24	I / I	1.04 (0.86-1.26)	6.83E-01	0.96 (0.86-1.07)	4.70E-01	0.48	0	0.98 (0.86-1.12)	6.93E-01
rs506255	118566069	C/A	0.09	0.09	I / I	1.05 (0.79-1.38)	7.55E-01	1.02 (0.87-1.20)	8.02E-01	0.88	0	1.03 (0.84-1.25)	7.04E-01
rs2851460	118716563	G/A	0.42	0.42	I / I	1.01 (0.86-1.19)	8.99E-01	1.02 (0.93-1.12)	7.18E-01	0.95	0	1.02 (0.91-1.14)	7.09E-01
rs7934890	118655356	C/T	0.23	0.23	I / I	1.10 (0.91-1.33)	3.38E-01	0.99 (0.89-1.10)	8.57E-01	0.36	0	1.02 (0.89-1.16)	7.22E-01
rs55794678	118725204	C/T	0.02	0.01	I / I	1.52 (0.83-2.80)	1.77E-01	0.92 (0.63-1.34)	6.69E-01	0.17	47	1.06 (0.68-1.65)	7.24E-01
rs140026975	118594669	A/C	0.23	0.23	I / I	1.04 (0.86-1.27)	6.77E-01	0.96 (0.86-1.07)	5.08E-01	0.49	0	0.99 (0.86-1.13)	7.35E-01
rs4938559	118718061	C/T	0.42	0.43	I / I	1.00 (0.85-1.18)	9.98E-01	1.02 (0.93-1.12)	7.21E-01	0.86	0	1.01 (0.90-1.13)	7.61E-01
rs586763	118816304	C/T	0.17	0.18	O / O	0.89 (0.71-1.11)	2.91E-01	1.02 (0.90-1.15)	7.57E-01	0.28	14	0.98 (0.84-1.14)	7.66E-01
chr11:118625605:D	118625605	CAT/C	0.04	0.03	I / I	0.76 (0.46-1.25)	2.81E-01	1.13 (0.89-1.44)	3.13E-01	0.16	50	1.01 (0.74-1.38)	7.76E-01
rs4938560	118718062	A/G	0.42	0.43	I / I	1.00 (0.85-1.18)	9.87E-01	1.02 (0.93-1.12)	7.37E-01	0.86	0	1.01 (0.90-1.13)	7.83E-01
rs112974653	118807637	G/T	0.10	0.11	I / I	0.73 (0.55-0.99)	4.00E-02	1.08 (0.93-1.25)	3.25E-01	0.02	81	0.97 (0.80-1.17)	7.96E-01
rs73009445	118744615	G/A	0.04	0.04	I / I	0.78 (0.49-1.22)	2.77E-01	1.12 (0.89-1.40)	3.27E-01	0.16	50	1.01 (0.76-1.35)	7.99E-01
rs4938589	118810405	C/T	0.11	0.12	O / I	0.79 (0.60-1.04)	8.78E-02	1.06 (0.92-1.22)	4.34E-01	0.06	72	0.97 (0.81-1.17)	8.05E-01
rs7943039	118603030	G/A	0.24	0.24	I / I	1.05 (0.87-1.27)	5.91E-01	0.97 (0.87-1.07)	5.29E-01	0.44	0	0.99 (0.87-1.13)	8.06E-01
rs77398170	118792278	A/G	0.03	0.03	I / I	0.78 (0.49-1.25)	3.08E-01	1.13 (0.87-1.48)	3.50E-01	0.18	45	1.02 (0.74-1.41)	8.07E-01
rs184012032	118595569	G/A	0.03	0.03	I / I	0.74 (0.44-1.25)	2.61E-01	1.06 (0.82-1.36)	6.72E-01	0.23	30	0.96 (0.69-1.33)	8.12E-01
rs184071181	118598936	T/C	0.03	0.03	I / I	0.73 (0.43-1.23)	2.34E-01	1.06 (0.83-1.37)	6.32E-01	0.20	39	0.96 (0.69-1.33)	8.22E-01
rs73001486	118629364	G/A	0.24	0.24	I / I	1.05 (0.87-1.27)	5.90E-01	0.97 (0.87-1.08)	5.49E-01	0.44	0	0.99 (0.87-1.13)	8.26E-01
rs11537150	118594517	A/G	0.23	0.24	I / I	1.04 (0.86-1.27)	6.56E-01	0.97 (0.87-1.08)	6.14E-01	0.52	0	0.99 (0.87-1.13)	8.50E-01
rs480958	118577990	A/G	0.35	0.36	O / O	1.07 (0.90-1.26)	4.33E-01	0.99 (0.90-1.09)	7.75E-01	0.41	0	1.01 (0.90-1.13)	8.61E-01
rs10892313	118809329	G/A	0.11	0.12	I / I	0.76 (0.57-1.00)	4.90E-02	1.08 (0.94-1.24)	2.89E-01	0.03	80	0.98 (0.81-1.17)	8.78E-01
rs7130875	118613674	T/C	0.24	0.24	I / I	1.07 (0.89-1.29)	4.93E-01	0.99 (0.89-1.10)	7.97E-01	0.47	0	1.01 (0.89-1.15)	8.84E-01
rs487177	118657297	C/G	0.24	0.24	I / I	1.07 (0.89-1.29)	4.55E-01	0.98 (0.88-1.09)	7.53E-01	0.42	0	1.01 (0.89-1.15)	8.97E-01

Supplementary Table 11. Association analysis in *CXCR5*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs112910608	118637475	C/T	0.23	0.23	I / I	1.06 (0.88-1.29)	5.31E-01	0.99 (0.89-1.10)	8.11E-01	0.51	0	1.01 (0.88-1.15)	8.97E-01
rs3825057	118622985	T/C	0.24	0.24	I / I	1.05 (0.87-1.26)	6.31E-01	0.98 (0.88-1.08)	6.57E-01	0.52	0	1.00 (0.88-1.13)	9.04E-01
rs75210328	118801296	G/T	0.04	0.04	I / I	0.86 (0.57-1.30)	4.74E-01	1.07 (0.84-1.37)	5.67E-01	0.36	0	1.01 (0.75-1.35)	9.22E-01
rs77875650	118801577	G/A	0.04	0.04	I / I	0.86 (0.57-1.30)	4.74E-01	1.07 (0.84-1.37)	5.68E-01	0.36	0	1.01 (0.75-1.35)	9.23E-01
rs11217022	118641606	A/G	0.24	0.24	I / I	1.06 (0.88-1.28)	5.30E-01	0.98 (0.89-1.09)	7.78E-01	0.49	0	1.01 (0.88-1.15)	9.24E-01
rs10892282	118627778	G/C	0.24	0.24	I / I	1.05 (0.87-1.26)	6.23E-01	0.98 (0.88-1.09)	6.77E-01	0.53	0	1.00 (0.88-1.13)	9.27E-01
chr11:118611794:D	118611794	TA/T	0.24	0.24	I / I	1.06 (0.88-1.27)	5.58E-01	0.97 (0.88-1.08)	6.35E-01	0.46	0	1.00 (0.88-1.13)	9.28E-01
chr11:118611795:D	118611795	AG/A	0.24	0.24	I / I	1.06 (0.88-1.27)	5.58E-01	0.97 (0.88-1.08)	6.35E-01	0.46	0	1.00 (0.88-1.13)	9.28E-01
rs68097885	118596444	G/A	0.23	0.23	I / I	1.05 (0.87-1.27)	6.28E-01	0.98 (0.88-1.09)	6.81E-01	0.53	0	1.00 (0.87-1.14)	9.28E-01
rs10892312	118807740	G/A	0.11	0.11	I / I	0.77 (0.58-1.02)	6.59E-02	1.08 (0.94-1.24)	2.92E-01	0.03	78	0.98 (0.82-1.18)	9.34E-01
rs12282154	118807876	G/A	0.11	0.11	I / I	0.77 (0.58-1.02)	6.59E-02	1.08 (0.94-1.24)	2.92E-01	0.03	78	0.98 (0.82-1.18)	9.34E-01
rs73001451	118614115	T/C	0.05	0.04	I / I	0.79 (0.51-1.23)	3.03E-01	1.08 (0.88-1.34)	4.58E-01	0.21	36	0.99 (0.75-1.31)	9.35E-01
rs7127427	118805138	G/A	0.04	0.04	I / I	0.86 (0.57-1.30)	4.86E-01	1.07 (0.84-1.36)	6.01E-01	0.39	0	1.00 (0.75-1.34)	9.47E-01
rs4499035	118610463	C/T	0.24	0.24	O / O	1.06 (0.88-1.27)	5.68E-01	0.98 (0.88-1.08)	6.63E-01	0.48	0	1.00 (0.88-1.13)	9.48E-01
rs11217016	118627149	A/C	0.24	0.24	I / I	1.05 (0.87-1.26)	6.23E-01	0.99 (0.89-1.10)	8.17E-01	0.59	0	1.00 (0.88-1.14)	9.48E-01
rs11217021	118640828	T/C	0.24	0.24	I / I	1.06 (0.88-1.27)	5.60E-01	0.98 (0.89-1.09)	7.59E-01	0.51	0	1.00 (0.88-1.14)	9.61E-01
rs11217013	118624919	G/C	0.24	0.24	I / I	1.05 (0.87-1.26)	6.24E-01	0.98 (0.88-1.09)	7.18E-01	0.54	0	1.00 (0.88-1.14)	9.63E-01
rs540716	118685015	C/T	0.20	0.20	I / I	1.12 (0.92-1.37)	2.72E-01	0.96 (0.85-1.08)	4.66E-01	0.19	42	1.00 (0.87-1.15)	9.68E-01
rs74678032	118812559	T/C	0.02	0.02	I / I	1.27 (0.72-2.24)	4.13E-01	0.92 (0.63-1.32)	6.41E-01	0.35	0	1.00 (0.66-1.54)	9.68E-01
rs7124498	118616253	G/A	0.24	0.24	I / I	1.05 (0.87-1.27)	5.97E-01	0.98 (0.88-1.09)	7.14E-01	0.52	0	1.00 (0.88-1.14)	9.76E-01
rs58868870	118668296	C/T	0.24	0.24	I / I	1.06 (0.88-1.28)	5.65E-01	0.98 (0.88-1.09)	7.45E-01	0.51	0	1.00 (0.88-1.14)	9.77E-01
rs693614	118678036	G/A	0.24	0.24	I / I	1.06 (0.88-1.28)	5.30E-01	0.98 (0.88-1.09)	7.19E-01	0.47	0	1.00 (0.88-1.14)	9.79E-01
rs7117408	118808140	C/T	0.11	0.11	I / I	0.77 (0.58-1.02)	7.12E-02	1.09 (0.94-1.25)	2.46E-01	0.03	78	0.99 (0.82-1.18)	9.81E-01
rs11217018	118635364	T/C	0.24	0.24	I / I	1.05 (0.87-1.27)	5.82E-01	0.98 (0.88-1.09)	7.14E-01	0.51	0	1.00 (0.88-1.14)	9.86E-01
rs56104144	118666289	G/C	0.24	0.24	I / I	1.06 (0.88-1.28)	5.43E-01	0.98 (0.88-1.09)	6.94E-01	0.47	0	1.00 (0.88-1.14)	9.91E-01

