Research Article



IL-10 -1082 A>G (rs1800896) polymorphism confers susceptibility to pulmonary tuberculosis in Caucasians but not in Asians and Africans: a meta-analysis

Mohammed Y. Areeshi¹, Raju K. Mandal¹, Sajad A. Dar^{1,2}, Arshad Jawed¹, Mohd Wahid¹, Mohtashim Lohani¹, Aditya K. Panda³, Bhartendu N. Mishra⁴, Naseem Akhter⁵ and Shafiul Haque00¹

¹Research and Scientific Studies Unit, College of Nursing and Allied Health Sciences, Jazan University, Jazan 45142, Saudi Arabia; ²The University College of Medical Sciences and GTB Hospital, University of Delhi, Delhi 110095, India; ³Centre for Life Sciences, Central University of Jharkhand, Ranchi 835205, Jharkhand, India; ⁴Department of Biotechnology, Institute of Engineering and Technology, Lucknow 226021, Uttar Pradesh, India; ⁵Department of Laboratory Medicine, Faculty of Applied Medical Sciences, Albaha University, Albaha 65431, Saudi Arabia

Correspondence: Shafiul Haque (shafiul.haque@hotmail.com)



Background: Earlier studies have shown that *interlukin-10* (*IL-10*) -1082 A>G gene polymorphism is implicated in susceptibility to pulmonary tuberculosis (PTB), but their results are inconsistent and inconclusive. In the present study, a meta-analysis was performed to analyze the potential association between *IL-10* -1082 A>G gene polymorphism and PTB susceptibility.

Methods: A quantitative synthesis was done using PubMed (Medline), EMBASE, and Google Scholar web databases search and meta-analysis was performed by calculating pooled odds ratios (ORs) and 95% confidence intervals (95% Cls) for all the genetic models.

Results: A total of 22 eligible studies comprising 4956 PTB cases and 6428 healthy controls were included in the analysis. We did not observe any increased or decreased risk of PTB in allelic contrast (G vs. A: P=0.985; OR = 1.001, 95% CI = 0.863–1.162), homozygous (GG vs. AA: P=0.889; OR = 1.029, 95% CI = 0.692–1.529), heterozygous (GA vs. AA: P=0.244; OR = 0.906, 95% CI = 0.767–1.070), dominant (GG + AG vs. AA: P=0.357; OR = 1.196, 95% CI = 0.817–1.752), and recessive (GG vs. AA + AG: P=0.364; OR = 0.921, 95% CI = 0.771–1.100) genetic models. Likewise, no association of *IL-10* -1082 A>G polymorphism with PTB risk was observed in Asian and African population for all the genetic models. Interestingly, the dominant model (GG + AG vs. AA: P=0.004; OR = 1.694, 95% CI = 1.183–2.425) demonstrated increased risk of PTB in Caucasian population.

Conclusions: This meta-analysis concludes that IL-10 -1082 A>G gene polymorphism is not significantly associated with overall, Asian and African population. However, this polymorphism is associated with Caucasian population.

Introduction

Tuberculosis (TB) caused by *Mycobacterium tuberculosis* (*M. tuberculosis* or *M. tb*) is mainly a disease of the lungs mostly of pulmonary type tuberculosis (PTB), which can easily be spread to others by coughing and breathing. Regardless of availability of various effective treatment strategies, which were assumed to eliminate this disease, recent epidemiological figures of the year 2016 shown that TB is once more on the upsurge [1]. Globally, there is a large burden of disease with 9.6 million new cases and 1.5 million people are reported to deaths in the year 2014 [1].

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Approximately one-third of the world's population is thought to be affected with *M. tuberculosis* but relatively large number of population remains with no clinical sign of the disease. However, remaining 5–15% of the infected individuals develop active disease later in life [2]. This suggests that besides *Mycobacteria* itself, the host genetic factors may regulate the differences in host susceptibility to TB [3]. The identification of host genes and genetic variations that are important in susceptibility and resistance to tuberculosis would lead to a better understanding of the pathogenesis of PTB and perhaps lead to new approaches of the disease treatment or prophylaxis.

Immune response to PTB is regulated by interactions between lymphocytes with antigen-presenting cells and the cytokines secreted by these cell types. Cytokines, their genes and receptors have been implicated in the protective immunity, pathophysiology and in the development of tuberculosis [4]. Manifestation of clinical PTB depends on balance between *T helper 1 (Th1)* cytokines associated with resistance to infection and *Th2* cytokines with progressive disease [5].

IL-10 gene maps on the long arm of chromosome 1 (1q31-1q32) locus and produced by both myeloid cells and T cells. *IL-10* signals through a receptor complex consisting of two subunits: *IL-10*R1, induced on stimulated hematopoietic cells, and the *IL-10*R2, constitutively expressed on most cells and tissues [6].

IL-10, an anti-inflammatory cytokine prevents the protective immune response to pathogens by blocking the production of proinflammatory cytokines, such as $TNF-\alpha$ and Th1-polarizing cytokine IL-12, by directly acting on antigen-presenting cells such as macrophages and dendritic cells [7]. *IL-10* may also inhibit phagocytosis and microbial killing by limiting the production of reactive oxygen and nitrogen intermediates in response to $IFN-\gamma$ and Th1 induced response to TB [8,9]. *IL-10* was shown to be elevated in the lungs and serum of PTB patients [10].

The production of cytokines can be modulated both by the stimuli present in the local environment as well as by the genetic factors. Both, *in vitro* and *in vivo* studies have demonstrated that the presence of polymorphisms within the coding or noncoding sequences of cytokine genes can alter the efficiency of transcription of these genes and thus the production of cytokines. Interindividual variations in *IL-10* production are genetically contributed by polymorphisms within the promoter region. The polymorphism -1082 A>G occurs within a putative Ets (E26 transformation-specific) transcription factor-binding site and may affect the binding of this transcriptional factor and therefore altered levels of this cytokine and may alter *Th 1/ Th 2* balance with major implications in tuberculous infection [11,12].

A number of clinical and genetic studies have been performed to consider the effect of IL-10 -1082 A>G (rs1800896) gene polymorphism on the development of PTB [13-34]. Results published from previous studies are either conflicting or contradictory in nature and still it is unclear whether this polymorphism is associated with increased or decreased risk of PTB infection [13-34]. Inconsistency in the results across many of the studies could possibly be due to the ethnicity of the population, sample size, and individual studies that have low power to evaluate the overall effect. To overcome this situation, nowadays meta-analysis statistical tool is in use to explore the risk factors associated with the genetic diseases, because it employs a quantitative method of pooling the data collected from individual studies where sample sizes are small to provide reliable conclusions. Hence, in the present study, a meta-analysis was performed to evaluate the effect of IL-10-1082 A>G gene polymorphism on the risk of overall PTB development and its ethnicity-wise distribution.

Materials and methods Literature search strategy

We performed a PubMed, Medline, EMBASE, and Google Scholar web databases search covering all research articles published with a combination of the following key words, i.e. *IL-10, Interleukin-10* gene (polymorphism OR mutation OR variant) AND tuberculosis susceptibility or TB or Pulmonary tuberculosis or PTB (last updated on June 2016). We examined potentially pertinent genetic association studies by examining their titles and abstracts, and procured the most relevant publication matching with the eligible criteria for a closer examination. Besides the online database search, the references given in the selected research articles were also screened for other potential articles that may have been missed in the primary search.

Inclusion and exclusion criteria

In order to minimize heterogeneity and facilitate the proper interpretation of this study, published articles included in the current meta-analysis had to meet all the following criteria, i.e.

- they must have done case-control studies between *IL-10* -1082 A>G gene polymorphism and PTB risk,
- clearly described confirmed PTB patients and PTB free controls



Table 1 Main characteristics of all studies included in the present meta-analysis

First author and year [Ref.]	Country	Ethnicity	Controls	Cases	Study	Genotyping technique
Hu et al., 2015 [13]	China	Asian	480	120	HB	ARMS PCR
Feng et al., 2014 [14]	China	Asian	191	191	HB	PCR-RFLP
García-Elorriaga et al., 2013 [15]	Mexico	Mixed	47	40	HB	TaqMan
Akgunes et al., 2011 [16]	India	Asian	30	30	HB	PCR Probe
Liang et al., 2011 [17]	China	Asian	78	112	HB	SNaPshot assay
Ansari et al., 2011 [18]	Pakistan	Asian	166	102	HB,PB	ARMS PCR
Ben-Selma et al., 2011 [19]	Tunisia	African	95	76	HB	ARMS PCR
Taype et al., 2010 [20]	Peru	Caucasian	510	500	PB	PCR-RFLP
Mosaad et al., 2010 [21]	Egypt	African	98	26	HB	ARMS PCR
Thye et al., 2009 [22]	Ghana	African	1968	1541	HB	FRET
Ansari et al., 2009 [23]	Pakistan	Asian	188	111	HB	ARMS PCR
Trajkov et al., 2009 [24]	Macedonia	Caucasian	301	75	HB, PB	PCR-SSP
Selvaraj et al., 2008 [25]	India	Asian	183	155	HB	ARMS PCR
Wu et al., 2008 [26]	China	Asian	111	183	PB	PCR RFLP
Anand et al., 2007 [27]	India	Asian	143	132	HB	ARMS PCR
Oh et al., 2007 [28]	Korea	Asian	117	145	HB	ARMS PCR
Amirzargar et al., 2006 [29]	Iran	Asian	123	41	HB	PCR-SSP
Shin et al., 2005 [30]	Korea	Asian	871	459	HB	MAPA
Scola et al., 2003 [31]	Italy	Caucasian	114	45	HB	ARMS PCR
López-Maderuelo et al., 2003 [32]	Spain	Caucasian	100	113	HB	ARMS PCR
Delgado et al., 2002 [33]	Cambodia	Asian	106	358	HB	PCR-SSP
Bellamy et al., 1998 [34]	Gambia	African	408	401	HB	Hybridization

Abbreviations: ARMS PCR, amplification-refractory mutation system polymerase chain reaction; FRET, fluorescence resonance energy transfer; HB, hospital based; MAPA, multiplex automated primer extension analysis; PB, population based; PCR-SSP, polymerase chain reaction with a sequence specific primers.

- have available genotype frequency in the both cases and controls
- published in the English language
- data collection and analysis methodology should be statistically acceptable
- additionally, when the case-control study was included in more than one research article using the same subject series, we selected the research study that incorporated the largest number of individuals.

The major reasons for study exclusion were:

- duplicate or overlapping publication
- study design based on only PTB cases
- genotype frequency not reported
- data of review or abstract

Data extraction and quality assessment

For each retrieved study, the methodological quality assessment and data extraction were independently abstracted in duplicate by two independent investigators (SAD & RKM) using a standard protocol. Data collection form was used to confirm the accuracy of the collected data by strictly following the inclusion/exclusion criteria as stated above. In case of disagreement between the above mentioned two investigators on any item related with the data collected from the selected studies, the issue was fully debated and deliberated with the investigators to attain a final consensus. Also, in case failure of reaching consensus between the two investigators, an agreement was achieved following an open discussion with the adjudicator (SH). The major characteristics abstracted from the retrieved publications included the name of first author, publication year, the country of origin, source of cases and controls, number of cases and controls, study type, genotype frequencies, and association with pulmonary TB.



Figure 1. PRISMA flow-diagram

The selection process (inclusion/exclusion) of the studies dealing with *IL10* -1082 A>G (rs1800871) gene polymorphism and PTB risk.

Quality assessment of the included studies

Methodological quality evaluation of the selected studies was performed independently by two investigators (RKM & SAD) by following the Newcastle–Ottawa Scale (NOS) of quality assessment [35]. The NOS quality assessment criteria included three major aspects: (i) subject selection: 0–4 points, (ii) comparability of subject: 0–2 points, and (iii) clinical outcome: 0–3 points. Selected case–control studies that gained five or more stars were considered as of moderate to good quality [36].

Statistical analysis

In order to evaluate the association between the *IL-10* -1082 A>G gene polymorphism and risk of developing PTB, pooled ORs and their corresponding 95% CIs were estimated. Heterogeneity assumption was examined by the chi-square-based Q-test [37]. Heterogeneity was considered significant at *P*-value < 0.05. The data from single comparison were combined using a fixed effects model [38], when no heterogeneity was obtained. Otherwise the random-effects model was used for the pooling of the data [39]. Moreover, I^2 statistics was employed to quantify interstudy variability and larger values suggested an increasing degree of heterogeneity [40]. Hardy–Weinberg equilibrium (HWE) in the controls was calculated by chi-square test. Funnel plot asymmetry was measured by Egger's regression test, which is a type of linear regression approach to measure the funnel plot asymmetry on the natural logarithm scale of the OR. The significance of the intercept was measured by the *t*-test (*P*-value < 0.05 was considered as a representation of statistically significant publication bias).

A comparative assessment of 'meta-analysis' based programs was done by using weblink http://www.meta-analysis. com/pages/comparisons.html. The Comprehensive Meta-Analysis (CMA) Version 2 software program (Biostat, U.S.A.) was utilized to perform all the statistical analysis involved in this meta-analysis.

