

## **Review** Article

# The Association with Subclinical Thyroid Dysfunction and Uric Acid

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The relationship between subclinical thyroid dysfunction and uric acid was not well established. This study aimed to determine if subclinical thyroid dysfunction is associated with hyperuricemia risk and to evaluate the levels of uric acid in patients with different forms of subclinical thyroid dysfunction. A systematic search was conducted in 4 databases to obtain relevant studies on subclinical thyroid dysfunction (subclinical hyperthyroidism and subclinical hypothyroidism) and uric acid. The standardized mean difference (SMD) or odds ratio (OR) and 95% confidence interval (95% CI) were used for evaluation, and the sensitivity analysis was conducted. Publication bias was estimated by funnel plot, Egger's test, and Begg's test. A total of 73 studies were included in this meta-analysis. The results demonstrated that serum levels of uric acid in patients with subclinical thyroid dysfunction had a higher prevalence of hyperuricemia compared with normal clinical thyroid function. Subclinical thyroid dysfunction was associated with the prevalence of hyperuricemia. Different types of subclinical thyroid dysfunction had varied effects on serum levels of uric acid.

## **1. Introduction**

Thyroid hormones elicited significant effects on numerous physiological processes, such as growth, development, and metabolism. Thyroid dysfunction is a common endocrine disease and consists of overt hypothyroidism (OH), subclinical hypothyroidism (SCH), overt hyperthyroidism (OHyper), and subclinical hyperthyroidism (SCHyper). Subclinical thyroid dysfunction was characterized by high (SCH)/low (SCHyper) TSH concentrations and normal serum thyroid hormones or serum-free thyroid hormones [1, 2]. The prevalence of SCH was approximately 4-10% [3, 4], and it can be as high as 20% in people over 60 years old [5]. SCHyper was also a common thyroid disorder with a prevalence of up to 10% [6-8]. Subclinical thyroid dysfunction, which can be diagnosed by thyroid function tests before symptoms and complications occur, is viewed as a risk factor for developing hyperthyroidism and

hypothyroidism complications [9]. Moreover, a growing body of observational data suggests that cardiovascular risk may also be increased in subgroups of patients with SCH or SCHyper [10]. Uric acid (UA) is the end product of the purine metabolism in the human body. Serum UA levels reflected a balance between the metabolic breakdown of purine nucleotides and UA excretion [11]. Serum UA levels have been considered as an independent predictive factor for metabolic syndrome [12, 13]. Hyperuricemia is the bestknown risk factor for gout, but it is also a risk factor for hypertension, diabetes, and chronic kidney disease (CKD) [14-16]. Across the globe, hyperuricemia was becoming a critical medical problem, and its prevalence has dramatically increased in past decades [17, 18]. Many epidemiologic studies have suggested that hyperuricemia is associated with hypertension, cardiovascular diseases, diabetes mellitus, and dyslipidemia [19-23]. Uric acid as the end product of the purine metabolism can be affected by thyroid hormones.

Therefore, we hypothesized that a link between UA and thyroid function may exist. Although previous studies have investigated the association between overt thyroid dysfunction and UA [24–27], the results are quite inconsistent between subclinical thyroid dysfunction and UA. A recent study by YE Y et al. showed that subclinical thyroid dysfunction was not significantly associated with serum UA levels, either SCHyper or SCH [28]. Zhang et al. found the marked elevated risk of hyperuricemia observed among the subjects with SCH [29]. This study, therefore, aimed to evaluate the association between subclinical thyroid dysfunction and hyperuricemia and focus on variation in subclinical thyroid dysfunction styles and serum UA levels.

## 2. Materials and Methods

2.1. Literature Search. We adopted PubMed, Embase, Cochrane library, and China Academic Journal Full-text Database (CNKI) to search relevant literature before March 2021. A systematic search for "subclinical hyperthyroidism/ hypothyroidism" and "hyperuricemia/uric acid" was carried out. Key-terms were grouped and searched within the article title, abstract, and keywords using the conjunctions "OR" and "AND." Selection of studies: after initial screening of titles and abstracts retrieved by the search, the full text of all potentially eligible studies was retrieved.

2.2. Inclusion Criteria. The inclusion criteria were as follows: the study was an observational or prospective study; data provided within the study met the needs to confirm the relationship between subclinical thyroid dysfunction and uric acid; the control group was included in the study or data for before and after therapy of subclinical thyroid dysfunction; there was no direct associations among studies; and the patient was diagnosed as subclinical hyperthyroidism, subclinical hypothyroidism, and hyperuricemia by a clear diagnosis.

2.3. Exclusion Criteria. The exclusion criteria were as follows: Animal studies, reviews, and case reports; studies that used data from a previously published study; and the data within the study which were not complete enough to meet the requirements of meta-analysis.

2.4. Literature Screening and Data Extraction. The first stage involved screening titles and abstracts to identify and exclude irrelevant articles. All full-text versions of studies that were potentially relevant were then screened in relation to the inclusion criteria. Two researchers independently searched and screened the literature and collected and crosschecked the relevant data. If the results were inconsistent, those would be discussed together or judged by a third senior researcher. Data from included studies were extracted and summarized independently using a prestandardized data extraction form. The excerpts included basic characteristics (year of publication, study area, number of participants, diagnostic criteria, the determination method of UA and thyroid hormones, and inclusion and exclusion criteria). Mean  $\pm$  SD was extracted when the level of UA was used as a continuous variable, and the corresponding proportion was extracted when the level of UA was used as a binary variable. The cutoff value for the diagnosis of hyperuricemia and subclinical thyroid dysfunction was extracted.

2.5. Statistical Analysis. The data and the database were organized and checked carefully according to the requirements of the meta-analysis. The RevMan 5.3 analysis software was used for statistical analysis. Standardized mean difference (SMD) for continuous variables, with 95% confidence interval (CI), was calculated for each study. For analyses of dichotomous variables, we used risk ratios (OR) and 95% confidence intervals (95% CI). The Z-test was assessed to evaluate the significance of the pooled effect size. If  $I^2 \le 50\%$  or  $P \ge 0.05$ , fixed effect model analysis was used; if  $I^2 > 50\%$  or P < 0.05, random effect model analysis was used. The sensitivity analysis was tested to determine the stability and reliability of the results in this meta-analysis. In addition, we will run subgroup analysis to explore possible sources of obvious heterogeneity. Funnel plot, Egger's test, and Begg's test were used to evaluate publication bias. P < 0.05 was considered statistically significant, suggesting that publication bias is not excluded. The stability of the conclusions was further evaluated after eliminating publication bias by the trim-and-fill method. Meta-regression and subgroup analysis were performed to explore the source of heterogeneity.

#### 3. Result

3.1. Literature Search Results. The systematic literature search retrieved 1983 publications; after exclusion of duplicates and screening for relevance in title and abstract, 1429 publications were further appraised in full text. In the second step, full texts were reviewed for eligibility and relevance of their findings, and 1094 articles were excluded due to duplicate data, review articles, and insufficient relevance. Finally, a total of 73 articles were included in the meta-analysis (Figure 1). We did not exclude any studies in the review based on the comorbidities of the study participants, but we kept into account this aspect when summarizing the results. Supplementary Materials (Table S1) provide the basic characteristics of included studies.

#### 3.2. Meta-Analysis Results

3.2.1. Relationship between SCH/SCHyper and the Prevalence of Hyperuricemia. A total of 4 studies provided a comparison of the prevalence of hyperuricemia. Among them, 2 studies were related to the comparison of the prevalence of hyperuricemia in SCHyper patients and normal thyroid function individuals. 3 studies involved the comparison of the prevalence of hyperuricemia between SCH patients and normal thyroid function people. It was shown that the prevalence of hyperuricemia of patients with subclinical thyroid dysfunction was higher than that of subjects with



FIGURE 1: Literature screening process and results.

normal thyroid function, and the difference was statistically significant ( $I^2 = 0\%$ , P = 0.50, Z = 2.09, P = 0.04, OR = 1.16, 95% CI: 1.01–1.34, Figure 2(a)).

3.2.2. Relationship between SCH/SCHyper and Serum UA Levels. 68 studies involved the comparison of serum UA levels between patients with SCH and subjects with normal thyroid function. 7 studies involved the comparison of serum UA levels between patients with SCHyper and subjects with normal thyroid function. 6 studies involved the comparison of serum UA levels between patients with SCH and SCHyper. The results showed that serum UA levels were significantly higher in patients with SCH than in those of normal controls ( $I^2 = 96\%$ , P < 0.01, Z = 9.04, P < 0.01, SMD = 0.78, 95% CI: 0.61–0.95, Figure 3(a)). There was no statistical difference in the levels of UA between patients with SCHyper and normal controls ( $I^2 = 97\%$ , P < 0.01, Z = 0.00, P = 1.00, SMD = 0.00, 95% CI: -0.67-0.67, Figure 4(a)). In addition, levels of UA in patients with SCH were significantly higher than those with SCHyper ( $I^2 = 95\%$ , P < 0.01, Z = 2.02, P = 0.04, SMD = 0.63, 95% CI: 0.02–1.23, Figure 2(b)).

3.2.3. Meta-Regression. Meta-regression analysis showed that patient age (P = 0.076) and TSH level (P = 0.608) did not significantly impact the UA level in patients with SCH compared with those with normal thyroid function. However, area (P = 0.004) affected the pooled effect size.

*3.2.4. Subgroup Analysis.* Due to the heterogeneity of the studies included, in order to further increase the reliability of the study, a subgroup analysis of age, area, and comorbidities in patients was performed.

(1) Area: (a) SCH: according to the area, patients were divided into two subgroups: Chinese and non-Chinese. There were 60 studies involving 38247 subjects in Chinese ( $I^2 = 96\%$ , P < 0.01, Z = 8.16,

P < 0.01, SMD = 0.66, 95% CI: 0.50–0.82), and 8 studies involving 1202 subjects elsewhere ( $I^2 = 97\%$ , P < 0.01, Z = 2.50, P < 0.01, SMD = 0.95, 95% CI: 0.20–1.69). These outcomes suggested the UA levels were higher in SCH patients, regardless of whether the patients were Chinese, and the difference was statistically significant (Figure 3(b)). (b) SCHyper: there were 5 studies involving 19146 subjects in Chinese ( $I^2 = 98\%$ , P < 0.01, Z = 0.33, P = 0.74, SMD = -0.14, 95% CI: -0.93–0.66), and 2 studies involving 228 subjects elsewhere ( $I^2 = 0\%$ , P = 0.53, Z = 2.360, P = 0.02, SMD = 0.42, 95% CI: 0.07–0.77). These outcomes suggested UA levels were higher in SCHyper patients only in those who were non-Chinese (Figure 4(b)).

- (2) Age: according to the average age of patients with subclinical thyroid dysfunction, the subjects were divided into three subgroups: age < 45 years old,  $45 \le age < 60$  years old, and  $age \ge 60$  years old. (a) SCH: there were 16 studies involving 21535 subjects with an average age younger than 45 years old. The result of the heterogeneity test was  $I^2 = 97\%$ , P < 0.01, Z = 4.84, P < 0.01, SMD = 0.95, 95% CI: 0.57-1.34, and the difference was statistically significant. 35 studies involved 12957 subjects with an average age between 45 and 60 years old. The result of the heterogeneity test was  $I^2 = 95\%$ , P < 0.01, Z = 6.67, P < 0.01, SMD = 0.73, 95% CI: 0.52-0.95, and the difference was statistically significant. 17 studies involved 4957 subjects with an average older than 60 years old. The result of the heterogeneity test was  $I^2 = 88\%$ , P < 0.01, Z = 3.71, P < 0.01, SMD = 0.38, 95% CI: 0.18-0.58, and the difference was statistically significant. It was suggested that regardless of age, UA levels in patients with SCH were higher than those with normal thyroid function (Figure 3(c)). (b) SCHyper: there were 4 studies involving 18735 subjects with an average age younger than 45 years old, 2 studies involving 390 subjects with an average age between 45 and 60 years old, and 1 study involving 249 subjects with an average older than 60 years old. There were no significant differences among the ages in the levels of UA in SCHyper patients (Figure 4(c)).
- (3) Comorbidities: of the 68 studies which compared levels of UA between patients with SCH and normal thyroid function subjects, only two involved a comparison of serum UA levels between chronic kidney disease patients with and without SCH, six involved cardiovascular diseases including coronary heart diseases and hypertension, eighteen pertained to metabolic syndromes (diabetes and dyslipidemia), four were focusing on severe preeclampsia, and the other three were on pregnancy. Furthermore, 35 studies involved a comparison of SCH-only patients and normal subjects. Serum UA levels were significantly higher in SCH patients combined with





FIGURE 2: (a) Forest plot of subclinical thyroid dysfunction and hyperuricemia. (b) Forest plot of the comparison of subclinical hypothyroidism and subclinical hyperthyroidism. (c) Funnel plot of subclinical thyroid dysfunction and hyperuricemia. (d) Funnel plot of the comparison of subclinical hypothyroidism and subclinical hyperthyroidism.

OR

20

0.5

metabolic syndrome or severe preeclampsia or pregnancy than those without SCH. No difference in the levels of serum UA was found between chronic kidney disease and cardiovascular diseases patients with or without SCH. The results are shown in Figure 3(d). Of the 7 studies which compared levels of UA between patients with SCHyper and normal thyroid function subjects, only one involved a comparison of serum UA levels between chronic kidney disease patients with and without SCHyper. The serum UA levels were significantly higher in patients with SCHyper with chronic kidney disease than in those with chronic kidney disease but without SCHyper. There was no statistically significant difference in the levels of serum UA between patients with or without SCHyper in six studies that included patients with SCHyper alone (Figure 4(d)).

(c)

3.2.5. Relationship between SCH and Serum UA Levels before and after Treatment. Four studies examined the level of UA in patients with SCH before and after treatment. The result showed that the level of UA reduced after treatment compared with before treatment ( $I^2 = 87\%$ , P < 0.01; Z = 2.47, P < 0.05, SMD = -0.66, 95% CI: -1.19 to -0.14, Figure 5(a)). The difference was statistically significant.

0

(d)

-1

SMD

3.2.6. Publication Bias. The funnel plot is shown in Figures 2(c), 2(d), 3(e), 4(e), and 5(b). Egger's test (P > 0.05) suggested no obvious publication bias.

## 4. Discussion

The results of this analysis showed that hyperuricemia was more prevalent in subclinical thyroid dysfunction than in normal thyroid function subjects. The serum UA levels of