Supplementary Table 12. Association analysis in *TNIP1*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs6579837	150434894	G/T	0.12	0.09	I / I	1.58 (1.23-2.04)	3.94E-04	1.38 (1.19-1.59)	1.71E-05	0.35	0	1.43 (1.20-1.71)	3.30E-08
rs2233290	150436503	G/C	0.11	0.09	I / I	1.60 (1.24-2.07)	2.87E-04	1.33 (1.15-1.55)	1.88E-04	0.22	34	1.40 (1.17-1.68)	3.57E-07
rs2042234	150439131	A/G	0.11	0.09	I / I	1.59 (1.23-2.05)	3.83E-04	1.33 (1.15-1.55)	1.69E-04	0.25	26	1.40 (1.17-1.67)	3.92E-07
rs2001542	150432859	C/T	0.12	0.09	I / I	1.62 (1.25-2.09)	2.12E-04	1.32 (1.14-1.53)	2.95E-04	0.18	46	1.40 (1.17-1.67)	4.81E-07
rs7732451	150444212	A/G	0.15	0.12	O / O	1.36 (1.09-1.71)	6.77E-03	1.33 (1.17-1.52)	2.43E-05	0.86	0	1.34 (1.14-1.57)	5.32E-07
rs13180950	150452553	T/C	0.19	0.15	I / I	1.40 (1.13-1.72)	1.65E-03	1.27 (1.13-1.44)	8.24E-05	0.45	0	1.31 (1.13-1.51)	5.52E-07
rs6861227	150447128	T/G	0.17	0.14	I / I	1.38 (1.11-1.72)	3.45E-03	1.29 (1.14-1.46)	7.93E-05	0.58	0	1.31 (1.13-1.53)	9.75E-07
rs17111708	150443507	G/A	0.12	0.09	I / I	1.57 (1.22-2.02)	5.52E-04	1.31 (1.13-1.52)	3.22E-04	0.24	27	1.38 (1.15-1.65)	1.05E-06
rs2233287	150440097	G/A	0.11	0.09	O / O	1.58 (1.23-2.04)	3.93E-04	1.31 (1.13-1.52)	4.18E-04	0.21	36	1.38 (1.15-1.65)	1.10E-06
rs59926079	150447743	A/G	0.11	0.09	I / I	1.56 (1.21-2.02)	6.31E-04	1.31 (1.13-1.52)	3.93E-04	0.24	27	1.38 (1.15-1.65)	1.45E-06
rs58474444	150447880	T/G	0.11	0.09	I / I	1.56 (1.21-2.01)	6.88E-04	1.31 (1.13-1.52)	3.99E-04	0.25	24	1.38 (1.15-1.65)	1.56E-06
rs13160369	150452196	C/G	0.18	0.15	I / I	1.33 (1.08-1.65)	8.33E-03	1.28 (1.14-1.45)	6.49E-05	0.76	0	1.29 (1.12-1.50)	1.71E-06
rs3792783	150455732	A/G	0.18	0.15	O / I	1.39 (1.13-1.71)	1.91E-03	1.26 (1.11-1.42)	2.19E-04	0.41	0	1.29 (1.12-1.49)	1.74E-06
rs6880110	150447090	A/G	0.17	0.14	I / I	1.38 (1.11-1.72)	3.79E-03	1.28 (1.13-1.45)	1.32E-04	0.55	0	1.31 (1.12-1.52)	1.78E-06
rs73272828	150449220	C/T	0.12	0.09	I / I	1.52 (1.17-1.96)	1.42E-03	1.31 (1.13-1.52)	3.35E-04	0.33	0	1.37 (1.14-1.63)	2.20E-06
rs3792784	150455672	A/G	0.13	0.10	I / I	1.53 (1.20-1.94)	5.69E-04	1.27 (1.11-1.47)	6.67E-04	0.20	38	1.34 (1.13-1.59)	2.44E-06
rs73272841	150453384	C/T	0.13	0.10	I / I	1.50 (1.18-1.90)	9.54E-04	1.28 (1.11-1.47)	5.91E-04	0.26	22	1.34 (1.13-1.58)	3.07E-06
rs1559127	150446753	T/C	0.14	0.11	I / I	1.52 (1.20-1.94)	6.30E-04	1.26 (1.10-1.45)	9.76E-04	0.18	43	1.33 (1.13-1.57)	4.03E-06
rs4958880	150438477	C/A	0.23	0.19	I / I	1.23 (1.01-1.48)	3.74E-02	1.26 (1.13-1.41)	3.88E-05	0.80	0	1.25 (1.09-1.43)	4.39E-06
rs75805068	150451075	A/T	0.12	0.09	I / I	1.53 (1.20-1.95)	6.85E-04	1.28 (1.10-1.49)	1.15E-03	0.23	30	1.35 (1.13-1.61)	5.10E-06
rs1107239	150454606	T/A	0.13	0.10	I / I	1.50 (1.18-1.92)	9.87E-04	1.26 (1.10-1.46)	9.99E-04	0.23	32	1.33 (1.12-1.57)	5.71E-06
rs4958881	150450236	T/C	0.14	0.11	O / O	1.50 (1.18-1.90)	8.88E-04	1.25 (1.09-1.43)	1.32E-03	0.20	40	1.32 (1.12-1.55)	7.20E-06
rs3792785	150451650	T/C	0.13	0.10	O / O	1.49 (1.17-1.89)	1.11E-03	1.26 (1.09-1.45)	1.36E-03	0.23	30	1.32 (1.11-1.56)	8.70E-06
rs10057690	150445215	T/C	0.11	0.09	I / I	1.52 (1.18-1.97)	1.27E-03	1.27 (1.10-1.48)	1.49E-03	0.24	28	1.34 (1.12-1.61)	1.07E-05
chr5:150451347:I	150451347	C/CCT	0.15	0.13	I / I	1.47 (1.17-1.84)	8.17E-04	1.23 (1.08-1.40)	2.08E-03	0.17	47	1.29 (1.10-1.51)	1.15E-05
chr5:150456053:D	150456053	CAG/C	0.15	0.12	I / I	1.50 (1.20-1.89)	4.23E-04	1.22 (1.07-1.39)	3.12E-03	0.12	60	1.29 (1.10-1.51)	1.20E-05
rs4958882	150454787	C/G	0.15	0.12	I / I	1.49 (1.19-1.87)	5.60E-04	1.22 (1.07-1.39)	3.18E-03	0.13	57	1.29 (1.10-1.51)	1.48E-05
rs73272842	150453888	G/A	0.15	0.12	I / I	1.48 (1.18-1.86)	7.03E-04	1.22 (1.07-1.39)	2.97E-03	0.14	54	1.29 (1.10-1.51)	1.58E-05
rs6869605	150452866	A/C	0.15	0.12	O / O	1.45 (1.15-1.82)	1.72E-03	1.23 (1.08-1.40)	2.12E-03	0.22	33	1.28 (1.10-1.50)	1.97E-05
rs4958436	150442829	T/C	0.24	0.21	I / I	1.19 (0.99-1.44)	6.79E-02	1.23 (1.10-1.37)	2.66E-04	0.81	0	1.22 (1.07-1.39)	4.93E-05
rs10036748	150458146	C/T	0.28	0.25	O / O	1.24 (1.04-1.48)	1.82E-02	1.18 (1.07-1.31)	1.40E-03	0.65	0	1.20 (1.06-1.36)	7.44E-05
rs6889239	150457771	T/C	0.28	0.25	I / I	1.24 (1.04-1.49)	1.67E-02	1.18 (1.06-1.30)	1.74E-03	0.60	0	1.20 (1.06-1.35)	8.70E-05
rs2233294	150429563	A/C	0.23	0.21	I / I	1.32 (1.09-1.60)	4.59E-03	1.17 (1.05-1.31)	4.36E-03	0.30	7	1.21 (1.06-1.38)	8.90E-05
rs7708392	150457485	G/C	0.28	0.25	I / I	1.24 (1.04-1.49)	1.73E-02	1.18 (1.06-1.30)	1.85E-03	0.61	0	1.20 (1.06-1.35)	9.51E-05
rs7719549	150460047	C/T	0.12	0.10	I / I	1.41 (1.11-1.80)	5.45E-03	1.23 (1.07-1.43)	4.69E-03	0.35	0	1.28 (1.08-1.52)	1.07E-04