Results Characteristics of the published studies

A total of 22 articles were lastly selected after literature search from the PubMed (Medline), EMBASE, and Google Scholar web databases. All retrieved articles were inspected carefully by reading their titles and abstracts, and the full-texts for the potentially relevant publications were further checked for their aptness of inclusion in this meta-analysis (Figure 1: PRISMA 2009 Flow Diagram). All the included 22 studies follow the preset eligible crite-

Table 2 Genotypic distribution of <i>II</i> -10 -1082 A \ G ((rs1800896) gene no	olymorphism included in the	meta-analysis
Table 2 Genolypic distribution of IL-10 - 1002 A>G	(15 1000030) yene po	orymorphism included in the	ineta-analysis

First author and year	Controls								
	Genotype Minor alle		Minor allele		Genotype		Minor allele	HWE	
	AA	GA	GG	MAF	AA	GA	GG	MAF	P-value
Hu et al., 2015	262	196	22	0.250	82	34	4	0.175	0.35
Feng et al., 2014	171	18	2	0.057	164	24	3	0.078	0.08
Elorriaga et al., 2013	25	18	4	0.276	27	11	2	0.187	0.01
Akgunes et al., 2011	17	13	0	0.216	15	9	6	0.350	0.26
Liang et al., 2011	69	9	0	0.057	100	12	0	0.053	0.11
Ansari et al., 2011	31	118	17	0.457	23	64	15	0.460	0.04
Ben-Selma et al., 2011	60	26	9	0.231	30	33	13	0.388	0.01
Taype et al., 2010	347	153	10	0.169	333	147	20	0.187	0.28
Mosaad et al., 2010	8	88	2	0.469	0	16	10	0.692	0.13
Thye et al., 2009	1048	783	140	0.269	794	630	117	0.280	0.27
Ansari et al., 2009	32	136	20	0.468	21	71	19	0.490	0.03
Trajkov et al., 2009	70	212	17	0.411	17	48	10	0.453	0.04
Selvaraj et al., 2008	108	69	6	0.221	102	42	5	0.174	0.83
Wu et al., 2008	104	18	0	0.073	48	12	1	0.114	0.98
Anand et al., 2007	73	61	6	0.260	74	55	3	0.231	0.01
Oh et al., 2007	45	53	19	0.388	98	43	4	0.175	0.95
Amirzargar et al., 2006	18	79	5	0.436	7	31	2	0.437	0.04
Shin et al., 2005	718	124	9	0.083	394	53	2	0.063	0.47
Scola et al., 2003	13	77	24	0.548	6	22	17	0.622	0.05
Maderuelo et al., 2003	21	50	29	0.540	33	47	33	0.501	0.91
Delgado et al., 2002	39	64	3	0.330	86	259	11	0.394	0.06
Bellamy et al., 1998	179	184	45	0.335	165	185	11	0.286	0.07

Abbreviations: HWE, Hardy-Weinberg equilibrium; MAF, minor allele frequency;.

ria of the study inclusion and clearly stated about sample sizes, genotypes, inclusion criteria of PTB patients, and healthy controls. All the studies included in this meta-analysis had recruited HIV free subjects.

Research articles either showing *IL-10* polymorphism to predict survival in PTB patients or considering *IL-10* variants as indicators for response to therapy were excluded straightaway. Similarly, studies investigating the levels of *IL-10* mRNA or protein expression or relevant review articles were also excluded from this meta-analysis. We included only case–control or cohort design studies stating the frequency of all three genotypes. Besides the database search, the supporting references available in the retrieved articles were also checked for other potential studies. After careful screening and following the inclusion and exclusion criteria, 22 eligible original published studies were finally considered for the present study (Table 1). Distribution of genotypes, HWE *P*-values in the controls, and susceptibility toward PTB have been shown in Table 2. All the selected studies (22 in number) were examined for the overall quality following the NOS and most of the studies (>80%) scored five stars or more, indicating a modest to good quality (Table 3).

Publication bias

Begg's funnel plot and Egger's test were performed to examine the publication bias among the selected studies for the present meta-analysis. The funnel plots were almost symmetric for both the Begg's test and Egger's test (Figure 2). The findings showed lack of publication bias among all comparison models (Table 4).

Test of heterogeneity

In order to test heterogeneity among the selected studies, Q-test and I^2 statistics were employed. Significant heterogeneity was detected in all models. Therefore, random effects model was applied to synthesize the data (Table 4).

Sensitivity analysis

Sensitivity analysis was performed to assess the influence of each individual study on the pooled OR by deleting one single study each time. The results showed that no individual affected the pooled OR significantly, suggesting stability of this meta-analysis (Figure 3).