0.5

0.05

0.2

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Shuhy exhiption         Mean         SD         Total         (%)         IV_Random, 99% CI         IV_Random, 99% CI           Ingrue Robit         334.3         98.4         35.3         97.2         18         1.5         42.3         1.03<			SCH		Control	Weight	Std. Mean Difference	Std. Mean Difference
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Insyme Rev2012         327.4         96.08         379.38         972.8	Man jin2016	334.3	98.18 95	357.97	84.53 153	1.5	-0.26 [-0.52, -0.01]	
Qamma Du2018         289         72         53         311         107         287         15         0.21         0.50         0.06           Comp Du2018         304.09         85.7         10         322.3         85.8         10         422.1         42.1         <	Jinyuan Ren2012	357.24	96.08 35	379.38	97.72 198	1.5	-0.23 [-0.59, 0.13]	
Zhang 2016         304.09         87.64         710         322.32         87.85         3187         1.6         6.21         6.23         6.13         6.14         6.14         6.14         6.14         6.14         6.14         6.14         6.14         6.14         6.14         6.14         6.15         6.11         6.14         6.15         6.11         6.14         6.15         6.11         6.15         6.11         6.15         6.11         6.15         6.11         6.15         6.11         6.15         6.11         6.15         6.11         6.15         6.11         6.15         6.11         6.15         6.11         6.15         6.11         6.15         6.11         6.16	Qiannan Du2018	289	92 55	311	107 287	1.5	-0.21 [-0.50, 0.08]	
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Quan Imagrado         30.22         75.34         25         309.81         91.65         2008         1.649         0.038         1.049         0.038         0.049         0.038         0.049         0.038         0.049         0.038         0.049         0.038         0.049         0.038         0.049         0.038	Rongrong Zhang2013	369.72	91.33 45	380.67	94.97 58	1.5	-0.12 [-0.51, 0.27]	
$ \begin{array}{                                    $	Qian Jiang2020	302.2	75.34 25	309.81	91.63 299	1.5	-0.08 [-0.49, 0.32]	
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Clang Sou <sup>2</sup> D16       440.7       986       60       48.1       10.2       60       1.5       0.03       1-03.0.1       0.04       1-04.7       0.47       0.54         Ping Docu2016       306.19       87.76       52       20       1.4       0.04       1-04.7       0.43       0.47       0.54       0.01       0.470       0.54       0.01       0.470       0.54       0.01       0.11	Devika Tayal2009	5.93	4.95 98	5.87	2.53 198	1.5	0.02 [-0.23, 0.26]	
Yanhua Xi2013         27.213         87.03         30         28.897         88.27         30         1.4         0.04 [-0.47, 0.54]           Mustafa Absy017         4.3         1         3         4.2         0.9         30         1.5         0.01 [-0.38, 0.59]           Mustafa Absy017         31.3         8.4         0.00         31.3         8.4         0.00         1.5         0.31 [-0.38, 0.59]           Jada         WangO16         33.3         8.6         202         1.5         0.31 [-0.00, 0.39]            Tanfong Fu2016         408.58         87.44         3         85.41         97.29         50         1.5         0.23 [-0.00, 0.48]            Stapar Sha2018         4.24         1.2         36         30.30         27.7         87.1         30.3         1.5         0.23 [-0.00, 0.43]           UW WX2019         33.35         91         143         1.5         0.23 [-0.00, 0.43]             Stapar Sha2018         4.24         1.2         37.87         105         1.5         0.33 [0.07, 0.58]            UW Mix019         33.441         70.13         31.1         34.2         1.5         0.33 [0.07, 0.58	Qiang Song2016	440.7	98.6 60	438.1	105.2 60	1.5	0.03 [-0.33, 0.38]	
Ping Doc2016         306.19         87.76         52         297.18         90.65         948         1.5         0.10         0.418, 0.01         0.438, 0.038           Yuan Gac2018         30.5.3         81.88         108         297.44         83.5         21.6         1.5         0.11         0.11         0.21         0.24           Jadan Wang206         33.9         67         20.3         139         97         0.57         0.15         0.031         0.00         0.048           Tranding Fac2016         408.88         87.44         43         33.81         97.20         1.5         0.021         0.01         0.04         0.04         0.04         0.04           Syaral Sub2016         42.2         1.2         5         0.32         0.02         0.04         0.04         0.05           Liping Xiaco2018         335.5         9         114         30.12         20.27         87.7         87.10         1.5         0.021         0.01         0.04         0.04         0.04         0.05         0.04         0.04         0.06         0.01         0.04         0.05         0.04         0.04         0.06         0.01         0.01         0.04         0.01         0.01<	Yanhua Xi2013	272.13	87.03 30	268.97	85.72 30	1.4	0.04 [-0.47, 0.54]	
Mushaf May2017       4.3       1       35       4.2       0.9       30       1.4       0.10       0.36, 0.59]         Yuna Guo2018       30.57       74.84       66       300.2       74.18       67       1.5       0.15       0.19       0.40, 0.9]         Roox Tang2016       333       86       203       217       79       309       99       371       1.5       0.23       0.02       0.04       0.91         Roox Tang2016       332       78       73       309       99       371       1.5       0.23       0.02       0.04 <th0.04< th="">       0.04       0.04</th0.04<>	Ping Dou2016	306.19	87.76 52	297.18	90.65 948	1.5	0.10 [-0.18, 0.38]	
Yan Gaz018         306.53         81.88         108         27.44         68.5         216         1.5         0.11         0.12         0.34           Jiada         Wang2016         333         86         202         31.7         79         202         1.6         0.35         0.03         0.39           Tanfang Fu2016         408.58         87.44         43         385.41         97.29         30         1.5         0.321         0.16         0.06         0.39           Tanfang Fu2016         408.58         87.44         43         385.41         97.29         31         5         0.321         0.16         0.051         0.051           Liping Kiazolus         335.55         91         11.4         310.12         355.78         71         105         15         0.031         0.01         0.04         0.051         1.5         0.33         0.07         0.04         0.051         1.5         0.33         0.07         0.04         0.04         0.051         1.5         0.33         0.01         0.05         0.02         0.01         0.05         0.03         0.07         0.053         0.02         0.01         0.03         0.01         0.01         0.03	Mustafa Altay2017	4.3	1 35	4.2	0.9 30	1.4	0.10 [-0.38, 0.59]	
Achanolis       31.75       74.84       66       300.2       74.18       67       1.5       0.15       0.19       0.40       0.39         Ruox Thang2016       329       78       73       309       90       371       1.5       0.23       0.02       0.48       90       371       1.5       0.23       0.02       0.48       90       90       1.5       0.23       0.02       0.48       90       90       1.5       0.23       0.02       0.04 </td <td>Yuan Guo2018</td> <td>306.53</td> <td>83.88 10</td> <td>3 297.44</td> <td>83.5 216</td> <td>1.5</td> <td>0.11 [-0.12, 0.34]</td> <td>+</td>	Yuan Guo2018	306.53	83.88 10	3 297.44	83.5 216	1.5	0.11 [-0.12, 0.34]	+
Jiada         Wang2016         333         86         202         317         79         202         1.6         0.19         0.00. 0.39           Tandang Fu2016         403.58         87.4         43         385.41         97.29         50         1.5         0.23         1.01         0.02         0.48	AoLiu2018	311.75	74.84 66	300.2	74.18 67	1.5	0.15 [-0.19, 0.49]	+
Ruot Tanga 10:6 329 78 77 3 309 90 371 1.5 0.23 $ 0.02, 0.48 $ Training 12:016 408.58 87.44 45 386.41 97.29 50 1.5 0.25 $ 0.05, 0.05 $ Wei Wei 2019 252.7 22.5 114 246.4 24.2 235 1.5 0.27 $ 0.04, 0.09 $ Liping Xiao2018 4.24 12 56 394 1.01 51 1.5 0.28 $ 0.02, 0.54 $ Liping Xiao2018 337.36 91 114 310.12 88.69 114 15 0.28 $ 0.02, 0.54 $ Jierer Zhou2014 418 92 46 378 114 109 15 0.03 $ 0.04, 0.05 $ Jierer Zhou2014 418 92 46 378 114 109 15 0.03 $ 0.04, 0.05 $ Jierer Zhou2014 418 92 46 378 114 109 15 0.03 $ 0.04, 0.05 $ Jierer Zhou2014 418 92 46 378 114 112 15 0.30 $ 0.04, 0.05 $ Jierer Zhou2014 418 92 46 378 114 112 15 0.30 $ 0.04, 0.05 $ Jierer Zhou2014 303 37.065 118.62 154 335.88 91.93 183 1.6 0.33 $ 0.02, 0.54 $ Weina Xu015 308.75 81.71 107 277.13 74.12 1348 1.6 0.42 $ 0.23, 0.62 $ Weina Xu015 308.75 81.71 107 277.13 74.12 1348 1.6 0.42 $ 0.23, 0.62 $ Weina Xu016 303.21 10.9 33.24 90.1 100 1.5 0.46 $ 0.18, 0.79 $ Weina Xu016 308.75 81.71 107 277.13 74.12 1348 1.6 0.42 $ 0.20, 0.73 $ Hin Zhong2104 308.1 82.6 63 330.87 95.38 352 1.5 0.46 $ 0.18, 0.79 $ Weina Xu0102 430.46 69.61 57 330.87 95.38 352 1.5 0.46 $ 0.18, 0.79 $ Weina Xu0102 430.46 90.61 57 330.87 95.38 352 1.5 0.46 $ 0.18, 0.79 $ Weina Xu0102 439.46 90.61 57 330.48 72.41 18 1.5 0.55 $ 0.18, 0.82 $ Shuryou Deng 2068 358.5 138.48 60 289.4 116.11 56 1.5 0.54 $ 0.06, 1.01 $ Jienzberg Chen2012 49.8 127.56 54 229.9 116.23 51 14 0.45 $ 0.05, 1.02 $ Jienzberg Chen2012 49.8 127.56 54 229.9 116.23 51 14 0.45 $ 0.05, 1.02 $ Jienzberg Chen2012 39.8 121.59 74 229.51 16.23 51 144 0.55 $ 0.17, 0.05 $ Jienzberg Chen2012 39.8 51 38.48 35 229.51 16.23 51 14 0.57 $ 0.17, 0.06 $ Jienzberg Chen2012 39.8 51 32.48 7.82 28.9 115.7 24.8 1.5 0.57 $ 0.27, 1.03, 1.05 $ Jienzberg Chen2012 39.8 52 13.84 83 35 22.95 11.5 1.5 1.6 0.64 $ 0.45, 1.05 $ Jienzberg 20.90 319.2 23.14 9.91 77 0 1.5 0.71 $ 0.37, 1.05 $ Jienzberg 20.90 319.2 29.91 12.91 41 1.5 0.71 $ 0.37, 1.05 $ Jienzberg 20.91 20.91 27.91 8.90 92 229.94 11.25 1.5 0.70 $ 0.37, 1.05 $ Jienzberg 20.91	Jiadan Wang2016	333	86 20	2 317	79 202	1.6	0.19 [-0.00, 0.39]	-
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Ruoxi Tang2016	329	78 73	309	90 371	1.5	0.23 [-0.02, 0.48]	
Wei Wei 2019       232.7       22.5       11.4       246.4       24.2       235       1.5       0.27       0.21       0.40       0.40       0.41         Liping Xiao2018       335.35       91       11.4       310.12       88.69       114       1.5       0.27       0.01       0.05	Tianfang Fu2016	408.58	87.44 45	385.41	97.29 50	1.5	0.25 [-0.16, 0.65]	+
Sapari Saba2018 4.24 1.2 56 3.94 1.01 51 1.5 0.27 (-0.11, 0.65) Lipb Sinac2013 337.06 86.7 356 302.86 74.1 331 1.4 0.30 (0.15, 0.45) Libo Linng2013 327.06 86.7 356 302.86 74.1 331 1.4 0.30 (0.15, 0.45) Libr Linng2013 327.06 86.7 356 302.86 74.1 331 1.4 0.30 (0.15, 0.45) Terkian P2020 5.1 14.0 118 4 338.8 91.93 183 1.6 0.33 (0.07, 0.65) Vent Liz015 386 94 78 357 87 105 1.5 0.32 (0.03, 0.62) Vent Liz015 386 94 778 357 87 105 1.5 0.32 (0.03, 0.62) Vent Liz016 377.57 81.71 107 277.13 74.12 1348 1.6 0.43 (0.12, 0.55) Vent Liz016 377.57 81.71 107 277.13 74.12 1348 1.6 0.43 (0.12, 0.55) Vent Liz017 383.1 32.4 7.88 112 1.5 0.46 (0.18, 0.51) Vent Liz017 383.1 32.4 7.88 112 1.5 0.46 (0.18, 0.51) Vent Liz019 244.54 97.2 857 248.79 897.7 85 1.5 0.46 (0.18, 0.51) Vent Liz020 358.5 1.84.86 0.5 37 385.04 472.4 118 1.5 0.50 (1.8, 0.82) Vent Liz020 359.5 1.84.86 35 299.4 116.11 56 1.5 0.55 (0.16, 0.02) Vent Liz020 359.5 1.84.86 35 299.4 116.12 56 1.5 0.57 (0.17, 0.96) Chungrong Wang2019 37.83 125.19 74 288.97 113.28 70 1.5 0.57 (0.17, 0.96) Chungrong Wang2019 37.83 125.19 74 288.97 113.28 70 1.5 0.57 (0.17, 0.96) Chungrong Wang2019 37.83 125.19 74 288.97 113.28 70 1.5 0.57 (0.17, 0.96) Chungrong Wang2019 357.8 125.49 79 52 22.94 41.46 54 1.5 0.71 (0.37, 1.05] Chungrong Vang2011 31.28 (0.13 45 286.47 73.42 28 1.4 0.68 (0.38, 1.21) Chungrong Vang2011 31.28 (0.13 45 286.47 73.42 28 1.4 0.58 (0.66, 1.50) Chungrong Vang2011 31.28 (0.13 45 286.47 73.42 28 1.4 0.57 (0.24, 0.91) Chungrong Vang2011 31.28 (0.13 45 286.47 73.42 28 1.4 0.57 (0.27, 0.06] Chungrong Vang2011 31.28 (0.13 45 286.47 73.42 28 1.4 0.57 (0.27, 0.06] Chungrong Vang2011 31.28 (0.13 45 28.47 73.42 28 1.4 0.57 (0.27, 0.06] Chungrong Vang2011 31.28 (0.13 45 28.47 73.42 28 1.4 0.57 (0.27, 0.06] Chungrong Vang2013 39.33 77.88 39.3 30.27 73.42 28 1.4 0.57 (0.27, 0.06] Chungrong Vang2013 39.33 77.88 39.3 30.27 73.42 28 1.4 0.57 (0.27, 0.06] Chungrong Vang2013 39.33 77.88 39.3 30.22 7.73.42 28 1.4 1.5 0.70 (0.37, 1.05] Chungrong Vang2013 39.73 8	Wei Wei2019	252.7	22.5 11	4 246.4	24.2 235	1.5	0.27 [0.04, 0.49]	
	Sayari Saba2018	4.24	1.2 56	3.94	1.01 51	1.5	0.27 [-0.11, 0.65]	+
Liko Ling2013 327.06 86.7 356 302.86 74.1 331 1.6 0.30 [0.15, 0.45]	Liping Xiao2018	335.35	91 11	4 310.12	88.69 114	1.5	0.28 [0.02, 0.54]	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Libo Liang2013	327.06	86.7 35	5 302.86	74.1 331	1.6	0.30 [0.15, 0.45]	-
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Jiaren Zhou2014	411	92 46	378	114 109	1.5	0.30 [-0.04, 0.65]	<u> </u>
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Wei Liu2015	386	94 78	357	87 105	1.5	0.32 [0.03, 0.62]	
$ \begin{array}{c} \mbox{Xiaolic} (Chen2018 & 370.85 & 11.862 & 154 & 335.88 & 91.93 & 183 & 1.6 & 0.33 (0.12, 0.55 ) \\ Yahai like2019 & 3384 & 70.13 & 11.2 & 312.34 & 7.881 & 112 & 15 & 0.35 (0.08, 0.61 ) \\ \mbox{Weina Xiao2015 & 308.75 & 81.71 & 107 & 277.13 & 7.412 & 1348 & 1.6 & 0.42 (0.23, 0.62 ) \\ \mbox{Weina Xiao2016 & 377.2 & 10.3 & 100 & 333.2 & 90.1 & 100 & 15 & 0.46 (0.18, 0.74 ) \\ \mbox{Weina Xiao2017 & 368.52 & 15.394 & 67 & 320.87 & 95.38 & 352 & 1.5 & 0.46 (0.20, 0.74 ) \\ \mbox{Weina Xiao2019 & 244.58 & 7.62 & 88 & 248.79 & 69.77 & 85 & 1.5 & 0.49 (0.18, 0.82 ) \\ \mbox{Weina Yiao200 & 429.46 & 90.61 & 77 & 385.04 & 87.24 & 118 & 15 & 0.50 (0.18, 0.82 ) \\ \mbox{Weina Yiao2010 & 359.5 & 138.48 & 60 & 289.4 & 116.11 & 56 & 1.5 & 0.57 (0.17, 0.86 ) \\ \mbox{Sing Bo2010 & 359.5 & 138.48 & 32 & 289.5 & 116.23 & 35 & 1.4 & 0.54 (0.06, 0.12 ) \\ \mbox{Sing Bo2010 & 359.5 & 138.48 & 32 & 289.5 & 116.23 & 35 & 1.4 & 0.54 (0.06, 0.12 ) \\ \mbox{Sing Bo2010 & 359.5 & 74 & 289.9 & 113.28 & 70 & 1.5 & 0.57 (0.17, 0.86 ) \\ \mbox{Chen2017 & 371 & 95.4 & 102 & 312 & 91.4 & 770 & 1.6 & 0.64 (0.43, 0.85 ) \\ \mbox{Cong Chen2017 & 371 & 95.4 & 102 & 312 & 91.4 & 770 & 1.6 & 0.44 (0.43, 0.85 ) \\ \mbox{Cong Chen2017 & 277.9 & 780 & 75 & 22.9.94 & 41.46 & 54 & 1.5 & 0.71 (0.29, 1.13 ) \\ \mbox{Chen2010 & 298.2 & 90.3 & 119 & 20.07 & 99.2.6 & 79 & 1.5 & 0.57 (0.16, 9.01 ) \\ \mbox{Chen2010 & 298.2 & 90.3 & 119 & 20.07 & 99.2.6 & 79 & 1.5 & 0.57 (0.16, 9.01 ) \\ \mbox{Chen2010 & 298.2 & 90.3 & 119 & 20.07 & 99.2.6 & 71 & 0.5 & 0.73 (0.43, 1.02 ) \\ \mbox{Chen2010 & 298.2 & 90.3 & 119 & 20.07 & 99.2.6 & 71 & 0.5 & 0.73 (0.43, 1.02 ) \\ \mbox{Chen2010 & 298.2 & 90.3 & 119 & 20.07 & 99.2.6 & 71 & 0.5 & 0.73 (0.43, 1.02 ) \\ \mbox{Chen2010 & 298.6 & 15.3 & 27.51 & 69.0 & 1.5 & 0.73 (0.43, 1.02 ) \\ \mbox{Chen2010 & 30.8 & 27.9 & 72.8 & 26.5 & 1.5 & 0.73 (0.43, 1.02 ) \\ \mbox{Chen2010 & 30.8 & 27.9 & 72.8 & 26.5 & 1.5 & 0.73 (0.43, 1.02 ) \\ \mbox{Chen2010 & 30.8 & 27.9 & 1.5 & 27.51 & 1.6 & 0.88 (0.57, 1.18 ) \\ \mbox{Chen2010 & 30.6 & 85.2 &$	Torkian P2020	5.1	1.4 11	3 4.6	1.63 121	1.5	0.33 [0.07, 0.58]	<del></del>
Table 11:0210         338.41         70.13         112         212         348.11         112         1.5         0.35 [0.08, 0.61]           Weina Xu2015         308.75         81.71         107         271.13         71.41         134.81         0.46 [0.18, 0.73]	Xiaolei Chen2018	370.85	118.62 15	4 335.88	91.93 183	1.6	0.33 [0.12, 0.55]	
$ \begin{array}{c} \mbox{Wein} Xu_{2015} & 308.75 & 81.71 & 107 & 277.13 & 74.12 & 1348 & 1.6 & 0.42 & [0.23, 0.02] \\ \mbox{Wein} Iniz_{2016} & 372.2 & 101.3 & 100 & 333.2 & 90.1 & 100 & 15 & 0.46 & [0.20, 0.74] \\ \mbox{Wein} Iniz_{2017} & 368.52 & 135.94 & 67 & 320.87 & 95.38 & 352 & 1.5 & 0.46 & [0.20, 0.74] \\ \mbox{Wein} Iniz_{2010} & 380.1 & 82.6 & 63 & 341.5 & 81.6 & 418 & 5 & 0.47 & [0.20, 0.74] \\ \mbox{Wein} Iniz_{2020} & 429.46 & 90.61 & 57 & 385.04 & 872.4 & 118 & 5 & 0.54 & [0.18, 0.82] \\ \mbox{Wein} Iniz_{2020} & 429.46 & 90.61 & 57 & 385.04 & 872.4 & 118 & 15 & 0.54 & [0.18, 0.82] \\ \mbox{Wein} Diver_{2008} & 358.5 & 138.48 & 60 & 289.4 & 116.11 & 56 & 1.5 & 0.54 & [0.18, 0.82] \\ \mbox{Sumyou Devg} 2008 & 358.5 & 138.48 & 52 & 89.5 & 115.28 & 70 & 15.6 & 0.57 & [0.07, 0.06] \\ \mbox{Chenz012} & 397.83 & 125.19 & 74 & 228.97 & 113.28 & 70 & 1.5 & 0.57 & [0.07, 0.06] \\ \mbox{Chenz012} & 397.83 & 125.19 & 74 & 288.97 & 113.28 & 70 & 1.6 & 0.64 & [0.43, 0.85] \\ \mbox{Chenz012} & 377.8 & 375 & 72 & 299.1 & 15.73 & 48 & 1.5 & 0.57 & [0.17, 0.06] \\ \mbox{Chenz017} & 371 & 95.4 & 102 & 311.2 & 91.4 & 770 & 1.6 & 0.64 & [0.43, 0.85] \\ \mbox{Chenz010} & 277.9 & 775 & 72 & 299.4 & 41.46 & 54 & 1.5 & 0.71 & [0.37, 1.05] \\ \mbox{Chenz010} & 277.9 & 77.4 & 118 & 26.2.3 & 73.42 & 298 & 1.6 & 0.74 & [0.29, 1.13] \\ \mbox{Chenz010} & 396.2 & 90.03 & 119 & 230.07 & 99.26 & 79 & 1.5 & 0.75 & [0.49, 1.01] \\ \mbox{Chenz010} & 396.2 & 70.02 & 4 & 26.417 & 40.65 & 1.5 & 0.86 & [0.52, 1.17] \\ \mbox{Chenz010} & 396.2 & 70.02 & 4 & 26.61 & 15.0 & 0.86 & [0.57, 1.16] \\ \mbox{Chenz010} & 386.2 & 77.02 & 4 & 266.11 & 816.7 & 1.5 & 0.85 & [0.52, 1.17] \\ \mbox{Chenz010} & 386.2 & 77.02 & 4 & 266.11 & 816.7 & 1.5 & 0.85 & [0.52, 1.17] \\ \mbox{Chenz010} & 386.2 & 77.02 & 4 & 266.11 & 10.4 & 1.48 & 0.52 & 1.41 & 1.41 \\ \mbox{Chenz010} & 366.5 & 80.69 & 155 & 27.16 & 90.95 & 22.0 & 1.6 & 0.93 & [0.72, 1.14] \\ \mbox{Chenz010} & 366.5 & 80.69 & 35.2 & 1.6 & 1.18 & 105. & 0.86 & [0.57, 1.16] \\ \mbox{Chenz010} & 366.8 & 33.41 & 27.16 & 90.95 & 22.41 $	Yahui liu2019	338.41	70.13 11	312.34	78.81 112	1.5	0.35 [0.08, 0.61]	
Wenjman Jianz 2016         377.2         101.3         100         15         0.46         10.8         0.74           Yingchuan Lui2017         368.2         135.44         67         320.87         95.38         352         15         0.46         10.20,073	Weina Xu2015	308 75	81.71 10	27713	74.12 1348	1.6	0 42 [0 23, 0 62]	
Yingchuan Lin2017       368.52       153.94       67       320.87       95.38       352       1.5       0.46       0.20.073	Weniuan Jiang2016	377.2	101.3 10	333.2	90.1 100	1.5	0.46 [0.18, 0.74]	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Vingchuan Liu2017	368 52	135.94 67	320.87	95 38 352	1.5	0.46 [0.20, 0.73]	
Mia and Gue2019       284.88       76.2       85       248.79       60.77       85       1.5       0.49       [018, 0.79]         Wenping Li2020       398.5       138.48       60       288.4       116.11       56       1.5       0.51       [0.16, 0.91]         Song Bo2010       399.5       138.48       35       288.5       116.23       35       1.4       0.45       [0.06, 0.91]         Janzken Chen2012       349.48       127.56       42       391.157.3       48       1.5       0.57       [0.17, 0.96]         Chungrong Wang2019       357.83       125.19       74       288.97       113.28       70       1.6       0.64       (0.43, 0.85]	Hua Zhong2014	380.1	82.6 63	341.5	81.6 418	1.5	0.47 [0.20, 0.74]	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Xiaoyan Guo2019	284 58	76.2 85	248 79	69.77 85	1.5	0.49 [0.18 0.79]	<del></del>
$ \begin{array}{c} \mbox{Trips} 10.00 & 155 & 138.48 & 50 & 280.4 & 10.41 & 150 & 15 & 0.50 & 0.5$	Wenning Li2020	429.46	90.61 57	385.04	87.24 118	1.5	0.49[0.10, 0.79] 0.50[0.18, 0.82]	
$ \begin{array}{c} \text{Junty During 2000} & 1500 & 1500 & 1500 & 1500 & 1500 & 11623 & 51 & 14 & 0.54 & [0.06, 1.02] \\ \text{Junzheng Chen2012} & 349.8 & 127.56 & 54 & 279.9 & 115.73 & 48 & 15 & 0.57 & [0.24, 0.91] \\ \text{Zhangxia Cui2016} & 477.9 & 87.5 & 42 & 391.8 & 90.5 & 32 & 14 & 0.63 & [0.57, 1.0.96] \\ \text{Chungrong Wang2014} & 366 & 123.45 & 47 & 286.96 & 95.51 & 45 & 14 & 0.71 & [0.37, 1.05] \\ \text{Gao F2017} & 277.9 & 78.07 & 95 & 229.94 & 41.46 & 54 & 1.5 & 0.77 & [0.37, 1.05] \\ \text{Gao F2017} & 277.9 & 78.07 & 95 & 229.94 & 41.46 & 54 & 1.5 & 0.71 & [0.37, 1.05] \\ \text{Gai F2017} & 277.9 & 78.07 & 95 & 229.94 & 41.46 & 54 & 1.5 & 0.77 & [0.49, 1.01] \\ \text{Gai F2017} & 278.2 & 90.03 & 119 & 230.07 & 99.26 & 79 & 1.5 & 0.75 & [0.49, 1.01] \\ \text{Gai F2017} & 316.82 & 73.42 & 118 & 262.3 & 73.42 & 298 & 1.6 & 0.74 & [0.52, 0.96] \\ \text{Fei L2014} & 316.82 & 73.42 & 118 & 262.3 & 73.42 & 298 & 1.6 & 0.76 & [0.52, 1.17] \\ \text{Zhaing Xang2010} & 398.2 & 136.26 & 0.289.6 & 118.21 & 78 & 1.5 & 0.86 & [0.54, 1.18] \\ \text{Jinting Xang2010} & 398.2 & 136.26 & 0.289.6 & 118.21 & 78 & 1.5 & 0.86 & [0.54, 1.18] \\ \text{Min Guo2015} & 328.6 & 77.02 & 54 & 266.11 & 70.15 & 1.5 & 0.86 & [0.57, 1.16] \\ \text{Takiar X2017} & 7.4 & 1.2 & 66 & 59 & 1.9 & 163 & 1.5 & 0.86 & [0.57, 1.16] \\ \text{Takiar X2017} & 7.4 & 1.2 & 66 & 59 & 1.9 & 163 & 1.5 & 0.86 & [0.57, 1.16] \\ \text{Ti L2016} & 356.58 & 86.29 & 302 & 724.29 & 62.2 & 20 & 1.3 & 1.04 & [0.31, 1.64] \\ \text{Tu halog Chen2015} & 356.05 & 86.26 & 30 & 274.29 & 62.2 & 20 & 1.3 & 1.04 & [0.31, 1.64] \\ \text{Tu halog Chen2015} & 356.05 & 86.26 & 30 & 274.29 & 62.2 & 20 & 1.3 & 1.04 & [0.31, 1.64] \\ \text{Tu halog Chen2015} & 356.05 & 86.26 & 30 & 274.29 & 62.2 & 20 & 1.3 & 1.04 & [0.31, 1.64] \\ \text{Tu halog Chen2015} & 356.05 & 86.26 & 30 & 274.29 & 62.2 & 20 & 1.3 & 1.04 & [0.31, 1.64] \\ \text{Tu halog Chen2013} & 258.8 & 33.6 & 32 & 299.7 & 255 & 1.8 & 1.2 & 1.15 & 1.048 & [0.66, 1.50] \\ \text{Tu halog Chen2013} & 258.8 & 33.6 & 32 & 299.7 & 255 & 1.4 & 1.38 & [0.95, 1.80] \\ \text{Tu halog Chen2013} & 258.8 & 33.6 & 32 & 299.7 & 255 & 1.4 & 1.38 & [$	Shunyou Dang 2008	358 5	138.48 60	289.4	116 11 56	1.5	0.50 [0.16, 0.02]	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Song Po2010	359.5	138.48 35	289.4	116.11 50	1.5	0.54[0.10, 0.91] 0.54[0.06, 1.02]	
$ \begin{array}{                                    $	Song B02010	3/0.8	127.56 54	209.3	115.25 33	1.4	0.54 [0.00, 1.02]	
Chunging Wang,2019 33,78,3 12,51,74 236,37 14, 268,57 14, 268,57 14, 268,51 12,52 6,66 15,51,10 14 14,65 14,12 14,10,10,10,10,10,10,10,10,10,10,10,10,10,	Chungman a Wang 2010	257.02	127.30 34	2/9.9	112.29 70	1.5	0.57 [0.17, 0.90]	
$ \begin{array}{c} 2 \text{ hang} (a) (a) (a) (a) (a) (a) (a) (a) (a) (a)$	Chungrong Wang2019	477.0	875 42	200.97	115.26 70	1.5	0.37 [0.24, 0.91] 0.62 [0.15, 1.10]	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Znangxia Cui2016	271	95.4 10	391.0	90.5 52	1.4	0.03[0.13, 1.10] 0.64[0.42, 0.85]	