rs960709	150461049	A/G	0.29	0.25	O / O	1.22 (1.02-1.46)	2.60E-02	1.18 (1.06-1.30)	1.62E-03	0.71	0	1.19 (1.05-1.35)	1.17E-04
rs13153275	150428399	C/G	0.29	0.26	I / I	1.32 (1.11-1.58)	2.15E-03	1.13 (1.02-1.25)	2.09E-02	0.13	56	1.18 (1.04-1.34)	3.33E-04
rs8177431	150403996	A/G	0.35	0.37	I / I	0.89 (0.75-1.06)	1.96E-01	0.87 (0.79-0.96)	4.77E-03	0.80	0	0.88 (0.78-0.99)	2.09E-03
rs4958874	150405395	C/T	0.35	0.38	I / I	0.88 (0.74-1.04)	1.28E-01	0.89 (0.81-0.98)	1.54E-02	0.89	0	0.89 (0.79-0.99)	4.23E-03
rs3792796	150402490	C/G	0.36	0.38	I / I	0.88 (0.74-1.04)	1.42E-01	0.89 (0.81-0.98)	1.60E-02	0.92	0	0.89 (0.79-1.00)	4.79E-03
rs10463312	150410894	C/T	0.36	0.38	I / I	0.89 (0.75-1.05)	1.65E-01	0.89 (0.81-0.98)	1.42E-02	0.99	0	0.89 (0.79-1.00)	4.87E-03
rs1862364	150448376	A/G	0.15	0.13	I / I	1.39 (1.12-1.73)	2.62E-03	1.10 (0.96-1.25)	1.71E-01	0.06	71	1.17 (1.00-1.37)	5.82E-03
rs3763010	150408711	T/C	0.36	0.38	I / I	0.89 (0.75-1.05)	1.62E-01	0.89 (0.81-0.98)	2.00E-02	0.94	0	0.89 (0.79-1.00)	6.65E-03
rs736775	150409348	C/T	0.36	0.38	I / I	0.88 (0.74-1.04)	1.35E-01	0.90 (0.82-0.99)	2.68E-02	0.82	0	0.89 (0.80-1.00)	7.58E-03
rs2112635	150432153	T/C	0.35	0.33	O / O	1.24 (1.05-1.47)	1.23E-02	1.08 (0.98-1.19)	1.26E-01	0.15	51	1.12 (1.00-1.26)	8.58E-03
rs8177427	150403011	G/A	0.16	0.17	I / I	0.77 (0.61-0.96)	2.10E-02	0.91 (0.80-1.03)	1.36E-01	0.19	41	0.87 (0.74-1.01)	1.27E-02
rs150973658	150463768	G/A	0.15	0.14	I / I	1.18 (0.94-1.48)	1.43E-01	1.14 (1.00-1.29)	5.05E-02	0.76	0	1.15 (0.98-1.35)	1.49E-02
rs3792797	150401891	C/A	0.16	0.18	I / I	0.75 (0.60-0.94)	1.12E-02	0.92 (0.82-1.04)	2.04E-01	0.11	62	0.87 (0.75-1.01)	1.54E-02
rs3828599	150401796	G/A	0.24	0.26	O / O	0.76 (0.62-0.92)	5.03E-03	0.94 (0.85-1.05)	2.93E-01	0.05	74	0.89 (0.78-1.01)	1.72E-02
rs3924	150410135	A/G	0.36	0.38	I / I	0.88 (0.75-1.05)	1.57E-01	0.91 (0.83-1.00)	5.48E-02	0.77	0	0.90 (0.80-1.01)	1.74E-02
rs35898062	150443650	C/T	0.04	0.03	I / I	1.01 (0.64-1.58)	9.68E-01	1.42 (1.11-1.83)	5.98E-03	0.19	41	1.29 (0.95-1.75)	1.88E-02
rs8177426	150402940	G/A	0.16	0.18	O / O	0.74 (0.60-0.93)	9.49E-03	0.93 (0.83-1.05)	2.55E-01	0.08	67	0.87 (0.75-1.02)	1.91E-02
rs4958873	150404096	G/A	0.16	0.17	O / O	0.77 (0.61-0.96)	2.10E-02	0.92 (0.81-1.04)	1.90E-01	0.16	49	0.87 (0.75-1.02)	1.94E-02
rs4958434	150402570	G/A	0.16	0.17	O / O	0.77 (0.62-0.96)	2.30E-02	0.92 (0.81-1.04)	1.90E-01	0.17	46	0.88 (0.75-1.02)	2.04E-02
rs77102485	150474712	G/C	0.14	0.13	I / I	1.15 (0.91-1.44)	2.34E-01	1.14 (1.00-1.30)	4.69E-02	0.96	0	1.14 (0.98-1.34)	2.06E-02
rs4958889	150473584	C/T	0.14	0.13	O / O	1.16 (0.92-1.45)	2.02E-01	1.14 (1.00-1.29)	5.47E-02	0.89	0	1.14 (0.98-1.34)	2.11E-02
rs10057917	150445646	T/C	0.04	0.03	I / I	1.03 (0.66-1.59)	8.98E-01	1.40 (1.09-1.80)	8.25E-03	0.23	31	1.28 (0.95-1.74)	2.11E-02
rs78053854	150466054	G/A	0.15	0.14	I / I	1.21 (0.97-1.51)	9.70E-02	1.12 (0.98-1.27)	9.37E-02	0.55	0	1.14 (0.98-1.33)	2.13E-02
rs4292439	150428195	T/C	0.17	0.18	O / O	0.76 (0.61-0.95)	1.50E-02	0.93 (0.82-1.05)	2.34E-01	0.12	59	0.88 (0.76-1.02)	2.14E-02
chr5:150436158:D	150436158	CA/C	0.23	0.25	I / I	0.90 (0.74-1.09)	2.78E-01	0.89 (0.80-1.00)	4.43E-02	0.97	0	0.90 (0.78-1.02)	2.26E-02
rs3805433	150435480	C/G	0.25	0.27	I / I	0.93 (0.77-1.12)	4.16E-01	0.89 (0.80-0.99)	3.08E-02	0.72	0	0.90 (0.79-1.02)	2.37E-02
rs138789533	150467540	G/A	0.15	0.14	I / I	1.22 (0.98-1.51)	8.23E-02	1.11 (0.98-1.26)	1.14E-01	0.48	0	1.14 (0.98-1.33)	2.37E-02
rs8177447	150407456	C/T	0.16	0.17	O / O	0.76 (0.61-0.95)	1.76E-02	0.93 (0.82-1.05)	2.50E-01	0.13	57	0.88 (0.76-1.02)	2.53E-02
rs7727250	150415651	T/C	0.16	0.17	I / I	0.77 (0.62-0.97)	2.51E-02	0.93 (0.82-1.05)	2.32E-01	0.17	48	0.88 (0.76-1.03)	2.77E-02
rs4958879	150434422	A/G	0.49	0.47	I / I	1.09 (0.93-1.29)	2.77E-01	1.09 (1.00-1.20)	5.83E-02	0.99	0	1.09 (0.98-1.22)	2.91E-02
rs52817781	150436422	C/T	0.04	0.03	I / I	1.00 (0.63-1.59)	9.85E-01	1.40 (1.08-1.80)	1.15E-02	0.22	33	1.27 (0.93-1.74)	3.14E-02
rs75970310	150468123	T/C	0.15	0.14	I / I	1.20 (0.97-1.50)	9.72E-02	1.10 (0.97-1.25)	1.37E-01	0.49	0	1.13 (0.97-1.32)	3.24E-02
rs10463311	150410835	T/C	0.24	0.26	I / I	0.76 (0.63-0.93)	6.55E-03	0.96 (0.86-1.06)	4.20E-01	0.05	75	0.90 (0.79-1.02)	3.34E-02
rs6895271	150434421	C/T	0.23	0.25	I / I	0.92 (0.75-1.11)	3.78E-01	0.90 (0.80-1.00)	5.35E-02	0.86	0	0.90 (0.79-1.03)	3.53E-02
rs115041073	150471861	G/A	0.15	0.14	I / I	1.20 (0.97-1.50)	1.00E-01	1.10 (0.97-1.25)	1.48E-01	0.48	0	1.13 (0.97-1.31)	3.59E-02