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Study name	51	tatistics	with stu	dy remov	ed	Odds ratio (95% CI) with study removed
G vs. A	Point	limit	Upper limit	Z-Value	p-Value	
Hu et al. 2015 1 Feng et al. 2014 0	1.025	0.882 0.850	1.192	0.328	0.743	‡
Elorriaga et al. 2013 1 Akgunes et al. 2011 0	1.016	0.874	1.181	0.201	0.841	
Liang et al. 2011 1 Ansari et al. 2011 1	1.004	0.862	1.168	0.046	0.963	- F
Taype et al. 2010	0.967	0.849	1.168	-0.459	0.960	- E
Thye et al. 2009 1 Ansari et al. 2009 0	1.005	0.844	1.123	0.054	0.957	1 王 1
Trajkov et al. 2009 0 Selvaraj et al. 2008 1	0.993	0.850	1.160	-0.087	0.931	1 1
Wu et al. 2008 0 Anand et al. 2007 1	0.988	0.850 0.866	1.149	-0.153 0.135	0.878	1 1
Oh et al. 2007 1 Amirzargar et al. 2006 1	1.045	0.922	1.185	0.692	0.489	
Scola et al. 2003 0 Mademalo et al. 2003 0	0.989	0.874	1.189	-0.143	0.808	E
Deigado et al. 2002 0 Beilamy et al. 1998 1	0.986	0.845	1.150	-0.182	0.855	<u> </u>
1	1.001	0.863	1.162	0.019	0.985	
Study name GG vs.AA	Sta	Lower	with sta Upper	dy remo	ved	Odds ratio (95% CI) with study removed
Fu et al. 2015 1	Point	limit 0.704	limit 1.609	Z-Value 0.296	0.767	1 1 1-1-1 1 1
Feng et al. 2014 1 Elorriaga et al. 2013 1	1.016	0.676	1.527	0.077	0.939 0.788	‡
Akgunes et al. 2011 0 Ansari et al. 2011 1	0.987	0.666	1.463	-0.066 0.106	0.947	‡
Ben Selma et al.20110 Taype et al. 2010 0	0.963	0.643	1.442	-0.185	0.853	===
Mosaad et al. 2010 0 Thyse et al. 2009 1	0.969	0.662	1.419	-0.160	0.873	<u> </u>
Ansari et al. 2009 1 Traikov et al. 2009 0	1.009	0.663	1.536	0.041	0.967	<u> I</u>
Selvaraj et al. 2008 1 Wu et al. 2008 1	1.039	0.687	1.573	0.183	0.856	±
Anand et al. 2007 1 Oh et al. 2007 1	1.063	0.707	1.599	0.295	0.768	====
Amirzargar et al 20061 Shin et al. 2005	1.030	0.685	1.549	0.144	0.886	±
Scola et al. 2003 1 Maderuelo et al. 2003	1.009	0.667	1.526	0.042	0.966	±
Delgado et al. 2002 1 Bellamy et al. 1998 1	1.008	0.668	1.520	0.036	0.971	=
1	1.029	0.692	1.529	0.139	0.889	
Study name GA vs. AA	5	tatistics	with sh	ady remov	bey	Odds ratio (95% CI) with study removed
	Point	limit	limit	Z-Value	p-Value	
Feng et al. 2015	0.936	0.750	1.055	-0.785	0.433	
Akgunes et al. 2011	0.908	0.766	1.065	-1.012	0.312	_
Ansari et al. 2011 (Ben Selma et al. 2011)	0.914	0.770	1.086	-1.021	0.307	
Taype et al. 2010 Mosaad et al. 2010	0.897	0.747	1.077	-1.166	0.243	
Thye et al. 2009 Ansari et al. 2009	0.891	0.736	1.077	-1.195	0.232 0.288	
Trajkov et al. 2009	0.904	0.761	1 075	-1.139	0.255	
Selvaraj et al. 2008	0.925	0.780	1.097	-0.899	0.369	
Selvaraj et al. 2008 (Wu et al. 2008 Anand et al. 2007 (0.925 0.893 0.906	0.780 0.753 0.761	1.097 1.058 1.080	-0.899 -1.312 -1.102	0.369 0.190 0.270	
Selvaraj et al. 2008 Wu et al. 2008 Anand et al. 2007 Oh et al. 2007 Amirzargar et al. 2006	0.925 0.893 0.906 0.952 0.903	0.780 0.753 0.761 0.819 0.762	1.097 1.058 1.080 1.106 1.071	-0.899 -1.312 -1.102 -0.641 -1.170	0.369 0.190 0.270 0.521 0.242	
Selvaraj et al. 2008 (Wu et al. 2008 (Anand et al. 2007 (On et al. 2007 (Amirzargar et al. 2006 (Shin et al. 2005 (Scola et al. 2003 (0.925 0.893 0.906 0.952 0.903 0.916 0.913	0.780 0.753 0.761 0.819 0.762 0.768 0.771	1.097 1.058 1.080 1.106 1.071 1.092 1.081	-0.899 -1.312 -1.102 -0.641 -1.170 -0.976 -1.060	0.369 0.190 0.270 0.521 0.242 0.329 0.289	
Selvaraj et al. 2006 Wu et al. 2008 Anand et al. 2007 Oh et al. 2007 Amizangar et al. 2006 Shin et al. 2005 Scola et al. 2003 Maderuelo et al. 2003 Delgado et al. 2002 Balany et al. 1998	0.925 0.893 0.906 0.952 0.903 0.916 0.913 0.921 0.869 0.891	0.780 0.753 0.761 0.819 0.762 0.768 0.776 0.768 0.771 0.778 0.740 0.744	1.097 1.058 1.080 1.106 1.071 1.092 1.081 1.091 1.022 1.067	-0.899 -1.312 -1.102 -0.641 -1.170 -0.976 -1.060 -0.954 -1.697 -1.255	0.369 0.190 0.270 0.521 0.242 0.329 0.289 0.340 0.090 0.210	
Selvaraj et al. 2008 Wu et al. 2008 Anand et al. 2007 Oh et al. 2007 Amizargar et al. 2006 Scola et al. 2005 Maderuelo et al. 2003 Delgado et al. 2003 Bellamy et al. 1998	0.925 0.893 0.906 0.952 0.903 0.916 0.913 0.921 0.869 0.891 0.906	0.780 0.753 0.761 0.819 0.762 0.768 0.771 0.778 0.740 0.740 0.744 0.767	1.097 1.058 1.080 1.106 1.071 1.092 1.081 1.091 1.022 1.067 1.070	-0.899 -1.312 -1.102 -0.641 -1.170 -0.976 -1.060 -0.954 -1.697 -1.255 -1.165	0.369 0.190 0.270 0.521 0.242 0.329 0.289 0.340 0.090 0.210 0.244	
Selvaraj et al. 2006 Wu et al. 2006 Anand et al. 2007 Och et al. 2007 Amirzangar et al. 2005 Scola et al. 2005 Scola et al. 2005 Deligado et al. 2005 Bellamy et al. 1996 Study name	0.925 0.893 0.906 0.952 0.903 0.916 0.913 0.921 0.869 0.891 0.906	0.780 0.753 0.761 0.819 0.762 0.768 0.771 0.778 0.740 0.744 0.767 ************	1.097 1.058 1.080 1.106 1.071 1.092 1.081 1.091 1.022 1.067 1.070 with st	-0.899 -1.312 -1.102 -0.641 -1.170 -0.976 -1.060 -0.954 -1.697 -1.255 -1.165	0.369 0.190 0.270 0.521 0.242 0.329 0.340 0.090 0.210 0.244	0.5 zij with study removed
Selvaraj et al. 2006 Wue tel. 2006 Anand et al. 2007 Och et al. 2007 Amiczargar et al. 2006 Scola et al. 2003 Delgado et al. 2003 Delgado et al. 2003 Delgado et al. 2002 Belamy et al. 1998 Study name GG+AG vs. AA	0.925 0.893 0.906 0.952 0.903 0.916 0.913 0.921 0.891 0.906 Star Point	0.780 0.753 0.761 0.819 0.762 0.768 0.771 0.778 0.774 0.774 0.774 0.767 0.767 atistics	1.097 1.058 1.080 1.106 1.071 1.092 1.081 1.091 1.091 1.022 1.067 1.070 with st Upper limit	-0.899 -1.312 -1.102 -0.641 -1.170 -0.976 -1.060 -0.954 -1.697 -1.255 -1.165 udy remo	0.369 0.190 0.270 0.521 0.242 0.329 0.289 0.340 0.210 0.210 0.244 wed	0.5 C) with study removed
Selvaraj et al. 2008 Wue tal. 2008 On et al. 2008 Anand et al. 2007 Amirzangue et al. 2009 Sociale et al. 2003 Modensio et al. 2003 Delgado et al. 2003 Belaamy et al. 1998 Study name GG+AG vs. AA Hu et al. 2015 Hu et al. 2014	0.925 0.893 0.906 0.952 0.903 0.916 0.913 0.921 0.869 0.891 0.906 Star Point 1.230 1.189	0.780 0.753 0.761 0.819 0.768 0.771 0.778 0.740 0.740 0.744 0.767 atistics Lower limit 0.827 0.804	1.097 1.058 1.080 1.106 1.071 1.092 1.081 1.092 1.081 1.092 1.067 1.070 with st Upper limit 1.829 1.758	-0.899 -1.312 -1.102 -1.102 -0.976 -1.060 -0.954 -1.697 -1.255 -1.165 Z-Value 1.024 0.867	0.369 0.190 0.270 0.221 0.242 0.329 0.289 0.240 0.290 0.240 0.244 wed p-Value 0.306 0.386	Odds ratio (825 C) with study removed
Selvarg et al. 2008 Avand et al. 2007 Anniczegy et al. 2007 Anniczegy et al. 2007 Anniczegy et al. 2008 Social et al. 2003 Medenolo et al. 2003 Belanny et al. 1998 Study name GG+AG vs. AA Hu et al. 2015 Feng et al. 2014 Elorage et al. 2014	0.925 0.893 0.906 0.952 0.903 0.916 0.913 0.921 0.869 0.891 0.906 Star Point 1.230 1.189 1.225 1.152	0.780 0.753 0.761 0.761 0.768 0.771 0.778 0.746 0.744 0.767 atistics Lower limit 0.827 0.804 0.830 0.789	1.097 1.058 1.080 1.106 1.071 1.092 1.081 1.091 1.022 1.067 1.070 with st Upper limit 1.829 1.758 1.810 1.683	-0.899 -1.312 -1.102 -0.641 -1.170 -0.976 -1.060 -0.954 -1.697 -1.255 -1.165 Z-Value 1.024 0.867 1.021 0.731	0.369 0.190 0.521 0.242 0.289 0.340 0.200 0.210 0.244 p-Value 0.306 0.366 0.366 0.366 0.367 0.465	Odds ratio (85% C) with study removed
Selvarg et al. 2008 Ww et al. 2008 Annual et al. 2007 Annual et al. 2007 Annual et al. 2007 Annual et al. 2005 Shin et al. 2005 Shin et al. 2005 Delanny et al. 2008 Study name GG+AG vs. AA Elvering et al. 2014 Elveringa et al. 2014 Elveringa et al. 2014 Elveringa et al. 2014	0.925 0.893 0.906 0.952 0.903 0.916 0.903 0.921 0.891 0.891 0.890 0.891 0.906 Sty Point 1.230 1.125 1.161 1.181	0.780 0.753 0.761 0.819 0.762 0.768 0.771 0.778 0.740 0.740 0.744 0.767 0.740 0.744 0.767 atistics Lower limit 0.827 0.804 0.830 0.787 0.781 0.781	1.097 1.058 1.060 1.106 1.071 1.071 1.091 1.021 1.021 1.027 1.070 with st Upper Emit 1.829 1.758 1.810 1.681 1.681 1.681 1.681 1.681 1.681 1.682 1.681 1.681 1.682 1.681 1.681 1.681 1.681 1.681 1.691 1.092 1.095 1.092 1.092 1.092 1.092 1.092 1.092 1.092 1.092 1.092 1.092 1.092 1.092 1.092 1.092 1.097 1.097 1.097 1.097 1.097 1.097 1.097 1.097 1.097 1.070	-0.899 -1.312 -1.102 -0.641 -1.170 -0.976 -1.060 -0.954 -1.697 -1.255 -1.165 Z-Value 1.024 0.867 1.021 0.804 0.731 0.804 0.741	0.369 0.190 0.201 0.521 0.242 0.289 0.340 0.289 0.340 0.210 0.244 0.244 0.244 0.244 0.244 0.244 0.244 0.244 0.244 0.244 0.244 0.244 0.244 0.244 0.244 0.245 0.244 0.2450	Odds ratio (85% CI) with study removed
Selvaraj et al. 2008 Wu et al. 2008 Anord et al. 2007 Anord et al. 2007 Anitzargare et al. 2006 Shin et al. 2005 Bolgado et al. 2003 Belgado et al. 2002 Belgado et al. 2002 Belgado et al. 2002 Belgado et al. 2003 Study name GG+AG yz. AA Hu et al. 2015 Frong et al. 2014 Frong et al. 2014 Angunes et al. 2011 Taype et al. 2014 Rossad et al. 2011	0.925 0.893 0.906 0.905 0.903 0.916 0.913 0.869 0.891 0.869 0.891 0.906 Still Point 1.230 1.189 1.225 1.181 1.251 1.182 1.182 1.182	0.780 0.753 0.761 0.819 0.762 0.762 0.762 0.778 0.774 0.774 0.774 0.774 0.7767 0.774 0.7767 0.7767 0.804 0.827 0.804 0.820 0.830 0.789 0.787 0.787 0.787	1.097 1.058 1.080 1.066 1.071 1.092 1.081 1.092 1.081 1.092 1.067 1.070 1.070 1.070 1.070 1.070 1.810 1.810 1.810 1.813 1.770 1.720 1.720	-0.899 -1.312 -1.102 -0.641 -1.170 -0.976 -1.060 -0.956 -1.060 -0.955 -1.165 Z-Value 1.024 0.867 1.021 0.804 0.741 0.804 0.385	0.369 0.190 0.270 0.521 0.242 0.242 0.289 0.289 0.290 0.290 0.210 0.244 p-Value 0.306 0.386 0.422 0.442 0.386 0.386 0.442 0.386 0.442 0.386 0.442 0.386 0.442 0.386 0.442 0.386 0.442 0.386 0.442 0.442 0.386 0.442 0.442 0.386 0.4420 0.4420 0.4400 0.44200 0.44200 0.4420000000000	Odds ratio (B5); C1) with study removed
Selvaraj et al. 2008 Wu et al. 2008 Anord et al. 2007 Anizargue et al. 2007 Anizargue et al. 2006 Shin et al. 2005 Bolgado et al. 2002 Belanny et al. 2002 Belanny et al. 2002 Belanny et al. 2002 Belanny et al. 2004 Belanny et al. 2014 Freng et al. 2014 Freng et al. 2014 Belanny et al. 2014 Belanny et al. 2014 Anaari et al. 2011 Taype et al. 2010 Thyse et al. 2010 Anaari et al. 2019	0.925 0.893 0.906 0.962 0.903 0.913 0.913 0.921 0.869 0.891 0.906 S 9 Point 1.230 1.189 1.252 1.181 1.152 1.151 1.152 1.154	0.780 0.753 0.761 0.763 0.768 0.768 0.768 0.768 0.768 0.768 0.767 0.7767 atistics beyone the second seco	1.097 1.058 1.080 1.071 1.071 1.071 1.071 1.071 1.071 1.071 1.070 with st 1.070 with st 1.670 1.770 1.670 1.670 1.681 1.629 1.629 1.758 1.610 1.75	-0.899 -1.312 -1.102 -0.641 -1.170 -0.976 -1.060 -0.954 -1.697 -1.255 -1.165 Z-Value 1.024 0.867 1.021 0.731 0.804 0.741 0.741 0.741 0.741	0.369 0.200 0.220 0.521 0.242 0.329 0.289 0.380 0.200 0.210 0.244 0.306 0.210 0.244 0.306 0.386 0.220 0.220 0.220 0.220 0.220 0.220 0.220 0.220 0.220 0.220 0.220 0.220 0.220 0.220 0.229 0.224 0.229 0.224 0.220 0.224 0.220 0.224 0.220 0.220 0.220 0.220 0.2210 0.2210 0.2210 0.2210 0.2210 0.2210 0.2210 0.2210 0.2210 0.2210 0.2210 0.2210 0.224	Otds ratio (P3% C) with study removed
Selvaraj et al. 2008 Avand et al. 2007 Avand et al. 2007 Avand et al. 2007 Avand et al. 2007 Shin et al. 2005 Shin et al. 2005 Belgado et al. 2003 Belgado et al. 2002 Belgado et al. 2002 Belgado et al. 2003 Hu et al. 2015 Feng et al. 2014 Hu et al. 2015 Feng et al. 2014 Augunes et al. 2017 Taype et al. 2010 Avanat et al. 2010 Thyse et al. 2010 Tajkove et al. 2009	0.925 0.893 0.906 0.906 0.905 0.903 0.916 0.903 0.913 0.921 0.891 0.891 0.891 0.891 0.891 0.891 1.252 1.181 1.152 1.181 1.152 1.162	0.780 0.751 0.761 0.761 0.761 0.768 0.771 0.778 0.776 0.744 0.767 0.744 0.804 0.804 0.804 0.804 0.804 0.804 0.804 0.804 0.804 0.804 0.804 0.804 0.781 0.804 0.781 0.804 0.781 0.804 0.804 0.804 0.771 0.775 0.775 0.775 0.775 0.775 0.775 0.775 0.775	1.097 1.028 1.080 1.080 1.071 1.092 1.081 1.091 1.091 1.091 1.091 1.091 1.091 1.091 1.091 1.091 1.091 1.091 1.091 1.091 1.091 1.091 1.091 1.080 1.010 1.091 1.090 1.080 1.091 1.080 1.091 1.091 1.080 1.091 1.091 1.080 1.091 1.091 1.092 1.080 1.091 1.092 1.0	-0,899 -1,312 -1,102 -0,641 -1,100 -0,954 -1,097 -1,265 -1,1697 -1,265 -1,165 Z-Value 1,024 1,027 1,025 -0,867 -1,021 0,867 -0,731 0,865 0,875 0,975	0.369 0.190 0.270 0.521 0.242 0.329 0.349 0.349 0.349 0.240 0.244 0.200 0.244 p-Value 0.306 0.365 0.365 0.365 0.365 0.465 0.469 0.460 0.387 0.461 0.353 0.553	Odds ratio (05% C) with study removed
Sekaraj et al. 2008 Avand et al. 2007 Avand et al. 2007 Avand et al. 2007 Avand et al. 2007 Sine et al. 2005 Sine et al. 2005 Belgado et al. 2003 Belgado et al. 2003 Belgado et al. 2003 Belgado et al. 2004 Situdy name GGAA0 vs. AA Hu et al. 2015 Feng et al. 2014 Beloritage et al. 2011 Beloritage et al. 2011 Beloritage et al. 2011 Thyse et al. 2019 Monaad et al. 2010 Trajkov et al. 2009 Trajkov et al. 2009 Trajkov et al. 2009	0.925 0.893 0.906 0.906 0.906 0.901 0.913 0.921 0.921 0.921 0.921 0.921 0.921 0.921 0.921 0.921 0.921 0.921 0.921 0.921 0.921 0.921 0.921 0.925	0.780 0.761 0.761 0.819 0.762 0.768 0.771 0.774 0.774 0.774 0.774 0.7767 0.804 0.827 0.804 0.827 0.804 0.789 0.787 0.787 0.787 0.787 0.787 0.779 0.789 0.779 0.779 0.779	1.097 1.058 1.080 1.070 1.070 1.070 1.071 1.072 1.067 1.070 1.022 1.067 1.070 1.022 1.067 1.070 1.022 1.067 1.070 1.022 1.067 1.070 1.022 1.067 1.070 1.022 1.067 1.070 1.022 1.067 1.022 1.067 1.022 1.067 1.022 1.067 1.022 1.025 1.022 1.025	-0,899 -1,312 -1,102 -0,641 -1,102 -0,954 -1,100 -0,954 -1,050 -1,255 -1,165 -1,165 -1,165 -1,165 -1,102 -1,024 -1,024 -0,954 -0,954 -1,024 -0,954 -1,024 -0,954 -1,102 -1,025 -1,105 -1,025 -1	0.360 0.190 0.270 0.221 0.242 0.329 0.289 0.280 0.280 0.280 0.280 0.280 0.280 0.280 0.280 0.280 0.280 0.280 0.306 0.306 0.306 0.306 0.306 0.306 0.306 0.306 0.306 0.220 0.220 0.289 0.289 0.289 0.289 0.289 0.289 0.289 0.280 0.220 0.200 0.200 0.200 0.300 0.300 0.300 0.300 0.300 0.300 0.307 0.305 0.300 0.307 0.307 0.307 0.307 0.307 0.307 0.307 0.307 0.307 0.405 0.307 0.405 0.307 0.405 0.307 0.4050	0.5 1 2 Odds ratio (P5% C) with study removed
Sekaraj et al. 2008 Avand et al. 2007 Avand et al. 2007 Avand et al. 2007 Avand et al. 2007 Belance al. 2006 Sela et al. 2005 Belany et al. 2006 Belany et al. 2007 Belany et al. 2007 Belany et al. 2007 Belana et al. 2017 Ben Sela et al. 2017 Ben Sela et al. 2017 Ben Sela et al. 2017 Type et al. 2019 Densa et al. 2017 Type et al. 2019 Trajkov et al. 2009 Trajkov et al. 2009 Avanand et al. 2007 Ch et al. 2007	0.925 0.893 0.906 0.906 0.906 0.913 0.921 0.911 0.921 0.921 0.921 0.921 0.921 0.920 0.891 0.906 7 1.230 1.230 1.129 1.125 1.152 1.15	0.780 0.761 0.819 0.768 0.770 0.768 0.770 0.768 0.770 0.776 0.776 0.776 0.827 0.827 0.827 0.827 0.827 0.827 0.827 0.757 0.757 0.757 0.757 0.757 0.757 0.757 0.759 0.812 0.775 0.8020	1.097 1.028 1.080 1.080 1.070 1.070 1.070 1.022 1.067 1.022 1.067 1.070 1.022 1.067 1.070 1.022 1.067 1.070 1.022 1.067 1.022 1.067 1.022 1.067 1.022 1.067 1.022 1.021 1.022 1.027 1.025 1.027 1.025 1.027 1.0	-0.689 -1.312 -1.102 -0.641 -1.102 -0.954 -1.020 -1.285 -1.165 -1.285 -1.165 Z-Value 1.024 0.864 0.867 0.385 0.652 0.293 0.652 0.293 0.652 0.293 0.652 0.293 0.652 0.293 0.652 0.293 0.652 0.293 0.652 0.293 0.652 0.293 0.652 0.293 0.652 0.293 0.652 0.293 0.652 0.293 0.652 0.293 0.554 0.554 0.554 0.554 0.555 0	0.366 0.190 0.270 0.521 0.220 0.242 0.289 0.240 0.289 0.240 0.289 0.240 0.220 0.230 0.200 0.306 0.305 0.305 0.305 0.355	0.5 1 2 Odds ratio (85% C) with study removed
Seharaj et al. 2006 Wu et al. 2008 Antizarga et al. 2007 On et al. 2007 An et al. 2007 Shin et al. 2005 Shin et al. 2005 Shin et al. 2005 Bekarny et al. 2006 Bekarny et al. 1998 Study name GG4AG vs. AA Hu et al. 2015 Feng et al. 2014 Eloritaga et al. 2015 Hu et al. 2015 Hu et al. 2015 Hu et al. 2015 Hu et al. 2016 Mosaad et al. 2011 Mosaad et al. 2010 Mosaad et al. 2001 Mosaad et al. 2009 Ansart et al. 2009 Ansart et al. 2009 Ansart et al. 2009 Ch et al. 2007 Ch et al. 2007	0.925 0.893 0.906 0.962 0.903 0.901 0.903 0.916 0.910 0.903 0.910 0.910 0.921 0.801 0.801 0.801 0.801 1.230 1.162 1.264 1.162 1.2641	0.780 0.753 0.761 0.819 0.762 0.768 0.776 0.770 0.744 0.776 0.744 0.767 1.0.767 0.744 0.804 0.804 0.804 0.804 0.804 0.804 0.789 0.787 0.775 0.775 0.776 0.779 0.779 0.779 0.779 0.812 0.775 0.777 0.779 0.812 0.775 0.779 0.812 0.775 0.779 0.812 0.775 0.779 0.812 0.775 0.779 0.812 0.775 0.779 0.812 0.775 0.775 0.779 0.775 0.779 0.775 0.779 0.775 0.779 0.812 0.775 0.775 0.775 0.779 0.775 0.755 0.775 0.7550000000000	with at 1.097 1.058 1.080 1.080 1.070 1.091 1.09	-0.850 -1.312 -1.102 -0.641 -1.170 -0.976 -1.170 -0.976 -1.170 -0.976 -1.170 -0.956 -1.285 -1.185 -1.285 -1.185 -1.285 -1.185 -1.185 -1.185 -1.024 -0.964 -0.964 -1.024 -0.964 -1.024 -0.964 -1.024 -1.024 -1.024 -1.024 -1.024 -1.024 -1.024 -1.024 -1.024 -1.024 -1.024 -1.024 -1.024 -1.024 -1.024 -1.024 -1.024 -1.024 -1.026 -1.125 -1	0.366 0.190 0.270 0.521 0.222 0.229 0.242 0.229 0.240 0.229 0.240 0.229 0.240 0.229 0.240 0.220 0.220 0.220 0.220 0.220 0.244 0.386 0.386 0.386 0.386 0.386 0.386 0.455 0.455 0.455 0.455 0.455 0.455 0.455 0.455 0.455 0.455 0.455 0.455 0.455 0.455 0.455 0.455 0.455 0.276 0.2770 0.2770 0.2750 0.27700 0.27700 0.2770000000000	0.5 1 2 Odds retio (85% C) with study removed
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Figure 3. Forest Plot: Sensitivity analysis for overall analysis.