$ \begin{array}{c} \mbox{Jec Warg2014} & 306 & 12.3+3 & 4' & 286.96 & 95.3+1 & 43 & 1.4 & 0.71 [0.25, 11.5] \\ \mbox{Qing Chen2010} & 298.2 & 90.03 & 119 & 230.07 & 99.2.6 & 79 & 1.5 & 0.72 [0.43, 1.02] \\ \mbox{Fei L2014} & 316.82 & 73.42 & 118 & 26.2.3 & 73.42 & 298 & 1.6 & 0.74 [0.52, 0.96] \\ \mbox{Leyin Xia2015} & 351.58 & 83.3 & 355 & 286.51 & 103.47 & 70 & 1.5 & 0.75 [0.49, 1.01] \\ \mbox{Chang2009} & 398.2 & 136.26 & 80 & 289.6 & 118.21 & 78 & 1.5 & 0.85 [0.35, 1.13] \\ \mbox{Jiniting Hao2012} & 389.2 & 89.41 & 31 & 323.71 & 64.71 & 40 & 1.4 & 0.85 [0.36, 1.34] \\ \mbox{Jiniting Hao2012} & 389.2 & 89.41 & 31 & 323.71 & 64.71 & 40 & 1.4 & 0.88 [0.54, 1.18] \\ \mbox{Jiniting Hao2012} & 389.2 & 89.41 & 31 & 323.71 & 64.71 & 40 & 1.4 & 0.88 [0.57, 1.16] \\ \mbox{Afsar B2017} & 7.4 & 1.2 & 66 & 5.9 & 1.9 & 163 & 1.5 & 0.86 [0.57, 1.16] \\ \mbox{Jini L2016} & 356.56 & 80.69 & 155 & 275.16 & 90.95 & 250 & 1.6 & 0.93 [0.72, 1.14] \\ \mbox{Yin L2016} & 356.56 & 80.69 & 155 & 271.69 & 90.52 & 50 & 1.6 & 0.93 [0.72, 1.14] \\ \mbox{Yin L2016} & 356.56 & 80.62 & 30 & 274.29 & 62.2 & 20 & 1.3 & 1.04 [0.43, 1.64] \\ \mbox{Abdel-Gayoum A A2014} & 25.98 & 12.28 & 21 & 209.04 & 20.37 & 14 & 1.2 & 1.16 [0.41, 1.88] \\ \mbox{Jini Dhang2017} & 352.72 & 54.26 & 424 & 284.33 & 65.79 & 613 & 1.6 & 1.11 [0.98, 1.25] \\ \mbox{Yanbin Zhang2017} & 352.72 & 54.26 & 424 & 284.33 & 65.79 & 513 & 1.6 & 1.11 [0.98, 1.25] \\ \mbox{Jini Dhang2017} & 352.72 & 54.26 & 424 & 284.33 & 65.79 & 513 & 1.6 & 1.11 [0.98, 1.25] \\ \mbox{Jini Dhang2017} & 352.72 & 54.26 & 424 & 284.33 & 65.79 & 513 & 1.4 & 1.08 [0.66, 1.50] \\ \mbox{Jini Dhang2017} & 352.72 & 54.26 & 424 & 284.33 & 65.79 & 513 & 1.4 & 1.08 [0.66, 1.50] \\ \mbox{Jini Dhang2017} & 352.72 & 54.2 & 62.6 & 51 & 1.2 & 1.15 [0.41, 1.88] \\ \mbox{Jini Dhang2017} & 356.8 & 35. & 261 & 68 & 35 & 1.4 & 1.16 & 91.18 \\ \mbox{Jini Dhang2017} & 356.8 & 35. & 261 & 68 & 35 & 1.4 & 1.67 [1.12, 2.21] \\ \mbox{Jini Dhang2017} & 356.8 & 35. & 261 & 68 & 35 & 1.4 & 1.54 [1.05, 2.03] \\ \mbox{Jini Dhang2017} & 258.8 & 33.6 & 32 & 298.$	Cong Chen2017	266	122 45 45	2 312	91.4 770	1.0	0.64 [0.45, 0.85]	
$ \begin{array}{c} Cao F2017 & 277.9 & 78.07 & 95 & 229.94 & 41.46 & 54 & 1.3 & 0.71 [0.57, 10.57] \\ \hline Cao F2010 & 298.2 & 90.03 & 119 & 220.07 & 99.2 & 79 & 1.5 & 0.72 [0.43, 1.02] \\ \hline Fei L2014 & 316.82 & 73.42 & 118 & 26.3 & 73.42 & 298 & 1.6 & 0.77 [0.43, 1.02] \\ \ Leyin Xia2015 & 351.58 & 83.3 & 355 & 286.51 & 103.47 & 70 & 1.5 & 0.75 [0.49, 1.01] \\ \hline Chunjiang Yang2011 & 316.26 & 80 & 289.6 & 118.21 & 78 & 1.5 & 0.88 [0.58, 1.22] \\ \ Jianting Zhong2009 & 398.2 & 136.26 & 80 & 289.6 & 118.21 & 78 & 1.5 & 0.86 [0.54, 1.18] \\ \hline Chunjiang Yang2012 & 389.2 & 89.41 & 31 & 332.71 & 64.71 & 40 & 1.4 & 0.85 [0.36, 1.34] \\ \ Min Guo2015 & 328.6 & 77.02 & 54 & 266.11 & 70.54 & 150 & 1.5 & 0.86 [0.57, 116] \\ \hline Cao g Huang2013 & 390.33 & 77.88 & 392 & 340.26 & 56.12   8167 & 1.6 & 0.88 [0.78, 0.98] \\ \hline Yin Li2016 & 356.56 & 80.69 & 155 & 275.16 & 90.95 & 250 & 1.6 & 0.93 [0.72, 1.14] \\ \hline Yuhong Chen2015 & 356.05 & 86.26 & 30 & 274.29 & 62.2 & 20 & 1.3 & 1.04 [0.43, 1.64] \\ \hline Yuhong Chen2015 & 356.05 & 86.26 & 30 & 274.29 & 62.2 & 20 & 1.3 & 1.04 [0.43, 1.64] \\ \hline Yuhong Chen2015 & 356.05 & 86.26 & 30 & 274.29 & 62.2 & 20 & 1.3 & 1.04 [0.43, 1.64] \\ \hline Yuhong Chen2015 & 356.05 & 86.26 & 30 & 274.29 & 2.55 & 1.4 & 1.38 [0.55, 1.80] \\ \hline Yanbin Zhang2017 & 352.72 & 54.26 & 424 & 284.33 & 65.79 & 613 & 1.6 & 1.11 [0.98, 1.25] \\ \hline Yuqin Yana2016 & 367 & 65 & 42 & 270 & 60 & 42 & 1.4 & 1.54 [1.05, 2.03] \\ \hline Yuqin Yana2016 & 367 & 65 & 42 & 270 & 60 & 42 & 1.4 & 1.54 [1.05, 2.03] \\ \hline Yuqin Yana2016 & 367 & 65 & 42 & 200 & 1.3 & 2.30 [1.72, 2.89] \\ \hline Yuqin Yana2016 & 367 & 65 & 42 & 200.6 & 1.3 & 2.30 [1.72, 2.89] \\ \hline Yuqin Yana2016 & 367 & 65 & 42 & 200.6 & 1.76 & 310 & 1.4 & 3.80 [3.56, 4.24] \\ \hline Yuqin Yana2016 & 367 & 65 & 42 & 20.06 & 1.76 & 310 & 1.4 & 3.80 [3.56, 4.24] \\ \hline Yuqin Yana2016 & 367 & 65 & 42 & 20.06 & 1.76 & 310 & 1.4 & 3.80 [3.56, 4.24] \\ \hline Yuqin Yana2016 & 367 & 67 & 4.20 & 2.00 & 1.4 & 3.30 [3.26, 4.24] \\ \hline Yuqin Yana2016 & 295.02 & 33.24 & 40 & 20.06 & 1.76 & 310 & 1.4 & 3.80 [3.56, 4.24] \\ \hline Yuqin Yana2019 & 294.9 & $	Jue Wang2014	277.0	72.07 05	280.90	95.51 43	1.4	0.71 [0.29, 1.15]	
Qing Chenz D10 $292, 2$ $79$ $1.3$ $0.72$ $0.43$ $1.021$ Pei L2014 $316.82$ $73.34$ $118$ $262.3$ $73.228$ $166$ $0.74$ $0.638$ $10.22$ $0.74$ $0.120$ $0.74$ $0.638$ $0.72$ $0.648$ $10.22$ $0.74$ $0.638$ $0.72$ $0.648$ $10.22$ $0.75$ $0.649$ $10.21$ $0.74$ $0.648$ $0.74$ $0.648$ $0.74$ $0.648$ $0.74$ $0.648$ $0.74$ $0.648$ $0.75$ $0.649$ $0.038$ $0.22$ $0.491$ $0.101$ $0.75$ $0.648$ $0.75$ $0.649$ $0.038$ $0.22$ $0.491$ $0.101$ $0.75$ $0.649$ $0.52$ $0.163$ $1.502$ $0.606$ $0.541$ $1.68$ $0.78$ $0.638$ $0.78$ $0.698$ $0.78$ $0.698$ $0.78$ $0.698$ $0.78$ $0.698$ $0.78$ $0.606$ $0.572$ $1.141$ $0.78$ $0.78$ $0.78$ $0.78$ $0.78$ $0.78$ $0.78$ $0.78$ $0.78$ $0.78$ $0.78$	Gao F2017	2//.9	70.07 95	229.94	41.40 54	1.5	0.71 [0.37, 1.05]	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Qing Chen2010	298.2	90.03 11	230.07	99.26 79	1.5	0.72 [0.43, 1.02]	
Leyin Xia2015 351.58 8.5.3 353 286.51 105.47 /0 1.5 0.75 [0.49, 1.01] Chunjiang Yang2011 312.81 61.03 45 268.47 48.65 50 1.5 0.86 [0.38, 1.22] Jianting Zhong2009 398.2 136.26 80 289.6 118.21 78 1.5 0.85 [0.52, 1.17] Zhiling Hao2012 389.2 89.41 31 323.71 64.71 40 1.4 0.85 [0.36, 1.34] Min Guo2015 328.6 77.02 54 266.11 70.54 150 1.5 0.86 [0.54, 1.18] Afsar B2017 7.4 1.2 66 5.9 1.9 163 1.5 0.86 [0.54, 1.18] Tyin Li2016 356.56 80.69 155 275.16 90.95 250 1.6 0.93 [0.72, 1.14] Yuhong Chen2015 356.05 86.26 30 274.29 62.2 20 1.3 1.04 [0.43, 1.64] Yuhong Chen2015 356.05 86.26 30 274.29 62.2 20 1.3 1.04 [0.43, 1.64] Yuhong Chen2015 356.05 86.26 30 274.29 62.2 20 1.3 1.04 [0.43, 1.64] Yuhong Chen2015 356.05 86.26 30 274.29 62.2 20 1.3 1.04 [0.43, 1.64] Yuhong Chen2015 356.05 86.26 30 274.29 62.2 20 1.3 1.04 [0.43, 1.64] Yuhong Chen2017 352.72 54.26 424 284.33 65.79 613 1.6 1.11 [0.98, 1.25] Yanbin Zhang2017 352.72 54.26 424 284.33 65.79 613 1.6 1.11 [0.98, 1.25] Yunbin Zhang2017 352.72 54.26 424 284.33 65.79 613 1.6 1.11 [0.98, 1.25] Yungin Yuan2016 367 65 42 270 60 42 1.4 1.54 [1.05, 2.03] Wenzhu Yu2015 386 80 35 261 68 35 1.4 1.67 [1.12, 2.21] Mingling Deng2016 297.68 30.54 39 257.44 27.25 85 1.5 1.44 [0.99, 1.83] Yuqin Yuan2016 367 65 42 270 60 42 1.4 1.54 [1.05, 2.03] Wenzhu Yu2015 386 80 35 261 168 35 1.4 1.67 [1.12, 2.21] Guoqing Chen2013 258.8 33.6 12 199.54 21.26 60 1.3 2.30 [1.72, 2.89] Jiajiaji Yin2015 295.02 33.24 40 220.61 21.26 100 1.4 2.93 [2.43, 3.44] Wenhui He2016 390.23 18.82 115 320.61 17.63 110 1.4 3.80 [3.64, 2.44] Saini Y2012 6.03 0.27 77 4.9 0.3 120 1.4 3.90 [3.42, 4.38] Chuang Zhang2012 258.3 33.21 25 199.54 21.26 60 1.3 2.30 [1.72, 2.89] Total (95% CI) 6623 32611 100.0 0.78 [0.61, 0.95] Heterogeneity: tau <sup>2</sup> = 0.47; chi <sup>2</sup> = 1760.13, df = 67 ( $P < 0.00001$ ; $P^{2} = 96\%$ Total (95% CI) 6623 32611 100.0 0.78 [0.61, 0.95] Heterogeneity: tau <sup>2</sup> = 0.47; chi <sup>2</sup> = 1760.13, df = 67 ( $P < 0.00001$ ; $P^{2} = 96\%$ Total (95% CI) 6623 32611 100.0 0.78	Fei Li2014	251 50	/5.42 11	3 262.3	/3.42 298	1.0	0.74 [0.52, 0.96]	
Chunjang Tang2011 312.81 61.03 45 286.47 486.65 50 1.15 0.80 [0.58, 1.2] Jianting Zhong2009 398.2 136.26 80 289.6 118.21 78 1.5 0.85 [0.52, 1.17] Zhiling Hao2012 389.2 89.41 31 323.71 64.71 40 1.4 0.85 [0.56, 1.34] Min Guo2015 328.6 77.02 54 266.11 70.54 150 1.5 0.86 [0.57, 1.16] Afsar B2017 7.4 1.2 66 5.9 1.9 163 1.5 0.86 [0.57, 1.16] The control of the con	Leyin Xia2015	212.01	63.3 35	286.51	103.47 70	1.5	0.75 [0.49, 1.01]	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Chunjiang Yang2011	312.81	61.03 45	268.47	48.65 50	1.5	0.80 [0.38, 1.22]	· · ·
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Jianting Zhong2009	398.2	130.20 80	289.6	118.21 /8	1.5	0.85 [0.52, 1.17]	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Zhiling Hao2012	389.2	89.41 31	323./1	64.71 40	1.4	0.85 [0.36, 1.34]	
Afsar B2017       7.4       1.2       66       5.9       1.9       163       1.5       0.86       [0.57, 1.16]         Rong Huang2013       390.33       77.88       392       340.26       56.12       18167       1.6       0.88       [0.78, 0.98]         Yin Li2016       356.56       80.69       155       275.16       90.95       250       1.6       0.93       [0.72, 1.14]          Yuhong Chen2015       356.05       86.26       30       274.29       62.2       20       1.3       1.04       [0.43, 1.64]         Abdel-Gayoum A A2014       225.98       12.28       21       209.04       20.37       14       1.2       1.04       [0.66, 1.50]          Yanbin Zhang2017       352.72       54.26       424       284.33       65.79       613       1.6       1.11       [0.98, 1.25]           Yuein Xuan2016       367       65       42       270       60       42       1.4       1.54       [1.05, 2.03]                        -	Min Guo2015	328.6	77.02 54	266.11	70.54 150	1.5	0.86 [0.54, 1.18]	
Rong Huang2013390.3377.88392340.2656.1218.160.880.78, 0.98Yin Li2016356.5680.69155275.1690.952501.60.930.72, 1.14Yuhong Chen2015356.0586.2630274.2962.2201.31.04[0.43, 1.64]Abdel-Gayoum A A2014225.9812.2821209.0420.37141.21.04[0.31, 1.76]Xueqin Wang2019326.3137.9251287.8232.65511.51.08[0.66, 1.50]Yanbin Zhang2017352.7254.26424284.3365.796131.61.11[0.98, 1.25]Krysiak R2014405501634552181.21.15[0.41, 1.88]Yueina Jiang2017375815026972551.41.38<[0.95, 1.80]	Afsar B2017	/.4	1.2 66	5.9	1.9 163	1.5	0.86 [0.57, 1.16]	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Kong Huang2013	390.33	77.88 39	2 340.26	56.12 18167	1.6	0.88 [0.78, 0.98]	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Yın Li2016	356.56	80.69 15	275.16	90.95 250	1.6	0.93 [0.72, 1.14]	
Abdel-Gayoum A A2014       225.98       12.28       21       209.04       20.37       14       1.2       1.04 [0.31, 1.76]         Xueqin Wang2019       326.31       37.92       51       287.82       32.65       51       1.5       1.08 [0.66, 1.50]         Yanbin Zhang2017       352.72       54.26       424       284.33       65.79       613       1.6       1.11 [0.98, 1.25]          Krysiak R2014       405       50       16       345       52       18       1.2       1.15 [0.41, 1.88]         Xuelian Jiang2017       375       81       50       269       72       55       1.4       1.38 [0.95, 1.80]          Wenzhu Yu2015       386       80       35       261       68       35       1.44       1.67 [1.12, 2.21]          Guoqing Chenz013       258.8       33.36       32       199.54       21.26       100       1.4       2.30 [1.72, 2.89]          Daijiajia Yin2015       295.02       33.24       40       220.61       21.26       100       1.4       2.39 [2.43, 3.44]           Venhu He2016       390.23       18.82       115       320.61       17.63       110 <td>Yuhong Chen2015</td> <td>356.05</td> <td>86.26 30</td> <td>274.29</td> <td>62.2 20</td> <td>1.3</td> <td>1.04 [0.43, 1.64]</td> <td></td>	Yuhong Chen2015	356.05	86.26 30	274.29	62.2 20	1.3	1.04 [0.43, 1.64]	
Xueqin Wang2019 $326.31$ $37.92$ $51$ $287.82$ $32.65$ $51$ $1.5$ $1.08$ $0.66, 1.50$ Yanbin Zhang2017 $352.72$ $54.26$ $424$ $284.33$ $65.79$ $613$ $1.6$ $1.11$ $[0.98, 1.25]$ Krysiak R2014 $405$ $50$ $16$ $345$ $52$ $18$ $1.2$ $1.15$ $[0.41, 1.88]$ Xuelian Jiang2017 $375$ $81$ $50$ $269$ $72$ $55$ $1.4$ $1.58$ $[0.95, 1.80]$ Mingling Deng2016 $297.68$ $30.54$ $39$ $257.44$ $27.25$ $85$ $1.5$ $1.41$ $[0.99, 1.83]$ Yuqin Yuan2016 $367$ $65$ $42$ $270$ $60$ $42$ $1.4$ $1.54$ $[1.50, 2.73]$ Guoqing Chen2013 $258.8$ $33.6$ $32$ $198.6$ $21.3$ $2.30$ $[1.72, 2.89]$ Daijiajia Yin2015 $295.02$ $33.24$ $40$ $220.61$ $21.26$ $100$ $1.4$ $2.93$ $[2.43, 3.44]$ $43.80$ $33.6$ $24.9$ <	Abdel-Gayoum A A2014	225.98	12.28 21	209.04	20.37 14	1.2	1.04 [0.31, 1.76]	
Yanbin Zhang2017       352.72       54.26       424       284.33       65.79       613       1.6       1.11       [0.98, 1.25]         Krysiak R2014       405       50       16       345       52       18       1.2       1.15       [0.41, 1.88]         Xuelian Jiang2017       375       81       50       269       72       55       1.4       1.38       [0.95, 1.80]         Mingling Deng2016       297.68       30.54       39       257.44       27.25       85       1.5       1.41       [0.99, 1.83]         Yuqin Yuan2016       367       65       42       270       60       42       1.4       1.54       [1.05, 2.03]         Wenzhu Yu2015       386       80       35       261       68       35       1.41       1.67       [1.12, 2.21]         Guoqing Chen2013       258.83       33.61       32       13       21.126       100       1.4       2.93       [2.43, 3.44]         Wenhui He2016       390.23       18.82       115       320.61       17.63       110       1.4       3.80       [3.36, 4.24]         Sain V2012       6.03       0.27       77       4.9       0.3       120       1.4 <td>Xueqin Wang2019</td> <td>326.31</td> <td>37.92 51</td> <td>287.82</td> <td>32.65 51</td> <td>1.5</td> <td>1.08 [0.66, 1.50]</td> <td></td>	Xueqin Wang2019	326.31	37.92 51	287.82	32.65 51	1.5	1.08 [0.66, 1.50]	
Krysiak R2014405501634552181.21.15[0.41, 1.88]Xuelian Jiang2017375815026972551.41.38[0.95, 1.80]Mingling Deng2016297.6830.5439257.4427.25851.51.41[1.05, 2.03]Wenzhu Yu2015386803526168351.41.67[1.12, 2.21]Guoqing Chen2013258.833.62198.621.3321.32.11[1.50, 2.73]Yating Zhang2012258.3333.21251.99.5421.26601.32.30[1.72, 2.89]Dajijajia Yin2015295.0233.2440220.6117.631101.43.80[3.36, 4.24]Saini V20126.030.27774.90.31201.43.90[3.42, 4.38]Chuang Zhang2019294.931.380220.24.62001.44.35[3.90, 4.79]Wen Cao2014294.7110.745225.666.7500.97.76[6.57, 8.96]Heterogeneity: tau <sup>2</sup> = 0.47; chi <sup>2</sup> = 1760.13, df = 67 ( $P < 0.00001$ ); $I^2 = 96\%$ -2-1012SCHcontrol	Yanbin Zhang2017	352.72	54.26 42	4 284.33	65.79 613	1.6	1.11 [0.98, 1.25]	
Xuelian Jiang2017       375       81       50       269       72       55       1.4       1.38 [0.95, 1.80]         Mingling Deng2016       297.68       30.54       39       257.44       27.25       85       1.5       1.41 [0.99, 1.83]         Yuqin Yuan2016       367       65       42       270       60       42       1.4       1.54 [1.05, 2.03]         Wenzhu Yu2015       386       80       35       261       68       35       1.4       1.67 [1.12, 2.21]         Guoqing Chenz013       258.8       33.61       32       198.6       21.3       32       1.3       2.11 [1.50, 2.73]         Paijiajia Yin2015       295.02       33.24       40       220.61       21.26       100       1.4       2.39 [2.43, 3.44]         Wenhui He2016       390.23       18.82       115       320.61       17.63       110       1.4       3.90 [3.42, 4.38]         Chuang Zhang2019       294.9       31.3       80       220.2       4.6       200       1.4       4.35 [3.90, 4.79]         Wen Cao2014       294.71       10.7       45       225.66       6.7       50       0.9       7.76 [6.57, 8.96]       -2         Total (95% CI)	Krysiak R2014	405	50 16	345	52 18	1.2	1.15 [0.41, 1.88]	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Xuelian Jiang2017	375	81 50	269	72 55	1.4	1.38 [0.95, 1.80]	
Yuqin Yuan2016 $367$ $65$ $42$ $270$ $60$ $42$ $1.4$ $1.54$ $1.65$ $1.05$ $2.03$ Wenzhu Yu2015 $386$ $80$ $35$ $261$ $68$ $35$ $1.4$ $1.54$ $1.67$ $1.12$ $2.211$ Guoqing Chen2013 $258.8$ $33.6$ $32$ $198.6$ $21.3$ $32$ $1.3$ $2.11$ $1.50$ $2.73$ Yating Zhang2012 $258.33$ $33.21$ $25$ $199.54$ $21.26$ $60$ $1.3$ $2.30$ $1.72$ $2.89$ Daijiajia Yin2015 $295.02$ $33.24$ $40$ $220.61$ $21.26$ $100$ $1.4$ $2.93$ $[2.43, 3.44]$ Wenhui He2016 $390.23$ $18.82$ $115$ $320.61$ $17.63$ $110$ $1.4$ $3.80$ $[3.42, 4.38]$ Chuang Zhang2019 $294.9$ $31.3$ $80$ $220.2$ $4.6$ $200$ $1.4$ $4.35$ $[3.90, 4.79]$ $9$ Wen Cao2014 $294.71$ $10.7$ $45$ $225.66$ $6.7$ </td <td>Mingling Deng2016</td> <td>297.68</td> <td>30.54 39</td> <td>257.44</td> <td>27.25 85</td> <td>1.5</td> <td>1.41 [0.99, 1.83]</td> <td></td>	Mingling Deng2016	297.68	30.54 39	257.44	27.25 85	1.5	1.41 [0.99, 1.83]	
Wenzhu Yu2015       386       80       35       261       68       35       1.4       1.67 [1.12, 2.21]         Guoqing Chen2013       258.8       33.6       32       198.6       21.3       32       1.3       2.11 [1.50, 2.73]         Yating Zhang2012       258.33       33.21       25       199.54       21.26       60       1.3       2.30 [1.72, 2.89]         Daijiajia Yin2015       295.02       33.24       40       220.61       21.26       100       1.4       2.93 [2.43, 3.44]         Wenhui He2016       390.23       18.82       115       320.61       17.63       110       1.4       3.80 [3.36, 4.24]         Saini V2012       6.03       0.27       77       4.9       0.3       120       1.4       3.90 [3.42, 4.38]         Chuang Zhang2019       294.9       31.3       80       220.2       4.6       200       1.4       4.35 [3.90, 4.79]         Wen Cao2014       294.71       10.7       45       225.66       6.7       50       0.9       7.76 [6.57, 8.96]         Heterogeneity: tau <sup>2</sup> = 0.47; chi <sup>2</sup> = 1760.13, df = 67 (P < 0.00001); I <sup>2</sup> = 96\%       32611       100.0       0.78 [0.61, 0.95]       -2       -1       0       1       2 <td>Yuqin Yuan2016</td> <td>367</td> <td>65 42</td> <td>270</td> <td>60 42</td> <td>1.4</td> <td>1.54 [1.05, 2.03]</td> <td></td>	Yuqin Yuan2016	367	65 42	270	60 42	1.4	1.54 [1.05, 2.03]	
Guoqing Chen2013       258.8       33.6       32       198.6       21.3       32       1.3       2.11 [1.50, 2.73]         Yating Zhang2012       258.33       33.21       25       199.54       21.26       60       1.3       2.30 [1.72, 2.89]         Daijiajia Yin2015       295.02       33.24       40       220.61       21.26       100       1.4       2.93 [2.43, 3.44]         Wenhui He2016       390.23       18.82       115       320.61       17.63       110       1.4       3.80 [3.36, 4.24]         Saini V2012       6.03       0.27       77       4.9       0.3       120       1.4       3.90 [3.42, 4.38]         Chuang Zhang2019       294.9       31.3       80       220.2       4.6       200       1.4       4.35 [3.90, 4.79]         Wen Cao2014       294.71       10.7       45       225.66       6.7       50       0.9       7.76 [6.57, 8.96]         Total (95% CI)       6623       32611       100.0       0.78 [0.61, 0.95]       -2       -1       0       1       2         Test for overall effect: Z = 9.04 ( $P < 0.00001$ ) $P < 0.00001$ ; $P^2 = 96\%$ -2       -1       0       1       2         SCH       con	Wenzhu Yu2015	386	80 35	261	68 35	1.4	1.67 [1.12, 2.21]	
Yating Zhang2012       258.33       33.21       25       199.54       21.26       60       1.3       2.30       [1.72, 2.89]         Daijiajia Yin2015       295.02       33.24       40       220.61       21.26       100       1.4       2.93       [2.43, 3.44]         Wenhui He2016       390.23       18.82       115       320.61       17.63       110       1.4       3.80       [3.36, 4.24]         Saini V2012       6.03       0.27       77       4.9       0.3       120       1.4       3.90       [3.42, 4.38]         Chuang Zhang2019       294.9       31.3       80       220.2       4.6       200       1.4       4.35       [3.90, 4.79]         Wen Cao2014       294.71       10.7       45       225.66       6.7       50       0.9       7.76       [6.57, 8.96]         Total (95% CI)       6623       32611       100.0       0.78       [0.61, 0.95]       -2       -1       0       1       2         Test for overall effect: Z = 9.04 ( $P < 0.00001$ ) $P < 0.00001$ ) $P < 0.00001$ 2       -2       -1       0       1       2	Guoqing Chen2013	258.8	33.6 32	198.6	21.3 32	1.3	2.11 [1.50, 2.73]	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Yating Zhang2012	258.33	33.21 25	199.54	21.26 60	1.3	2.30 [1.72, 2.89]	
Wenhui He2016 $390.23$ $18.82$ $115$ $320.61$ $17.63$ $110$ $1.4$ $3.80$ $[3.36, 4.24]$ Saini V2012 $6.03$ $0.27$ $77$ $4.9$ $0.3$ $120$ $1.4$ $3.90$ $[3.42, 4.38]$ Chuang Zhang2019 $294.9$ $31.3$ $80$ $220.2$ $4.6$ $200$ $1.4$ $4.35$ $[3.90, 4.79]$ Wen Cao2014 $294.71$ $10.7$ $45$ $225.66$ $6.7$ $50$ $0.9$ $7.76$ $[6.57, 8.96]$ Total (95% CI)       6623 $32611$ $100.0$ $0.78$ $[0.61, 0.95]$ $42$ $-2$ $-1$ $0$ $1$ $2$ Test for overall effect: Z = 9.04 ( $P < 0.00001$ ) $776$ $6623$ $32611$ $100.0$ $0.78$ $0.61, 0.95$ $-2$ $-1$ $0$ $1$ $2$ Test for overall effect: Z = 9.04 ( $P < 0.00001$ ) $776$ $6623$ $32611$ $100.0$ $0.78$ $0.61, 0.95$ $-2$ $-1$ $0$ $1$ $2$ $-2$ $-1$ $0$ $1$ $2$ $5$ </td <td>Daijiajia Yin2015</td> <td>295.02</td> <td>33.24 40</td> <td>220.61</td> <td>21.26 100</td> <td>1.4</td> <td>2.93 [2.43, 3.44]</td> <td>*</td>	Daijiajia Yin2015	295.02	33.24 40	220.61	21.26 100	1.4	2.93 [2.43, 3.44]	*
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Wenhui He2016	390.23	18.82 11	5 320.61	17.63 110	1.4	3.80 [3.36, 4.24]	↓
Chuang Zhang 2019 294.9 31.3 80 220.2 4.6 200 1.4 $4.35$ [3.90, 4.79] Wen Cao 2014 294.71 10.7 45 225.66 6.7 50 0.9 7.76 [6.57, 8.96] Total (95% CI) 6623 32611 100.0 0.78 [0.61, 0.95] Heterogeneity: tau <sup>2</sup> = 0.47; chi <sup>2</sup> = 1760.13, df = 67 (P < 0.00001); I <sup>2</sup> = 96% Test for overall effect: Z = 9.04 (P < 0.00001) Control to the second sec	Saini V2012	6.03	0.27 77	4.9	0.3 120	1.4	3.90 [3.42, 4.38]	→
Wen Cao 2014       294.71       10.7       45       225.66       6.7       50       0.9 $7.76$ $[6.57, 8.96]$ Total (95% CI)       6623       32611       100.0       0.78 $[0.61, 0.95]$ $\bullet$ Heterogeneity: tau <sup>2</sup> = 0.47; chi <sup>2</sup> = 1760.13, df = 67 (P < 0.00001); I <sup>2</sup> = 96% $-2$ $-1$ $0$ $1$ $2$ SCH       control       control $-2$ $-1$ $0$ $1$ $2$	Chuang Zhang2019	294.9	31.3 80	220.2	4.6 200	1.4	4.35 [3.90, 4.79]	►
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Wen Cao2014	294.71	10.7 45	225.66	6.7 50	0.9	7.76 [6.57, 8.96]	▶
Total (95% CI)       6623       32611       100.0       0.78 [0.61, 0.95]         Heterogeneity: tau <sup>2</sup> = 0.47; chi <sup>2</sup> = 1760.13, df = 67 (P < 0.00001); l <sup>2</sup> = 96%       -2       -1       0       1       2         Test for overall effect: Z = 9.04 (P < 0.00001)								
Heterogeneity: $\tan^2 = 0.47$ ; $\cosh^2 = 1760.13$ , $df = 67$ ( $P < 0.00001$ ); $I^2 = 96\%$ Test for overall effect: $Z = 9.04$ ( $P < 0.00001$ ) SCH control	Total (95% CI)		662	3	32611	100.0	0.78 [0.61, 0.95]	•
Test for overall effect: $Z = 9.04 (P < 0.00001)$ -2       -1       0       1       2         SCH       control	Heterogeneity: $tau^2 = 0.47$	$chi^2 = 17$	60.13, df = 6	7 (P < 0.0000)	(1); $I^2 = 96\%$		,	
SCH control	Test for overall effect: $Z = 9$	9.04 (P < 0	0.00001)					-2 -1 0 1 2
								SCH control