Supplementary Table 12. Association analysis in *TNIP1*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs79183735	150470472	G/T	0.15	0.14	I / I	1.20 (0.96-1.49)	1.05E-01	1.10 (0.97-1.25)	1.46E-01	0.50	0	1.13 (0.97-1.31)	3.63E-02
rs35932632	150444309	G/A	0.04	0.03	I / I	1.02 (0.65-1.61)	9.22E-01	1.37 (1.06-1.76)	1.62E-02	0.27	17	1.26 (0.92-1.72)	3.66E-02
rs12110030	150448647	C/G	0.04	0.03	I / I	0.93 (0.60-1.46)	7.64E-01	1.40 (1.08-1.80)	9.76E-03	0.12	58	1.25 (0.92-1.70)	4.24E-02
rs7727034	150415477	G/C	0.24	0.26	I / I	0.77 (0.64-0.94)	8.75E-03	0.96 (0.86-1.07)	4.58E-01	0.05	74	0.90 (0.79-1.03)	4.32E-02
rs35736924	150449945	T/C	0.04	0.03	I / I	0.98 (0.62-1.54)	9.15E-01	1.37 (1.06-1.77)	1.50E-02	0.20	39	1.25 (0.91-1.70)	4.50E-02
rs13162693	150440447	C/T	0.04	0.03	I / I	0.97 (0.61-1.53)	8.99E-01	1.37 (1.06-1.77)	1.48E-02	0.19	41	1.25 (0.91-1.70)	4.57E-02
rs11747926	150414388	G/A	0.15	0.17	I / I	0.80 (0.64-1.00)	4.99E-02	0.93 (0.82-1.05)	2.63E-01	0.24	27	0.89 (0.76-1.04)	4.65E-02
rs12109187	150448861	A/C	0.04	0.03	O / O	0.98 (0.63-1.51)	9.15E-01	1.35 (1.05-1.74)	1.72E-02	0.20	39	1.23 (0.91-1.67)	4.99E-02
rs71586194	150433351	G/A	0.03	0.03	I / I	1.01 (0.64-1.61)	9.50E-01	1.35 (1.04-1.75)	2.42E-02	0.29	10	1.24 (0.91-1.71)	5.20E-02
rs78405841	150435255	G/C	0.04	0.03	I / I	1.00 (0.63-1.59)	9.88E-01	1.34 (1.04-1.73)	2.29E-02	0.28	15	1.24 (0.91-1.69)	5.29E-02
rs34063173	150448404	A/G	0.04	0.03	I / I	0.98 (0.63-1.54)	9.38E-01	1.35 (1.05-1.74)	2.03E-02	0.23	31	1.23 (0.91-1.68)	5.42E-02
chr5:150448368:D	150448368	ATCT/A	0.04	0.03	I / I	0.95 (0.60-1.48)	8.07E-01	1.37 (1.06-1.77)	1.61E-02	0.16	50	1.24 (0.90-1.69)	5.62E-02
rs3792786	150446838	T/C	0.04	0.03	I / I	0.98 (0.63-1.54)	9.46E-01	1.35 (1.04-1.74)	2.26E-02	0.24	29	1.23 (0.90-1.68)	5.80E-02
rs13182162	150456367	C/T	0.04	0.03	I / I	0.98 (0.63-1.54)	9.34E-01	1.34 (1.04-1.73)	2.59E-02	0.24	28	1.23 (0.90-1.67)	6.53E-02
rs17111727	150455442	A/G	0.06	0.05	I / I	1.08 (0.74-1.56)	6.90E-01	1.20 (0.99-1.46)	6.90E-02	0.61	0	1.17 (0.91-1.49)	7.95E-02
rs35589164	150445677	T/C	0.03	0.03	I / I	1.03 (0.66-1.62)	8.86E-01	1.30 (1.00-1.68)	4.95E-02	0.39	0	1.22 (0.89-1.66)	8.17E-02
rs35325406	150432973	G/C	0.03	0.03	I / I	0.99 (0.62-1.58)	9.65E-01	1.32 (1.02-1.72)	3.78E-02	0.29	11	1.22 (0.88-1.68)	8.23E-02
rs34038142	150434308	C/A	0.03	0.03	I / I	1.00 (0.63-1.59)	9.85E-01	1.30 (1.00-1.68)	4.56E-02	0.34	0	1.21 (0.88-1.66)	8.84E-02
rs17111695	150432446	T/C	0.16	0.18	O / O	1.00 (0.81-1.24)	9.71E-01	0.88 (0.78-1.00)	4.50E-02	0.30	9	0.91 (0.79-1.06)	9.33E-02
rs4958878	150428584	T/A	0.10	0.11	I / I	0.85 (0.65-1.11)	2.29E-01	0.91 (0.79-1.06)	2.33E-01	0.64	0	0.89 (0.74-1.07)	9.89E-02
rs4958435	150438284	G/T	0.48	0.47	O / O	1.09 (0.93-1.28)	3.06E-01	1.06 (0.97-1.17)	2.01E-01	0.80	0	1.07 (0.96-1.20)	1.04E-01
rs9324672	150420056	C/A	0.11	0.12	O / O	1.15 (0.89-1.49)	2.82E-01	0.83 (0.71-0.95)	9.61E-03	0.03	80	0.91 (0.76-1.08)	1.05E-01
rs4958891	150477137	T/C	0.22	0.21	O / O	1.03 (0.84-1.25)	8.00E-01	1.10 (0.99-1.23)	7.99E-02	0.53	0	1.08 (0.94-1.24)	1.06E-01
rs3763002	150467539	T/C	0.46	0.45	I / I	1.12 (0.96-1.32)	1.50E-01	1.05 (0.96-1.15)	3.27E-01	0.45	0	1.07 (0.96-1.19)	1.11E-01
rs11747116	150427285	T/C	0.46	0.45	O / I	1.20 (1.02-1.41)	2.93E-02	1.02 (0.93-1.12)	6.09E-01	0.10	63	1.07 (0.96-1.20)	1.11E-01
rs2233277	150467329	T/C	0.46	0.45	O / I	1.13 (0.96-1.32)	1.44E-01	1.05 (0.95-1.15)	3.37E-01	0.43	0	1.07 (0.96-1.19)	1.12E-01
rs2287725	150466504	A/G	0.46	0.45	I / I	1.13 (0.96-1.32)	1.34E-01	1.04 (0.95-1.15)	3.49E-01	0.41	0	1.07 (0.96-1.19)	1.12E-01
rs10051105	150423459	A/G	0.06	0.06	O / O	0.64 (0.44-0.92)	1.75E-02	0.96 (0.80-1.17)	7.08E-01	0.05	74	0.86 (0.67-1.09)	1.14E-01
rs7713223	150430696	T/C	0.12	0.13	O / I	1.06 (0.83-1.36)	6.37E-01	0.87 (0.75-0.99)	3.74E-02	0.15	51	0.92 (0.78-1.08)	1.31E-01
rs4958876	150422765	C/A	0.11	0.12	O / O	0.87 (0.68-1.12)	2.87E-01	0.92 (0.80-1.06)	2.65E-01	0.70	0	0.91 (0.76-1.08)	1.31E-01
rs999011	150479351	C/T	0.12	0.13	O / O	1.08 (0.85-1.37)	5.24E-01	0.85 (0.74-0.98)	2.91E-02	0.09	65	0.91 (0.77-1.08)	1.31E-01
rs2233297	150429240	T/C	0.06	0.06	I / I	0.68 (0.46-0.99)	4.61E-02	0.95 (0.79-1.15)	6.10E-01	0.12	58	0.87 (0.68-1.10)	1.36E-01
rs8177441	150405994	G/C	0.19	0.20	I / I	1.08 (0.88-1.33)	4.55E-01	0.88 (0.78-0.99)	2.73E-02	0.08	67	0.93 (0.81-1.07)	1.41E-01
rs8177442	150405995	A/T	0.19	0.20	I / I	1.08 (0.88-1.33)	4.55E-01	0.88 (0.78-0.99)	2.73E-02	0.08	67	0.93 (0.81-1.07)	1.41E-01
rs60646696	150432657	T/C	0.08	0.07	I / I	1.05 (0.78-1.42)	7.58E-01	1.14 (0.96-1.34)	1.32E-01	0.64	0	1.11 (0.91-1.36)	1.50E-01