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First author and year [Ref.]	Quality indicators								
	Selection	Comparability	Exposure						
Hu et al., 2015 [13]	***	*	**						
Feng et al., 2014 [14]	***	*	**						
García-Elorriaga et al., 2013 [15]	***	*	**						
Akgunes et al., 2011 [16]	**	*	**						
Liang et al., 2011 [17]	****	**	**						
Ansari et al., 2011 [18]	***	*	**						
Ben-Selma et al., 2011 [19]	****	*	**						
Taype et al., 2010 [20]	****	*	**						
Mosaad et al., 2010 [21]	***	*	**						
Thye et al., 2009 [22]	****	**	**						
Ansari et al., 2009 [23]	***	*	**						
Trajkov et al., 2009 [24]	***	*	**						
Selvaraj et al., 2008 [25]	***	*	**						
Wu et al., 2008 [26]	***	*	***						
Prabhu Anand et al., 2007 [27]	***	*	***						
Oh et al., 2007 [28]	**	*	**						
Amirzargar et al., 2006 [29]	**	*	**						
Shin et al., 2005 [30]	***	*	**						
Scola et al., 2003 [31]	**	*	**						
López-Maderuelo et al., 2003 [32]	***	*	**						
Delgado et al., 2002 [33]	***	**	**						
Bellamy et al., 1998 [34]	***	*	**						

Table 3 Quality assessment conducted according to the NOS for all the studies included in the meta-analysis

Quantitative synthesis

We pooled all the 22 studies together which resulted into 4956 confirmed PTB cases and 6428 controls, for the assessment of overall association between the *IL-10* -1082 gene polymorphism and risk of developing PTB. The pooled ORs from the overall studies indicated no association with increased or decreased risk between *IL-10* -1082 A>G gene polymorphism and PTB susceptibility in allelic contrast (G vs. A: P=0.985; OR = 1.001, 95% CI = 0.863-1.162), homozygous (GG vs. AA: P=0.889; OR = 1.029, 95% CI = 0.692-1.529), heterozygous (GA vs. AA: P=0.244; OR = 0.906, 95% CI = 0.767-1.070), dominant (GG + AG vs. AA: P=0.357; OR = 1.196, 95% CI = 0.817-1.752), and recessive (GG vs. AA + AG: P=0.364; OR = 0.921, 95% CI = 0.771-1.100) genetic models, respectively (Figures 3 and 4).

Subgroup analysis

We have performed subgroup analysis based on ethnicity to explore the effect of ethnicity (Asian, African, and Caucasian) in the risk between *IL-10* -1082 A>G and PTB risk.

Asian population

In Asian population, 13 studies were included and heterogeneity was observed in all the genetic models (Table 5). We

Comparisons	E	gger's regression ana	llysis	Не	terogeneity and	Model used for the meta-analysis	
	95% confidence Intercept interval <i>P</i> -valu		P-value	Q-value	P heterogeneity	l ² (%)	
G vs. A	0.134	-1.53 to 1.80	0.868	78.171	0.001	73.13	Random
GG vs. AA	0.261	-1.12 to 1.64	0.696	60.855	0.001	67.135	Random
AG vs. AA	-0.494	-1.68 to 0.69	0.396	48.356	0.001	56.572	Random
GG + AG vs. AA	-0.293	-1.63 to 1.04	0.651	60.090	0.001	65.052	Random
GG vs. AA + AG	0.420	-1.10 to 1.94	0.570	69.612	0.001	71.270	Random

Table 4 Statistics to test publication bias and heterogeneity in meta-analysis: overall analysis



Study name	Statistics for each study	Odds ratio and 95% CI
Odds ratio	Lower Upper limit limit Z-Value p-Value	
Hu et al. 2015 0-533 Frang et al. 2013 0-60 Elorriaga et al. 2013 0-60 Augunes et al. 2013 0-60 Advante et al. 2011 1-94 Lang et et al. 2011 1-94 Martin et al. 2012 1-15 Advante et al. 2011 1-94 Mosand et al. 2012 1-15 Mosand et al. 2010 1-244 Taylow et al. 2009 1-16 Ananat et al. 2009 1-16 Ananat et al. 2009 1-16 Ananat et al. 2009 1-52 Anant et al. 2009 1-52 Anant et al. 2007 0-33 Scole et al. 2000 1-32 Scole et al. 2000 1-32 Delayor et al. 2000 1-32 Bellany et al. 2005 1-32 Bellany et al. 2005 1-32 Bellany et al. 2005 1-32 Bellany et al. 2015 1-32 Hu et al. 2015 </td <td>0.442 0.915 -2.436 0.015 0.789 2.465 1.145 0.252 0.281 1.241 -1.373 0.707 0.865 4.333 1.609 0.108 0.361 2.230 -0.171 0.863 1.317 1.485 1.021 0.865 0.865 4.333 1.100 0.102 0.865 4.333 1.100 0.862 0.861 4.331 1.021 0.865 0.862 4.335 1.101 0.862 0.863 1.455 1.021 0.863 0.768 1.520 8.863 0.822 0.768 1.220 0.896 0.303 0.768 1.220 0.832 0.222 0.769 1.633 0.642 0.836 0.562 1.220 0.832 0.623 0.423 0.563 1.620 0.832 0.624 0.838 0.563 1.620 0.842 0.842</td> <td>0.1 0.2 0.5 1 2 5 10 Odds natis and 1955 CT</td>	0.442 0.915 -2.436 0.015 0.789 2.465 1.145 0.252 0.281 1.241 -1.373 0.707 0.865 4.333 1.609 0.108 0.361 2.230 -0.171 0.863 1.317 1.485 1.021 0.865 0.865 4.333 1.100 0.102 0.865 4.333 1.100 0.862 0.861 4.331 1.021 0.865 0.862 4.335 1.101 0.862 0.863 1.455 1.021 0.863 0.768 1.520 8.863 0.822 0.768 1.220 0.896 0.303 0.768 1.220 0.832 0.222 0.769 1.633 0.642 0.836 0.562 1.220 0.832 0.623 0.423 0.563 1.620 0.832 0.624 0.838 0.563 1.620 0.842 0.842	0.1 0.2 0.5 1 2 5 10 Odds natis and 1955 CT
Elorriaga et al. 2013 0.463 Akgunes et al. 2011 14.677	0.078 2.752 -0.847 0.397 0.763 282.272 1.781 0.075	
Ansart et al. 2011 1.189 Ben Seime at 2.1012.889 2012.889 Taype et al. 2010 2.040 Mosand et al. 2017.8.09 1.420 Ansart et al. 2009 1.448 Trajhov et al. 2009 1.448 Trajhov et al. 2009 1.448 Trajhov et al. 2009 0.432 Anand et al. 2007 0.433 Ormet al. 2007 0.433 Schnet al. 2008 0.802 Schnet al. 2005 0.403 Schnet al. 2005 0.403 Schnet al. 2005 0.403 Beltany et al. 2007 1.403 Beltany et al. 2007 0.403 Combined 1.029	0.494 2.865 0.386 0.669 1.110 7.117 0.501 0.661 0.663 0.663 0.561 4.518 1.860 0.663 0.365 0.664 0.365 0.664 0.365 0.664 0.365 0.664 0.363 0.664 0.363 0.766 0.664 0.363 0.766 0.663 0.363 0.766 0.663 0.363 0.766 0.363 0.765 0.674 0.363 0.765 0.674 0.363 0.765 0.674 0.363 0.363 0.363 </td <td></td>	
Study name GA vs. AA Origin	Statistics for each study	Odds ratio and 95% Cl
ratio	limit limit Z-Value p-Value	
Feng et al. 2014 1.3 Elorriaga et al. 2013 0.56 Alapunes et al. 2011 0.35 Alapunes et al. 2011 0.35 Ban Steina et al. 2011 0.35 Ben Steina et al. 2012 3.16 Trappe et al. 2010 1.00 Anoard et al. 2010 1.00 Anoard et al. 2010 1.00 Anoard et al. 2010 0.00 Anoard et al. 2000 0.33 Steinar et al. 2000 0.33 Steinar et al. 2000 0.33 Che et al. 2007 0.88 Che et al. 2000 0.93 Stolar et al. 2000 0.93 Exclustre et al. 2001 0.61 Madernotio et al. 2000 0.81 Madernotio et al. 2000 0.93 Combined 0.900 Study name 1.99	0 0.728 2.657 0.997 0.319 0 224 1.429 - 1224 0.228 0 252 1 4.239 - 1224 0.228 0 252 1 4.239 - 1224 0.228 0 252 2.351 - 0.433 0.665 0 252 2.351 - 0.433 0.665 0 252 2.351 - 0.435 0 252 2.351 - 0.435 0 252 4.988 2.703 0.007 0 753 1.314 0.008 0.993 0 745 1.314 0.008 0.993 0 745 1.314 0.008 0.993 0 745 1.314 0.008 0.993 0 745 1.480 - 0.722 0.470 0 254 1.220 0.425 0 455 1.480 - 0.722 0.470 0 554 1.420 - 0.722 0.420 0 554 0.55 - 0.55 0.552 0.55	0.1 0.2 0.5 1 2 5 10 Odds ratio and 95% CI
GG+AG vs. AA Odds ratio	Lower Upper limit limit Z-Value p-Value	
Hu et al. 2015. 0.71 Fenng et al. 2013. 0.68 Elorrings et al. 2013. 0.68 Ben Seima et al. 2013. 0.61 Ben Seima et al. 2013. 0.61 Taype et al. 2009. 1.73 Trappe et al. 2009. 1.73 Trappe et al. 2009. 1.73 Ansair et al. 2008. 0.67 Anizarge et al. 2003. 0.27 Madrouelo et al. 2003. 0.27 Madrouelo et al. 2003. 0.25 Combined 1.960 Stady name 56 Stady name 56	0.243 2.154 0.599 5.49 0.249 9.128 0.647 0.652 0.068 3.064 0.653 0.524 0.791 3.187 1.885 0.652 0.791 3.187 1.886 0.662 0.791 4.890 1.487 0.650 0.863 0.162 1.442 0.144 0.863 1.876 0.650 0.653 0.833 3.475 1.554 0.564 0.662 0.244 1.817 1.511 0.524 0.524 0.524 0.245 0.331 1.377 0.553 0.581 0.364 0.563 0.581 0.541 0.542 0.542 0.524	
Odds	Lower Upper limit limit Z-Value p-Value	
Hu et al. 2015 0.50 Feng et al. 2014 1.40 Elorriaga et al. 2013 0.42 Lange et al. 2011 1.30 Lange et al. 2011 1.30 Lange et al. 2011 1.30 Ben Seina et al. 2011 1.30 Mosand et al. 2011 1.30 Ansari et al. 2011 1.30 Ansari et al. 2001 1.42 Ansari et al. 2009 1.44 Ansari et al. 2009 0.46 Ansari et al. 2009 0.50 Scole et al. 2001 0.30 Anser et al. 2003 0.46 Delgabe et al. 2003 0.46 Delgabe et al. 2003 0.46 Delgabe et al. 2003 0.46	0.364 0.851 -2.702 0.007 0.261 0.760 2.668 1.067 0.277 0.261 3.133 -1.360 0.177 0.261 0.167 0.261 3.163 -1.500 0.177 0.261 0.161 0.171 0.473 3.165 0.517 0.626 0.171 0.463 0.171 0.473 3.162 0.471 3.163 0.517 0.626 0.273 0.151 0.626 0.263 0.621 0.626 0.274 0.171 0.048 0.626 0.321 0.627 0.535 1.064 0.451 0.517 0.503 0.626 0.321 0.627 0.531 0.517 0.503 0.517 0.503 0.517 0.503 0.517 0.533 0.517 0.533 0.517 0.533 0.517 0.533 0.517 0.533 0.517 0.533 0.517 0.533 0.517 0.533 0.517 0.533 0.517 0.533 0.517 0.517	

Figure 4. Forest plot: Overall analysis showing OR with 95% CI to evaluate the association of the *IL10* -1082 A>G (rs1800871) gene polymorphism and PTB risk. Black squares represent the value of OR and the size of the square indicates the inverse proportion relative to its variance. Horizontal line is the 95% CI of OR.



Comparisons	E	gger's regression ana	lysis	Не	terogeneity and	Model used for the meta-analysis	
	Intercept	95% confidence interval	P-value	Q-value	Pheterogeneity	l ² (%)	
G vs. A	1.686	-2.38 to 5.75	0.380	44.674	0.001	73.139	Random
GG vs. AA	1.018	-1.08 to 3.88	0.446	24.674	0.010	55.419	Random
AG vs. AA	0.883	-2.29 to 4.06	0.552	28.851	0.004	58.409	Random
GG+AG vs. AA	1.672	-1.85 to 5.19	0.318	37.372	0.001	67.890	Random
GG vs. AA+AG	0.025	-2.42 to 2.47	0.981	22.603	0.020	51.334	Random

Table 5 Statistics to test publication bias and heterogeneity in the present meta-analysis: Asian population

performed analyses using random effect models for all the genetic models and no significant association of PTB susceptibility in all genetic models was detected in allele model (G vs. A: P=0.466; OR = 0.917, 95% CI = 0.726-1.158), homozygous model (GG vs. AA: P=0.602; OR = 0.853, 95% CI = 0.4710-1.547), heterozygous model (GA vs. AA: P=0.170; OR = 0.839, 95% CI = 0.652-1.078), dominant model (GG + AG vs. AA: GG vs. AA + AG: P=0.836; OR = 0.945, 95% CI = 0.554-1.613), and recessive model (GG vs. AA + AG: P=0.282; OR = 0.858, 95% CI = 0.650-1.134) (Figure 5).

African population

In African population four studies were found. Publication bias was not significant but heterogeneity was found significant and conducted analyses using random effect models for all the genetic models (Table 6). We found no association with PTB risk in allele model (G vs. A: P=0.165; OR = 1.300, 95% CI = 0.898–1.883), homozygous model (GG vs. AA: P=0.569; OR = 1.407, 95% CI = 0.434–4.562), heterozygous model (GA vs. AA: P=0.128; OR = 1.101, 95% CI = 0.973–1.246), dominant model (GG + AG vs. AA: P=0.438; OR = 1.614, 95% CI = 0.482–5.412), and recessive model (GG vs. AA + AG: P=0.244; OR = 1.240, 95% CI = 0.863–1.783) genetic models (Figure 6).