(a) FIGURE 3: Continued.

Study or Subgroup	Mean	SCH SD	Total	Mean	Control SD	Total	Weight (%)	Std. Mean Difference IV, Random, 95 CI	Std. Mean Difference IV, Random, 95% CI
17.1.1 Chinese									
to Liu2018	311.75	74.84	66	300.2	74.18	67	1.5	0.15 [-0.19, 0.49]	+
Chuang Zhang2019	275.94	35.3	200	220.2	4.6	200	1.5	2.21 [1.96, 2.46]	
hunjiang Yang2011	312.81	61.03	45	268.47	48.65	50	1.4	0.80 [0.38, 1.22]	<del></del>
hunrong Wang2019	357.83	125.19	74	288.97	113.28	70	1.5	0.57 [0.24, 0.91]	
ong Chen2017	371	95.4	102	312	91.4	770	1.6	0.64 [0.43, 0.85]	
aijiajia Yin2015	242.65	38.47	64	220.61	21.26	100	1.5	0.75 [0.43, 1.08]	-
ei Li2014	316.82	73.42	118	262.3	73.42	298	1.6	0.74 [0.52, 0.96]	
iao F2017	277.9	78.07	95	229.94	41.46	54	1.5	0.71 [0.37, 1.05]	
uoqing Chen2013	242.27	37.75	50	199.54	21.26	60	1.4	1.42 [1.00, 1.84]	
iua Zhong2014	380.1	82.6	63	341.5	81.6	418	1.5	0.47 [0.20, 0.74]	
adan Wang2016.	333	86	202	317	79	202	1.6	0.19 [-0.00, 0.39]	-
anting Zhong2009	398.2	136.26	80	289.6	118.21	78	1.5	0.85 [0.52, 1.17]	
aren Zhou2014	411	92	46	378	114	109	1.5	0.30 [-0.04, 0.65]	<u> </u>
ngli Cheng2019	291.21	79.21	62	290.31	73.23	198	1.5	0.01 [-0.27, 0.30]	
nyuan Ren2012	357.24	96.08	35	379.38	97.72	198	1.5	-0.23 [-0.59, 0.13]	T
anjuan Sun2018	361.12	107.2	25	368.69	111.99	86	1.4	-0.07 [-0.51, 0.38]	
ie Wang2014	366	366	47	286.96	95.51	45	1.4	0.71 [0.29, 1.13]	
inzheng Chen2012	349.8	123.56	54	279.9	115.73	48	1.5	0.57 [0.17, 0.96]	
eyin Xia2015	351.58	83.3	355	286.51	103.47	70	1.5	0.75 [0.49, 1.01]	
ibo Liang2013	327.06	86.7	356	302.86	74.1	331	1.6	0.30 [0.15, 0.45]	
iping Xiao2018	335.35	91	114	310.12	88.69	114	1.5	0.28 [0.02, 0.54]	
lan Jin2016	334.3	98.18	95	357.97	84.53	153	1.5	-0.26 [-0.52, -0.01]	
lin Guo2015	328.6	77.02	54	266.11	70.54	150	1.5	0.86 [0.54, 1.18]	
lingling Deng2016	297.68	30.54	39	257.44	27.25	85	1.4	1.41 [0.99, 1.83]	<u> </u>
ing Dou2016	306.19	87.76	52	297.18	90.65	948	1.5	0.10 [-0.18, 0.38]	
ian Jiang2020	302.2	75.34	25	309.81	91.63	299	1.4	-0.08 [-0.49, 0.32]	
iang Song2016	440.7	98.6	60	438.1	105.2	60	1.5	0.03 [-0.33, 0.38]	
iannan Du2018	289	92	55	311	107	287	1.5	-0.21 [-0.50, 0.08]	
ing Chen2010	298.2	90.03	119	230.07	99.26	79	1.5	0.72 [0.43, 1.02]	
ong Huang2013	390.33	77.88	392	340.26	56.12	18167	1.6	0.88 [0.78, 0.98]	<sup>_</sup>
ongrong Zhang2013	369.72	91.33	45	380.67	94.97	58	1.5	-0.12 [-0.51, 0.27]	
aoxi Tang2016	329	78	73	309	90	371	1.5	0.23 [-0.02, 0.48]	<u> </u>
unyou Deng 2008	358.5	138.48	60	289.4	116.11	56	1.5	0.54 [0.16, 0.91]	
ong Bo2010	359.5	138.48	35	289.5	116.23	35	1.4	0.54 [0.06, 1.02]	
iantang Fu2016	408.58	87.44	45	385.41	97.29	50	1.4	0.25 [-0.16, 0.65]	
vei Kiu2015	386	94	78	357	87	105	1.5	0.32 [0.03, 0.62]	
/ei Wei2019	252.7	22.5	114	246.4	24.2	235	1.6	0.27 [0.04, 0.49]	
/eina Xu2015	308.75	81.71	107	277.13	74.12	1348	1.6	0.42 [0.23, 0.62]	· · · · · · · · · · · · · · · · · · ·
/en Cao2014	294.71	10.7	45	225.66	6.7	50	0.8	7.76 [6.57, 8.96]	
/enhui He2016	390.23	18.82	115	320.61	17.63	110	1.4	3.80 [3.36, 4.24]	<b>"</b>
enjuan Jiang2016	377.2	101.3	100	333.2	90.1	100	1.5	0.46 [0.18, 0.74]	
/enlang Li2009	429.46	90.61	57	385.04	87.24	118	1.5	0.50 [0.18, 0.82]	
venzhu Yu2015	386	80	35	261	68	35	1.3	1.67 [1.12, 2.21]	
laolei Chen2018	370.85	118.62	154	335.88	91.93	183	1.6	0.33 [0.12, 0.55]	
laoyan Guo2019	284.58	76.2	85	248.79	69.77	85	1.5	0.49 [0.18, 0.79]	
uenan Jiang2017	375	81	50	269	72	55	1.4	1.38 [0.95, 1.80]	
ueqin Wang2019	326.31	37.92	51	287.82	32.65	51	1.4	1.08 [0.66, 1.50]	
anui Liu2019	338.41	70.13	112	312.34	78.81	112	1.5	0.35 [0.08, 0.61]	· _
anbin Zhang2017	352.72	54.26	424	284.33	65.79	613	1.6	1.11 [0.98, 1.25]	
anhua Xi2013	272.13	87.03	30	268.97	85.72	30	1.4	0.04 [-0.47, 0.54]	[]
ating Zhang2012	242.27	37.75	50	199.54	21.26	60	1.4	1.42 [1.00, 1.84]	
in Li2016	356.56	80.69	155	275.16	90.95	250	1.6	0.93 [0.72, 1.14	
IngChuan Liu2017	368.52	135.94	67	320.87	95.38	352	1.5	0.46 [0.20, 0.73]	<u> </u>
uan Guo2018	306.53	83.88	108	297.44	83.5	216	1.5	0.11 [-0.12, 0.34]	
aelei Wu2020	339.26	124.03	129	337.87	106.05	131	1.5	0.01 [-23, 0.26]	[
unong Cnen2015	356.05	86.26	30	2/4.29	62.2	20	1.3	1.04 [0.45, 1.64]	· · · · · · · · · · · · · · · · · · ·
aqın Yuan2016	367	65	42	270	60	42	1.4	1.54 [1.05, 2.03]	-
nang J2016	304.09	87.62	710	322.32	87.58	3187	1.6	-0.21 [-0.29, -0.13]	·
hangxia Cui2016	447.9	87.5	42	391.8	90.5	32	1.4	0.63 [0.15, 1.10]	
hiling Hao2012	389.2	89.41	31	323.71	64.71	40	1.4	0.85 [0.36, 1.34]	
ubtotal (95 CI) leterogeneity: $tau^2 = 0.37$ ;	$chi^2 = 131$	9.24, df	6323 = 59 (I	P < 0.0000	1); $I^2 = 9$	31924 6%	88.8	0.66 [0.50, 0.82]	•
7.1.2 non-Chinese	10 (1 < 0.	50001)							
hdel-Gavouum A A 2014	225 00	12.28	21	209.04	20.37	14	1.2	1 04 [0 31 1 76]	———
fear B2017	223.98 7 A	12.20	66	50	10.57	163	1.2	0.86 [0.57, 1.16]	
.18a1 D2U1/ Jewika Taval2000	7.4	1.2	00	5.9	1.9	103	1.5	0.00 [0.37, 1.10]	+
revial 1aya12009	5.93 405	4.95	98 16	3.8/ 3/5	2.53	198	1.5	1 15 [0 41 1 99]	
li yolak R2014 Austafa Altar2017	405	50	10 2F	343	52	10	1.2	1.1.5 [0.41, 1.88]	
iustata Aitay201/	4.3	1	33 77	4.2	0.9	30	1.4	0.10 [-0.38, 0.59]	1
ann V2012	0.03	0.27	// 50	4.9	0.3	120	1.4	3.90 [3.42, 4.38]	· · · · · · · · · · · · · · · · · · ·
ayari Saba2018	4.24	1.2	56	3.94	1.01	51	1.5	0.27 [-0.11, 0.65]	
orkian P2020	5.1	1.4	118	4.6	1.63	121	1.5	0.33 [0.07, 0.58]	
<i>ubtotal</i> (95 CI) Heterogeneity: $tau^2 = 1.08$ ; Fact for overall effects 7 = 2	$chi^2 = 219$	0.47, df =	487 7 (P <	0.00001);	$I^2 = 97\%$	715 6	11.2	0.95 [0.20, 1.69]	
est for overall effect: $Z = 2$ .	50 (P < 0.	01)	6010			22620	100.0	0.70 [0.54, 0.95]	
0101 (95% CI)	1.2	0.75 10	0610		1) 2	32039	100.0	0.70 [0.54, 0.85]	▼
$4 \text{eterogeneity} \cdot \tan^2 = 0.40$	chi <sup>2</sup> = 154	2.75, df	= 67 (I	> < 0.0000	1); $I^2 = 9$	6%		-	
	/*				,, .				2 1 0 1 2

(b) FIGURE 3: Continued.

Study or Subgroup		SCH			Control		Weight	Std. Mean Difference	Std. Mean Difference			
orady of outgroup	Mean	SD	Total	Mean	SD	Total	(%)	IV, Random, 95% CI	IV, Random, 95% CI			
19.1.1 Age<45 years old												
Abdel-Gayoum A A2014	225.98	12.28	21	209.04	20.37	14	1.2	1.04 [0.31, 1.76]				
Chunrong Wang2019	357.83	125.19	74	288.97	113.28	70	1.5	0.57 [0.24, 0.91]				
Jiaren Zhou2014	411	92	46	378	114	109	1.5	0.30 [-0.04, 0.65]				
Nustara Altay2017	4.5	1	35	4.2	0.9	30	1.4	0.10 [-0.38, 0.59]	-			
Rongrong Zhang20133	369.72	91.33	45	380.67	94 97	58	1.0	-0.12 [-0.51 0.27]				
Saini V2012	6.03	0.27	77	4.9	0.3	120	1.4	0.90 [3.42, 4.38]	•			
Sayari Saba2018	4.24	1.2	56	3.94	1.01	51	1.5	0.27 [-0.11, 0.65]	+			
Tianfang Fu2016	408.58	87.44	45	385.41	97.29	50	1.4	0.25 [-0.16, 0.65]	+			
Wenhui He2016	390.23	18.82	115	320.61	17.63	110	1.4	3.80 [3.36, 4.24]	▶			
Wenping Li2020	429.46	90.61	57	385.04	87.24	118	1.5	0.50 [0.18, 0.82]				
Wenzhu Yu2015	386	80	35	261	68	35	1.3	1.67 [1.12, 2.21]				
Xiaoyan Guo2019	284.58	76.2	85	248.79	69.77	85	1.5	0.49 [0.18, 0.79]				
Yanbin Zhang2017	352.72	54.26	424	284.33	65.79	613	1.6	1.11 [0.98, 1.25]				
Thangyia Cui2016	300.33 447.9	87.5	108	297.44	85.5 90.5	32	1.5	0.11 [-0.12, 0.34]	<u> </u>			
Subtotal (95% CI)	11/.)	07.5	1657	591.0	<i>J</i> 0. <i>J</i>	19878	23.2	0.95 [0.57, 1.34]				
Heterogeneity: $Tau^2 = 0.58$ ;	$Chi^2 = 46$	2.75, df =	15 (P <	< 0.00001)	$I^2 = 97\%$							
Test for overall effect: $Z = 4.84 \ (P < 0.00001)$												
19.1.2 45 <age<60 old<="" td="" years=""><td></td><td>1.2</td><td></td><td>5.0</td><td>1.0</td><td>1.62</td><td>1.5</td><td>0.06 [0.57, 1.16]</td><td></td></age<60>		1.2		5.0	1.0	1.62	1.5	0.06 [0.57, 1.16]				
Afsar B2017 Chung Zhang2010	7.4	1.2	66 200	5.9	19	163	1.5	0.86 [0.57, 1.16]				
Chuniiang Vang2011	2/5.94	55.5 61.03	200	220.2	4.0	200	1.5	2.21 [1.96, 2.46]				
Dajijajia Vin2015	242.65	38.47	64	200.47	21.26	100	1.4	0.75 [0.43, 1.08]				
Devika Taval2009	5.93	4.95	98	5.87	2.53	198	1.5	0.02 [-0.23, 0.26]				
Gao F2017	277.9	78.07	95	229.94	41.46	54	1.5	0.71 [0.37, 1.05]				
Guoqing Chen2013	242.27	37.75	50	199.54	21.26	60	1.4	1.42 [1.00, 1.84]				
Jiadan Wang2016	333	86	202	317	79	202	1.6	0.19 [-0.00, 0.39]				
Jianting Zhong2009	398.2	136.26	80	289.6	118.21	78	1.5	0.85 [0.52, 1.17]				
Juanjuan Sun2018	361.12	107.2	25	368.69	111.99	86	1.4	-0.07 [-0.51, 0.38]				
Junzheng Chen2012	349.8	127.56	54	279.9	115.73	48	1.5	0.57 [0.17, 0.96]				
Krysiak R2014	405	50	16	345	52	18	1.2	1.15 [0.41, 1.88]				
Leyin Xia2015	351.58	83.3	355	286.51	103.47	70	1.5	0.75 [0.49, 1.01]				
Liba Liang2013	327.06	86.7	356	302.86	74.1	331	1.6	0.30 [0.15, 0.45]				
Liping Alao2018	335.35	91 77.02	54	310.12	88.69	114	1.5	0.28 [0.02, 0.54]	· ·			
Ping Dou2016	306.19	87.76	54 52	200.11	70.54 90.65	948	1.5	0.00 [0.34, 1.18]				
Oiannan Du2018	200.12	07.70	52	211	107	297	1.5	0.10 [-0.10, 0.50]				
Qiaman Du2018 Qing Chen2010	269	92	55 110	230.07	107	287	1.5	-0.21 [-0.50, 0.08]				
Ruoxi Tang2016	329	78	73	309	90	371	1.5	0.23 [-0.02 0.48]				
Shunyou Deng 2008	358.2	138.48	60	289.4	116.11	56	1.5	0.54 [0.16, 0.91]				
Song Bo2010	359.5	138.48	35	289.5	116.23	35	1.4	0.54 [0.06, 1.02]				
Torkian P2020	5.1	1.4	118	4.6	1.63	121	1.5	0.33 [0.07, 0.58]				
Wei wei2019	252.7	22.5	114	246.4	24.2	235	1.6	0.27 []0.004, 0.49]				
Weina Xu2015	308.75	81.71	107	277.13	74.12	1348	1.6	0.42 [0.23, 0.62]				
Wen Cao2014	294.71	10.7	45	225.66	6.7	50	0.8	7.76 [6.57, 8.96]	►			
Wenjuan jiang2016	377.2	101.3	100	333.2	90.1	100	1.5	0.46 [0.18, 0.74]				
Xuelian jiang2017	375	81	50	269	72	55	1.4	1.38 [0.95, 1.80]				
Xueqin Wang2019	326.31	37.92	51	287.82	32.65	51	1.4	1.08 [0.66, 1.50]				
Yanhua Xi2013	338.41	/0.13	20	312.34	/8.81	20	1.5	0.35 [0.08, 0.61]				
Vating Zhang2012	2/2.13	37.05	50	208.97	21.26	50 60	1.4	0.04 [-0.47, 0.54]				
Yuqin Yuan2016	367	65	42	270	60	42	1.4	1.54 [1.05 -0.13]				
Zhang J2016	304.09	87.62	710	322.32	87.58	3187	1.6	-0.21 [-0.29, -0.13]	+			
Zhiling Hao2012	389.2	89.41	31	323.71	64.71	40	1.4	0.85 [0.36, 1.34]				
Subtotal (95% CI)			3828			9129	51.3	0.73 [0.52, 0.95]	•			
Heterogeneity: $Tau^2 = 0.39$ ;	Chi <sup>2</sup> = 75	3.76, df =	34 (P <	< 0.00001)	$I^2 = 95\%$							
Test for overall effect: $Z = 6.0$	67 (P < 0.	00001)										
1913 Age>60 years old												
Ao Liu2018	311 75	74 84	66	300.2	74 18	67	15	0.15 [-0.19 0.49]	- <del> </del>			
Cong Chen2017	371	95.4	102	312	914	770	1.6	0.64 [0.43, 0.85]				
Fei Li2014	316.82	73.42	118	262.3	73.42	298	1.6	0.74 [0.52, 0.96]	— —			
Hua Zhong2014	380.1	82.6	63	341.5	81.6	418	1.5	0.47 [0.20, 0.74]				
Jingli Cheng2019	291.21	79.21	62	290.31	73.23	198	1.5	0.01 [-0.27, 0.30]				
Jinyuan Ren2012	357.24	9608	35	379.38	97.72	198	1.5	-0.23 [-0.59, 0.13]				
Jue Wang2014	366	123.45	47	286.96	95.51	45	1.4	0.71 [0.29, 1.13]				
Man Jin2016	334.3	98.18	95	357.97	84.53	153	1.5	-0.26 [-0.52, -0.01]				
Mingling Deng2016	297.68	30.54	39	257.44	27.25	85	1.4	1.41 [0.99, 1.83]				
Qian Jiang2020	302.2	75.34	25	309.81	91.63	299	1.4	-0.08 [-0.49, 0.32]				
Wai Lin2015	440./ 394	98.0	0U 79	458.1	105.2	105	1.5	0.05 [-0.33, 0.38]	<u> </u>			
Viaolei Chen2018	370.85	94 118.62	70 154	335.88	0/01/03	105	1.5	0.32 [0.03, 0.62]				
Yin Li2016	356 56	80.69	154	275.16	90.95	250	1.0	0.93 [0.72, 1.14]				
Yingchuan Liu2017	368 52	135.94	67	320.87	95.38	352	1.5	0.46 [0.20, 0.73]	<del></del>			
Yuelei Wu2020	339.256	124.032	129	337.866	106.047	131	1.5	0.01 [-0.23, 0.26]	+-			
Yuhong Chen2015	356.05	86.26	30	274.29	62.2	20	1.3	1.04 [0.43, 1.64]	———			
Subtotal (95% CI)			1325			3632	25.5	0.38 [0.18, 0.58]	•			
Heterogeneity: Tau <sup>2</sup> = 0.15;	$Chi^2 = 13$	4.51, df =	16 (P <	< 0.00001)	$I^2 = 88\%$			,				
Test for overall effect: $Z = 3$ .	71 ( $P = 0$ .	0002)		,								
Total (05% CI)			6010			27620	100.0	0.70 [0.54.0.95]				
Heterogeneity: $T_{au}^2 = 0.40$	$Chi^2 = 15$	12 75 25	- 67 (D	< 0.00001	). $I^2 = 0.00$	52039 %	100.0	0.70 [0.34, 0.85]	<b>*</b>			
Test for overall effect: $7 - 8$	72 (P < 0)	00001	- 07 (P	~ 0.00001	,1 = 20	10			-2 -1 0 1 2			
Test for subgroup difference	s: Chi <sup>2</sup> =	9.19: DF -	= 2 (P -	$(0.01) \cdot I^2$	= 78.2%				SCH control			
rescion subgroup unicience	. om –	····, DI ·	- 11 -	0.01),1 -	/ 0.2 /0				control			

(c) FIGURE 3: Continued.