rs10071465	150471377	A/G	0.48	0.50	O / O	0.86 (0.74-1.01)	7.35E-02	0.97 (0.89-1.07)	5.84E-01	0.20	39	0.94 (0.84-1.05)	1.57E-01
rs11748040	150414945	G/A	0.10	0.11	I / I	0.85 (0.65-1.11)	2.28E-01	0.93 (0.80-1.08)	3.73E-01	0.54	0	0.91 (0.76-1.09)	1.63E-01
rs4958877	150423571	G/A	0.12	0.12	I / O	0.86 (0.66-1.10)	2.30E-01	0.94 (0.81-1.08)	3.73E-01	0.54	0	0.91 (0.77-1.09)	1.64E-01
rs71586196	150464590	C/A	0.04	0.04	O / O	1.09 (0.73-1.62)	6.77E-01	1.17 (0.93-1.47)	1.70E-01	0.76	0	1.15 (0.87-1.51)	1.66E-01
chr5:150427966:I	150427966	AT/A	0.11	0.12	I / I	0.87 (0.68-1.13)	3.00E-01	0.93 (0.81-1.07)	3.27E-01	0.67	0	0.91 (0.77-1.09)	1.67E-01
rs2346024	150464235	C/G	0.49	0.50	I / I	0.87 (0.74-1.01)	7.65E-02	0.98 (0.89-1.07)	6.13E-01	0.20	39	0.94 (0.84-1.05)	1.70E-01
rs141122558	150412600	T/C	0.05	0.06	I / I	0.68 (0.47-1.00)	5.32E-02	0.96 (0.79-1.17)	6.84E-01	0.12	58	0.87 (0.68-1.12)	1.70E-01
rs3792790	150442171	C/A	0.48	0.46	I / I	1.06 (0.90-1.25)	4.86E-01	1.06 (0.96-1.16)	2.42E-01	0.98	0	1.06 (0.95-1.18)	1.73E-01
rs13160766	150424837	G/C	0.11	0.12	I / I	0.87 (0.67-1.12)	2.68E-01	0.94 (0.81-1.08)	3.68E-01	0.60	0	0.92 (0.77-1.09)	1.77E-01
rs8177425	150402873	C/T	0.02	0.02	O / O	1.14 (0.66-1.94)	6.41E-01	0.74 (0.54-1.02)	6.24E-02	0.18	46	0.83 (0.57-1.22)	1.83E-01
rs149507718	150413812	A/G	0.05	0.06	I / I	0.68 (0.46-1.01)	5.58E-02	0.97 (0.80-1.18)	7.39E-01	0.12	59	0.88 (0.68-1.13)	1.95E-01
rs146571698	150471878	C/T	0.06	0.06	I / I	1.18 (0.82-1.70)	3.67E-01	1.10 (0.91-1.33)	3.35E-01	0.73	0	1.12 (0.88-1.43)	1.95E-01
rs72790109	150418221	G/A	0.11	0.12	I / I	1.24 (0.96-1.60)	1.01E-01	0.83 (0.72-0.96)	1.06E-02	0.01	86	0.93 (0.78-1.11)	1.95E-01
rs76462670	150478223	G/A	0.06	0.06	I / I	1.23 (0.86-1.77)	2.56E-01	1.08 (0.89-1.31)	4.24E-01	0.53	0	1.12 (0.88-1.43)	2.00E-01
rs7713028	150430421	G/A	0.05	0.05	I / I	0.75 (0.50-1.12)	1.55E-01	0.94 (0.76-1.15)	5.46E-01	0.33	0	0.88 (0.68-1.14)	2.05E-01
rs10463314	150463879	G/A	0.25	0.26	I / I	1.01 (0.84-1.22)	8.77E-01	0.92 (0.82-1.02)	1.10E-01	0.34	0	0.94 (0.83-1.07)	2.06E-01
rs79901336	150476675	G/T	0.06	0.06	I / I	1.21 (0.84-1.74)	3.16E-01	1.09 (0.89-1.32)	4.01E-01	0.62	0	1.12 (0.88-1.43)	2.13E-01
rs2233311	150410219	C/A	0.11	0.12	O / O	1.23 (0.96-1.59)	1.07E-01	0.83 (0.72-0.96)	1.34E-02	0.01	85	0.93 (0.78-1.11)	2.16E-01
chr5:150472305:D	150472305	AC/A	0.04	0.04	I / I	1.12 (0.75-1.68)	5.69E-01	1.14 (0.90-1.44)	2.69E-01	0.96	0	1.13 (0.86-1.50)	2.16E-01
rs72790117	150428746	G/A	0.11	0.12	I / I	1.23 (0.95-1.59)	1.17E-01	0.84 (0.72-0.97)	1.54E-02	0.01	85	0.93 (0.78-1.11)	2.22E-01
rs74817271	150469973	G/A	0.06	0.06	I / I	1.14 (0.79-1.64)	4.90E-01	1.10 (0.91-1.34)	3.13E-01	0.89	0	1.11 (0.87-1.42)	2.22E-01
rs35916756	150470583	G/A	0.04	0.04	O / O	1.08 (0.72-1.61)	7.10E-01	1.15 (0.92-1.43)	2.36E-01	0.80	0	1.13 (0.86-1.48)	2.30E-01
rs2070593	150407940	G/A	0.19	0.20	O / O	1.09 (0.89-1.34)	3.88E-01	0.89 (0.79-1.00)	5.28E-02	0.09	66	0.95 (0.82-1.09)	2.37E-01
rs8177412	150400087	T/C	0.12	0.13	O / I	1.13 (0.88-1.44)	3.36E-01	0.87 (0.76-1.00)	4.76E-02	0.07	70	0.94 (0.79-1.11)	2.44E-01
rs8177834	150409989	C/T	0.11	0.12	O / O	1.23 (0.96-1.59)	1.07E-01	0.84 (0.73-0.97)	1.70E-02	0.01	85	0.94 (0.78-1.11)	2.45E-01
rs72790113	150425910	C/T	0.11	0.12	I / I	1.23 (0.95-1.58)	1.22E-01	0.84 (0.73-0.97)	1.92E-02	0.01	84	0.94 (0.78-1.12)	2.45E-01
rs8177458	150409667	G/A	0.03	0.04	O / O	0.77 (0.48-1.23)	2.74E-01	0.92 (0.72-1.18)	4.99E-01	0.52	0	0.87 (0.64-1.19)	2.49E-01
rs870406	150400601	G/A	0.12	0.13	O / O	1.12 (0.88-1.44)	3.53E-01	0.87 (0.76-1.00)	5.19E-02	0.08	68	0.94 (0.79-1.11)	2.49E-01
rs35655311	150478365	C/T	0.04	0.04	O / O	1.09 (0.73-1.63)	6.66E-01	1.13 (0.90-1.42)	2.76E-01	0.87	0	1.12 (0.85-1.48)	2.49E-01
rs72790114	150426138	G/C	0.11	0.12	I / I	1.23 (0.95-1.59)	1.16E-01	0.84 (0.73-0.97)	1.92E-02	0.01	84	0.94 (0.78-1.12)	2.51E-01
rs72790116	150426677	G/C	0.11	0.12	I / I	1.23 (0.95-1.59)	1.16E-01	0.84 (0.73-0.97)	1.98E-02	0.01	84	0.94 (0.79-1.12)	2.55E-01
rs72790110	150420038	G/A	0.11	0.12	I / I	1.23 (0.95-1.59)	1.10E-01	0.84 (0.73-0.97)	1.91E-02	0.01	85	0.94 (0.79-1.12)	2.56E-01
chr5:150466690:D	150466690	GC/G	0.06	0.06	I / I	1.13 (0.78-1.63)	5.30E-01	1.10 (0.90-1.33)	3.46E-01	0.90	0	1.11 (0.87-1.41)	2.58E-01
chr5:150413667:I	150413667	C/CT	0.11	0.12	I / I	1.26 (0.98-1.63)	7.62E-02	0.83 (0.72-0.96)	1.45E-02	0.01	87	0.94 (0.79-1.12)	2.59E-01
rs999556	150473674	A/G	0.31	0.32	O / O	1.04 (0.88-1.23)	6.59E-01	0.92 (0.84-1.02)	1.10E-01	0.24	28	0.95 (0.85-1.07)	2.63E-01