Caucasian population

In Caucasian population four studies were included. Publication bias and heterogeneity were not significant, hence fixed effect models were applied for all the genetic models (Table 7). We potentially found association of PTB risk with dominant model (GG + AG vs. AA: P=0.004; OR = 1.694, 95% CI = 1.183– 2.425). Whereas, other genetic models, i.e. allele (G vs. A: P=0.236; OR = 1.103, 95% CI = 0.938–1.298), homozygous model (GG vs. AA: P=0.098; OR = 1.439, 95% CI = 0.935–2.215), heterozygous model (GA vs. AA: P=0.446; OR = 0.915, 95% CI = 0.729–1.150), and recessive model (GG vs. AA + AG: P=0.926; OR = 0.990, 95% CI = 0.794–1.233) did not show any increased or decreased risk of PTB with *IL-10* -1082 A>G gene polymorphism (Figure 7).

Discussion

Although various mechanisms have been described for the development of a protective immune response that restricts and controls the infection and thus prevents the progression of the active disease, the reasons underlying active disease progression remain poorly understood [41]. Candidate gene approach and association studies have identified various host genetic factors that affect the susceptibility to TB [41]. As an immune response modulator, IL-10 has a crucial role to suppress proinflammatory cytokine responses by the innate and adaptive immune systems [42]. *IL-10*

Comparisons	E	gger's regression and	alysis	He	eterogeneity and	Model used for the present meta-analysis	
	Intercept	95% confidence interval	P-value	Q-value	P heterogeneity	l ² (%)	
G vs. A	2.415	-7.48 to 12.31	0.403	21.824	0.001	86.254	Random
GG vs. AA	1.047	-11.12 to 13.21	0.746	26.345	0.001	88.613	Random
AG vs. AA	1.562	-2.28 to 5.40	0.222	6.646	0.084	54.862	Fixed
GG + AG vs. AA	1.610	-4.12 to 7.34	0.350	10.073	0.018	70.216	Random
GG vs. AA + AG	1.486	-13.42 to 16.40	0.709	35.484	0.001	91.545	Random

Table o olaristics to test publication bias and neterogeneity in the present meta analysis. Amoun population
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| Feng et al. 2014 | 1.395 | 0.789

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| Akgunes et al. 2011 | 1.947 | 0.865

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| Liang et al. 2011 | 0.925 | 0.380

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| Ansari et al. 2011 | 1.012 | 0.713

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| Ansari et al. 2009 | 1.096 | 0.786

 | 1.528 | 0.542 | 0.588
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| Selvaraj et al. 2008 | 1.629 | 0.505

 | 1.090 | -1.490 | 0.135
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| Apand at al. 2005 | 1.020 | 0.780

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| Objet al. 2007 | 0.852 | 0.225

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| Amirzamar et al 2006 | 1 005 | 0.591

 | 0.602 | 0.019 | 0.985
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| Shin et al. 2005 | 0.745 | 0.541

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| Delgado et al. 2002 | 1.323 | 0.957

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| Hu et al. 2015 | 0.581 | 0.195

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| Feng et al. 2014 | 1.564 | 0.258

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| Akgunes et al. 2011 | 14.677 | 0.763

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| Ansari et al. 2011 | 1.189 | 0.494

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| Ansari et al. 2009 | 1.448 | 0.628

 | 3.336 | 0.868 | 0.385
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| Servaraj et al. 2008 | 0.882 | 0.261

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| vvu et al. 2008 | 6.464 | 0.259

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| Anand et al. 2007 | 0.493 | 0.119

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| On et al. 2007 | 0.097 | 0.031

 | 0.301 | -4.036 | 0.001
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| Amirzargar et al. 2006 | 1.029 | 0.160

 | 0.592 | 0.031 | 0.976
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| Shin et al. 2005 | 0.405 | 0.087

 | 1.884 | -1.153 | 0.249
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| Combined | 1.663 | 0.439

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| Hu et al. 2015 | 0.554 | 0 357

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| Feng et al. 2015 | 1,390 | 0.728

 | 2 657 | 0.997 | 0.310
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| Akgunes et al 2011 | 0.785 | 0.262

 | 2.351 | -0.433 | 0.665
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| Liang et al. 2011 | 0,920 | 0.368

 | 2.302 | -0.178 | 0.859
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| Ansari et al. 2011 | 0.731 | 0.394

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| Ansari et al 2009 | 0.796 | 0.428

 | 1,480 | -0.722 | 0.470
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| Selvaraj et al. 2008 | 0.645 | 0.403

 | 1,031 | -1,834 | 0.067
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| Wu et al. 2008 | 1.444 | 0.645

 | 3,236 | 0,894 | 0,372
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| Anand et al. 2007 | 0.889 | 0.546

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| Oh et al. 2007 | 0.373 | 0.218

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| Amirzargar et al. 2006 | 1.009 | 0.384

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| Shin et al. 2005 | 0.779 | 0.552

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| Delgado et al. 2002 | 1.835 | 1.151

 | 2.927 | 2.549 | 0.011
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| Combined | 0.839 | 0.652

 | 1.078 | -1.372 | 0.170
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GG+GA vs. AA
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| Study name
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Akgunes et al. 2011 | Odds
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| Study name
SG+GA vs. AA
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Feng et al. 2014 ³
Akgunes et al. 2011
Ansari et al. 2011 | Odds
ratio
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Hu et al. 2015
Feng et al. 2014 ³
Akgunes et al. 2011
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0.306
0.244

 | cs for ea
Upper
limit
2.124
9.128
301.623
3.177
3.415
3.425
151.331 | Z-Value
-0.599
0.447
1.865
1.089
1.594
0.039
1.100 | p-Value
0.549
0.655
0.062
0.276
0.111
0.969
0.271
 | Odds ratio and 95% CI | | | | | | | | |
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| Study name
36+6A vs. AA
Hu et al. 2015
Feng et al. 2014
Akgunes et al. 2011
Ansari et al. 2009
Selvaraj et al. 2009
Wu et al. 2008
Anand et al. 2007 | Odds
ratio
0.718
1.508
16.184
1.511
1.735
1.024
6.074
0.519 | Statisti
Lower
limit
0.243
0.249
0.868
0.719
0.881
0.306
0.244
0.127

 | cs for ea
Upper
limit
2.124
9.128
301.623
3.177
3.415
3.425
151.331
2.121 | Z-Value
-0.599
0.447
1.865
1.089
1.594
0.039
1.100
-0.913 | p-Value
0.549
0.655
0.062
0.276
0.111
0.969
0.271
0.361
 | Odds ratio and 95% CI | | | | | | | | |
 | | | | | |
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| Study name
36+6A vs. AA
Hu et al. 2015
Feng et al. 20143
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2009
Selvaraj et al. 2008
Anand et al. 2007
Oh et al. 2007 | Odds
ratio
0.718
1.508
16.184
1.511
1.735
1.024
6.074
0.519
0.146 | Statisti
Lower
limit
0.243
0.249
0.868
0.719
0.881
0.306
0.244
0.127
0.048

 | cs for ea
Upper
limit
2.124
9.128
301.623
3.177
3.415
3.425
151.331
2.121
0.443 | Z-Value
-0.599
0.447
1.865
1.089
1.594
0.039
1.100
-0.913
-3.338 | p-Value
0.549
0.655
0.062
0.276
0.111
0.969
0.271
0.361
0.001
 | Odds ratio and 95% CI | | | | | | | | |
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| Study name
56+6A vs. AA
Hu et al. 2015
Feng et al. 20143
Akgunes et al. 2011
Ansari et al. 2009
Selvaraj et al. 2008
Wu et al. 2008
Anand et al. 2007
Oh et al. 2007
Amirzargar et al. 2006 | Odds
ratio
0.718
1.508
16.184
1.511
1.735
1.024
6.074
0.519
0.146
1.021 | Statistii
Lower
limit
0.243
0.249
0.868
0.719
0.881
0.306
0.244
0.127
0.048
0.190

 | cs for ea
Upper
limit
2.124
9.128
301.623
3.177
3.415
3.425
151.331
2.121
0.443
5.426 | z-Value
-0.599
0.447
1.865
1.089
1.508
1.039
1.100
-0.913
-3.338
0.024 | p-Value
0.549
0.655
0.276
0.111
0.969
0.271
0.361
0.001
0.981
 | Odds ratio and 95% CI | | | | | | | | |
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| Study name
StreAvs. AA
Hu et al. 2015
Feng et al. 2014 ³
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2019
Seivaraj et al. 2008
Mu et al. 2007
Oh et al. 2007
Annitzargar et al. 2005 | Odds
ratio
0.718
1.508
16.184
1.511
1.735
1.024
6.074
0.519
0.146
1.021
0.419 | Statisti
Lower
limit
0.243
0.249
0.868
0.719
0.881
0.306
0.244
0.127
0.048
0.190
0.090

 | cs for ea
Upper
limit
2.124
9.128
301.623
3.177
3.415
3.425
151.331
2.121
0.443
5.426
1.945 | Z-Value
-0.599
0.447
1.865
1.089
1.594
0.039
1.100
-0.913
-3.338
0.024
-1.111 | p-Value
0.549
0.655
0.062
0.276
0.111
0.969
0.271
0.361
0.001
0.981
0.267
 | Odds ratio and 95% CI | | | | | | | | |
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| Study name
30+6A vs. AA
Hu et al. 2015
Feng et al. 20143
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2009
Selvaraj et al. 2008
Anand et al. 2007
Oh et al. 2007
Amirzargar et al. 2006
Delgado et al. 2005
Delgado et al. 2002 | Odds
ratio
0.718
1.508
1.511
1.735
1.024
6.074
0.519
0.146
1.021
0.419
1.095
0.041 | Statisti
Lower
limit
0.243
0.249
0.868
0.719
0.868
0.244
0.127
0.048
0.190
0.090
0.090
0.300

 | cs for ea
Upper
limit
2.124
9.128
301.623
3.177
3.415
3.425
151.331
2.121
0.443
5.426
1.945
3.995 | 2-Value
-0.599
0.447
1.865
1.089
1.594
0.039
1.109
1.003
-0.913
-3.338
0.024
-1.111
0.137
0.237 | p-Value
0.549
0.655
0.062
0.276
0.111
0.969
0.271
0.361
0.001
0.981
0.267
0.891
 | Odds ratio and 95% CI | | | | | | | | |
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| Study name
30+04 vs. AA
Hu et al. 2015
Feng et al. 20143
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2009
Selvaraj et al. 2008
Anand et al. 2007
On et al. 2007
Amirzargar et al. 2006
Delgado et al. 2002
Combined | Odds
ratio
0.718
1.508
16.184
1.511
1.735
1.024
6.074
0.146
1.021
0.419
1.095
0.945 | Statisti Lower limit 0.243 0.249 0.868 0.719 0.861 0.306 0.244 0.127 0.048 0.190 0.300 0.300 0.300

 | cs for ea
Upper
limit
2.124
9.128
301.623
3.177
3.415
3.425
151.331
2.121
0.443
5.426
1.945
3.998
1.613 | 2-Value
-0.599
0.447
1.865
1.089
1.594
0.039
1.100
-0.913
-3.338
0.024
-1.111
0.137
-0.207 | p-Value
0.549
0.655
0.062
0.276
0.111
0.969
0.271
0.361
0.001
0.267
0.881
0.836
 | Odds ratio and 95% Cl | | | | | | | | |
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| Study name
36+64 vs. AA
Hu et al. 2015
Feng et al. 20143
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2019
Selvaraj et al. 2008
Wu et al. 2008
Wu et al. 2007
Anirzargar et al. 2005
Delgado et al. 2002
Combined
Study name | Odds
ratio
0.718
1.508
1.511
1.735
1.024
6.074
0.146
1.021
0.419
1.095
0.945 | Statisti
Lower
limit
0.243
0.249
0.868
0.719
0.306
0.244
0.127
0.048
0.190
0.090
0.300
0.554
Statisti

 | cs for ea
Upper
limit
2.124
9.128
301.623
3.177
3.415
3.425
151.331
2.121
0.443
5.426
1.945
3.998
1.613 | 2-Value
-0.599
0.447
1.865
1.089
1.594
0.039
1.100
-0.913
-3.338
0.024
-1.111
0.137
-0.207
ach study | p-Value
0.549
0.655
0.062
0.276
0.111
0.969
0.271
0.361
0.001
0.281
0.265
0.891
0.836
 | Odds ratio and 95% CI | | | | | | | | |
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| Study name
30+6A vs. AA
Hu et al. 2015
Feng et al. 20143
Akgunes et al. 2011
Ansari et al. 2021
Ansari et al. 2009
Selvaraj et al. 2008
Anand et al. 2007
Amirzargar et al. 2007
Amirzargar et al. 2006
Delgado et al. 2002
Combined
Study name
36 vs. AA+GA | Odds
ratio
0.718
1.508
16.184
1.511
1.735
1.024
6.074
0.519
0.146
1.021
0.419
1.095
0.945
Odds | Statisti
Lower
limit
0.243
0.366
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0.868
0.719
0.306
0.244
0.127
0.048
0.190
0.090
0.300
0.554
Statisti
Lower

 | cs for ea
Upper
limit
2.124
9.128
301.623
3.177
3.415
151.331
2.121
0.443
5.426
1.945
3.998
1.613
cs for ea
Upper | 2-Value
-0.599
0.447
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1.089
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0.024
-1.111
0.137
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ach study | p-Value
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 | Odds ratio and 95% Cl | | | | | | | | |
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| Study name
GR+GA vs. AA
Hu et al. 2015
Feng et al. 2014
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2009
Selvaraj et al. 2008
Mu et al. 2007
On et al. 2007
On et al. 2007
On et al. 2007
On et al. 2007
Delgado et al. 2007
Delgado et al. 2005
Delgado et al. 2002
Combined
Study name
GG vs. AA+GA | Odds
ratio
0.718
1.508
16.184
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0.5550000 | Statisti
Lower
limit
0.243
0.249
0.868
0.719
0.881
0.306
0.244
0.127
0.048
0.190
0.300
0.300
0.300
0.554
Statisti
Lower
limit