5.1.1 MS	Mean	SD	Total	Mean	SD	Total	(%)	Std. Mean Difference IV, Random, 95% CI	Std. Mean Difference IV, Random, 95% CI
		-							
Qiannan Du2018	289	92	55	311	107	287	1.5	-0.21 [-0.50, 0.08]	<u> </u>
Jingli Cheng2019	291 21	79.21	62	291 31	73.23	198	1.4	-0.08 [-0.49, 0.32]	+
Yanhua Xi2013	272.13	87.03	30	268.97	85.72	30	1.4	0.04 [-0.47, 0.54]	+-
Ping Dou2016	306.19	87.76	52	297.18	90.65	948	1.5	0.10 [-0.18, 0.38]	+
Ruoxi Tang2016	329	78	73	309	90	371	1.5	0.23 [-0.02, 0.48]	<u> </u>
Liping Xiao2018	335 35	91	114	246.4	24.2 88.69	114	1.0	0.27 [0.04, 0.49]	
Xiaolei Chen2018	370.85	118.62	154	335.88	91.93	183	1.6	0.33 [0.12, 0.55]	
Yahui Liu2019	338.41	70.13	112	312.34	78.81	112	1.5	0.35 [0.08, 0.61]	-
Cong Chen2017	371	95.4	102	312	91.4	770	1.6	0.64 [0.43, 0.85]	11
Min Guo2015	328.6	77.02	54	262.5	70.54	150	1.5	0.86 [0.54, 1.18]	
Yin Li2016	356.56	80.69	155	275.16	90.95	250	1.6	0.93 [0.72, 1.14]	-
Xueqin Wang2019	326.31	37.92	54	287.82	32.65	51	1.4	1.08 [0.66, 1.50]	
Krysiak R2014	405	50	16	342	52	18	1.2	1.20 [0.47, 1.94]	
Auelian Jiang2017 Mingling Deng2016	375	81 30.54	50 30	269	27.25	55 85	1.4	1.38 [0.95, 1.80]	
Subtotal (95% CI)	277.00	50.54	1376	257.44	27.25	4454	26.8	0.51 [0.31, 0.70]	•
Heterogeneity: $Tau^2 = 0.12$ Test for overall effect: $Z =$	5; $Chi^2 = 1$ 5.06 ( $P < 0$	40.42, d	f = 17 (	<i>P</i> < 0.0000	(1); $I^2 = 8$	8%			
5.1.2 Cardiovascular disea	ise								
Man Jin2016	334 3	98.18	95	357.97	84.53	153	1.5	-0.26 [-0.52, -0.01]	
JinYuan Ren2012	357.24	96.08	35	379.38	97.72	198	1.5	-0.23 [-0.59, 0.13]	-+
Yuelei Wu2020	339.256	124.032	2 1 2 9	337.866	106.047	131	1.5	0.01 [-0.23, 0.26]	+
Ao Liu2018	311.75	74.84	66	300.2	74.18	67	1.5	0.15 [-0.19, 0.49]	t
Wei Liu2015 Vingchuan Liu217	386	94 135.04	78 67	357	87	105	1.5	0.32 [0.03, 0.62]	Ē.
Subtotal (95% CI)	308.32	1.55.94	470	320.87	73.36	1006	9.1	0.08 [-0.16, 0.32]	•
Heterogeneity: $Tau^2 = 0.0$ Test for overall effects 7	7; $Chi^2 = 2$	0.74, df	= 5 (P	= 0.0009);	$I^2 = 76\%$				
z = 5	0.00 (P = )								
5.1.5 Severe preeclampsia Tianfang Eu2016	409 59	87 44	45	385 41	07.20	50	1.4	0.25 [-0.16.0.65]	<u> </u>
Jianang ru2016 Jiaren Zhou2014	408.58	07.44 92	45 46	378	97.29 114	50 109	1.4	0.25 [-0.16, 0.65]	<b>├</b>
Wenping Li2020	429.46	90.61	57	385.04	87.24	118	1.5	0.50 [0.18, 0.82]	<del>-</del>
Zhangxia Cui2016	447.9	87.5	42	391.8	90.5	32	1.4	0.63 [0.15, 1.10]	
Heterogeneity: $Tau^2 = 0.0$	0; Chi <sup>2</sup> = ?	.08. df =	190 3 (P <	0.56); I <sup>2</sup> =	0%	309	5.8	0.41 [0.22, 0.60]	▼
Test for overall effect: $Z =$	4.29 (P < 0	0.0001)	- (	,,.					
5.1.5 pregnancy									
Yuan Guo2018	306.53	83.88	108	297.44	83.5	216	1.5	0.11 [-0.12, 0.34]	t _
Yanbin Zhang2017	352.72	54.26	424	284.33	65.79	613	1.6	1.11 [0.98, 1.25]	
Subtotal (95% CI)	390.23	16.62	647	520.61	17.05	939	4.6	1.66 [0.24, 3.07]	
5.1.6 Chronic kidney disea Juanjuan Sun2018	se 361.12	107.2	25	368.69	111.99	86	1.4	-0.07 [-0.51 0.38]	_
Afsar B2017	74	12	66	59	19	103	15	0.86 [0.57, 1.16]	
Afsar B2017 Subtotal (95% CI)	7.4	1.2	66 91	5.9	1.9	249	1.5 2.9	0.86 [0.57, 1.16] 0.41 [-0.50, 1.33]	
Afsar B2017 Subtotal (95% CI) Heterogeneity: $Tau^2 = 0.4t$ Test for overall effect: $Z =$	7.4 0; $Chi^2 = 1$ 0.89 ( $P = 0$	1.2 1.66, df (.37)	66 91 = 1 (P	5.9 < 0.0006);	1.9 $I^2 = 91\%$	249	1.5 2.9	0.86 [0.57, 1.16] 0.41 [-0.50, 1.33]	-
Afsar B2017 Subtotal (95% CI) Heterogeneity: $Tau^2 = 0.44$ Test for overall effect: $Z =$	7.4 0; Chi <sup>2</sup> = 1 0.89 (P = 0	1.66, df ().37)	66 91 = 1 (P	5.9 < 0.0006);	1.9 I <sup>2</sup> = 91%	249	1.5 2.9	0.86 [0.57, 1.16] 0.41 [-0.50, 1.33]	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = $0.44$ Test for overall effect: Z = 5.1.7 normal Zhang 12016	7.4 0; $Chi^2 = 1$ 0.89 ( $P = 0$ 304 086	1.2 1.66, df 0.37) 87.62	66 91 = 1 (P	5.9 < 0.0006);	1.9 $I^2 = 91\%$ 87.58	165 249 3187	1.5 2.9	0.86 [0.57, 1.16] 0.41 [-0.50, 1.33]	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.44 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013	7.4 0; $Chi^2 = 1$ 0.89 ( $P = 0$ 304.086 369.72	1.2 1.66, df 0.37) 87.62 91.33	66 91 = 1 (P 710 45	5.9 < 0.0006); 322.323 380.67	1.9 I <sup>2</sup> = 91% 87.58 94.97	165 249 3187 58	1.5 2.9 1.6 1.5	-0.21 [-0.29, -0.13] -0.12 [-0.50, 1.33]	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.44 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016	7.4 0; Chi <sup>2</sup> = 1 0.89 ( <i>P</i> = 0 304.086 369.72 440.7	1.2 1.66, df 0.37) 87.62 91.33 98.6	66 91 = 1 (P 710 45 60	5.9 < 0.0006); 322.323 380.67 105.2	1.9 I <sup>2</sup> = 91% 87.58 94.97 105.2	3187 58 60	1.5 2.9 1.6 1.5 1.5	-0.21 [-0.29, -0.13] -0.22 [-0.29, -0.13] -0.12 [-0.51, 0.27] 0.03 [-0.33, 0.38]	, , ,
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4. Test for overall effect: $Z =$ 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017	7.4 0; Chi <sup>2</sup> = 1 0.89 (P = 0 304.086 369.72 440.7 4.3	1.2 1.66, df 0.37) 87.62 91.33 98.6 1	66 91 = 1 (P 710 45 60 35	5.9 < 0.0006); 322.323 380.67 105.2 4.2 5.9	1.9 $I^2 = 91\%$ 87.58 94.97 105.2 0.9 0.10	163 249 3187 58 60 30	1.5 2.9 1.6 1.5 1.5 1.4	-0.21 [-0.29, -0.13] -0.21 [-0.29, -0.13] -0.12 [-0.51, 0.27] -0.3 [-0.33, 0.38] 0.10 [-0.38, 0.59]	, , , ,
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Allay2017 Devika Tayal2009 Jiadan Wano2016	7.4 0; $\text{Chi}^2 = 1$ 0.89 ( $P = 0$ 304.086 369.72 440.7 4.3 5.93 333	1.0.12 1.2 1.66, df 0.37) 87.62 91.33 98.6 1 0.5 82	$66 \\ 91 \\ = 1 (P - 710) \\ 45 \\ 60 \\ 35 \\ 98 \\ 202 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$	5.9 < 0.0006); 322.323 380.67 105.2 4.2 5.87 317	1.9 $I^2 = 91\%$ 87.58 94.97 105.2 0.9 0.18 79	3187 58 60 30 198 202	1.5 2.9 1.6 1.5 1.5 1.4 1.5 1.4	0.86 (0.57, 1.16] 0.41 [-0.50, 1.33] -0.21 [-0.29, -0.13] -0.12 [-0.51, 0.27] 0.03 [-0.33, 0.38] 0.10 [-0.38, 0.59] 0.19 [-0.06, 0.43] 0 19 [-0.06, 0.43]	· · · · · · · · · · · · · · · · · · ·
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Tayal2009 Jiadan Wang2016 Sayari Saba2018	7.4 0; $\operatorname{Chi}^2 = 1$ 0.89 ( $P = 0$ 304.086 369.72 440.7 4.3 5.93 333 4.24	1.0.12 1.2 1.66, df 0.37) 87.62 91.33 98.6 1 0.5 86 1.2	66 91 = 1 (P 45 60 35 98 202 56	5.9 < 0.0006); 322.323 380.67 105.2 4.2 5.87 317 3.94	$1.9$ $I^{2} = 91\%$ 87.58 94.97 105.2 0.9 0.18 79 1.01	3187 58 60 30 198 202 51	1.5 2.9 1.6 1.5 1.5 1.4 1.5 1.6 1.5	-0.21 [-0.29, -0.13] -0.21 [-0.29, -0.13] -0.12 [-0.51, 0.27] 0.03 [-0.33, 0.38] 0.10 [-0.38, 0.59] 0.19 [-0.06, 0.43] 0.19 [-0.06, 0.43] 0.19 [-0.00, 0.39]	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Altay2017 Devika Tayal2009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013	7.4 7.4 0; $\operatorname{Chi}^2 = 1$ 0.89 ( $P = 0$ 304.086 369.72 440.7 4.3 5.93 333 4.24 327.06	1.0.12 1.66, df 0.37) 87.62 91.33 98.6 1 0.5 86 1.2 86.7	66 91 = 1 (P 45 60 35 98 202 56 356	5.9 < 0.0006); 322.323 380.67 105.2 4.2 5.87 317 3.94 302.86	$1.9$ $I^{2} = 91\%$ $87.58$ $94.97$ $105.2$ $0.9$ $0.18$ $79$ $1.01$ $74.1$	3187 58 60 30 198 202 51 331	1.5 2.9 1.6 1.5 1.5 1.4 1.5 1.6 1.5 1.6	-0.86 [0.57, 1.16] 0.41 [-0.50, 1.33] -0.21 [-0.29, -0.13] -0.12 [-0.51, 0.27] 0.03 [-0.33, 0.38] 0.10 [-0.38, 0.59] 0.19 [-0.00, 0.39] 0.27 [-0.11, 0.65] 0.30 [0.15, 0.45]	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang 12016 Rongrong Zhang2013 Qiang Song2016 Mustafa Allay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libb Liang2013 Torkian P.2020	7.4 0; Chi <sup>2</sup> = 1 0.89 ( <i>P</i> = 0 304.086 369.72 440.7 4.3 5.93 333 4.24 327.06 5.1	1.2 1.2 1.66, df 0.37) 87.62 91.33 98.6 1 0.5 86 1.2 86.7 1.4	$ \begin{array}{c} 66\\ 91\\ =1 (P \\ 710\\ 45\\ 60\\ 35\\ 98\\ 202\\ 56\\ 356\\ 118\\ 165\\ \end{array} $	5.9 < 0.0006); 322.323 380.67 105.2 4.2 5.87 317 3.94 302.86 4.6	$1.9$ $I^{2} = 91\%$ $87.58$ $94.97$ $105.2$ $0.9$ $0.18$ $79$ $1.01$ $74.1$ $1.63$	3187 58 60 30 198 202 51 331 121	1.5 2.9 1.6 1.5 1.5 1.5 1.6 1.5 1.6 1.5	-0.86 [0.57, 1.16] 0.41 [-0.50, 1.33] -0.21 [-0.29, -0.13] -0.12 [-0.51, 0.27] 0.03 [-0.33, 0.38] 0.19 [-0.00, 0.43] 0.27 [-0.11, 0.65] 0.33 [0.07, 0.58]	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015	7.4 0; Chi <sup>2</sup> = 1 0.89 ( <i>P</i> = ( 304.086 369.72 440.7 4.3 5.93 333 4.24 327.06 5.1 308.75 377.2	1.0.12 1.2 1.66, df 0.37) 87.62 91.33 98.6 1 0.5 86 1.2 86.7 1.4 81.71 1012	$66 \\ 91 \\ = 1 (P - 710 \\ 45 \\ 60 \\ 35 \\ 98 \\ 202 \\ 56 \\ 356 \\ 118 \\ 107 \\ 100 \\ 10$	5.9 < 0.0006); 322.323 380.67 105.2 4.2 5.87 317 302.86 4.6 277.13 322.5	$1.9$ $I^{2} = 91\%$ $87.58$ $94.97$ $105.2$ $0.9$ $0.18$ $79$ $1.01$ $74.1$ $1.63$ $74.12$ $90.1$	3187 58 60 30 198 202 51 331 121 1348	1.5 2.9 1.6 1.5 1.5 1.5 1.6 1.5 1.6 1.5 1.6	-0.21 [-0.29, -0.13] -0.21 [-0.29, -0.13] -0.12 [-0.51, 0.27] 0.03 [-0.33, 0.38] 0.19 [-0.06, 0.43] 0.19 [-0.06, 0.43] 0.19 [-0.06, 0.43] 0.27 [-0.11, 0.65] 0.33 [0.07, 0.58] 0.42 [0.23, 0.62]	-
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Altay2017 Devika Tayal2009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015	7.4 0; Chi <sup>2</sup> = 1 0.89 ( <i>P</i> = 0 304.086 369.72 440.7 4.3 5.93 333 4.24 327.06 5.1 308.75 377.2 380.1	1.2 1.2 1.66, df 0.37) 87.62 91.33 98.6 1 0.5 86.6 1.2 86.7 1.4 81.71 101.3 82.6	$66 \\ 91 \\ = 1 (P - 710 \\ 45 \\ 60 \\ 35 \\ 98 \\ 202 \\ 56 \\ 356 \\ 118 \\ 107 \\ 100 \\ 63 \\ $	5.9 < 0.0006); 322.323 380.67 105.2 4.2 5.87 317 3.94 302.86 4.6 277.13 333.2 341 5	$1.9$ $l^{2} = 91\%$ 87.58 94.97 105.2 0.9 0.18 79 1.01 74.1 1.63 74.12 90.1 81.6	3187 58 60 30 198 202 51 331 121 1348 100 418	1.5 2.9 1.6 1.5 1.5 1.4 1.5 1.6 1.5 1.6 1.5 1.6 1.5	-0.86 [0.57, 1.16] 0.41 [-0.50, 1.33] -0.21 [-0.29, -0.13] -0.12 [-0.51, 0.27] 0.03 [-0.33, 0.38] 0.10 [-0.38, 0.59] 0.19 [-0.00, 0.39] 0.27 [-0.11, 0.65] 0.33 [0.07, 0.58] 0.33 [0.07, 0.58] 0.42 [0.23, 0.62] 0.46 [0.18, 0.74] 0.47 [0.20 7.04]	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang 12016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Tayal2009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Wenjuan Jiang2016 Hua Zhong2014 Xiaoyan Guo2019	7.4 0; Chi <sup>2</sup> = 1 0.89 (P = 0 304.086 369.72 440.7 4.3 5.93 333 4.24 327.06 5.1 308.75 377.2 380.1 284.58	1.2 1.2 1.66, df 0.37) 87.62 91.33 98.6 1 0.5 86 1.2 86.7 1.4 81.71 101.3 82.6 76.2	$ \begin{array}{c} 66\\91\\=1(P)\\ 710\\45\\60\\35\\98\\202\\56\\356\\118\\107\\100\\63\\85\end{array} $	5.9 < 0.0006); 322.323 380.67 105.2 4.2 5.87 302.6 4.6 277.13 333.2 341.5 248.79	$1.9$ $l^{2} = 91\%$ 87.58 94.97 105.2 0.9 0.18 79 1.01 74.1 1.63 74.12 90.1 81.6 69.77	3187 58 60 30 198 202 51 331 121 1348 100 418 85	1.5 2.9 1.6 1.5 1.5 1.4 1.5 1.6 1.5 1.6 1.5 1.6 1.5 1.5 1.5	$\begin{array}{c} -0.86 \left[ 0.57, 1.16 \right] \\ 0.47 \left[ -0.29, -0.13 \right] \\ -0.21 \left[ -0.29, -0.13 \right] \\ -0.12 \left[ -0.51, 0.27 \right] \\ 0.03 \left[ -0.33, 0.38 \right] \\ 0.10 \left[ -0.38, 0.59 \right] \\ 0.10 \left[ -0.38, 0.59 \right] \\ 0.19 \left[ -0.00, 0.39 \right] \\ 0.27 \left[ -0.11, 0.65 \right] \\ 0.33 \left[ 0.15, 0.45 \right] \\ 0.33 \left[ 0.07, 0.58 \right] \\ 0.44 \left[ 0.18, 0.74 \right] \\ 0.47 \left[ 0.20, 0.74 \right] \\ 0.47 \left[ 0.$	*
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Wenjuan Jiang2016 Hua Zhong2014 Xiaoyan Guo2019 Shunyou Deng 2008	7.4 0; Chi <sup>2</sup> = 1 0.89 (P = 0 304.086 369.72 440.7 4.3 5.93 333 4.24 327.06 5.1 308.75 377.2 380.1 284.58 358.5	1.2 1.66, df 0.37) 87.62 91.33 98.6 1 0.5 86 1.2 86.7 1.4 81.71 101.3 82.6 76.2 138.48	$\begin{array}{c} 66\\ 91\\ =1\ (P \\ \\ 710\\ 45\\ 60\\ 35\\ 98\\ 202\\ 56\\ 356\\ 118\\ 107\\ 100\\ 63\\ 85\\ 60\\ \end{array}$	5.9 < 0.0006); 322.323 380.67 105.2 4.2 5.87 317 3.94 302.86 4.6 277.13 333.2 341.5 248.79 289.4	$1.9$ $I^{2} = 91\%$ 87.58 94.97 105.2 0.9 0.18 79 1.01 74.1 1.63 74.12 90.1 81.6 69.77 116.11	3187 58 60 30 198 202 51 331 121 1348 100 418 85 56	$1.5 \\ 2.9 \\ 1.6 \\ 1.5 \\ 1.5 \\ 1.6 \\ 1.5 \\ 1.6 \\ 1.5 \\ 1.6 \\ 1.5 $	$\begin{array}{c} 0.86 \left[ 0.57, 1.16 \right] \\ 0.47 \left[ -0.50, 1.33 \right] \\ \end{array}$	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Uso Liabo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Song B02010	7.4 0; Chi <sup>2</sup> = 1 0.89 ( <i>P</i> = ( 304.086 369.72 440.7 4.3 5.93 333 4.24 327.06 5.1 308.75 377.2 380.1 284.58 358.5 359.5	1.2 1.66, df 0.37) 87.62 91.33 98.6 1 0.5 86 1.2 86.7 1.4 81.71 101.3 82.6 76.2 138.48 138.48 138.48	66 91 = 1 (P 45 60 35 98 202 56 356 118 107 100 63 85 60 35	5.9 322.323 380.67 105.2 4.2 5.87 317 3.94 302.86 4.6 277.13 333.2 341.5 248.79 289.4 289.5 270.00	1.9 $1.9$ $87.58$ $94.97$ $105.2$ $0.9$ $0.18$ $79$ $1.01$ $74.1$ $1.63$ $74.12$ $90.1$ $81.6$ $69.77$ $116.11$ $116.23$ $117$	3187 58 60 30 198 202 51 331 121 1348 100 418 85 56 35	1.5 2.9 1.6 1.5 1.5 1.4 1.5 1.6 1.5 1.6 1.5	$\begin{array}{c} -0.86 \ [0.57, 1.16] \\ 0.41 \ [-0.50, 1.33] \\ \hline \\ -0.21 \ [-0.50, 1.33] \\ \hline \\ -0.12 \ [-0.51, 0.27] \\ -0.53 \ [-0.51, 0.27] \\ -0.53 \ [-0.53, 0.38] \\ 0.10 \ [-0.38, 0.59] \\ 0.19 \ [-0.06, 0.43] \\ 0.19 \ [-0.00, 0.39] \\ 0.27 \ [-0.11, 0.65] \\ 0.30 \ [0.15, 0.45] \\ 0.33 \ [0.15, 0.45] \\ 0.33 \ [0.15, 0.45] \\ 0.33 \ [0.15, 0.45] \\ 0.42 \ [0.23, 0.62] \\ 0.44 \ [0.18, 0.79] \\ 0.44 \ [0.18, 0.79] \\ 0.54 \ [0.06, 1.02] \\ -0.54 \ [0.06, 1.02] \\ -0.54 \ [0.06, 1.02] \\ \hline \end{array}$	-
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang 12016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Wenjuan Jiang2016 Hua Zhong2014 Xiaoyan Guo2019 Shunyou Deng 2008 Song Bo2010 Junzheng Chen2012 Churengen U Ju-2012	7.4 7.4 0; Chi <sup>2</sup> = 1 0.89 ( <i>P</i> = ( 304.086 369.72 440.7 4.3 5.93 333 4.24 327.06 5.1 308.75 377.2 380.1 284.58 359.5 359.5 349.8 357.2 349.8 357.2 349.8 357.2 349.8 357.2 349.8 357.2 349.8 357.2 349.8 357.2 349.8 357.2 349.8 357.2 349.8 357.2 349.8 359.5 349.8 359.5 349.8 359.5 349.8 359.5 349.8 359.5 349.8 359.5 349.8 359.5 349.8 359.5 349.8 359.5 349.8 359.5 349.8 359.5 349.8 359.5 349.8 359.5 349.8 359.5 349.8 359.5 359.5 349.8 359.5 359.5 349.8 359.5 349.8 357.5 349.8 357.5 349.8 357.5 349.8 357.5 349.8 357.5 349.8 359.5	1.2 1.66, df 0.37) 87.62 91.33 98.6 1 0.5 86 1.2 86.7 1.4 81.71 101.3 82.6 76.2 138.48 138.48 138.48 127.55		5.9 322.323 380.67 105.2 4.2 5.87 317 302.86 4.6 277.13 333.2 341.5 248.79 289.5 279.9 289.9	1.9 $1.9$ $87.58$ $94.97$ $105.2$ $0.9$ $0.18$ $79$ $1.01$ $74.1$ $1.63$ $74.12$ $90.1$ $81.6$ $69.77$ $116.11$ $116.23$ $115.73$ $112.73$	3187 58 60 30 198 202 51 331 121 1348 100 418 85 56 35 48 70	1.5 2.9 1.6 1.5 1.5 1.6 1.5 1.6 1.5	$\begin{array}{c} -0.86 \left[ 0.57, 1.16 \right] \\ 0.47 \left[ -0.29, -0.13 \right] \\ -0.21 \left[ -0.29, -0.13 \right] \\ -0.12 \left[ -0.51, 0.27 \right] \\ 0.33 \left[ -0.33, 0.38 \right] \\ 0.10 \left[ -0.38, 0.59 \right] \\ 0.10 \left[ -0.38, 0.59 \right] \\ 0.10 \left[ -0.38, 0.59 \right] \\ 0.33 \left[ 0.15, 0.45 \right] \\ 0.33 \left[ 0.15, 0.45 \right] \\ 0.33 \left[ 0.15, 0.45 \right] \\ 0.33 \left[ 0.07, 0.58 \right] \\ 0.44 \left[ 0.18, 0.74 \right] \\ 0.47 \left[ 0.20, 0.74 \right] \\ 0.47 \left[ 0.20, 0.74 \right] \\ 0.47 \left[ 0.18, 0.79 \right] \\ 0.54 \left[ 0.06, 1.02 \right] \\ 0.57 \left[ 0.17, 0.96 \right] \\ 0.57 \left[ 0.17, 0.96 \right] \\ 0.57 \left[ 0.17, 0.96 \right] \end{array}$	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Ung2014 Xiaoyan Guo2019 Shunyou Deng 2008 Song Bo2010 Junzheng Chen2012 Chungrong Wang2019 Jue Wang2014	7.4 0; Chi <sup>2</sup> = 1 0.89 ( <i>P</i> = ( 304.086 369.72 440.7 4.3 5.93 333 4.24 327.06 5.1 308.75 377.2 380.1 284.58 358.5 359.5 349.8 357.83 366	1.2 1.66, df 0.37) 87.62 91.33 98.6 1 0.5 86 1.2 86.7 1.4 81.71 101.3 82.6 76.2 138.48 138.48 138.48 127.56 123.45 124.45 125.45	$66 \\ 91 \\ = 1 (P \cdot P + P + P + P + P + P + P + P + P + $	5.9 322.323 380.67 105.2 4.2 5.87 3.94 302.86 4.6 277.13 333.2 341.5 248.79 289.4 289.5 279.9 288.97 286.96	1.9 $l^2 = 91\%$ 87.58 94.97 105.2 0.9 0.18 79 1.01 74.1 1.63 74.12 90.1 81.6 69.77 116.11 116.23 115.73 113.28 95.51	3187 58 60 30 198 202 51 331 121 1348 100 418 85 56 35 48 70 45	$\begin{array}{c} 1.5\\ 2.9\\ \\ 