Supplementary Table 12. Association analysis in *TNIP1*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs2233302	150415098	C/G	0.11	0.12	I / I	1.26 (0.98-1.63)	7.57E-02	0.84 (0.72-0.97)	1.50E-02	0.01	87	0.94 (0.79-1.12)	2.64E-01
rs11738559	150476129	C/T	0.17	0.18	I / I	1.06 (0.86-1.30)	6.09E-01	0.90 (0.80-1.02)	1.03E-01	0.20	38	0.94 (0.81-1.09)	2.67E-01
rs3763011	150404703	G/A	0.20	0.20	I / I	1.04 (0.85-1.27)	7.09E-01	0.92 (0.82-1.02)	1.26E-01	0.28	13	0.95 (0.83-1.09)	2.73E-01
rs4958888	150472842	G/A	0.25	0.26	I / O	1.00 (0.83-1.21)	9.75E-01	0.93 (0.84-1.04)	1.96E-01	0.50	0	0.95 (0.84-1.08)	2.82E-01
rs3763003	150467530	C/T	0.39	0.39	I / I	1.08 (0.92-1.28)	3.36E-01	1.03 (0.94-1.13)	5.07E-01	0.61	0	1.05 (0.93-1.17)	2.83E-01
rs72790107	150412836	C/T	0.11	0.12	I / I	1.25 (0.97-1.62)	8.49E-02	0.84 (0.73-0.97)	1.89E-02	0.01	86	0.94 (0.79-1.12)	2.84E-01
rs35191122	150465593	G/C	0.04	0.04	I / I	1.11 (0.75-1.66)	6.00E-01	1.12 (0.88-1.41)	3.52E-01	0.99	0	1.12 (0.84-1.48)	2.86E-01
rs870407	150400587	A/G	0.13	0.14	I / I	1.08 (0.85-1.38)	5.14E-01	0.89 (0.78-1.02)	9.94E-02	0.17	46	0.94 (0.80-1.11)	2.92E-01
rs3763012	150404657	G/A	0.20	0.21	O / I	1.06 (0.86-1.29)	5.89E-01	0.91 (0.82-1.02)	1.18E-01	0.22	34	0.95 (0.83-1.09)	3.00E-01
rs17801328	150472328	C/T	0.04	0.03	I / I	0.82 (0.49-1.37)	4.44E-01	1.23 (0.97-1.56)	8.97E-02	0.16	50	1.10 (0.80-1.51)	3.02E-01
rs1024995	150476004	T/C	0.12	0.11	O / O	1.20 (0.94-1.54)	1.51E-01	1.02 (0.89-1.18)	7.57E-01	0.28	16	1.07 (0.90-1.27)	3.05E-01
rs3762997	150469552	C/T	0.40	0.39	I / I	1.09 (0.93-1.29)	2.73E-01	1.02 (0.93-1.12)	6.27E-01	0.48	0	1.04 (0.93-1.17)	3.19E-01
rs76956521	150464641	A/C	0.06	0.06	I / I	1.14 (0.79-1.65)	4.90E-01	1.08 (0.89-1.31)	4.63E-01	0.79	0	1.09 (0.86-1.40)	3.23E-01
chr5:150471727:I	150471727	G/GT	0.45	0.44	I / I	1.13 (0.96-1.33)	1.34E-01	1.01 (0.92-1.11)	8.39E-01	0.23	30	1.04 (0.93-1.17)	3.33E-01
rs71586197	150468380	A/G	0.04	0.04	I / I	1.13 (0.75-1.68)	5.59E-01	1.09 (0.87-1.38)	4.54E-01	0.90	0	1.10 (0.83-1.46)	3.45E-01
rs3792780	150466193	A/C	0.40	0.39	O / O	1.10 (0.93-1.29)	2.58E-01	1.02 (0.93-1.12)	6.90E-01	0.43	0	1.04 (0.93-1.17)	3.47E-01
rs75851973	150464579	A/G	0.06	0.06	I / I	1.14 (0.79-1.65)	4.90E-01	1.07 (0.88-1.30)	4.99E-01	0.77	0	1.09 (0.85-1.39)	3.48E-01
rs2233279	150467170	T/C	0.40	0.39	O / O	1.10 (0.94-1.30)	2.41E-01	1.02 (0.93-1.12)	7.09E-01	0.41	0	1.04 (0.93-1.17)	3.48E-01
rs79984475	150473104	A/C	0.25	0.26	O / I	1.01 (0.84-1.21)	9.31E-01	0.94 (0.85-1.04)	2.46E-01	0.51	0	0.96 (0.84-1.09)	3.49E-01
rs3792779	150466385	A/C	0.40	0.39	O / O	1.10 (0.93-1.29)	2.57E-01	1.02 (0.93-1.12)	7.06E-01	0.42	0	1.04 (0.93-1.17)	3.56E-01
rs3763001	150467636	G/A	0.40	0.39	I / I	1.10 (0.94-1.30)	2.45E-01	1.02 (0.93-1.12)	7.21E-01	0.41	0	1.04 (0.93-1.16)	3.58E-01
rs10067529	150469986	C/T	0.45	0.45	O / O	1.12 (0.96-1.32)	1.51E-01	1.01 (0.92-1.10)	8.68E-01	0.24	26	1.04 (0.93-1.16)	3.65E-01
rs76837520	150467476	G/A	0.40	0.39	I / I	1.09 (0.93-1.29)	2.92E-01	1.02 (0.93-1.12)	6.85E-01	0.48	0	1.04 (0.93-1.16)	3.66E-01
rs2233276	150467401	G/A	0.04	0.04	I / I	1.11 (0.74-1.66)	6.05E-01	1.09 (0.86-1.38)	4.61E-01	0.94	0	1.10 (0.83-1.45)	3.68E-01
rs4958887	150472602	A/G	0.46	0.45	O / O	1.12 (0.96-1.32)	1.52E-01	1.01 (0.92-1.10)	8.90E-01	0.24	27	1.04 (0.93-1.16)	3.80E-01
rs4958885	150470963	A/G	0.45	0.44	I / I	1.13 (0.97-1.33)	1.23E-01	1.00 (0.91-1.10)	9.53E-01	0.19	41	1.04 (0.93-1.16)	3.85E-01
rs4958883	150465247	G/A	0.45	0.45	I / I	1.13 (0.96-1.33)	1.36E-01	1.00 (0.92-1.10)	9.40E-01	0.21	36	1.04 (0.93-1.16)	3.91E-01
rs7711245	150470403	A/G	0.45	0.45	O / O	1.12 (0.96-1.32)	1.51E-01	1.00 (0.92-1.10)	9.30E-01	0.23	31	1.04 (0.93-1.16)	4.02E-01
rs3762999	150469426	C/T	0.45	0.45	O / O	1.12 (0.96-1.32)	1.52E-01	1.00 (0.92-1.10)	9.35E-01	0.23	31	1.04 (0.93-1.16)	4.06E-01
rs13159559	150464949	C/G	0.04	0.04	I / I	1.12 (0.75-1.67)	5.94E-01	1.08 (0.85-1.37)	5.20E-01	0.90	0	1.09 (0.82-1.45)	4.07E-01
rs7711385	150470461	C/T	0.45	0.45	O / O	1.13 (0.96-1.32)	1.43E-01	1.00 (0.91-1.10)	9.62E-01	0.21	36	1.04 (0.93-1.16)	4.13E-01
rs13188308	150471568	T/C	0.45	0.45	I / I	1.12 (0.96-1.32)	1.51E-01	1.00 (0.91-1.10)	9.54E-01	0.22	32	1.04 (0.93-1.16)	4.16E-01
rs79563056	150435150	C/G	0.03	0.03	I / I	0.79 (0.45-1.36)	3.91E-01	0.94 (0.72-1.25)	6.86E-01	0.56	0	0.90 (0.63-1.28)	4.24E-01
rs7711658	150470576	C/G	0.45	0.45	I / I	1.12 (0.96-1.32)	1.49E-01	1.00 (0.91-1.10)	9.70E-01	0.22	34	1.04 (0.93-1.16)	4.25E-01
rs918499	150465555	G/A	0.45	0.45	I / I	1.13 (0.96-1.33)	1.36E-01	1.00 (0.91-1.10)	9.98E-01	0.20	40	1.04 (0.93-1.16)	4.29E-01
rs7731894	150470747	T/C	0.45	0.45	O / I	1.12 (0.96-1.32)	1.58E-01	1.00 (0.91-1.10)	9.74E-01	0.23	31	1.03 (0.93-1.16)	4.37E-01
chr5:150471732:I	150471732	G/GC	0.45	0.45	I / I	1.12 (0.95-1.31)	1.85E-01	1.00 (0.91-1.10)	9.48E-01	0.26	20	1.03 (0.92-1.16)	4.48E-01
rs9968694	150470913	C/T	0.30	0.30	I / I	1.03 (0.87-1.23)	7.11E-01	0.94 (0.85-1.04)	2.61E-01	0.38	0	0.97 (0.86-1.09)	4.49E-01
rs2161361	150464905	T/C	0.45	0.45	I / I	1.12 (0.96-1.32)	1.57E-01	1.00 (0.91-1.10)	9.91E-01	0.22	35	1.03 (0.92-1.16)	4.57E-01
rs2161360	150464901	C/G	0.45	0.45	I / I	1.12 (0.96-1.32)	1.57E-01	1.00 (0.91-1.10)	9.88E-01	0.21	35	1.03 (0.92-1.16)	4.60E-01
rs999557	150474080	T/G	0.40	0.40	O / O	1.08 (0.92-1.27)	3.52E-01	1.01 (0.92-1.11)	7.75E-01	0.51	0	1.03 (0.92-1.15)	4.62E-01
rs7717069	150471698	C/G	0.30	0.31	I / I	1.03 (0.87-1.23)	7.29E-01	0.95 (0.86-1.05)	2.82E-01	0.40	0	0.97 (0.86-1.09)	4.67E-01
rs4661	150408315	C/T	0.06	0.06	O / O	1.04 (0.72-1.50)	8.39E-01	0.91 (0.75-1.10)	3.36E-01	0.53	0	0.94 (0.74-1.20)	4.80E-01
rs10056212	150471394	A/G	0.45	0.45	O / I	1.12 (0.95-1.32)	1.64E-01	1.00 (0.91-1.09)	9.57E-01	0.22	34	1.03 (0.92-1.15)	4.88E-01
rs7706327	150469752	A/C	0.45	0.45	O / O	1.13 (0.96-1.32)	1.39E-01	0.99 (0.91-1.09)	9.12E-01	0.18	44	1.03 (0.92-1.15)	4.89E-01
rs7734456	150427172	G/C	0.42	0.43	I / I	0.88 (0.75-1.04)	1.26E-01	1.01 (0.92-1.11)	8.77E-01	0.16	49	0.97 (0.87-1.09)	4.96E-01
rs3763009	150412140	G/A	0.35	0.35	O / O	0.90 (0.76-1.06)	2.12E-01	1.00 (0.91-1.10)	1.00E+00	0.28	15	0.97 (0.86-1.09)	5.07E-01
chr5:150462573:D	150462573	GGC/G	0.08	0.08	I / I	0.98 (0.72-1.33)	8.75E-01	0.94 (0.80-1.12)	5.02E-01	0.85	0	0.95 (0.77-1.17)	5.15E-01
rs3805434	150420339	C/G	0.13	0.13	I / I	0.83 (0.65-1.07)	1.52E-01	1.01 (0.88-1.16)	8.94E-01	0.19	43	0.96 (0.81-1.13)	5.18E-01
rs3792781	150456869	A/G	0.02	0.02	I / I	1.36 (0.74-2.49)	3.28E-01	1.02 (0.75-1.39)	8.98E-01	0.42	0	1.11 (0.74-1.64)	5.30E-01
rs7726776	150469888	T/C	0.45	0.45	I / I	1.12 (0.96-1.32)	1.50E-01	0.99 (0.90-1.09)	8.63E-01	0.18	44	1.03 (0.92-1.15)	5.36E-01
rs13170017	150466790	A/C	0.04	0.04	O / I	1.07 (0.72-1.60)	7.23E-01	1.06 (0.84-1.34)	6.27E-01	0.95	0	1.06 (0.80-1.41)	5.49E-01
rs78961323	150455661	A/G	0.02	0.02	I / I	1.35 (0.74-2.49)	3.30E-01	1.01 (0.74-1.39)	9.38E-01	0.41	0	1.10 (0.74-1.63)	5.59E-01
rs56908687	150459138	G/A	0.02	0.02	I / I	1.44 (0.79-2.60)	2.31E-01	0.99 (0.72-1.36)	9.45E-01	0.28	16	1.10 (0.74-1.63)	5.64E-01
rs56003867	150412900	T/C	0.06	0.06	I / I	1.04 (0.72-1.49)	8.49E-01	0.93 (0.77-1.12)	4.32E-01	0.60	0	0.96 (0.75-1.22)	5.73E-01
rs73272866	150458064	T/G	0.02	0.02	I / I	1.35 (0.74-2.49)	3.30E-01	1.00 (0.73-1.38)	9.78E-01	0.40	0	1.09 (0.73-1.63)	5.88E-01
rs3762996	150469626	G/T	0.25	0.25	O / O	0.99 (0.83-1.20)	9.48E-01	0.97 (0.87-1.08)	5.51E-01	0.81	0	0.98 (0.86-1.11)	5.90E-01
rs79937737	150457479	G/A	0.02	0.02	I / I	1.36 (0.74-2.49)	3.28E-01	1.00 (0.73-1.38)	9.85E-01	0.39	0	1.09 (0.73-1.63)	5.93E-01
rs73272850	150455571	C/G	0.02	0.02	I / I	1.36 (0.74-2.50)	3.23E-01	1.00 (0.73-1.38)	9.97E-01	0.38	0	1.09 (0.73-1.63)	5.97E-01
rs1422674	150445609	T/G	0.10	0.10	O / I	0.95 (0.72-1.26)	7.24E-01	0.97 (0.83-1.13)	7.06E-01	0.90	0	0.96 (0.80-1.17)	6.12E-01
rs79556964	150457256	G/A	0.02	0.02	I / I	1.36 (0.74-2.49)	3.28E-01	1.00 (0.72-1.37)	9.87E-01	0.38	0	1.09 (0.73-1.62)	6.14E-01
rs73272847	150455492	C/T	0.02	0.02	I / I	1.31 (0.72-2.41)	3.78E-01	1.01 (0.74-1.38)	9.65E-01	0.45	0	1.09 (0.73-1.61)	6.14E-01
rs3805435	150401296	T/C	0.09	0.09	O / O	0.83 (0.61-1.12)	2.18E-01	1.02 (0.87-1.19)	8.48E-01	0.24	28	0.96 (0.78-1.17)	6.23E-01
rs3805430	150447690	C/G	0.02	0.02	I / I	1.37 (0.74-2.51)	3.16E-01	0.98 (0.71-1.36)	9.23E-01	0.35	0	1.08 (0.72-1.61)	6.52E-01
rs13356414	150460244	C/T	0.09	0.10	I / I	1.00 (0.75-1.32)	9.83E-01	0.96 (0.82-1.12)	6.22E-01	0.83	0	0.97 (0.80-1.18)	6.68E-01
rs3792798	150401765	G/A	0.09	0.09	I / O	0.83 (0.61-1.12)	2.12E-01	1.02 (0.87-1.21)	7.73E-01	0.22	34	0.96 (0.79-1.18)	6.74E-01
rs73272871	150458301	T/C	0.02	0.02	I / I	1.35 (0.74-2.49)	3.30E-01	0.98 (0.71-1.35)	8.99E-01	0.36	0	1.07 (0.72-1.61)	6.82E-01
rs77013900	150429129	G/A	0.02	0.02	I / I	0.85 (0.45-1.62)	6.23E-01	0.98 (0.74-1.29)	8.74E-01	0.70	0	0.94 (0.64-1.38)	6.93E-01
rs59601429	150460354	C/A	0.02	0.02	I / I	1.58 (0.88-2.83)	1.25E-01	0.92 (0.67-1.27)	6.19E-01	0.11	60	1.07 (0.72-1.59)	6.94E-01
rs59841346	150471274	C/T	0.05	0.05	O / O	1.13 (0.82-1.56)	4.67E-01	0.91 (0.74-1.12)	3.63E-01	0.27	18	0.97 (0.76-1.23)	7.00E-01