 | cs for ea
Upper
limit
2.124
9.128
301.623
3.177
3.415
3.425
151.331
2.121
0.443
5.426
1.945
3.998
1.613
cs for ea
Upper
limit | 2-Value
-0.599
0.447
1.865
1.089
1.594
0.039
1.100
-0.913
-3.338
0.024
-1.111
0.027
-0.207
ach study
Z-Value | p-Value
0.549
0.655
0.062
0.276
0.111
0.969
0.271
0.361
0.981
0.267
0.891
0.836
p-Value
 | Odds ratio and 95% CI | | | | | | | | |
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| Study name
GR+GA vs. AA
Hu et al. 2015
Feng et al. 20143
Akgunes et al. 2011
Ansari et al. 2001
Ansari et al. 2009
Selvaraj et al. 2008
Wu et al. 2008
Anand et al. 2007
Amirzargar et al. 2006
Oh et al. 2007
Amirzargar et al. 2006
Delgado et al. 2002
Combined
Study name
GG vs. AA+GA
Hu et al. 2015 | Odds
ratio
0.718
1.508
16.184
1.511
1.735
0.6074
0.519
0.419
1.095
0.945
Odds
ratio
0.557 | Statisti
Lower
limit
0.243
0.249
0.888
0.719
0.881
0.306
0.244
0.127
0.048
0.190
0.090
0.300
0.554
Statisti
Lower
limit
0.364
0.364

 | cs for ea
Upper
limit
2.124
9.128
301.623
3.415
3.425
151.331
2.121
0.443
5.426
1.945
3.998
1.613
cs for ea
Upper
limit
0.851
0.851 | 2-Value
-0.599
0.447
1.865
1.089
1.594
0.039
1.100
-0.913
-3.338
0.024
-1.111
0.137
-0.207
ach study
Z-Value
-2.702
 | p-Value
0.549
0.652
0.276
0.111
0.969
0.271
0.361
0.001
0.836
p-Value
0.007
 | Odds ratio and 95% CI | | | | | | | | |
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| Study name Strady xs. AA Hu et al. 2015 Feng et al. 20143 Akgunes et al. 2011 Ansari et al. 2011 Ansari et al. 2019 Solvaraj et al. 2009 Solvaraj et al. 2008 Solvaraj et al. 2007 Oh et al. 2007 Aninat et al. 2007 Aninat et al. 2007 Aninat et al. 2007 Shin et al. 2005 Dolgado et al. 2002 Combined Study name SG vs. AA+GA Hu et al. 2015 Feng et al. 2014 Contact | Odds
ratio
0.718
1.508
16.184
1.511
1.024
6.074
0.514
1.021
0.449
1.095
0.945
Vodds
ratio
0.557
1.408 | Statisti Lower limit 0.243 0.249 0.868 0.719 0.881 0.306 0.244 0.127 0.048 0.127 0.048 0.300 0.554 Statisti 0.364 0.364 0.364

 | cs for ea
Upper
limit
2.124
9.128
301.623
3.177
3.415
3.425
151.331
2.121
0.443
5.426
1.945
3.998
1.613
cs for ea
Upper
limit
0.851
2.608 | 2-Value
-0.599
0.447
1.865
1.089
1.594
0.039
1.594
0.039
1.504
-0.913
-3.338
0.024
-1.111
0.137
-0.207
ach study
Z-Value
-2.702
1.087
0.519
-2.702
1.087
-2.702
1.087
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0.549
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0.276
0.111
0.969
0.271
0.361
0.267
0.891
0.836
p-Value
0.007
0.277
 | Odds ratio and 95% CI | | | | | | | | |
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| Study name Study name S0+GA vs. AA Hu et al. 2015 Feng et al. 20143 Akgunes et al. 2011 Ansari et al. 2011 Ansari et al. 2019 Solvaraj et al. 2008 Anal et al. 2008 Wu et al. 2008 Anand et al. 2007 On et al. 2007 Amirzargar et al. 2006 Deligado et al. 2007 Combined Study name Sov. AA+GA Hu et al. 2015 Feng et al. 2014 Akgunes et al. 2014 Akgunes et al. 2011 | Odds
ratio
0.718
1.508
16.184
1.511
1.735
1.024
6.074
0.519
1.021
0.419
1.025
0.945
0.557
1.408
1.308 | Statisti
limit
0.243
0.249
0.868
0.719
0.306
0.244
0.127
0.048
0.190
0.3090
0.3090
0.3090
0.554
Statisti
Lower
limit
0.364
0.760
0.364
0.760

 | cs for ex
Upper
limit
2.124
9.128
301.623
3.415
3.425
5.426
3.998
1.613
Cs for ex
Upper
limit
2.121
0.443
3.998
1.613
0.443
3.998
1.613
0.998
1.945
3.998
0.611
0.945
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1.2608
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0.8 | 2-Value
-0.599
0.447
1.865
1.089
1.594
0.039
1.594
0.039
1.100
-0.913
-3.38
0.024
-1.111
0.137
-0.207
z-Value
-2.702
1.087
0.517
0.517 | p-Value
0.549
0.655
0.062
0.2766
0.111
0.361
0.267
0.891
0.836
p-Value
0.007
0.277
0.605
 | Odds ratio and 95% Cl | | | | | | | | |
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| Study name StreAvs. AA Hu et al. 2015 Feng et al. 20143 Akgunes et al. 2011 Ansari et al. 2011 Ansari et al. 2011 Ansari et al. 2019 Selvaraj et al. 2009 Selvaraj et al. 2009 Selvaraj et al. 2009 Annad et al. 2009 Selvaraj et al. 2009 Selvaraj et al. 2006 Oh et al. 2007 Ch et al. 2007 Oh et al. 2005 Delgado et al. 2002 Combined Study name Sig vz. AA+GA Hu et al. 2015 Feng et al. 2014 Akgunes et al. 2011 Liang et al. 2011 Liang et al. 2011 | Odds
ratio
0.718
1.508
16.184
1.511
1.735
1.024
6.074
0.519
0.466
1.021
0.415
0.945
0.945
Odds
ratio
0.545
1.095
0.945 | Statisti Lower limit 0.243 0.249 0.868 0.719 0.861 0.306 0.244 0.127 0.044 0.120 0.306 0.306 0.306 0.306 0.308 Statisti D.364 0.769 0.364 0.760 0.473 0.384 0.473 0.364

 | cs for es
Upper
limit
2.124
30.1.623
3.177
3.415
151.331
2.121
0.443
3.998
1.613
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3.998
5.426
1.945
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-0.599
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1.504
0.447
0.437
-0.207
2-Value
-2.702
1.087
0.517
-0.178
-0.178
-0.178 | p-Value
0.549
0.655
0.062
0.276
0.276
0.361
0.361
0.267
0.891
0.836
p-Value
0.007
0.277
0.605
0.859
 | Odds ratio and 95% Cl | | | | | | | | |
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| Study name
30+64 vs. AA
Hu et al. 2015
Feng et al. 20143
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2009
Solvaraj et al. 2008
Anand et al. 2007
Oh et al. 2007
Oh et al. 2007
Amirzargar et al. 2007
Delgado et al. 2007
Delgado et al. 2007
Delgado et al. 2007
Combined
Study name
30 vs. AA+GA
Hu et al. 2015
Feng et al. 2011
Ansari et al. 2011
Ansari et al. 2011 | Odds
ratio
0.718
1.508
16.184
6.074
6.074
0.519
0.346
1.021
1.095
0.945
0.945
0.945
0.0557
1.408
1.308
0.320
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0.320 | Statisti
Lover
11mit
0.243
0.249
0.868
0.719
0.868
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3. | 2-Value
-0.599
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0.039
1.594
0.024
-1.111
0.137
-0.207
2-Value
-2.702
1.087
0.517
-0.178
-0.767 | p-Value
0.549
0.655
0.276
0.276
0.211
0.361
0.267
0.891
0.836
p-Value
0.007
0.277
0.605
0.859
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 | Odds ratio and 95% Cl | | | | | | | | |
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| Study name StreAvs. AA Hu et al. 2015 Feng et al. 20143 Akgunes et al. 2011 Ansari et al. 2011 Ansari et al. 2012 StreAvs. AA Bolvarigt et al. 2014 Ansari et al. 2009 Solvaraj et al. 2008 Anand et al. 2008 Anand et al. 2007 Amriczargar et al. 2007 Amrizzargar et al. 2007 Deligado et al. 2002 Combined Study name Sör v. A+GA Hu et al. 2015 Feng et al. 2014 Akgunes et al. 2011 Ansari et al. 2011 Ansari et al. 2011 Ansari et al. 2011 Sovarate al. 2011 | Odds
ratio
0.718
1.508
16.184
6.074
6.074
0.519
0.419
1.095
0.945
Odds
ratio
0.957
1.408
1.308
0.920
0.789
0.879 | Statisti Lower limit 0.243 0.249 0.868 0.719 0.860 0.242 0.300 0.300 0.300 0.554 Statisti Lower limit 0.304 0.700 0.554

 | cs for ex
Upper
limit
2.124
301.623
3.177
3.415
3.425
151.331
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1.943
5.426
1.943
5.426
1.945
2.1043
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p-Value
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 | Odds ratio and 95% CI | | | | | | | | |
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| Study name
36+6A vs. AA Hu et al. 2015 Feng et al. 20143 Akgunes et al. 2011 Ansari et al. 2011 Ansari et al. 2011 Ansari et al. 2011 Ansari et al. 2008 Solvaraj et al. 2008 Bolvaraj et al. 2007 Oh et al. 2007 Anand et al. 2007 Anand et al. 2007 Shin et al. 2005 Delgado et al. 2002 Combined Study name S6 vs. AA+GA Hu et al. 2015 Feng et al. 2014 Akgunes et al. 2011 Ansari et al. 2011 Ansari et al. 2012 Solvaraj et al. 2008 | Odds
ratio
0.718
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-0.4 | P-Value 0.549 0.655 0.662 0.276 0.111 0.969 0.271 0.361 0.261 0.891 0.836 P-Value 0.007 0.277 0.277 0.859 0.483 0.678 0.077
 | Odds ratio and 95% CI | | | | | | | | |
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| Study name
StreAvs. AA
Hu et al. 2015
Feng et al. 20143
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2009
Solvaraj et al. 2008
Wu et al. 2008
Anand et al. 2007
Amirzargar et al. 2006
Delgado et al. 2007
Combined
Study name
Study name
Sty AA+GA
Hu et al. 2015
Feng et al. 2014
Akgunes et al. 2011
Ansari et al. 2008
Selvaraj et al. 2008 | Odds
ratio
0.718
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0.459</td><td>Odds ratio and 95% Cl</td></tr> <tr><td>Study name Study name S0+GA vs. AA Hu et al. 2015 Feng et al. 20143 Akgunes et al. 2011 Ansari et al. 2011 Ansari et al. 2019 Solvaraj et al. 2008 Anand et al. 2008 Anand et al. 2007 Oh et al. 2007 Oh et al. 2007 Oh et al. 2007 Oh et al. 2007 Shin et al. 2007 Oh et al. 2005 Delgado et al. 2002 Combined Study name Study name Sid vs. AA+GA Hu et al. 2015 Feng et al. 2014 Akgunes et al. 2011 Ansari et al. 2011 Ansari et al. 2011 Solvaraj et al. 2019 Solvaraj et al. 2009 Solvaraj et al. 2009 Solvaraj et al. 2007 Dh et al. 2007</td><td>Odds
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ratio
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0.676</td><td>Odds ratio and 95% Cl</td></tr> <tr><td>Study name Study name G8+GA vs. AA Hu et al. 2015 Feng et al. 20143 Akgunes et al. 2011 Ansari et al. 2011 Ansari et al. 2011 Ansari et al. 2008 Wu et al. 2008 Solvaraj et al. 2007 Oh et al. 2007 Oh et al. 2007 Amizragrar et al. 2006 Delgado et al. 2002 Combined Study name S6 vs. AA+GA Hu et al. 2015 Feng et al. 2011 Ansari et al. 2014 Akgunes et al. 2011 Ansari et al. 2018 Sulvaraj et al. 2008 Wu et al. 2008 Anand et al. 2007 Ansari et al. 2010 Combined Wu et al. 2015 Selvaraj et al. 2014 Akgunes et al. 2011 Ansari et al. 2019 Selvaraj et al. 2018 Anand et al. 2009 Oh et al. 2007 Oh et al. 2007 Shin et al. 2007 Shin et al. 2007 Oh et al. 2007 Shin et al.
2007</td><td>Odds
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0.419
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limit 2.124 9.128 301.623 301.623 3.177 3.415 151.331 2.121 0.443 5.426 3.998 1.613 0.451 2.602 1.447 1.377 0.459 2.422 1.056 1.377 0.499</td><td>Ach study Z-Value -0.599 0.47 1.887 1.889 1.594 0.039 1.500 0.039 -3.338 0.024 -0.913 -3.338 0.024 -1.111 0.137 -0.207 b. -1.111 0.137 -0.2702 1.067 -0.778 -0.778 -0.781 -0.781 -0.747 -0.643 -0.643 -0.621 -0.255</td><td>p-Value
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GR-GA vs. AA
Hu et al. 2015
Feng et al. 20143
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2009
Solvaraj et al. 2008
Anand et al. 2007
Oh et al. 2007
Oh et al. 2007
Oh et al. 2007
Combined
Study name
Study
name
S</td><td>Odds
ratio
0.718
1.508
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0.35700000000000000000000000000000000000</td><td>Statisti Lower limit 0.243 0.249 0.868 0.719 0.861 0.306 0.244 0.27 0.868 0.900 0.300 0.554 Lower limit 0.364 0.700 0.430 0.430 0.430 0.430 0.430 0.430 0.430 0.431 0.432 0.430 0.431 0.430 0.431 0.538 1.150</td><td>cs for eta Upper
limit 2.124 9.128 3.01.623 3.01.623 3.177 3.415 1.213 3.425 1.243 3.435 1.242 1.945 3.998 1.613 5.426 2.602 2.602 3.452 2.302 1.045 3.452 1.045 3.452 1.045 3.452 1.056 2.905 2.905
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Gr-GA vs. AA
Hu et al. 2015
Feng et al. 20143
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2009
Selvaraj et al. 2007
Oh et al. 2007
Oh et al. 2007
Oh et al. 2007
Delgado et al. 2002
Combined
Study name
Gr vs. AA+GA
Hu et al. 2015
Feng et al. 2014
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2001
Nusari et al. 2001
Nusari et al. 2001
Ansari et al. 2007
Muizzagar et al. 2007
Shin et al. 2007
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GR-GA vs. AA
Hu et al. 2015
Feng et al. 20143
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2009
Solvaraj et al. 2008
Anand et al. 2007
Oh et al. 2007
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ratio
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Gr-GA vs. AA
Hu et al. 2015
Feng et al. 20143
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2009
Selvaraj et al. 2007
Oh et al. 2007
Oh et al. 2007
Oh et al. 2007
Delgado et al. 2002
Combined
Study name
Gr vs. AA+GA
Hu et al. 2015
Feng et al. 2014
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2001
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| Study name Study name G8+GA vs. AA Hu et al. 2015 Feng et al. 20143 Akgunes et al. 2011 Ansari et al. 2011 Ansari et al. 2011 Ansari et al. 2008 Wu et al. 2008 Solvaraj et al. 2007 Oh et al. 2007 Oh et al. 2007 Amizragrar et al. 2006 Delgado et al. 2002 Combined Study name S6 vs. AA+GA Hu et al. 2015 Feng et al. 2011 Ansari et al. 2014 Akgunes et al. 2011 Ansari et al. 2018 Sulvaraj et al. 2008 Wu et al. 2008 Anand et al. 2007 Ansari et al. 2010 Combined Wu et al. 2015 Selvaraj et al. 2014 Akgunes et al. 2011 Ansari et al. 2019 Selvaraj et al. 2018 Anand et al. 2009 Oh et al. 2007 Oh et al. 2007 Shin et al. 2007 Shin et al. 2007 Oh et al. 2007 Shin et al. 2007 | Odds
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| Study name
GR-GA vs. AA
Hu et al. 2015
Feng et al. 20143
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2009
Solvaraj et al. 2008
Anand et al. 2007
Oh et al. 2007
Oh et al. 2007
Oh et al. 2007
Combined
Study name
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S | Odds
ratio
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| Study name
Gr-GA vs. AA
Hu et al. 2015
Feng et al. 20143
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2009
Selvaraj et al. 2007
Oh et al. 2007
Oh et al. 2007
Oh et al. 2007
Delgado et al. 2002
Combined
Study name
Gr vs. AA+GA
Hu et al. 2015
Feng et al. 2014
Akgunes et al. 2011
Ansari et al. 2011
Ansari et al. 2001
Nusari et al. 2001
Nusari et al. 2001
Ansari et al. 2007
Muizzagar et al. 2007
Shin et al. 2007
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0.718
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Figure 5. Forest plot: Data from the Asian population showing OR with 95% CI to evaluate the association of the *IL10*-1082 A>G (rs1800871) gene polymorphism and PTB risk. Black squares represent the value of OR and the size of the square indicates the inverse proportion relative to its variance. Horizontal line is the 95% CI of OR.