1.6\\ 1.5\\ 1.5\\ 1.6\\ 1.5\\ 1.6\\ 1.5\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.5\\ 1.4\\ 1.5\\ 1.5\\ 1.4\\ 1.5\\ 1.5\\ 1.4\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5$	$\begin{array}{c} 0.86 \left[ 0.57, 1.16 \right] \\ 0.47 \left[ -0.50, 1.33 \right] \\ \end{array}$	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Ukiang Gue2019 Shunyon Deng 2008 Song Bo2010 Junzheng Chen2012 Chungrong Wang2014 Jao Kang2014 Gao F2017	7.4 7.4 0; $Chi^2 = 1$ 0.89 ( $P = 0$ 304.086 369.72 440.7 4.3 5.93 333 4.24 327.06 5.1 308.75 377.2 380.1 284.58 358.5 359.5 349.8 357.83 366 277.9	1.2 1.66, df 0.37) 87.62 91.33 98.6 1 0.5 86 1.2 86.7 1.4 81.71 101.3 82.6 76.2 138.48 127.56 125.19 123.45 78.07	$66 \\ 91 \\ = 1 (P \\ 710 \\ 45 \\ 60 \\ 35 \\ 98 \\ 202 \\ 56 \\ 356 \\ 118 \\ 107 \\ 100 \\ 63 \\ 85 \\ 60 \\ 35 \\ 45 \\ 74 \\ 47 \\ 95 \\ 100 $	5.9 < 0.0006); 322.323 380.67 105.2 4.2 5.8 317 3.94 302.86 4.6 277.13 333.2 341.5 248.79 289.4 289.5 279.9 288.97 288.97 288.97 288.97 289.94	$1.9 \\ 1.9 \\ 1.9 \\ 1.9 \\ 1.05$	3187 58 60 30 198 202 51 331 121 1348 202 51 331 121 1348 55 56 35 48 70 45 54	$\begin{array}{c} 1.5\\ 2.9\\ \\1.6\\ 1.5\\ 1.6\\ 1.5\\ 1.6\\ 1.5\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5$	$\begin{array}{c} -0.86 & [0.57, 1.16] \\ 0.41 & [-0.50, 1.33] \\ \end{array}$	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang 12016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Wenjuan Jiang2016 Hua Zhong2014 Xiaoyan Gu2019 Shunyou Deng 2008 Song Bo2010 Junzheng Chen2012 Chungrong Wang2019 Jue Wang2014 Gao F2017 Qing Chen2010	7.4 7.4 7.4 7.4 7.4 7.4 304.086 369.72 440.7 4.3 333 4.24 327.06 5.1 308.75 377.2 380.1 284.58 359.5 357.83 366 277.9 298.2 277.9 298.2 277.9 298.5 377.5	1.2 1.66, df 1.37) 87.62 91.33 98.6 1 0.5 86.7 1.4 81.71 101.3 82.6 76.2 138.48 138.48 138.48 127.56 125.19 123.45 78.07 90.03	66 91 = 1 (P 45 60 35 98 202 56 356 118 107 100 63 85 60 35 45 74 47 95 119	5.9 < 0.0006); 322.323 380.67 105.2 4.2 5.87 317 3.94 302.86 4.6 277.13 333.2 341.5 248.79 289.5 279.9 289.5 279.9 288.97 288.97 288.96 229.94 230.07	$\begin{array}{c} 1.9 \\ 1.9 \\ l^2 = 91\% \\ 87.58 \\ 94.97 \\ 105.2 \\ 0.9 \\ 0.18 \\ 79 \\ 1.01 \\ 74.1 \\ 1.63 \\ 74.12 \\ 90.1 \\ 81.6 \\ 69.77 \\ 116.11 \\ 116.23 \\ 115.73 \\ 113.28 \\ 95.51 \\ 41.46 \\ 99.26 \end{array}$	3187           58           60           198           202           51           331           121           1348           100           418           85           56           35           48           70           45           54           79	$\begin{array}{c} 1.5\\ 2.9\\ \end{array}$	$\begin{array}{c} -0.86 \left[ 0.57, 1.16 \right] \\ 0.47 \left[ -0.50, 1.33 \right] \\ \end{array} \\ \begin{array}{c} -0.21 \left[ -0.29, -0.13 \right] \\ -0.12 \left[ -0.51, 0.27 \right] \\ 0.37 \left[ -0.30, 0.38 \right] \\ 0.10 \left[ -0.38, 0.59 \right] \\ 0.30 \left[ 0.15, 0.45 \right] \\ 0.33 \left[ 0.15, 0.45 \right] \\ 0.33 \left[ 0.15, 0.45 \right] \\ 0.33 \left[ 0.15, 0.45 \right] \\ 0.44 \left[ 0.18, 0.74 \right] \\ 0.47 \left[ 0.20, 0.74 \right] \\ 0.47 \left[ 0.20, 0.74 \right] \\ 0.47 \left[ 0.24, 0.71 \right] \\ 0.57 \left[ 0.24, 0.91 \right] \\ 0.57 \left[ 0.24, 0.43 \right] \\ 0.57 \left[ 0.24 \left[ 0.43, 0.25 \right] \\ 0.57 \left[ 0.24 \left[ 0.43, 0.25 \right] \right] \\ 0.57 \left[ 0.24 \left[ 0.43, 0.25 \right] \\ 0.57 \left[ 0.24 \left[ 0.43, 0.25 \right] \right] \\ 0.57 \left[ 0.24 \left[ 0.43, 0.25 \right] \\ 0.57 \left[ 0.24 \left[ 0.43, 0.25 \right] \right] \\ 0.57 \left[ 0.25 \left[ 0$	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weinjaan Jiang2016 Hua Zhong2014 Xiaoyan Guo2019 Shunyou Deng 2008 Song Bo2010 Junzheng Chen2012 Chungrong Wang2019 Jue Wang2014 Gao F2017 Qing Chen2010 Levin Xia2015	7.4 7.4 0; Chi <sup>2</sup> = 1 0.89 ( <i>P</i> = ( 304.086 369.72 440.7 4.3 5.93 333 4.24 327.06 5.1 308.75 377.2 380.1 284.58 359.5 349.8 357.83 366 277.9 298.2 351.58 202.2	1.2 1.2 1.66, df 91.33 98.6 1 0.5 86 1 0.5 86 1.2 86.7 1.4 81.71 101.3 82.6 76.2 138.48 138.48 138.48 138.48 125.59 125.19 125.45 78.02 125.19 125.45 78.02 125.19 125.45 78.02 125.19 125.45 78.02 125.19	66 91 = 1 (P 45 60 35 98 202 56 356 118 107 100 63 85 60 35 45 74 47 95 119 355	5.9 < 0.0006); 322.323 380.67 105.2 4.2 5.87 317 302.86 4.6 277.13 333.2 341.5 248.79 289.4 289.5 279.9 289.4 289.4 289.5 279.9 286.96 229.94 230.07 286.65 230.02 200.7 286.65 200.7 286.65 200.7 286.51 200.7 286.51 200.7 286.51 200.7 286.51 200.7 286.51 200.7 286.51 200.7 286.55 200.7 286.65 200.7 286.65 200.7 286.65 200.7 286.65 287.7 297.7 207.7 207.7 207.7 207.7 207.7 207.7 207	$\begin{array}{c} 1.9\\ 87.58\\ 94.97\\ 105.2\\ 0.9\\ 0.18\\ 79\\ 0.18\\ 79\\ 1.01\\ 74.1\\ 90.1\\ 181.6\\ 69.77\\ 116.11\\ 116.23\\ 95.51\\ 113.28\\ 95.51\\ 113.28\\ 95.51\\ 03.47\\ 10.23\\$	163           249           3187           58           60           30           198           202           51           3311           1214           1348           100           418           85           56           35           48           70           45           54           79           70           100	$\begin{array}{c} 1.5\\ 2.9\\ 1.6\\ 1.5\\ 1.5\\ 1.4\\ 1.5\\ 1.6\\ 1.5\\ 1.6\\ 1.5\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.5\\ 1.4\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5$	$\begin{array}{c} 0.86 \left[ 0.57, 1.16 \right] \\ 0.41 \left[ -0.50, 1.33 \right] \\ \hline \\ 0.21 \left[ -0.29, -0.13 \right] \\ -0.12 \left[ -0.51, 0.27 \right] \\ 0.31 \left[ -0.33, 0.38 \right] \\ 0.10 \left[ -0.38, 0.59 \right] \\ 0.10 \left[ -0.38, 0.59 \right] \\ 0.27 \left[ -0.11, 0.65 \right] \\ 0.33 \left[ 0.07, 0.58 \right] \\ 0.46 \left[ 0.18, 0.74 \right] \\ 0.46 \left[ 0.18, 0.74 \right] \\ 0.46 \left[ 0.18, 0.74 \right] \\ 0.47 \left[ 0.20, 0.74 \right] \\ 0.57 \left[ 0.20, 0.74 \right] \\ 0.57 \left[ 0.17, 0.96 \right] \\ 0.57 \left[ 0.17, 0.96 \right] \\ 0.57 \left[ 0.24, 0.91 \right] \\ 0.77 \left[ 0.37, 1.05 \right] \\ 0.77 \left[ 0.37, 1.05 \right] \\ 0.75 \left[ 0.44, 1.02 \right] \\ 0.75 \left[ 0.44, 0.91 \right] \\ 0.75 \left[ 0.44, 0.91 \right] \\ 0.75 \left[ 0.44, 0.91 \right] \\ 0.75 \left[ 0.44, 1.02 \right] \\ 0.75 \left[ 0.$	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Yu2015 Mug20ng Quag2019 Junxbeng Chen2012 Chungrong Wang2014 Gao F2017 Qing Chen2010 Leyin Xia2015 Daijiaja Yin2015	7.4 7.4 7.4 0; $Chi^2 = 1$ 0.89 ( $P = ($ 304.086 369,72 440.7 4.3 5.93 333 4.24 327.06 5.1 308.75 377.2 377.2 380.1 284.58 359.5 349.8 357.83 366 277.9 298.2 357.83 366 277.9 298.2 35.73 312 81 81	1.2 1.66, df 91.33 98.6 1 0.5 86 1.2 86.7 1.4 81.71 101.3 82.6 76.2 138.48 127.519 1.3 84.74 123.45 78.07 90.03 38.43 33.3 33.3 34.7 123.45	$66 \\ 91 \\ = 1 (P \\ 45 \\ 60 \\ 35 \\ 98 \\ 202 \\ 56 \\ 356 \\ 356 \\ 356 \\ 107 \\ 100 \\ 35 \\ 45 \\ 74 \\ 47 \\ 95 \\ 119 \\ 355 \\ 64 \\ 45 \\ 100$	5.9 < 0.0006); 322.323 380.67 105.2 4.2 5.87 317 3.94 302.86 4.6 277.13 3341.5 248.79 289.5 279.9 288.97 288.97 288.97 288.97 289.94 20.07 289.94 20.07 280.61 220.61 220.61 226.61 268.47 269.47 269.47 269.47 269.47 279.47	$\begin{array}{c} 1.9 \\ 87.58 \\ 94.97 \\ 105.2 \\ 0.9 \\ 0.18 \\ 79 \\ 1.01 \\ 74.1 \\ 1.63 \\ 74.12 \\ 90.1 \\ 1.63 \\ 74.12 \\ 1.63 \\ 74.12 \\ 90.1 \\ 1.63 \\ 74.12 \\ 90.1 \\ 1.63 \\ 74.12 \\ 1.15.73 \\ 1$	163           249           3187           58           60           30           198           251           331           121           1348           100           418           56           35           48           70           45           54           79           70           100	$\begin{array}{c} 1.5\\ 2.9\\ \end{array}$	$\begin{array}{c} -0.86 & [0.57, 1.16] \\ 0.41 & [-0.50, 1.33] \\ \hline \\ -0.21 & [-0.29, -0.13] \\ -0.12 & [-0.51, 0.27] \\ 0.03 & [-0.33, 0.38] \\ 0.10 & [-0.38, 0.59] \\ 0.19 & [-0.06, 0.43] \\ 0.19 & [-0.00, 0.39] \\ 0.27 & [-0.11, 0.65] \\ 0.30 & [0.15, 0.45] \\ 0.33 & [0.15, 0.45] \\ 0.33 & [0.15, 0.45] \\ 0.33 & [0.15, 0.45] \\ 0.42 & [0.23, 0.62] \\ 0.47 & [0.20, 0.74] \\ 0.49 & [0.18, 0.79] \\ 0.54 & [0.06, 1.02] \\ 0.57 & [0.24, 0.91] \\ 0.57 & [0.24, 0.91] \\ 0.77 & [0.49, 1.01] \\ 0.75 & [0.49, 1.01] \\ 0.75 & [0.49, 1.01] \\ 0.75 & [0.49, 1.01] \\ 0.75 & [0.49, 1.01] \\ 0.57 & [0.24, 1.01] \\ 0.57 & [0.43, 1.02] \\ 0.51 & [0.15, 1.22] \\$	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Tayal2009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015 Weina Xu2015 Mua Zhong2014 Shunyou Deng 2008 Song Bo2010 Junzheng Chen2012 Chungrong Wang2019 Jue Wang2014 Qiang Chen2010 Leyin Xia2015 Daijiajia Yin2015 Chungigang Yang2011 Jianting Zhong2001	$\begin{array}{c} 7.4\\ 7.4\\ 0; {\rm Chi}^2=1\\ 0.89 \ (P=(\\\\ 369,72\\ 440,7\\ 4.3\\ 5.93\\ 333\\ 4.24\\ 327,06\\ 5.1\\ 380,1\\ 284,58\\ 357,83\\ 366\\ 357,83\\ 366\\ 357,83\\ 366\\ 277,9\\ 298,2\\ 351,85\\ 312,81\\ 398,2 \end{array}$	1.2 1.2 1.66, df 91.33 98.6 1 0.5 86 1 1.2 86.7 1.4 81.71 101.3 82.6 76.2 138.48 127.56 125.19 23.45 78.07 90.03 38.3 38.3 38.3 38.3 38.47 61.03 38.3 27.57	$66 \\ 91 \\ = 1 (P \\ 45 \\ 60 \\ 35 \\ 98 \\ 202 \\ 56 \\ 356 \\ 356 \\ 356 \\ 356 \\ 356 \\ 356 \\ 355 \\ 64 \\ 47 \\ 95 \\ 74 \\ 47 \\ 95 \\ 64 \\ 45 \\ 80 \\ $	5.9 < 0.0006); 322.323 380.67 105.2 4.2 5.87 317 3.94 302.86 4.6 277.13 331.5 248.79 289.5 279.9 289.5 279.9 288.97 289.5 279.9 288.97 289.5 279.9 288.97 286.96 229.94 230.07 286.61 220.07 286.61 220.86 120.22 286.95 279.9 288.97 286.96 229.94 230.07 286.96 229.94 230.07 286.96 229.94 230.07 286.96 229.94 230.07 286.96 229.94 230.07 286.96 229.94 230.07 286.96 229.94 230.07 286.96 229.94 230.07 286.96 229.94 230.07 286.96 229.94 230.07 286.96 229.94 230.07 286.96 229.94 230.07 286.96 229.94 230.07 286.96 229.94 230.07 286.96 229.94 229.94 230.07 286.96 229.94 220.94 229.94 229.94 229.94 229.94 229.94 229.94 229.94 229.94 220.94 229.94 229.94 220.94 229.94 220.94 229.94 220.94 220.94 220.94 229.94 220.94 220.94 229.94 220.	$\begin{array}{c} 1.9 \\ 87.58 \\ 94.97 \\ 105.2 \\ 9.9 \\ 105.2 \\ 9.9 \\ 1.01 \\ 1.63 \\ 79 \\ 1.01 \\ 1.63 \\ 79 \\ 1.01 \\ 1.63 \\ 79 \\ 1.01 \\ 1.63 \\ 74.12 \\ 90.1 \\ 81.6 \\ 69.77 \\ 116.11 \\ 116.23 \\ 115.73 $	3187           58           60           30           98           202           51           331           121           1348           100           56           54           70           100           50           54           70           100           50           78	$\begin{array}{c} 1.5\\ 2.9\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.6\\ 1.5\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5$	$\begin{array}{c} -0.86 \ [0.57, 1.16] \\ 0.41 \ [-0.50, 1.33] \\ \end{array}$	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang [2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Wenjuan Jiang2016 Hua Zhong2014 Xiaoyan Guo2019 Shunyou Deng 2008 Song Bo2010 Junzheng Chen2010 Leyin Xia2015 Daijiajia Yin2015 Chungjiang Yang2011 Jianting Zhong2009 Zhiling Hao2012	$\begin{array}{c} 7.4 \\ 0; {\rm Ch}^2 = 1 \\ 0.89 \ (P = ( \\ 304.086 \\ 369.72 \\ 440.7 \\ 4.3 \\ 5.93 \\ 333 \\ 4.24 \\ 327.06 \\ 5.1 \\ 308.72 \\ 333 \\ 4.24 \\ 327.06 \\ 5.1 \\ 308.7 \\ 333 \\ 4.24 \\ 357.5 \\ 377.2 \\ 380.1 \\ 284.58 \\ 357.83 \\ 359.5 \\ 359.5 \\ 349.8 \\ 357.83 \\ 366 \\ 277.9 \\ 298.2 \\ 351.58 \\ 242.65 \\ 312.81 \\ 398.2 \\ 389.2 \\ 389.2 \end{array}$	1.2 1.66, df 91.33 98.6 1 0.5 86 1.2 86.7 1.4 81.71 101.3 82.6 76.2 138.48 138.48 127.56 78.07 90.03 83.3 38.47 61.03 136.42 16.03 1	$\begin{matrix} 66\\ 91\\ =1 (P \\ \hline \\ 100\\ 45\\ 60\\ 35\\ 98\\ 202\\ 56\\ 356\\ 118\\ 107\\ 100\\ 63\\ 85\\ 60\\ 35\\ 45\\ 74\\ 47\\ 95\\ 119\\ 355\\ 64\\ 45\\ 80\\ 31\\ \end{matrix}$	5.9 < 0.0006); 322.323 380.67 105.2 4.2 5.87 317 3.94 302.86 277.19 333.2 341.5 248.79 289.4 289.5 279.9 288.96 229.94 239.4 289.5 289.65 229.94 230.07 286.651 220.611 266.47 289.6 323.71	$\begin{array}{c} 1.9\\ 87.58\\ 94.97\\ 105.2\\ 0.9\\ 94.97\\ 105.2\\ 0.9\\ 101\\ 116.2\\ 90.1\\ 81.6\\ 69.77\\ 116.11\\ 116.22\\ 99.1\\ 115.73\\ 113.28\\ 99.26\\ 103.47\\ 21.26\\ 41.46\\ 99.26\\ 118.21\\ 64.71\\ \end{array}$	3187           58           60           30           98           202           51           331           121           1348           100           55           48           70           100           50           78           40	$\begin{array}{c} 1.5\\ 2.9\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.6\\ 1.5\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.4\\ 1.5\\ 1.5\\ 1.4\\ 1.5\\ 1.5\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.4\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5$	$\begin{array}{c} 0.86 & [0.57, 1.16]\\ 0.41 & [-0.50, 1.33] \end{array}\\ \\ \begin{array}{c} -0.21 & [-0.29, -0.13]\\ -0.12 & [-0.51, 0.27]\\ 0.03 & [-0.33, 0.38]\\ 0.10 & [-0.38, 0.59]\\ 0.10 & [-0.38, 0.59]\\ 0.10 & [-0.38, 0.59]\\ 0.21 & [-1.00, 0.39]\\ 0.27 & [-0.11, 0.65]\\ 0.33 & [0.17, 0.56]\\ 0.33 & [0.17, 0.56]\\ 0.33 & [0.17, 0.56]\\ 0.44 & [0.18, 0.74]\\ 0.47 & [0.20, 0.74]\\ 0.47 & [0.20, 0.74]\\ 0.47 & [0.20, 0.74]\\ 0.47 & [0.20, 0.74]\\ 0.57 & [0.47, 0.91]\\ 0.57 & [0.47, 0.91]\\ 0.57 & [0.43, 1.02]\\ 0.75 & [0.43, 1.02]\\ 0.75 & [0.43, 1.02]\\ 0.75 & [0.43, 1.02]\\ 0.75 & [0.43, 1.02]\\ 0.75 & [0.43, 1.03]\\ 0.75 & [0.43, 1.03]\\ 0.75 & [0.43, 1.03]\\ 0.58 & [0.36, 1.24]\\ 0.58 & [0.36, 1.24]\\ 0.58 & [0.36, 1.24]\\ 0.58 & [0.36, 1.24]\\ 0.58 & [0.36, 1.34]\\ \end{array}$	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Ukina Gua2014 Gao F2017 Qing Chen2010 Leyin Xia2015 Daijiajia Yin2015 Chungrong Yang2011 Jianting Zhong2009 Zhiling Hao2012	$\begin{array}{c} 7.4 \\ 0; {\rm Ch}^2 = 1 \\ 0.89 \ (P = 0 \\ 304.086 \\ 369.72 \\ 440.7 \\ 43.5 \\ 933 \\ 4.24 \\ 333 \\ 4.24 \\ 327.06 \\ 5.1 \\ 308.75 \\ 377.2 \\ 380.1 \\ 284.58 \\ 358.5 \\ 359.5 \\ 35$	1.2 1.66, df 91.33 98.6 1 0.5 86 1 0.5 86 12 138.48 127.56 123.48 123.45 78.07 138.48 133.48 133.48 133.48 133.48 133.48 133.48 133.48 137.78 134.48 13	$66 \\ 91 \\ = 1 (P \\ 45 \\ 60 \\ 35 \\ 98 \\ 202 \\ 56 \\ 356 \\ 118 \\ 107 \\ 100 \\ 63 \\ 85 \\ 60 \\ 35 \\ 45 \\ 74 \\ 95 \\ 119 \\ 355 \\ 64 \\ 45 \\ 80 \\ 31 \\ 392 \\ 56 \\ 56 \\ 45 \\ 80 \\ 31 \\ 392 \\ 56 \\ 56 \\ 31 \\ 392 \\ 56 \\ 56 \\ 31 \\ 392 \\ 56 \\ 56 \\ 31 \\ 392 \\ 56 \\ 56 \\ 31 \\ 392 \\ 56 \\ 56 \\ 31 \\ 392 \\ 35 \\ 56 \\ 56 \\ 56 \\ 56 \\ 56 \\ 56 \\ 56$	5.9 322.323 380.67 105.2 4.2 5.87 317 3.94 4.6 277.13 333.2 341.5 248.79 289.5 279.9 289.5 279.9 288.97 289.5 279.9 288.97 289.5 279.9 288.97 288.96 323.07 286.51 220.61 220.61 226.64 229.9.6 323.71 340.25 83.27 289.6 323.71 340.25 83.27 289.6 323.71 340.25 83.27 340.25 83.27 340.25 83.27 340.25 83.27 35.27 289.5 279.9 288.97 289.5 279.9 288.97 289.5 279.9 289.5 279.9 288.97 289.5 279.9 280.5 279.9 280.5 279.9 280.5 279.9 280.5 279.9 280.5 279.9 280.5 279.9 280.5 279.9 280.5 279.9 280.5 279.9 280.5 279.9 280.5 279.9 280.5 279.5 279.5 280.5 279.5 270.5	$\begin{array}{c} 1.9 \\ 87.58 \\ 94.97 \\ 105.2 \\ 0.9 \\ 0.18 \\ 79 \\ 0.10 \\ 1.01 \\ 74.12 \\ 90.1 \\ 116.23 \\ 115.73 \\ 113.28 \\ 99.26 \\ 103.47 \\ 116.23 \\ 115.73 \\ 113.28 \\ 99.26 \\ 103.47 \\ 116.23 \\ 115.73 \\ 116.23 \\ 115.73 \\ 116.23 \\ 115.73 \\ 116.23 \\ 115.73 \\ 116.23 \\ 115.73 \\ 116.23 \\ 11$	3187 58 60 30 198 202 51 331 121 1348 85 56 35 48 55 48 55 48 54 70 45 54 70 70 00 50 840 100 18167	$\begin{array}{c} 1.5\\ 2.9\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.6\\ 1.5\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5$	$\begin{array}{c} -0.86 \\ 0.57, 1.16 \\ 0.41 \\ [-0.50, 1.33] \end{array}$	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Altay2017 Devika Tayal2009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Yu2015 Junzheng Chen2010 Junzheng Chen2010 Junzheng Chen2010 Leyin Xia2015 Daijajia Yin2015 Chungrong Yang2011 Jianting Zhong2013 Zhong Zha0212 Rong Han2012 Rong Han2012 Rong2013 Zhiling Hao2012 Rong Han2012 Rong Han2012 Rong Han2013 Chungrong Yang2011 Jianting Zhong2009 Zhiling Hao2012 Rong Huang2013 Yuhong Chen2015 Daijajai Yin2015	7.4 7.4 