Supplementary Table 12. Association analysis in *TNIP1*

SNP	BP	Alleles	MAF		Observed or Imputed in Dataset1/2	Dataset 1		Dataset 2		Test of heterogeneity		Meta analysis	
		maj / min	Case	Control		OR (95% CI)	*P*	OR (95% CI)	*P*	P_Q	I^2	OR (95% CI)	*P*
rs2161362	150474388	A/G	0.42	0.42	O / O	1.04 (0.88-1.22)	6.53E-01	1.01 (0.92-1.10)	8.85E-01	0.75	0	1.02 (0.91-1.14)	7.18E-01
rs2277940	150409477	T/C	0.08	0.08	O / O	0.91 (0.67-1.23)	5.36E-01	1.00 (0.84-1.19)	9.95E-01	0.59	0	0.97 (0.79-1.20)	7.38E-01
rs6867766	150457699	C/T	0.02	0.02	I / I	1.40 (0.76-2.58)	2.79E-01	0.95 (0.69-1.31)	7.73E-01	0.27	16	1.06 (0.71-1.59)	7.41E-01
rs3762998	150469551	G/A	0.05	0.05	O / O	1.13 (0.81-1.56)	4.70E-01	0.92 (0.74-1.12)	4.01E-01	0.29	11	0.97 (0.76-1.23)	7.43E-01
rs57783314	150446428	A/G	0.02	0.02	I / I	1.36 (0.74-2.51)	3.17E-01	0.96 (0.69-1.33)	8.02E-01	0.32	0	1.06 (0.71-1.59)	7.49E-01
rs4958437	150460768	T/C	0.09	0.09	I / I	0.95 (0.72-1.26)	7.42E-01	0.99 (0.85-1.15)	8.68E-01	0.83	0	0.98 (0.81-1.18)	7.52E-01
chr5:150460088:D	150460088	GA/G	0.11	0.12	I / I	1.04 (0.80-1.35)	7.71E-01	0.96 (0.83-1.11)	5.79E-01	0.60	0	0.98 (0.82-1.17)	7.53E-01
rs8177437	150405387	G/C	0.08	0.08	I / I	0.88 (0.65-1.21)	4.41E-01	1.01 (0.85-1.20)	9.10E-01	0.46	0	0.97 (0.79-1.20)	7.54E-01
rs869975	150406372	G/A	0.08	0.08	I / I	0.88 (0.65-1.21)	4.41E-01	1.01 (0.85-1.20)	9.06E-01	0.46	0	0.97 (0.79-1.20)	7.57E-01
rs73272873	150458604	G/A	0.02	0.02	I / I	1.49 (0.82-2.70)	1.91E-01	0.93 (0.67-1.28)	6.45E-01	0.17	47	1.06 (0.71-1.58)	7.61E-01
rs11548	150407783	C/T	0.08	0.08	O / O	0.90 (0.66-1.22)	4.91E-01	1.01 (0.85-1.19)	9.31E-01	0.52	0	0.98 (0.79-1.20)	7.70E-01
rs3792795	150403802	C/T	0.08	0.08	O / O	0.89 (0.66-1.22)	4.74E-01	1.01 (0.85-1.20)	9.14E-01	0.50	0	0.97 (0.79-1.20)	7.73E-01
rs12655899	150428157	G/A	0.08	0.08	I / I	0.90 (0.66-1.22)	4.96E-01	1.01 (0.85-1.19)	9.22E-01	0.52	0	0.98 (0.79-1.20)	7.81E-01
rs28372811	150461285	A/G	0.09	0.09	I / I	0.96 (0.72-1.27)	7.75E-01	0.99 (0.85-1.15)	8.90E-01	0.85	0	0.98 (0.81-1.19)	7.88E-01
rs76204372	150450001	C/T	0.02	0.02	I / I	1.35 (0.74-2.48)	3.33E-01	0.95 (0.69-1.32)	7.64E-01	0.32	0	1.05 (0.70-1.58)	7.95E-01
rs10038339	150460320	C/A	0.09	0.09	I / I	0.97 (0.73-1.29)	8.33E-01	0.99 (0.84-1.15)	8.63E-01	0.92	0	0.98 (0.81-1.19)	7.96E-01
rs8177438	150405405	C/T	0.08	0.08	I / I	0.88 (0.65-1.21)	4.39E-01	1.02 (0.86-1.21)	8.50E-01	0.44	0	0.98 (0.79-1.21)	8.02E-01
rs17728260	150443005	A/G	0.09	0.09	O / O	0.90 (0.67-1.21)	4.82E-01	1.01 (0.86-1.19)	8.82E-01	0.49	0	0.98 (0.80-1.19)	8.04E-01
rs8177429	150403098	G/C	0.09	0.09	I / I	0.85 (0.63-1.14)	2.72E-01	1.04 (0.88-1.22)	6.62E-01	0.24	28	0.98 (0.80-1.20)	8.31E-01
rs76340441	150450365	G/A	0.02	0.02	I / I	1.35 (0.74-2.48)	3.30E-01	0.94 (0.68-1.30)	7.12E-01	0.30	6	1.04 (0.69-1.56)	8.38E-01
rs113620860	150449404	A/C	0.02	0.02	I / I	1.32 (0.72-2.41)	3.75E-01	0.95 (0.68-1.31)	7.49E-01	0.35	0	1.04 (0.69-1.56)	8.41E-01
rs78381597	150443945	T/A	0.02	0.02	I / I	1.36 (0.74-2.50)	3.20E-01	0.94 (0.67-1.30)	6.97E-01	0.29	11	1.04 (0.69-1.57)	8.43E-01
rs10063243	150458826	T/A	0.02	0.02	I / I	1.49 (0.82-2.70)	1.91E-01	0.90 (0.65-1.25)	5.35E-01	0.15	52	1.04 (0.69-1.55)	8.66E-01
rs62382335	150425032	T/A	0.08	0.08	I / I	0.91 (0.67-1.24)	5.45E-01	1.02 (0.86-1.20)	8.56E-01	0.54	0	0.98 (0.80-1.21)	8.67E-01
rs76523847	150454184	A/G	0.02	0.02	I / I	1.32 (0.72-2.43)	3.66E-01	0.94 (0.68-1.30)	6.99E-01	0.33	0	1.03 (0.69-1.55)	8.78E-01
rs60454275	150436073	G/A	0.02	0.02	I / I	1.32 (0.72-2.43)	3.64E-01	0.94 (0.67-1.30)	6.96E-01	0.32	0	1.03 (0.69-1.56)	8.79E-01
rs3805432	150439504	C/T	0.02	0.02	I / I	1.40 (0.76-2.59)	2.76E-01	0.91 (0.65-1.28)	6.06E-01	0.23	31	1.03 (0.68-1.56)	8.88E-01
rs3792792	150440506	T/C	0.02	0.02	I / I	1.36 (0.74-2.50)	3.20E-01	0.92 (0.66-1.28)	6.31E-01	0.27	18	1.03 (0.68-1.55)	9.03E-01
rs2233289	150436517	G/A	0.01	0.01	O / O	1.24 (0.57-2.69)	5.93E-01	0.96 (0.62-1.49)	8.46E-01	0.57	0	1.03 (0.60-1.76)	9.04E-01
rs60602178	150413528	A/G	0.08	0.08	I / I	0.92 (0.68-1.25)	5.99E-01	1.04 (0.88-1.23)	6.57E-01	0.50	0	1.00 (0.82-1.23)	9.23E-01
rs56661379	150419962	T/C	0.08	0.08	I / I	0.90 (0.66-1.23)	5.09E-01	1.04 (0.88-1.24)	6.10E-01	0.41	0	1.00 (0.81-1.23)	9.35E-01
rs1862363	150448145	G/A	0.02	0.02	I / I	1.32 (0.72-2.43)	3.65E-01	0.92 (0.66-1.28)	6.34E-01	0.31	5	1.02 (0.68-1.54)	9.38E-01
rs11747389	150472036	G/C	0.05	0.05	I / I	1.18 (0.85-1.64)	3.15E-01	0.94 (0.77-1.16)	5.75E-01	0.25	24	1.00 (0.79-1.28)	9.53E-01
rs141907998	150419467	C/T	0.02	0.02	I / I	1.00 (0.53-1.89)	1.00E+00	0.99 (0.73-1.34)	9.58E-01	0.98	0	0.99 (0.67-1.48)	9.64E-01
rs3805431	150439539	G/A	0.08	0.08	I / I	0.91 (0.66-1.24)	5.43E-01	1.04 (0.88-1.23)	6.70E-01	0.46	0	1.00 (0.81-1.23)	9.70E-01
rs3792794	150434722	C/T	0.08	0.08	O / O	0.90 (0.65-1.23)	4.93E-01	1.04 (0.88-1.24)	6.39E-01	0.41	0	1.00 (0.81-1.23)	9.74E-01
rs6870205	150453011	G/A	0.02	0.02	I / I	1.28 (0.70-2.34)	4.29E-01	0.92 (0.66-1.27)	6.00E-01	0.34	0	1.01 (0.67-1.50)	9.81E-01
rs4958438	150461069	A/G	0.10	0.10	O / O	0.94 (0.71-1.24)	6.61E-01	1.02 (0.88-1.19)	7.65E-01	0.60	0	1.00 (0.83-1.20)	9.84E-01
rs8177449	150407939	C/T	0.07	0.07	I / I	1.04 (0.75-1.43)	8.17E-01	0.99 (0.82-1.19)	8.90E-01	0.79	0	1.00 (0.80-1.25)	9.96E-01
rs62382333	150418959	T/C	0.08	0.08	I / I	0.91 (0.67-1.24)	5.41E-01	1.03 (0.87-1.22)	7.05E-01	0.47	0	1.00 (0.81-1.23)	9.97E-01

Supplementary Table 13: Suggestive regions from analysis using Dataset 4.