<□Decreased | Increased □>



Study name		Statist	ics for ea	ach study	!		Od	ds rati	io and	95% CI	
	Odds ratio	Lower limit	Upper limit	Z-Value	p-Value						
Ben Selma et al. 2011	2.105	1.317	3.365	3.110	0.002	1	1	1	1 -	* - 1	1 I
Mosaad et al. 2010	2.543	1.325	4.883	2.805	0.005					╈	
Thye et al. 2009	1.055	0.949	1.172	0.995	0.320						
Bellamy et al. 1998	0.795	0.640	0.988	-2.070	0.038			11			
Combined	1.300	0.898	1.883	1.390	0.165						
						0.1	0.2	0.5	1	2 0	5 10
Study name		Statisti	cs for eac	ch study			Od	ds rati	o and	95% CI	
GG vs. AA	Odds ratio	Lower limit	Upper limit	Z-Value	p-Value						
Ben Selma et al. 2011	2.889	1.110	7.517	2.174	0.030		1			-1	1
Mosaad et al. 2010	71.400	3.005	1696.744	2.641	0.008				1		-
Thye et al. 2009	1.103	0.849	1.434	0.733	0.464						
Bellamy et al. 1998	0.265	0.133	0.530	-3.758	0.000			-			
Combined	1.407	0.434	4.562	0.569	0.569			-	\bullet	-	
						0.01	0.	1	1	10	100
Study name		Statisti	cs for ea	ch study			Odd	ls ratio	o and	95% CI	
GA vs. AA	Odds ratio	Lower limit	Upper limit	Z-Value	p-Value						
Ben Selma et al. 2011	2.538	1.292	4.988	2.703	0.007		1		-	- 1	1
Mosaad et al. 2010	3.169	0.174	57.613	0.780	0.436				+-•		-
Thye et al. 2009	1.062	0.924	1.221	0.844	0.399						
Bellamy et al. 1998	1.091	0.813	1.463	0.579	0.562				+		
Combined	1.101	0.973	1.246	1.522	0.128						
						0.01	0.4	1	1	10	100
Study name		Statisti	cs for ead	ch study			Odd	ds ratio	o and §	95% CI	
GG+GA vs. AA	Odds	Lower	Upper								
	ratio	limit	limit	Z-Value	p-Value						
Ben Selma et al. 2011	1.972	0.794	4.898	1.462	0.144	1	1		+	- 1	- T
Mosaad et al. 2010	30.000	6.010	149.753	4.146	0.000				1	-	\rightarrow
Thye et al. 2009	1.075	0.833	1.387	0.553	0.581				ė.		
Bellamy et al. 1998	0.254	0.129	0.498	-3.982	0.000		- I-	-	Т		
Combined	1.614	0.482	5.412	0.776	0.438			-		-	
						0.01	0.1		1	10	100
Study name		Statisti	cs for ea	ach study	1		Od	ds rati	io and	95% CI	
UU IS. AATUA	Odds ratio	Lower limit	Upper limit	Z-Value	p-Value						
Ben Selma et al. 2011	2.629	1.413	4.890	3.051	0.002	Ĩ	T	T	1 -	┼═─┤	
Mosaad et al. 2010	4.978	0.278	89.107	1.090	0.276		-	_	+	+	\rightarrow
Thye et al. 2009	1.068	0.935	1.221	0.969	0.332						
Bellamy et al. 1998	0.929	0.698	1.234	-0.510	0.610			-	-		
Combined	1.240	0.863	1.783	1.165	0.244				۲	•	
						0.1	0.2	0.5	1	2 4	10
						0.1	0.2	0.0			

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Figure 6. Forest plot: Data from the African population showing OR with 95% Cl to evaluate the association of the *IL10*-1082 A>G (rs1800871) gene polymorphism and PTB risk. Black squares represent the value of OR and the size of the square indicates the inverse proportion relative to its variance. Horizontal line is the 95% Cl of OR.



Study name	Statistics for each study					Odds ratio and 95% CI						
6 VS. A	Odds ratio	Lower limit	Upper limit	Z-Value	p-Value							
Taype et al. 2010	1.126	0.896	1.415	1.021	0.307	1			-	1	1	1
Trajkov et al. 2009	1.187	0.828	1.701	0.931	0.352				-	-		
Scola et al. 2003	1.357	0.823	2.237	1.198	0.231				+-	+		
Maderuelo et al. 2003	0.852	0.582	1.247	-0.824	0.410				■			
Combined	1.103	0.938	1.298	1.186	0.236				٠			
						0.1	0.2	0.5	1	2	5	10
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Study name		Statistics for each study			Odds ratio and 95% Cl							
	Odds ratio	Lower limit	Upper limit	Z-Value	p-Value							
Taype et al. 2010	2.084	0.961	4.518	1.860	0.063				+	۰	-1	
Trajkov et al. 2009	2.422	0.942	6.225	1.837	0.066				+	-	+	
Scola et al. 2003	1.535	0.486	4.845	0.730	0.465			+	+•	•	-	
Maderuelo et al. 2003	0.724	0.345	1.518	-0.854	0.393			-+-	┣┼──			
Combined	1.439	0.935	2.215	1.653	0.098							
						0.1	0.2	0.5	1	2	5	10
Study name		Statistics for each study				Odds ratio and 95% Cl						
GA vs. AA	Odds	Lower Upper										
	ratio	limit	limit	Z-Value	p-Value							
Taype et al. 2010	1.001	0.763	1.314	0.008	0.993	- T	T	1		1	1	1
Trajkov et al. 2009	0.932	0.504	1.726	-0.223	0.823				-	-1		
Scola et al. 2003	0.619	0.211	1.818	-0.873	0.383				+	-1		
Maderuelo et al. 2003	0.598	0.304	1.177	-1.488	0.137				+			
Combined	0.915	0.729	1.150	-0.762	0.446			- I -	•			
						0.1	0.2	0.5	1	2	5	10
Study name		Statisti	cs for ea	ach study	1		Od	ds rati	o and	1 95%		
GGTAG VS. AA	Odds	Lower	Upper									
	ratio	limit	limit	Z-Value	p-Value							
Taype et al. 2010	2.083	0.965	4.497	1.870	0.062				+	-	-1	
Trajkov et al. 2009	2.552	1.117	5.831	2.222	0.026				-	╶┼═╸	+	
Scola et al. 2003	2.277	1.073	4.831	2.144	0.032					╼	-	
Maderuelo et al. 2003	1.010	0.558	1.826	0.033	0.974			-	-			
Combined	1.694	1.183	2.425	2.879	0.004							
						0.1	0.2	0.5	1	2	5	10
Study name		Statistics for each study				Odds ratio and 95% Cl						
GG vs. AA+AG	Odds	Lower	Unner									
	ratio	limit	limit	Z-Value	p-Value							
Taype et al. 2010	1.068	0.821	1.389	0.488	0.626	1	1	1	#	1	1	T
Trajkov et al. 2009	1.043	0.571	1.906	0.136	0.891			_	Ŧ	-1		
Scola et al. 2003	0.837	0.297	2.356	-0.338	0.736		.	-	•	+		
Maderuelo et al. 2003	0.644	0.343	1.209	-1.369	0.171			-+-	+			
Combined	0.990	0.794	1.233	-0.093	0.926				٠			
						0.1	0.2	0.5	1	2	5	10
								crease	d In	crease	d 🖒	

Figure 7. Forest plot: Data from the Caucasian population showing OR with 95% CI to evaluate the association of the *IL10* -1082 A>G (rs1800871) gene polymorphism and PTB risk. Black squares represent the value of OR and the size of the square indicates the inverse proportion relative to its variance. Horizontal line is the 95% CI of OR.



Comparisons	E	gger's regression ana	Не	terogeneity ana	Model used for the present meta-analysis		
	Intercept	95% confidence interval	P-value	Q-value	P _{heterogeneity}	l ² (%)	_
G vs. A	0.158	-8.42 to 8.74	0.940	2.616	0.455	0.001	Fixed
GG vs. AA	2.859	-16.58 to 22.30	0.590	5.366	0.147	44.089	Fixed
AG vs. AA	-1.361	-4.15 to 1.42	0.170	2.446	0.485	00.001	Fixed
GG + AG vs. AA	-1.031	-4.68 to 2.62	0.348	2.235	2.235	0.5250	Fixed
GG vs. AA + AG	8.205	3.75 to 12.65	0.015	4.744	0.192	36.760	Fixed

Table 7 Statistics to test publication bias and heterogeneity in the present meta-analysis: Caucasian population

is also thought to play an important regulatory role in many bacterial infections [43,44]. Immunoregulatory genes are very important in modulating the host susceptibility to PTB because the first line of defense against *M. tuberculosis* involves the identification and uptake of the bacterium by macrophages and dendritic cells [45].

As we know that PTB is one of the most common infectious diseases with a high morbidity and mortality [1]. A well-established genetic marker surely would have a significant influence in screening and prevention of PTB. Cytokine polymorphism has been considered to be of important roles in host genetic factors. Among them, *IL-10* is an essential pleiotropic cytokine which takes part in immunoregulatory activities. Lately, *IL-10* gene has been widely studied and some studies suggested that the *IL-10* -1082 A>G polymorphism is associated with PTB susceptibility, but the results are inconsistent. The results of studies generated could be having insufficient statistical power of individual studies with small sample sizes or variations that existed in different population. Therefore, we conducted this meta-analysis to provide more accurate statistical evidence of association between *IL-10* -1082 A>G polymorphism and PTB susceptibility. Pooled ORs generated from large sample size and sufficient statistical power from various studies have the advantage of reducing random errors [46].

In the present study, we have included 22 studies with all the preset eligible criteria of sample size, genotype, inclusion criteria of PTB patients, and healthy controls. Most of the included studies scored five or more stars in NOS quality score assessment and suggested good to moderate quality by clearly stating about the sample size, genotype, inclusion criteria of PTB patients, and healthy controls.

Overall, we found that there was no association between *IL-10* -1082 A>G polymorphism and PTB susceptibility under any genetic models in overall analysis.

These observations suggested that the IL-10 -1082 A allele leads to increased resistance to PTB. Studies carried out on mice observed that overexpression of IL-10 may not be important for susceptibility to initial infection with M. tb but may play a role in reactivation of the latent disease [47]. Other studies also reported no association between the said polymorphism and resistance to TB [48,49].

During the subgroup analysis, we found that IL-I0 -1082 A>G polymorphism has no role of increasing or decreasing PTB susceptibility in Asian and African populations. Interestingly, significant association was found with dominant model. This result implied that among different ethnicities, the same gene polymorphism may act differently in PTB susceptibility. Tuberculosis report clarified racial differences of susceptibility to TB [50]. Thus, the current results of the present study might attribute the racial differences and reflect the existence of racial differences of TB.

However, the susceptibility toward PTB is polygenic and multiple candidate genes are likely to be involved in determining resistance or susceptibility to TB [51]. Due to multifactorial nature of TB infection and complex nature of the immune system, *IL-10* -1082 A>G genetic polymorphism cannot be solely responsible for the predisposition of PTB.

In the present study, significant heterogeneity was found between the selected studies in the test of heterogeneity. This discordance may be related to the ethnic origin of the patients as ethnicity-specific genetic variations may influence the host immunity to PTB. Nevertheless, some limitations also need to be addressed. First, we only included studies published in the English language, abstracted and indexed by the selected electronic databases were included for data analysis; it is possible that some pertinent studies published in other languages and indexed in other electronic databases may have missed. Second, the abstracted data were not stratified by other factors, e.g. HIV status or severity of the TB infection, and our results were based on unadjusted parameters. Third, we did not test for gene–environment interactions because of inadequate data available in the published reports. Despite above limitations, there are some advantages of the present study. First, the present meta-analysis was comprised with more number of studies which



increased the statistical power of the study and ultimately reached at robust conclusion. Second, no publication bias was observed and further sensitivity analysis also supported our results more reliably.