304.086 304.086 369.72 440.7 4.3 333 4.24 4.3 333 4.24 4.3 333 4.24 4.3 333 4.24 308.75 377.9 277.9 277.9 277.9 277.9 277.9 284.26 351.58 324.26 351.58 324.26 351.58 326.27 390.33 356.05 356.35 356.35 356.35 356.35 356.35 357.55 3	1.2 1.66, df 91.33 98.6 1 0.5 86 1.2 86.7 1.4 81.71 101.3 82.6 84.71 101.3 82.6 84.71 101.3 82.6 81.71 101.3 82.6 81.71 101.3 82.6 81.71 101.3 82.6 81.71 101.3 82.6 81.71 101.3 82.6 81.71 101.3 82.6 81.71 101.3 82.6 81.71 101.3 82.6 81.71 101.3 82.6 81.71 101.3 82.6 81.71 101.3 82.6 81.71 101.3 82.6 81.71 101.3 82.6 83.3 138.48 81.71 101.3 138.48 81.71 101.3 138.48 81.71 101.3 138.48 81.71 101.3 138.48 81.71 101.3 138.48 81.71 101.3 138.48 83.3 136.26 83.3 136.26 83.3 136.26 83.3 136.26 83.3 136.26 83.3 136.26 83.3 136.26 83.3 136.26 83.3 136.26 83.3 136.26 83.3 136.26 83.3 136.26 83.3 136.26 10.5 123.48 81.71 10.5 123.48 81.71 11.2 123.48 123.48 123.48 123.48 123.48 123.48 123.48 123.48 123.48 123.48 123.48 123.48 123.48 123.48 123.48 123.48 123.48 123.13 123.48 123.13 123.48 123.13 123.48 123.13 123.48 123.13 123.13 123.26 123.13 123.13 123.13 123.13 123.13 123.13 123.13 123.13 123.13 123.13 123.13 123.13 123.13 123.14	66 91 710 45 60 35 98 202 56 356 356 356 356 356 418 107 100 63 85 60 35 45 74 47 95 119 355 64 45 80 31 392 302 21	5.9 322.323 380.67 105.2 5.87 3.94 4.6 4.6 5.27,13 302.86 4.6 227,13 302.86 4.6 228,94 238,97 288,97 288,97 288,97 288,96 229,94 230,07 288,97 289,94 230,07 289,45 299,44 230,67 289,45 299,44 230,67 289,45 299,44 230,67 289,45 299,44 230,67 289,57 290,57 290,57 200,57	$\begin{array}{c} 1.9 \\ 87.58 \\ 94.97 \\ 105.2 \\ 0.9 \\ 1.01 \\ 79 \\ 1.63 \\ 79 \\ 1.01 \\ 1.63 \\ 74.12 \\ 81.6 \\ 69.77 \\ 113.28 \\ 95.51 \\ 115.73 \\ 113.28 \\ 95.51 \\ 115.73 \\ 113.21 \\ 115.73 \\ 113.21 \\ 115.73 \\ $	3187 58 60 198 202 51 331 121 1348 100 418 85 56 35 48 70 100 418 85 56 45 45 45 45 45 45 45 45 45 45 45 45 45	$\begin{array}{c} 1.5\\ 2.9\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.6\\ 1.5\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5$	$\begin{array}{c} -0.86 \ [0.57, 1.16] \\ 0.41 \ [-0.50, 1.33] \\ \hline \\ -0.21 \ [-0.29, -0.13] \\ -0.12 \ [-0.51, 0.27] \\ 0.31 \ [-0.33, 0.38] \\ 0.10 \ [-0.38, 0.59] \\ 0.10 \ [-0.38, 0.59] \\ 0.10 \ [-0.38, 0.59] \\ 0.10 \ [-0.38, 0.59] \\ 0.10 \ [-0.38, 0.59] \\ 0.10 \ [-0.30, 0.39] \\ 0.27 \ [-0.11, 0.65] \\ 0.33 \ [0.15, 0.45] \\ 0.33 \ [0.15, 0.45] \\ 0.33 \ [0.15, 0.45] \\ 0.33 \ [0.15, 0.45] \\ 0.33 \ [0.16, 0.45] \\ 0.42 \ [0.23, 0.62] \\ 0.44 \ [0.18, 0.79] \\ 0.44 \ [0.18, 0.79] \\ 0.44 \ [0.18, 0.79] \\ 0.45 \ [0.17, 0.96] \\ 0.47 \ [0.20, 0.74] \\ 0.47 \ [0.20, 0.74] \\ 0.47 \ [0.20, 0.74] \\ 0.47 \ [0.20, 0.74] \\ 0.47 \ [0.20, 0.74] \\ 0.47 \ [0.20, 0.74] \\ 0.47 \ [0.20, 0.74] \\ 0.47 \ [0.20, 0.74] \\ 0.47 \ [0.20, 0.74] \\ 0.47 \ [0.20, 0.74] \\ 0.43 \ [0.75, 0.43, 1.02] \\ 0.75 \ [0.43, 1.08] \\ 0.75 \ [0.43, 1.08] \\ 0.88 \ [0.78, 0.98] \\ 1.46 \ [0.43, 1.64] \\ 1.46 \ [0.43$	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Yu2014 Xiaoyan Guo2019 Shunyou Deng 2008 Song Bo2010 Junzheng Chen2012 Chungrong Wang2014 Gao F2017 Qing Chen2010 Leyin Xia2015 Daijajia Yin2015 Chungjiang Yang2011 Jianting Zhong2009 Zhiling Hao2012 Rong Huang2013 Yuhong Chen2015 Chungiang Yang2011 Gao F2017 Qing Chen2015 Chungiang Yang2011 Jianting Zhong2009 Zhiling Hao2012 Rong Huang2013 Yuhong Chen2015	7.4 304.086 369.72 304.086 369.72 303.3 303.75 308.75 377.2 308.75 377.2 308.75 377.9 208.2 359.5 3	1.2 1.2 1.66, df 91.33 98.6 1 91.33 98.6 1 0.5 86 1.2 86.7 1.4 81.71 101.3 82.6 76.2 84.71 101.3 82.6 76.2 84.71 101.3 84.84 125.19 123.45 84.78 125.19 83.84 83.84 83.84 125.19 123.45 84.71 125.19 123.45 84.75 125.19 125.15 84.75 125.15 125.15 84.75 125.15 15	66 91 = 1 (P · 45 60 35 60 35 56 356 356 356 355 64 45 80 31 355 64 45 80 31 392 30 21 50	5.9 322.323 380.67 105.2 4.2 5.87 317 302.86 4.6 4.77.13 33.94 4.6 4.77.13 33.94 4.89.5 289.4 289.5 286.5 229.4 286.5 286.5 286.5 286.5 286.5 286.5 286.5 287.13 341.5 286.5 286.5 286.5 287.13 341.5 286.5 286.5 287.4 287.4 286.5 286.5 287.4 287.4 286.5 287.4 286.5 287.4 286.5 287.4 287.4 286.5 287.4 286.5 287.4 289.4 287.4 286.5 287.4 287.4 287.4 287.4 287.5 286.5 287.4 287.4 287.4 287.4 287.4 287.4 287.4 287.4 287.4 287.4 287.4 287.4 287.4 299.4 299.4 287.4 299.4 299.9 286.5 297.4 299.9 299.9 297.9 207.7 207.9 207.7 207.9 207.7 207.7 207.9 207.7 207.9 207.7 207.9 207.7 207.9 207.7 207.9 207.7 207.9 207.7 207.9 207.7 207.9 207.7 207.9 207.7 207.9 207.7 207.9 207.7 207.9 207.7 207.9 207.9 207.7 207.9 207.7 207.9 207.7 207.9 207.7 207.9 207.7 207.9 207.7 20	$\begin{array}{c} 1.9 \\ 87.58 \\ 94.97 \\ 105.2 \\ 0.9 \\ 0.18 \\ 74.11 \\ 10.6 \\ 74.11 \\ 10.6 \\ 74.12 \\ 10.7 \\ 11.6 \\ 74.12 \\ 10.7 \\ 11.6$	3187           58           60           198           202           331           121           1331           124           1348           100           418           85           56           351           1348           100           51           35           48           70           100           50           78           40           18167           20           14           60	$\begin{array}{c} 1.5\\ 2.9\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5$	$\begin{array}{c} 0.86 & [0.57, 1.16] \\ 0.41 & [-0.50, 1.33] \\ \end{array}\\ \begin{array}{c} -0.21 & [-0.29, -0.13] \\ -0.12 & [-0.51, 0.27] \\ 0.03 & [-0.33, 0.38] \\ 0.10 & [-0.38, 0.59] \\ 0.10 & [-0.38, 0.59] \\ 0.10 & [-0.38, 0.59] \\ 0.10 & [-0.38, 0.59] \\ 0.27 & [-0.11, 0.65] \\ 0.33 & [0.17, 0.56] \\ 0.33 & [0.17, 0.56] \\ 0.33 & [0.17, 0.56] \\ 0.44 & [0.18, 0.74] \\ 0.44 & [0.18, 0.74] \\ 0.47 & [0.20, 0.74] \\ 0.47 & [0.20, 0.74] \\ 0.47 & [0.20, 0.74] \\ 0.47 & [0.20, 0.74] \\ 0.47 & [0.20, 0.74] \\ 0.47 & [0.18, 0.79] \\ 0.57 & [0.47, 10.5] \\ 0.57 & [0.47, 10.5] \\ 0.57 & [0.47, 10.5] \\ 0.57 & [0.43, 1.02] \\ 0.75 & [0.43, 1.02] \\ 0.75 & [0.43, 1.02] \\ 0.75 & [0.43, 1.03] \\ 0.75 & [0.43, 1.03] \\ 0.88 & [0.38, 1.22] \\ 0.85 & [0.52, 1.17] \\ 0.88 & [0.56, 1.34] \\ 0.88 & [0.78, 0.98] \\ 1.44 & [1.00, 184] \\ \end{array}$	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Yu2015 Ukina Ku2015 Junyan Gua2019 Junxbang Chen2019 Junkang2014 Gao F2017 Qing Chen2010 Leyin Xia2015 Daijiajia Yin2015 Chungrong Yang2011 Jianting Zhong2009 Zhiling Hao2012 Nobel-Cayoum A A2014 Guoqing Chen2013 Yuhong Chen2013 Yuhong Chen2013 Yuhong Chen2013 Yuhong Chen2013	7.4 304.086 369.72 333 4.24 304.086 369.72 333 4.24 308.75 377.2 380.1 284.58 357.83 366.75 377.9 288.2 357.83 367.83 377.9 267.25 389.2 255.98 242.257 367.84 242.257 367.84 242.257 367.84 377.94 377.	1.2 1.2 1.66, df 91.33 98.6 1 0.5 86 1.2 87.62 91.33 98.6 1 0.5 86 1.2 1.3 87.62 91.33 98.6 1 87.62 91.33 98.6 1 1.4 81.71 101.3 82.6 6.7 22.138 48.17 102.3 84.8 81.38 84.1 102.3 83.3 38.427 90.03 38.33 38.427 90.03 38.437 132.23 89.41 132.457 80.7 80.33 132.25 80.417 133.488 80.417 133.488 80.417 133.488 80.417 133.488 80.417 133.488 80.417 133.488 80.417 133.488 80.417 133.488 80.417 133.488 80.417 133.488 80.417 133.488 80.417 134.488 80.417 133.488 80.417 133.488 80.417 133.488 80.417 133.488 80.417 133.488 80.417 133.488 80.417 133.488 80.417 134.488 134.487 134.488 134.487 134.488 134.487 134.488 134.487 134.487 134.488 134.478 134.487 134.477 134.487 134.487 134.487 134.477 134.487 134.487 134.477 134.487 134.477 134.487 134.487 134.477 134.487 134.487 134.477 134.487 134.47		5.9 322.323 380.67 105.2 4.2 5.87 3.94 302.86 4.6 248.79 288.97 289.47 299.47 200	$\begin{array}{c} 1.9 \\ 87.58 \\ 94.97 \\ 105.2 \\ 0.9 \\ 0.18 \\ 94.97 \\ 105.2 \\ 0.9 \\ 105.2 \\ 0.9 \\ 101.1 \\ 116.2 \\ 90.1 \\ 116.2 \\ 90.1 \\ 115.7 \\ 113.28 \\ 90.26 \\ 115.73 \\ 113.28 \\ 99.26 \\ 115.73 \\ 115.73 \\ 113.28 \\ 115.73 \\$	3187           58           60           198           202           51           331           121           1348           100           418           85           60           70           70           70           70           70           70           70           70           70           70           70           70           70           70           100           50           78           40           14           60	$\begin{array}{c} 1.5\\ 2.9\\ 1.6\\ 1.5\\ 1.4\\ 1.5\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5$	$\begin{array}{c} -0.86 \\ (0.57, 1.16) \\ 0.41 \\ [-0.50, 1.33] \end{array} \\ \begin{array}{c} -0.21 \\ [-0.50, 1.33] \\ \hline \\ 0.13 \\ [-0.51, 0.27] \\ 0.13 \\ [-0.51, 0.27] \\ 0.15 \\ 0$	· · · · · · · · · · · · · · · · · · ·
Afsar B2017 Subtotal (95% C1) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Altay2017 Devika Tayal2009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Yu2015 Shunyou Deng 2008 Song Bo2010 Junzheng Chen2012 Chungrong Wang2019 Jue Wang2014 Gao F2017 Qing Chen2010 Leyin Xia2015 Daijajia Yin2015 Chungliang Yang2011 Jianting Zhong2001 Zhiling Hao2012 Rong Huang2013 Yuhong Chen2015 Shunyon Chen2015 Chungrong Yang2011 Jianting Zhong2001 Zhiling Hao2012 Rong Huang2013 Yuhong Chen2015 Shudei-Gayoum A A2014 Guoqing Chen2015 Yating Zhang2012 Yating Zhang2012 Yating Zhang2012 Yating Zhang2012	7.4 7.4 304.086 304.086 369.72 440.7 4.3 333 4.24 4.3 333 4.24 4.3 333 4.24 4.3 333 4.24 369.5 377.9 277.9 277.9 277.9 277.9 277.9 277.9 277.9 277.9 277.9 277.9 284.26 31.28 339.33 356.65 31.28 399.33 356.65 31.28 399.33 356.55 325.58 325.58 362.25 58.38 367.35 367.35 377.2 377.9 284.26 377.9 284.26 377.9 285.27 377.9 285.27 377.9 285.27 377.9 285.27 377.9 285.27 377.9 285.27 377.9 285.27 377.9 285.27 377.9 285.27 377.9 285.27 377.9 285.27 377.9 285.27 377.9 285.27 377.9 285.27 377.9 285.27 377.9 285.27 377.9 285.28 375.38	1.2 1.2 1.66, df 91.33 98.6 1 0.5 86 1.2 86.7 1.4 81.71 101.3 82.6 12.2 86.7 1.4 81.71 101.3 82.6 12.3 84.7 80.3 12.7 56 12.3 84.7 80.3 1.2 1.3 84.6 1.2 1.3 84.6 1.2 1.3 84.6 1.2 1.3 84.6 1.2 1.3 84.6 1.2 1.3 84.6 1.2 1.3 84.6 1.2 1.3 84.6 1.2 1.3 84.6 1.2 1.3 84.6 1.2 1.3 84.6 1.2 1.3 1.3 84.6 1.2 1.3 1.3 84.6 1.2 1.3 1.3 84.6 1.2 1.3 1.3 84.6 1.2 1.3 1.3 84.7 1.3 1.3 8.4 8.3 1.3 8.3 3.3 8.3 3.3 8.4.7 3.13 1.3 6.6 8.5 1.2 1.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 5.5 6.5 6		5.9 322.323 380.67 105.2 4.2 5.87 302.8 302.9 302.	$\begin{array}{c} 1.9 \\ 87.58 \\ 94.97 \\ 105.2 \\ 0.9 \\ 0.18 \\ 94.97 \\ 105.2 \\ 0.9 \\ 1.01 \\ 79 \\ 1.01 \\ 74.1 \\ 1.63 \\ 79 \\ 1.63 \\ 79 \\ 1.63 \\ 79.1 \\ 1.63 \\ 79.1 \\ 1.63 \\ 99.26 \\ 1.15.73 \\ 113.28 \\ 95.51 \\ 113.21 \\ 115.73 \\ 113.28 \\ 115.73 \\ 113.21 \\ 115.73 \\ 113.21 \\ 1.57 \\ 115.73 \\ 1.57 \\ 1.55 \\ 118.21 \\ 1.57 \\ 1.55 \\ 118.21 \\ 1.57 \\ 1.55 \\ 118.21 \\ 1.57 \\ 1.55 $	163           249           3187           58           60           30           198           202           51           121           11348           85           54           70           100           60           70           100           18167           201           40           60           42	$\begin{array}{c} 1.5\\ 2.9\\ 1.6\\ 1.5\\ 1.4\\ 1.5\\ 1.5\\ 1.4\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5$	$\begin{array}{c} 0.86 \\ 0.57, 1.16 \\ 0.41 \\ [-0.30, 1.33] \end{array} \\ \begin{array}{c} -0.21 \\ [-0.30, 1.33] \end{array} \\ \begin{array}{c} -0.12 \\ -0.51, 0.27 \\ 0.35, 0.38 \\ 0.35, 0.38 \\ 0.35, 0.38 \\ 0.35, 0.38 \\ 0.35, 0.38 \\ 0.35, 0.35 \\$	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Yu2015 Ghunyen Deng 2008 Song B02010 Junzheng Chen2010 Leyin Xia2015 Daijajia Yin2015 Chungiang Yang2011 Gao F2017 Qing Chen2010 Leyin Xia2015 Daijajia Yin2015 Chungiang Yang2011 Jiahing Zhong2009 Zhiling Ha02012 Rong Huang2013 Yuhong Chen2015 Abdel-Cayoum A A2014 Guoqing Chen2015 Abdel-Cayoum A A2014 Guoqing Chen2015 Abdel-Cayoum A A2014 Yuhong Chen2015	7.4 0, Chi <sup>2</sup> = 1 0.89 (P = 1 0.81 (P = 1	1.2 1.2 1.66, df 91.33 98.6 1 0.5 86 1.2 86.7 1.4 81.71 1.38.48 81.71 1.38.48 123.45 78.07 7.62 138.48 81.71 138.48 81.71 138.48 81.71 138.48 81.72 56 57.55 57.75 56 50 57.55 50 50 50 50 50 50 50 50 50	66 91 = 1 (P 45 60 35 98 202 56 356 45 45 45 45 45 45 45 45 45 45 45 45 45	5.9 322.323 380.67 105.2 4.2 5.87 302.86 4.7 302.86 4.7 302.86 4.7 333.4 289.4 289.4 289.4 289.4 289.4 228.4 228.5 228.6 4.2 228.5 228.6 4.2 228.6 4.2 228.5 228.6 4.2 228.5 228.6 4.2 228.5 228.6 4.2 228.5 228.6 4.2 228.5 228.6 4.2 228.6 4.2 228.5 228.6 4.2 228.5 228.6 4.2 228.5 228.6 4.2 228.5 228.5 228.6 4.2 228.5 229.5 228.5 229.5 228.5 229.5 228.5 229.5 200.5	$\begin{array}{c} 1.9 \\ 87.58 \\ 94.97 \\ 105.2 \\ 99.9 \\ 1.01 \\ 105.2 \\ 99.2 \\ 105.2 \\ 99.2 \\ 115.73 \\ 115.73 \\ 115.73 \\ 115.73 \\ 115.73 \\ 115.22 \\ 115.73 \\ 115.22 \\ 115.73 \\ 115.22 \\ 115.73 \\ 115.22 \\ 115.73 \\ 115.23 \\ 115.73 \\ 115.23 \\ 115.73 \\ 115.23 \\ 115.73 \\ 115.23 \\ 115.73 \\ 115.23 \\ 115.73 \\ 115.23 \\ 115.73 \\ 115.23 \\ 115.73 \\ 115.23 \\ 115.73 \\ 115$	163           249           3187           58           60           30           198           202           51           331           121           1348           85           56           35           48           70           45           54           70           50           78           40           50           78           40           60           60           60           60           60           60           60           60           60	$\begin{array}{c} 1.5\\ 2.9\\ 1.6\\ 1.5\\ 1.6\\ 1.5\\ 1.6\\ 1.5\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5$	$\begin{array}{c}$	· · · · · · · · · · · · · · · · · · ·
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Ukina P2020 Junzheng Chen2019 Junzheng Chen2019 Junwang Jang2014 Gao F2017 Qing Chen2010 Leyin Xia2015 Daijiajia Yin2015 Chungrong Yang2011 Jianting Zhong2009 Zhilling Hao2012 Rong Hhang2013 Yuhong Chen2013 Yuhong Chen2014 Yuhong Chen2014 Yuhong Chen2014 Yuhong Chen2014 Yuhong Chen2014 Yuhong Chen	7.4 7.4 304.086 369.72 333 4.24 333 4.24 327.6 308.75 377.2 380.1 284.58 357.83 366.75 377.9 288.2 357.83 367.83 377.9 367.83 377.9 377.	1.2 1.2 1.66, df 91.33 98.6 1 0.5 86 1.2 87.62 91.33 98.6 1 0.5 86 1.2 86.7 1.4 81.71 101.3 82.6 76.2 138.48 81.73 82.6 1.4 81.71 101.3 82.6 6.72 1.33 82.6 8.6 1.2 1.33 82.6 1.4 81.73 1.2 1.33 82.6 8.6 1.2 1.33 82.6 8.6 1.2 1.33 82.6 8.6 1.2 1.33 82.6 8.6 1.2 1.33 82.6 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5	$\begin{array}{c} 66\\ 9I\\ 9I\\ =1 \left(P\right)^{-1}\\ 1 \left(P\right)^{-$	5.9 322.323 380.67 105.2 4.2 5.87 3.94 302.86 4.6 248.97 248.97 288.94 288.97 289.4 200.94 199.54 277.13 200.94 199.54 277.29 266.12 200.94 200.	$\begin{array}{c} 1.9 \\ 87.58 \\ 94.97 \\ 105.2 \\ 0.9 \\ 105.2 \\ 0.9 \\ 105.2 \\ 0.18 \\ 79 \\ 0.18 \\ 79 \\ 0.18 \\ 74.12 \\ 90.1 \\ 101 \\ 74.12 \\ 90.1 \\ 116.11 \\ 116.23 \\ 115.73$	163         249           3187         58           60         30           198         202           51         331           121         140           418         85           56         35           48         70           700         78           60         79           70         100           58         40           18167         20           144         60           60         42           35         200           100         10           101         146           60         42           35         200           100         10           101         10	$\begin{array}{c} 1.5\\ 2.9\\ 1.6\\ 1.5\\ 1.4\\ 1.5\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5$	$\begin{array}{c} -0.86 \\ (0.57, 1.16) \\ 0.41 \\ [-0.50, 1.33] \end{array} \\ \begin{array}{c} -0.21 \\ [-0.50, 1.33] \\ \hline \\ -0.12 \\ [-0.51, 0.27] \\ (-0.51, 0.27] $	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang 12016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Tayal2009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Wenjuan Jiang2016 Hua Zhong2014 Xiaoyan Guo2019 Shunyou Deng 2008 Song Bo2010 Junzheng Chen2012 Chungrong Wang2019 Jue Wang2014 Gao F2017 Qing Chen2010 Leyin Xia2015 Daijiajia Yin2015 Chungliang Yang2011 Jianting Zhong2001 Zhiling Hao2012 Rong Huang2013 Yuhong Chen2015 Abdel-Gayoum A A2014 Guoqing Chen2015 Yating Zhang2012 Yating Zhang2012 Yating Zhang2012 Yating Zhang2012 Yating Zhang2012 Saini V2012 Wen Cao2014	7.4 7.4 304.086 369.72 333 4.24 40.7 4.3 333 4.24 4.3 333 4.24 4.3 333 4.24 4.3 333 4.24 338.7 377.9 238.2 351.58 359.5 357.83 360.5 312.81 390.33 356.05 312.81 390.33 356.05 312.81 390.33 356.05 312.81 390.33 356.05 325.58 389.22 367.38 377.99 380.27 377.99 282.27 386.27 367.38 367.38 377.39 377.99 37	1.2 1.2 1.2 1.66, df 1. 