Gene symbol	Chr	SNP	BP (hg19)	Observed or imputed	Alleles	MAF[b]		OR (95% CI)	*P*
					maj/min[a]	Case	Control		
CPEB4	5	rs359457	173279842	O	T/C	0.40	0.45	0.79 (0.72-0.87)	8.96E-07
RASGRP3	2	rs13425999	33702203	O	C/T	0.05	0.08	0.64 (0.53-0.77)	3.44E-06
VCAM1	1	chr1:100993403	100993403[c]	O	A/G	0.06	0.04	1.68 (1.35-2.09)	4.29E-06
SATB1	3	rs11915281	18662988	I	C/T	0.03	0.02	2.09 (1.52-2.87)	5.03E-06
ATXN2	12	rs4766578	111904371	I	A/T	0.53	0.48	1.23 (1.12-1.35)	7.58E-06
2q31.1	2	rs1554770	177479463	O	A/G	0.40	0.45	0.81 (0.74-0.89)	8.43E-06
MIR1208	8	rs759651	129164288	O	T/C	0.24	0.20	1.28 (1.15-1.43)	1.22E-05
C1orf53	1	rs61829103	197862946	O	A/G	0.05	0.07	0.64 (0.52-0.78)	1.24E-05
PRDM7	16	rs4785621	88658236	O	G/A	0.09	0.12	0.71 (0.61-0.83)	1.45E-05
TMCO4	1	rs6699160	20025383	O	T/C	0.17	0.13	1.33 (1.17-1.51)	1.70E-05
TP53TG1	7	rs11762311	86780761	O	G/A	0.07	0.05	1.53 (1.26-1.85)	1.71E-05
RNLS	10	rs558443	90013195	I	A/C	0.21	0.25	0.78 (0.70-0.87)	1.83E-05
IRF8	16	rs11117431	86015316	O	A/G	0.17	0.22	0.77 (0.69-0.87)	1.86E-05
CCR3	3	rs79539493	46302938	I	G/A	0.12	0.15	0.74 (0.64-0.85)	1.88E-05
TPD52L2	20	rs12624434	62482223	I	G/A	0.05	0.08	0.65 (0.54-0.79)	2.05E-05
IL12RB2	1	rs6672745	67788565	O	C/T	0.14	0.11	1.35 (1.18-1.56)	2.50E-05
SNX13	7	rs6973480	17944654	O	A/G	0.50	0.46	1.21 (1.11-1.33)	3.73E-05
ABHD6	3	rs200129705	58225966	I	T/TA	0.27	0.32	0.81 (0.73-0.90)	3.87E-05
IL15RA-IL2RA	10	rs1323651	6033301	O	C/A	0.41	0.36	1.22 (1.11-1.34)	4.44E-05
DOCK1-NPS	10	rs10830107	129194065	O	A/G	0.21	0.17	1.28 (1.14-1.44)	4.70E-05
UBE2E3	2	rs6734603	182038729	O	C/T	0.27	0.23	1.25 (1.12-1.39)	4.93E-05

a. Major allele and minor allele;
b. The minor allele frequency (MAF).
c. This base pair position in shown in hg18.

Supplementary Table 14: Multiple logistic regression model of genome-wide and suggestive association SNPs to Sjögren's syndrome risk.

SNP	Gene	Minor Allele	OR(95%CI)	P
rs6658353	*FCGR2A*	G	0.85(0.77-0.94)	8.7E-04
rs10553577	*STAT4*	T	1.40(1.26-1.56)	5.3E-10
rs485497	*IL12A*	A	1.27(1.15-1.40)	9.1E-07
rs3733346	*DGKQ*	C	1.23(1.12-1.35)	2.3E-05
rs6579837	*TNFAIP3*	T	1.42(1.22-1.65)	5.6E-06
rs2431098	*PTTG1*	A	0.78(0.71-0.86)	2.9E-07
rs116232857	*HLA-DQA1*	G	1.98(1.77-2.20)	1.3E-34
rs115575857	*HLA-DQB1*	G	2.34(2.04-2.68)	1.7E-34
rs526531	*PRDM1*	A	1.23(1.11-1.36)	6.9E-05
rs6933404	*TNFAIP3*	C	1.29(1.15-1.44)	7.1E-06
rs3757387	*IRF5*	C	1.41(1.22-1.64)	4.0E-06
rs10954213	*IRF5*	G	1.18(1.02-1.37)	2.4E-02
rs17339836	*IRF5*	T	1.47(1.28-1.70)	6.3E-08
rs2736345	*BLK*	G	1.33(1.20-1.47)	2.9E-08
rs7119038	*CXCR5*	G	0.75(0.67-0.85)	3.0E-06
C statistic (area under ROC curve)				0.811

Supplementary Table 15: Table of odds ratios (ORs) with the 95% confidence intervals for significantly associated loci outside the HLA in Sjögren's syndrome and various autoimmune disorders. The PubMed ID (PMID) for the reference from which data for each variant was is provided; Sjögren's syndrome data is obtained from this study. Abbreviations: Sjögren's syndrome (SS); celiac disease (CelD); primary biliary cirrhosis (PBC); rheumatoid arthritis (RA); ulcerative colitis (UC); systemic lupus erythematosus (SLE); systemic sclerosis (SSc).

Row in Figure	Locus	Phenotype	SNP	Location	OR	95% CI	P value	PMID
01	*CXCR5*	PBC	rs6421571	11q23	0.73	0.67-0.80	3.00E-12	21399635
02	*CXCR5*	SS	rs6421571	11q23	0.76	0.65-0.88	2.08E-07	-
03	*BLK*	SSc	rs2736340	8p21.3	1.27	1.10-1.40	6.80E-05	19796918
04	*BLK*	SLE	rs13277113	8p21.3	1.39	1.28-1.51	1.00E-10	18204098
05	*BLK*	RA	rs2736340	8p21.3	1.19	1.13-1.27	5.69E-09	19503088
06	*BLK*	SS	rs2736345	8p21.3	1.30	1.16-1.46	1.17E-10	-
07	*IRF5*	SSc	rs4728142	7q32	1.22	1.14-1.29	4.74E-10	22407130
08	*IRF5*	UC	rs4728142	7q32	1.07	1.03-1.11	2.00E-08	21297633
09	*IRF5*	PBC	rs12531711	7q32	1.58	1.41-1.76	8.90E-17	21399635
10	*IRF5*	SLE	rs3807307	7q32	1.59	1.33-1.89	2.20E-07	18063667
11	*IRF5*	RA	rs752637	7q32	0.86	0.79-0.93	3.03E-05	23073787
12	*IRF5*	SS	rs3757387	7q32	1.44	1.29-1.62	2.73E-19	-
13	*TNIP1*	SLE	rs6579837	5q32	1.28	1.16-1.42	2.45E-05	22833143
14	*TNIP1*	SS	rs6579837	5q32	1.43	1.20-1.71	3.30E-08	-
15	*IL12A*	CelD	rs17810546	3q25.33	1.36	1.29-1.44	4.00E-28	20190752
16	*IL12A*	CelD	rs17810546	3q25–3q26	1.35	1.23-1.49	1.07E-09	18311140
17	*IL12A*	PBC	rs9877910	3q25	1.47	1.34-1.60	1.02E-17	22936693
18	*IL12A*	SS	rs485497	3q25	1.30	1.16-1.46	1.17E-10	-
19	*STAT4*	SSc	rs3821236	2q32	1.30	1.19-1.41	3.93E-09	20383147
20	*STAT4*	PBC	rs10931468	2q32	1.50	1.37-1.64	2.35E-19	21399635
21	*STAT4*	SLE	rs7574865	2q32	1.55	1.34-1.79	1.87E-09	17804842
22	*STAT4*	RA	rs7574865	2q32	1.27	1.16-1.36	4.64E-08	17804842
23	*STAT4*	SS	rs10553577	2q32	1.43	1.26-1.62	6.80E-15	-

Supplementary Table 16: Table of odds ratios (ORs) with the 95% confidence intervals for significantly associated loci within the HLA in Sjögren's syndrome and various autoimmune disorders. The PMID for the reference from which data for each variant was is provided; Sjögren's syndrome data is obtained from this study. Abbreviations: Sjögren's syndrome (SS); multiple sclerosis (MS); celiac disease (CelD); psoriasis (Psor); primary biliary cirrhosis (PBC); rheumatoid arthritis (RA); systemic lupus erythematosus (SLE); systemic sclerosis (SSc); type 1 diabetes (T1D).

Row in Figure	Locus	Phenotype	SNP	Location	OR	95% CI	*P* value	PMID
01	*WASF5P - HLA-B*	Psor	rs10484554	6p21.33	4.66	4.23-5.13	4.00E-214	20953190
02	*MSH5*	SLE	rs3131379	6p21.33	2.36	2.11-2.64	2.00E-52	18204446
03	*C6orf10*	RA	rs6910071	6p21.32	2.88	2.73-3.03	1.00E-299	20453842
04	*C6orf10*	MS	rs3129934	6p21.32	3.30	2.30-4.90	9.00E-11	18941528
05	*HLA-DRA*	MS	rs3135388	6p21.32	2.75	2.46-3.07	4.00E-225	19525953
06	*HLA-DQA1*	SS	rs116232857	6p21.32	2.53	2.24-2.86	1.33E-96	-
07	*HLA-DQA1*	T1D	rs9272346	6p21.32	5.49	4.83-6.24	5.00E-134	17554300
08	*HLA-DQA1*	CelD	rs2187668	6p21.32	6.23	5.95-6.52	1.00E-50	20190752
09	*HLA-DQA2*	PBC	rs7774434	6p21.32	1.60	1.48-1.73	4.00E-34	21399635
10	*HLA-DQB1 - HLA-DQA2*	RA	rs6457620	6p21.32	2.55	2.40-2.71	4.00E-186	18794853
11	*HLA-DQB1*	SS	rs115575857	6p21.32	3.53	3.03-4.11	7.65E-114	-
12	*HLA-DQB1 - HLA-DQA2*	T1D	rs2647044	6p21.32	8.30	6.97-9.89	1.00E-16	17632545
13	*HLA-DQB1 - HLA-DQA2*	SSc	rs9275390	6p21.32	2.38	2.13-2.67	3.00E-54	21779181