Also, all the included studies were of good to modest quality fulfilling the preset needful criteria as tested by NOS quality score evaluation scale.

Conclusions

In conclusion, this meta-analysis demonstrated that IL-10 -1082 A>G gene polymorphism is not associated with PTB risk in overall, Asian and African population. Our result provided evidence that G allele carrier is associated with PTB in Caucasian population. In the near future, because of significant public health impact of PTB, larger studies are warranted to identify the host genes with their functional allele controlling the response to mycobacterial infections. This will help in the identification of the host genetic factors for the susceptibility to PTB, and would greatly help in the global control of this infectious disease.

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Competing Interests

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Author Contribution

M.Y.A., R.K.M., S.A.D., A.J., M.W., M.L., A.K.P., B.N.M., N.A., and S.H. conceived and designed the study. M.Y.A., R.K.M., S.A.D., A.J., and M.W. searched the literature for selection of relevant studies. M.L., A.K.P., B.N.M., N.A., and S.H. verified the selection and extracted the required data from the articles. R.K.M., S.A.D., A.J., A.K.P., and S.H. performed the analysis. R.K.M., S.A.D., and S.H. wrote the paper. All the authors reviewed and approved the final manuscript.

Abbreviations

CI, confidence interval; HWE, Hardy–Weinberg equilibrium; IFN-y, Interferon gamma; IL-10, interlukin-10; NOS, Newcastle–Ottawa Scale; OR, odds ratio; PTB, pulmonary tuberculosis; Th1, T helper 1; TNF-a, Tumor necrosis factor - alpha.

References

- 1 World Health Organization, Global Tuberculosis Report (2016), World Health Organization, http://www.who.int/tb/publications/global_report/gtbr2016_executive_summary.pdf
- 2 Andrews, J.R., Noubary, F., Walensky, R.P., Cerda, R., Losina, E. and Horsburgh, C.R. (2012) Risk of progression to active tuberculosis following reinfection with *Mycobacterium tuberculosis. Clin. Infect. Dis.* **54**, 784–791
- 3 Bellamy, R. (2003) Susceptibility to Mycobacterial infections: the importance of host genetics. Genes Immun. 4, 4–11
- 4 Flynn, J. and Chan, J. (2001) Immunology of tuberculosis. Annu. Rev. Immunol. 19, 93–129
- 5 Wallis, R.S. and Ellner, J.J. (1994) Cytokines and tuberculosis. J. Leukoc. Biol. 55, 676–681
- 6 Moore, K.W., de Waal Malefyt, R., Coffman, R.L. and O'Garra, A. (2001) Interleukin-10 and the interleukin-10 receptor. *Annu. Rev. Immunol.* **19**, 683–765
- 7 Fiorentino, D.F., Zlotnik, A., Mosmann, T. R., Howard, M. and O'cGarra, A. (1991) IL-10 inhibits cytokine production by activated macrophages. *J. Immunol.* **147**, 3815–3822
- 8 Gazzinelli, R.T., Oswald, I.P., James, S.L. and Sher, A. (1992) IL-10 inhibits parasite killing and nitrogen oxide production by IFN-gamma-activated macrophages. *J. Immunol.* **148**, 1792–1796
- 9 Gong, J.H., Zhang, M., Modlin, R.L., Linsley, P.S., Iyer, D., Lin, Y. et al. (1996) Interleukin-10 downregulators *Mycobacterium tuberculosis*-induced Th-1 responses and CTLA-4 expression. *Infect. Immun.* **64**, 913–918
- 10 Verbon, A., Juffermans, N., Van Deventer, S.J., Speelman, P., Van Deutekom, H. and Van Der Poll, T. (1999) Serum concentrations of cytokines in patients with active tuberculosis (TB) and after treatment. *Clin. Exp. Immunol.* **115**, 110–113
- 11 Vidyarani, M., Selvaraj, P., Adnand, A.P., Jawahar, M.S., Adhilakshmi, A.R. and Narayanan, P.R. (2006) Interferon gamma (IFNc) & interleukin-4 (IL-4) gene variants & cytokine levels of pulmonary tuberculosis. *Indian J. Med. Res.* **124**, 403–410
- 12 Ates, O., Musellim, B., Ongen, G. and Topal-Sarikaya, A. (2008) Interleukin-10 and tumor necrosis factor-alpha gene polymorphisms in tuberculosis. *J. Clin. Immunol.* **28**, 232–236



16

- 13 Hu, Y., Wu, L., Li, D., Zhao, Q., Jiang, W. and Xu, B. (2015) Association between cytokine gene polymorphisms and tuberculosis in a Chinese population in Shanghai: a case-control study. *BMC Immunol.* **16**, 8, doi:10.1186/s12865-015-0071-6
- 14 Feng, F.M., Liu, X.X., Sun, Y.H., Zhang, P., Sun, S.F., Zhang, B. et al. (2014) Independent and joint effects of the IL-6 and IL-10 gene polymorphisms in pulmonary tuberculosis among the Chinese Han population. *Genet. Mol. Res.* **13**, 7766–7772
- 15 García-Elorriaga, G., Vera-Ramírez, L., del Rey-Pineda, G. and González-Bonilla, C. (2013) -592 and -1082 interleukin-10 polymorphisms in pulmonary tuberculosis with type 2 diabetes. *Asian Pac. J. Trop. Med.* **6**, 505–509
- 16 Akgunes, A., Coban, A.Y. and Durupinar, B. (2011) Human leucocyte antigens and cytokine gene polymorphisms and tuberculosis. Indian J. Med. Microbiol. 29, 28–32
- 17 Liang, L., Zhao, Y.L., Yue, J., Liu, J.F., Han, M., Wang, H. et al. (2011) Interleukin-10 gene promoter polymorphisms and their protein production in pleural fluid in patients with tuberculosis. *FEMS Immunol. Med. Microbiol.* **62**, 84–90
- 18 Ansari, A., Hasan, Z., Dawood, G. and Hussain, R. (2011) Differential combination of cytokine and interferon-γ +874 T/A polymorphisms determines disease severity in pulmonary tuberculosis. *PLoS One* **6**, e27848
- 19 Ben-Selma, W., Harizi, H. and Boukadida, J. (2011) Association of TNF-a and IL-10 polymorphisms with tuberculosis in Tunisian populations. *Microbes* Infection **13**, 837–843
- 20 Taype, C.A., Shamsuzzaman, S., Accinelli, R.A., Espinoza, J.R. and Shaw, M.A. (2010) Genetic susceptibility to different clinical forms of tuberculosis in the Peruvian population. *Infect. Genet. Evol.* **10**, 495–504
- 21 Mosaad, Y.M., Soliman, O.E., Tawhid, Z.E. and Sherif, D.M. (2010) Interferon-gamma +874 T/A and interleukin-10 -1082 A/G single nucleotide polymorphism in Egyptian children with tuberculosis. Scand. J. Immunol. 72, 358–364
- 22 Thye, T., Browne, E.N., Chinbuah, M.A., Gyapong, J., Osei, I., Owusu-Dabo, E. et al. (2009) IL10 haplotype associated with tuberculin skin test response but not with pulmonary TB. *PLoS One* **4**, e5420
- 23 Ansari, A., Talat, N., Jamil, B., Hasan, Z., Razzaki, T., Dawood, G. et al. (2009) Cytokine gene polymorphisms across tuberculosis clinical spectrum in Pakistani patients. *PLoS One* **4**, e4778
- 24 Trajkov, D., Trajchevska, M., Arsov, T., Petlichkovski, A., Strezova, A., Efinska-Mladenovska, O. et al. (2009) Association of 22 cytokine gene polymorphisms with tuberculosis in Macedonians. *Indian J. Tuberc.* **56**, 117–131
- 25 Selvaraj, P., Alagarasu, K., Harishankar, M., Vidyarani, M., Nisha Rajeswari, D. and Narayanan, P.R. (2008) Cytokine gene polymorphisms and cytokine levels in pulmonary tuberculosis. *Cytokine* **43**, 26–33
- 26 Wu, F., Qu, Y., Tang, Y., Cao, D., Sun, P. and Xia, Z. (2008) Lack of association between cytokine gene polymorphism and silicosis and pulmonary tuberculosis in Chinese Iron Miners. J. Occup. Health 50, 445–454
- 27 Prabhu Anand, S., Selvaraj, P., Jawahar, M.S., Adhilakshmi, A.R. and Narayanan, P.R. (2007) Interleukin-12B & interleukin-10 gene polymorphisms in pulmonary tuberculosis. *Indian J. Med. Res.* **126**, 135–138
- 28 0h, J.H., Yang, C.S., Noh, Y.K., Kweon, Y.M., Jung, S.S., Son, J.W. et al. (2007) Polymorphisms of interleukin-10 and tumour necrosis factor-alpha genes are associated with newly diagnosed and recurrent pulmonary tuberculosis. *Respirology* **12**, 594–598
- 29 Amirzargar, A.A., Rezaei, N., Jabbari, H., Danesh, A.A., Khosravi, F., Hajabdolbaghi, M. et al. (2006) Cytokine single nucleotide polymorphisms in Iranian patients with pulmonary tuberculosis. *Eur. Cytokine Netw.* **17**, 84–89
- 30 Shin, H.D., Park, B.L., Kim, Y.H., Cheong, H.S., Lee, I.H. and Park, S.K. (2005) Common interleukin 10 polymorphism associated with decreased risk of tuberculosis. *Exp. Mol. Med.* **37**, 128–132
- 31 Scola, L., Crivello, A., Marino, V., Gioia, V., Serauto, A., Candore, G. et al. (2003) *IL-10* and *TNF-alpha* polymorphisms in a sample of Sicilian patients affected by tuberculosis: implication for ageing and life span expectancy. *Mech. Ageing Dev.* **124**, 569–572
- 32 López-Maderuelo, D., Arnalich, F., Serantes, R., González, A., Codoceo, R., Madero, R. et al. (2003) Interferon-gamma and interleukin-10 gene polymorphisms in pulmonary tuberculosis. *Am. J. Respir. Crit. Care Med.* **167**, 970–975
- 33 Delgado, J.C., Baena, A., Thim, S. and Goldfeld, A.E. (2002) Ethnic-specific genetic associations with Pulmonary tuberculosis. J. Infect. Dis. 186, 1463–1468
- 34 Bellamy, R., Ruwende, C., Corrah, T., McAdam, K.P., Whittle, H.C. and Hill, A.V. (1998) Assessment of the interleukin 1 gene cluster and other candidate gene polymorphisms in host susceptibility to tuberculosis. *Tuber. Lung Dis.* **79**, 83–89
- 35 Stang, A. (2010) Critical evaluation of the Newcastle-Ottawa scale for the assessment of the quality of nonrandomized studies in metaanalyses. *Eur. J. Epidemiol.* **25**, 603–605
- 36 Hu, P., Huang, M.Y., Hu, X.Y., Xie, X.J., Xiang, M.X. et al. (2015) Meta-analysis of C242T polymorphism in CYBA genes: risk of acute coronary syndrome is lower in Asians but not in Caucasians. J. Zhejiang. Univ. Sci. B. 16, 370–379
- 37 Wu, R. and Li, B. (1999) A multiplicative-epistatic model for analyzing interspecific differences in outcrossing species. Biometrics 55, 355–365
- 38 Mantel, N. and Haenszel, W. (1959) Statistical aspects of the analysis of data from retrospective studies of disease. J. Natl. Cancer Inst. 22, 719–748
- 39 DerSimonian, R. and Laird, N. (1986) Meta-analysis in clinical trials. *Control Clin. Trials.* 3, 177–188
- 40 Higgins, J.P., Thompson, S.G., Deeks, J.J. and Altman, D.G. (2003) Measuring inconsistency in meta-analyses. Br. Med. J. 327, 557–560
- 41 Möller, M., de Wit, E. and Hoal, E.G. (2010) Past, present and future directions in human genetic susceptibility to tuberculosis. *FEMS Immunol. Med. Microbiol.* **58**, 3–26
- 42 Moore, K.W., de Waal Malefyt, R., Coffman, R.L. and O'Garra, A. (2001) Interleukin-10 and the interleukin-10 receptor. *Annu. Rev. Immunol.* **19**, 683e765
- 43 Harizi, H., Juzan, M., Pitard, V., Moreau, J.F. and Gualde, N. (2002) Cyclooxygenase2-issued prostaglandine (2) enhances the production of endogenous IL- 10, which down-regulates dendritic cell functions. *J. Immunol.* **168**, 2255–2263
- 44 Mege, J.L., Meghari, S., Honstettre, A., Capo, C. and Raoult, D. (2006) The two faces of interleukin 10 in human infectious diseases. *Lancet Infect. Dis.* **6**, 557–569



- 45 Rockett, K.A., Brookes, R., Udalova, I., Vidal, V., Hill, A.V. and Kwiatkowski, D. (1998) 1,25- Dihydroxyvitamin D3 induces nitric oxide synthase and suppresses growth of *Mycobacterium tuberculosis* in a human macrophage-like cell line. *Infect. Immun.* **66**, 5314–5321
- 46 Ioannidis, J.P., Boffetta, P., Little, J., O'Brien, T.R., Uitterlinden, A.G., Vineis, P. et al. (2008) Assessment of cumulative evidence on genetic associations: interim guidelines. *Int. J. Epidemiol.* **37**, 120–132
- 47 Turner, J., Gonzalez-Juarrero, M., Ellis, D.L., Basaraba, R.J., Kipnis, A., Orme, I.M. et al. (2002) In vivo IL-10 production reactivates chronic pulmonary tuberculosis in C57BL/6 mice. J. Immunol. **169**, 6343e6351
- 48 Bidwell, J., Keen, L., Gallagher, G., Kimberly, R., Huizinga, T., McDermott, M.F. et al. (1999) Cytokine gene polymorphism in human disease: on-line databases. *Genes Immun.* **1**, 3–19
- 49 Zhang, J., Chen, Y., Nie, X.B., Wu, W.H., Zhang, H., Zhang, M. et al. (2011) Interleukin-10 polymorphisms and tuberculosis susceptibility: a meta-analysis. *Int. J. Tuberc. Lung Dis.* **15**, 594–601
- 50 Stead, W.W., Senner, J.W., Reddick, W.T. and Lofgren, J.P. (1990) Racial differences in susceptibility to infection by Mycobacterium tuberculosis. *N. Engl. J. Med.* **322**, 422–427
- 51 Bellamy, R. (2006) Genome-wide approaches to identifying genetic factors in host susceptibility to tuberculosis. Microbes Infect 8, 1119–1123