0.5 1.3 87,62 91,33 98,6 1. 0.5 86 1. 0.5 86 1. 0.5 86 1. 0.3 88,7 1. 38,47 1. 38,48 1. 27,55 80,33 38,47 61,03 28,47 77,88 83,33 38,47 61,03 28,47 77,88 86,33 81,25 1,94 9,45 81,25 1,94 9,45 81,25 1,94 9,45 81,25 1,94 9,45 81,25 1,94 9,45 81,25 1,94 9,45 81,25 1,94 9,45 81,25 1,94 9,45 81,25 1,94 9,45 1,94 9,45 1,94 1,94 1,94 1,94 1,94 1,94 1,94 1,94		5.9 322.323 380.67 105.2 4.2 5.87 3.94 4.6 5.87 302.86 4.6 5.248.79 288.97 288.97 288.97 288.97 288.97 288.92 289.94 230.07 288.94 230.61 229.94 230.63 229.94 230.63 229.94 230.64 199.54 199.54 199.54 199.54 199.54 199.54 270 260 270 281 270 285 270 270 285 270 270 289.65 270 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 270.94 289.65 270.94 289.65 270.94 289.65 270.94 270.94 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 289.65 270.94 270.94 270.94 289.55 270.94 289.65 270.94 270.94 289.65 270.94 270.94 270.94 270.94 289.65 270.94 270.94 270.94 289.65 270.94 270.94 270.94 270.94 270.94 270.94 270.94 270.94 270.94 270.94 270.94 270.94 270.94 270.94 270.94 270.94 270.95 270.94 270.94 270.95 270.95 270.95 270.95 270.95 270.95 270.95 270.95 270.95 270.95 270.95 270.95 270.25 270.55 27	$\begin{array}{c} 1.9 \\ 1.9 \\ 87.58 \\ 94.97 \\ 105.2 \\ 0.9 \\ 0.18 \\ 79 \\ 1.01 \\ 1.63 \\ 79 \\ 1.01 \\ 1.63 \\ 79 \\ 1.01 \\ 1.63 \\ 79 \\ 1.01 \\ 1.63 \\ 79 \\ 1.01 \\ 1.63 \\ 79 \\ 1.01 \\ 1.13.28 \\ 95.51 \\ 1.13.28 \\ 95.51 \\ 1.13.28 \\ 95.51 \\ 1.13.28 \\ 95.51 \\ 1.13.28 \\ 1$	163         249           3187         58           60         30           198         202           51         331           121         1348           100         56           54         79           70         70           100         50           50         78           40         18167           20         60           60         42           35         50           50         50	$\begin{array}{c} 1.5\\ 2.9\\ 1.6\\ 1.5\\ 1.4\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5$	$\begin{array}{c} -0.86 \ [0.57, 1.16] \\ 0.41 \ [-0.30, 1.33] \\ \hline \\ -0.21 \ [-0.29, -0.13] \\ -0.12 \ [-0.51, 0.27] \\ 0.35 \ [-0.51, 0.27] \\ 0.35 \ [-0.51, 0.27] \\ 0.35 \ [-0.51, 0.27] \\ 0.35 \ [-0.51, 0.27] \\ 0.35 \ [-0.51, 0.27] \\ 0.35 \ [-0.51, 0.27] \\ 0.35 \ [-0.51, 0.27] \\ 0.36 \ [-0.51, 0.37] \\ 0.37 \ [-0.11, 0.65] \\ 0.36 \ [-0.51, 0.45] \\ 0.36 \ [-0.51, 0.45] \\ 0.36 \ [-0.51, 0.45] \\ 0.36 \ [-0.51, 0.45] \\ 0.36 \ [-0.51, 0.45] \\ 0.36 \ [-0.51, 0.45] \\ 0.36 \ [-0.51, 0.45] \\ 0.36 \ [-0.51, 0.45] \\ 0.36 \ [-0.51, 0.45] \\ 0.36 \ [-0.51, 0.45] \\ 0.36 \ [-0.52, 0.24] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.47 \ [-0.20, 0.74] \\ 0.48 \ [-0.78, 0.84] \\ 0.48 \ [-0.78, 0.98] \\ 0.44 \ [-0.43, 1.64] \\ 0.46 \ [-0.43, 1.64] \\ 0.46 \ [-0.43, 1.64] \\ 0.46 \ [-0.43, 1.64] \\ 1.42 \ [-0.0, 1.84] \\ 1.42 $	
Afsar B2017 Subbotal (95% CI) Heterogeneiiy: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang 12016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Munyou Deng 2008 Song Bo2010 Junzheng Chen2010 Leyin Xia2015 Daijajia Yin2015 Chungiang Yang2011 Jianing Zhong2009 Zhiling Hao2012 Rong Huang2013 Yuhong Chen2010 Leyin Xia2015 Daijajia Yin2015 Chungiang Yang2011 Jianing Zhong2009 Zhiling Hao2012 Rong Huang2013 Yating Zhang2012 Yuqin Yuan2016 Wenzhu Yu2015 Chuang Zhang2012 Yuqin Yuan2016 Wenzhu Yu2015 Chuang Zhang2019 Saini Y2012 Wen Cao2014	7.4 0; Chi <sup>2</sup> = 1 0.89 (P = 1 0.81 (P = 1	1.2 1.2 1.2 1.66, df 91.337) 87.62 91.33 98.6 1 0.5 88.6 1.2 86.7 1.4 81.71 101.3 82.6 76.2 28.6 7.62 21.38.48 81.71 101.3 84.71 101.3 84.7 127.56 61.03 136.26 83.3 136.26 83.41 138.48 8.526 122.59 8.53 136.27 55 77.75 65 37.75 63 30.27 10.7		5.9 322.323 380.67 105.2 4.2 5.87 317 302.86 4.6 4.77.13 33.94 4.6 4.77.13 33.94 4.89.5 289.4 289.4 289.4 289.4 220.44 200.67 289.4 220.44 200.67 229.24 220.68.47 220.68.47 220.68.47 220.68.47 220.68.47 220.68.47 220.68.47 220.68.47 220.68.47 220.68.47 220.68.47 209.54 227.429 209.54 274.29 209.54 274.29 209.54 274.29 209.54 274.29 209.54 274.29 209.54 274.29 209.54 274.29 209.54 274.29 209.54 274.29 209.54 274.29 209.54 274.29 209.54 274.29 209.54 274.29 209.54 274.29 209.54 274.29 200.51 201.24 274.29 200.51 202.54 202.66 202.42 202.54 202.55 20	$\begin{array}{c} 1.9\\ 87.58\\ 94.97\\ 105.2\\ 0.9\\ 94.97\\ 105.2\\ 0.9\\ 105.2\\ 0.9\\ 105.2\\ 0.9\\ 105.2\\ 0.9\\ 105.2\\ 0.18\\ 79\\ 0.18\\ 79\\ 105.2\\ 1$	163         249           3187         58           60         30           198         202           51         331           121         1348           100         418           55         54           70         100           50         78           40         60           60         42           35         200           120         500           50         500	$\begin{array}{c} 1.5\\ 2.9\\ 1.6\\ 1.5\\ 1.5\\ 1.6\\ 1.5\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5$	$\begin{array}{c} 0.36 \\ (0.57, 1.16) \\ 0.41 \\ (-0.50, 1.33] \\ \hline \\ 0.41 \\ (-0.50, 1.33] \\ \hline \\ 0.51 \\ (-0.51, 0.27] \\ (-0.51, 0.27] \\ (-0.51, 0.27] \\ (-0.51, 0.27] \\ (-0.51, 0.27] \\ (-0.51, 0.27] \\ (-0.51, 0.27] \\ (-0.51, 0.27] \\ (-0.51, 0.25] \\ (-0.$	· · · · · · · · · · · · · · · · · · ·
Afsar B2017 Subbotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang 12016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weinjuan Jiang2016 Hua Zhong2014 Xiaoyan Guo2019 Shunyou Deng 2008 Song Bo2010 Junzheng Chen2012 Chungrong Wang2014 Gao F2017 Qing Chen2010 Leyin Xia2015 Daijajia Yin2015 Chungjiang Yang2011 Jianting Zhong2009 Zhiling Hao2012 Rong Huang2013 Yating Zhang2012 Yuqin Yuan2016 Wenzhu Yuz015 Chungjiang Zhang2012 Yuqin Yuan2016 Wenzhu Yuz015 Chung Zhang2012 Yuqin Yuan2016 Wenzhu Yuz015 Chung Zhang2012 Yuqin Yuan2016 Wenzhu Yuz015 Chung Zhang2012 Yuqin Yuan2016 Wenzhu Yuz015 Chung Zhang2019 Saini Y2012 Wen Cao2014	7.4 7.4 304.086 369.72 333 333 4.24 308.75 377.2 380.1 284.58 359.5	1.2 1.2 1.2 1.3 87.62 91.33 98.6 1. 98.6 1. 98.6 1. 98.6 1. 98.6 1. 98.6 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		5.9 322.323 380.67 105.2 4.2 302.86 4.6 302.86 4.6 302.86 4.6 302.86 4.6 302.86 4.6 229.94 229.94 220.61 220.62 229.94 220.63 229.94 220.64 220.94 220.64 227.13 340.26 274.29 286.51 220.52 274.29 209.54 227.25 266.47 220.52 220.52 20.52 20.	$\begin{array}{c} 1.9\\ 1.9\\ 87.58\\ 94.97\\ 105.2\\ 0.9\\ 94.97\\ 105.2\\ 0.9\\ 105.2\\ 0.9\\ 105.2\\ 0.9\\ 105.2\\ 0.18\\ 79\\ 90.18\\ 105.2\\ 105.$	163         249           3187         58           60         30           30         58           60         30           3187         58           60         30           301         198           202         51           331         121           1348         56           35         54           70         100           50         79           700         18167           200         14           60         60           60         60           120         20           120         55           2000         50           50         52           700         50           700         120           50         52           200         50           50         50           70%         50	$\begin{array}{c} 1.5\\ 2.9\\ 1.6\\ 1.5\\ 1.4\\ 1.5\\ 1.6\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5$	$\begin{array}{c}$	
Afsar B2017 Subbotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang 12016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015 Weina Xu2015 Munyou Deng 2008 Song Bo2010 Jumzheng Chen2012 Chungiong Wang2014 Gao F2017 Qing Chen2010 Leyin Xia2015 Daijiajia Yin2015 Chungiang Yang2011 Jiahing Zhong2009 Zhiling Hao2012 Rong Chen2013 Yuhong Chen2014 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z =	7.4 7.4 304.086 369.72 334.087 3593 35.93 35.93 37.22 308.75 377.2 308.75 377.2 308.75 377.2 308.75 377.2 308.75 377.2 308.75 339.5 359.5 359.5 359.5 359.5 359.5 359.5 359.5 359.5 359.5 359.5 359.5 359.5 359.5 360.5 359.5 359.5 360.5 377.9 380.2 380.2 380.2 380.2 380.2 380.2 380.2 380.2 380.2 380.2 380.2 380.2 380.2 380.2 380.2 380.5 380.5 380.2 380.2 380.2 380.5 380.2 38	1.2 1.2 1.2 1.2 1.3 87.62 91.33 98.6 1 0.5 86 1.2 86.7 1.4 8.171 101.3 82.6 76.2 1.3 8.4 8.171 101.3 82.6 76.2 1.3 8.4 8.171 101.3 82.6 76.2 8.67 1.4 8.171 101.3 82.6 76.2 8.67 1.4 8.171 101.3 82.6 76.2 8.67 1.4 8.171 101.3 82.6 76.2 8.67 1.4 8.171 101.3 82.6 76.2 8.57 1.5 8.5 8.3 3.3 8.4 8.3 1.3 8.48 8.171 102.5 8.5 8.5 8.5 1.2 8.5 8.5 8.5 1.2 8.5 8.5 1.2 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5	$\begin{array}{c} 66\\ 91\\ =1 \ (P^{-1})\\ 710\\ 45\\ 60\\ 35\\ 98\\ 202\\ 56\\ 356\\ 356\\ 356\\ 60\\ 35\\ 56\\ 41\\ 47\\ 95\\ 119\\ 355\\ 64\\ 45\\ 80\\ 31\\ 355\\ 64\\ 45\\ 200\\ 21\\ 55\\ 200\\ 50\\ 50\\ 21\\ 50\\ 50\\ 201\\ 61\\ 32\\ 21\\ 50\\ 50\\ 50\\ 200\\ 77\\ 45\\ 200\\ 77\\ 45\\ 200\\ 76\\ 34\\ (0,0)\\ 10\\ 21\\ 35\\ 200\\ 10\\ 21\\ 35\\ 200\\ 10\\ 21\\ 35\\ 200\\ 10\\ 21\\ 35\\ 200\\ 10\\ 21\\ 35\\ 200\\ 21\\ 35\\ 200\\ 21\\ 35\\ 200\\ 21\\ 35\\ 200\\ 21\\ 35\\ 200\\ 21\\ 35\\ 200\\ 20\\ 21\\ 35\\ 200\\ 20\\ 21\\ 35\\ 200\\ 20\\ 20\\ 20\\ 20\\ 20\\ 20\\ 20\\ 20\\ 2$	$\begin{array}{c} 5.9\\ 322.323\\ 380.67\\ 105.2\\ 4.2\\ 30.86\\ 4.6\\ 30.28\\ 30.28\\ 4.6\\ 30.28\\ 4.6\\ 20.27\\ 13\\ 30.28\\ 4.6\\ 20.27\\ 13\\ 30.28\\ 4.6\\ 20.27\\ 13\\ 30.28\\ 248, 7\\ 729.9\\ 288, 98\\ 729, 98\\ 729, 98\\ 729, 98\\ 729, 98\\ 729, 98\\ 729, 98\\ 729, 98\\ 729, 98\\ 729, 98\\ 729, 98\\ 720, 98\\ 72$	$\begin{array}{c} 1.9\\ 1.9\\ 2^2 = 91\%\\ 87.58\\ 94.97\\ 105.2\\ 0.9\\ 105.2\\ 0.9\\ 105.2\\ 0.9\\ 105.2\\ 0.9\\ 105.2\\ 0.9\\ 105.2\\ 0.18\\ 79\\ 0.18\\ 79\\ 0.18\\ 79\\ 105.2\\ 105$	163         249           3187         58           60         30           198         202           211         1348           100         56           3187         56           311         121           1348         56           351         56           352         54           70         100           100         78           40         60           42         35           200         120           50         50           70         122           18167         200           120         25682           77%         20	1.5 2.9 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	$\begin{array}{c} 0.86 \\ 0.57, 1.16 \\ 0.41 \\ [-0.50, 1.33] \end{array} \\ \begin{array}{c} -0.21 \\ [-0.50, 1.33] \end{array} \\ \begin{array}{c} -0.21 \\ [-0.50, 1.33] \end{array} \\ \begin{array}{c} -0.21 \\ [-0.51, 0.27] \\ 0.35 \\ [-0.51, 0.27] \\ 0.35$	
Afsar B2017 Subbotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4 Test for overall effect: Z = 5.1.7 normal Zhang J2016 Rongrong Zhang2013 Qiang Song2016 Mustafa Alltay2017 Devika Taya12009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Weina Xu2015 Munyou Deng 2008 Song B02010 Jumzheng Chen2012 Chungrong Wang2014 Gao F2017 Qing Chen2010 Leyin Xia2015 Daijiajia Yin2015 Chunging Zhong2009 Zhiling Ha02012 Rong Huang2013 Yuhong Chen2013 Yuhong Chen2014 Sabtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4! Test for overall effect: Z =	7.4 7.4 304.086 369.72 334.086 369.72 334.3 35.93 332.706 5.1 380.1 284.58 335.83 336.75 377.2 285.98 349.8 357.83 366.75 377.9 288.2 357.83 369.2 357.83 356.83 357.83 369.2 357.83 369.2 357.83 369.2 357.83 369.2 357.83 369.2 377.9 389.2 380.2	1.2 1.2 1.2 1.66, df 91.337) 87.62 91.33 98.6 1 0.5 86 1.2 1.4 8.7 1.4 8.7 1.4 8.171 101.3 8.6 7.62 8.67 7.1.4 8.171 101.3 8.4 8.171 101.3 8.4 8.171 101.3 8.4 8.171 101.3 8.4 8.171 101.3 8.4 8.171 101.3 8.4 8.171 101.3 8.4 8.171 101.3 8.4 8.171 101.3 8.4 8.171 101.3 8.4 8.171 101.3 8.4 8.171 101.3 8.4 8.171 101.3 8.4 8.171 102.3 8.4 8.171 102.3 8.4 8.171 102.3 8.4 8.171 102.3 8.4 8.171 102.3 8.4 8.171 102.3 8.4 8.3 1.25.19 1.23.48 8.3 3.3 8.4 8.4 8.4 8.4 1.27.56 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5	$66 \\ 91 \\ = 1 (P)^{-1} \\ 710 \\ 45 \\ 60 \\ 35 \\ 98 \\ 202 \\ 56 \\ 35 \\ 80 \\ 118 \\ 107 \\ 100 \\ 63 \\ 56 \\ 45 \\ 74 \\ 47 \\ 95 \\ 74 \\ 47 \\ 95 \\ 74 \\ 47 \\ 95 \\ 80 \\ 119 \\ 355 \\ 64 \\ 45 \\ 30 \\ 21 \\ 50 \\ 64 \\ 45 \\ 30 \\ 21 \\ 50 \\ 64 \\ 45 \\ 30 \\ 21 \\ 50 \\ 64 \\ 45 \\ 30 \\ 21 \\ 50 \\ 64 \\ 45 \\ 30 \\ 21 \\ 50 \\ 56 \\ 44 \\ 35 \\ 200 \\ 77 \\ 45 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 67 \\ 35 \\ 200 \\ 20 \\ 20 \\ 35 \\ 200 \\ 20 \\ 20 \\ 20 \\ 20 \\ 20 \\ 20 \\ $	5.9 322.323 380.67 105.2 4.2 5.87 3.94 302.86 4.6 5.87 3.94 302.86 4.6 228.94 228.94 228.94 228.94 228.94 220.94 200.04 20	1.9 $l^2 = 91\%$ 87.58 94.97 105.2 0.9 1.01 174.1 1.63 74.12 90.1 1.01 174.1 1.63 74.12 90.1 1.01 1.01 1.74.1 1.63 92.56 1.03.47 2.126 6.03 6.7 2.126 6.0 8.6 6.7 2.126 6.0 8.6 6.7 2.126 6.0 8.6 7 2.126 6.0 8.6 7 2.126 6.0 8.6 7 2.126 6.0 8.6 7 2.126 6.0 8.6 7 2.126 6.0 8.6 7 2.126 6.0 8.6 7 2.126 6.0 8.6 7 2.126 6.0 8.6 7 2.126 6.0 7 2.126 6.0 8.6 7 2.126 6.0 8.6 7 1.12 1.28 1.12 1.28 1.12 1.28 1.12 1.28 1.12 1.28 1.12 1.28 1.12 1.28 1.12 1.28 1.12 1.28 1.28 1.28 1.12 1.28 1.	1163         249           31187         58           60         30           198         202           211         1348           100         51           3311         121           1331         121           1348         56           35         56           35         54           70         100           50         50           70         10           50         50           70         14           60         60           42         35           2000         50           50         50           50         50           70         120           50         50           50         50           70         120           50         50           50         50           70         120           50         50           50         50           50         50           50         50           50         50           50         50	1.5 2.9 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	0.86 [0.57, 1.16] 0.41 [-0.50, 1.33] -0.21 [-0.29, -0.13] -0.12 [-0.51, 0.27] 0.03 [-0.33, 0.38] 0.10 [-0.38, 0.59] 0.19 [-0.06, 0.43] 0.19 [-0.06, 0.43] 0.30 [0.15, 0.45] 0.30 [0.15, 0.45] 0.30 [0.15, 0.45] 0.33 [0.07, 0.58] 0.42 [0.23, 0.62] 0.44 [0.18, 0.74] 0.47 [0.20, 0.74] 0.47 [0.20, 0.74] 0.47 [0.20, 0.74] 0.47 [0.20, 0.74] 0.54 [0.16, 0.91] 0.57 [0.43, 1.02] 0.57 [0.43, 1.02] 0.77 [0.49, 1.01] 0.75 [0.43, 1.02] 0.88 [0.52, 1.17] 0.88 [0.52, 1.17] 0.88 [0.52, 1.17] 0.88 [0.52, 0.34] 1.44 [1.00, 1.84] 1.44 [1.00, 1.84] 1.44 [1.00, 1.84] 1.44 [1.00, 1.84] 1.44 [1.00, 1.84] 1.44 [1.00, 1.84] 1.44 [1.00, 1.84] 1.56 [1.32, 2.31] 2.07 [0.54, 0.86] 0.70 [0.54, 0.86]	
Afsar B2017 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.4. Test for overall effect: Z = 5.1.7 normal Zhang [2016 Rongrong Zhang2013 Rongrong Zhang2013 Mustafa Allay2017 Devika Tayal2009 Jiadan Wang2016 Sayari Saba2018 Libo Liang2013 Torkian P2020 Weniyaan Jiang2016 Menia Xu2015 Weniyaan Jiang2016 Yangya Chen2010 Junzheng Chen2010 Junzheng Chen2010 Chungrong Wang2014 Song Bo2010 Junzheng Chen2010 Chungrong Wang2014 Gao F2017 Qing Chen2010 Chung1ay Yang2014 Gao F2017 Qing Chen2010 Zhiling Hao2012 Chunging Yang2013 Yuhong Chen2015 Daijiajia Yin2015 Daijiajia Yin2015 Daijiajia Yin2015 Daijiajia Yin2015 Daijiajia Yin2015 Daijiajia Yin2015 Daijiajia Yin2015 Daijiajia Yin2015 Daijiajia Yin2015 Daijiajia Yin2015 Chung Chen2010 Yuhong Chen2013 Yuhong Chen2013 Yuhong Chen2014 Subtotal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.41 Test for overall effect: Z = Tatal (95% CI) Heterogeneity: Tau <sup>2</sup> = 0.41 Test for overall effect: Z =	7.4 7.4 7.4 304.086 360.72 440.7 4.3 333 4.24 333 4.24 359.5 377.2 380.1 284.58 359.5 377.2 284.58 359.5 357.83 369.5 377.9 42.27,94 40.27,94 40.27,94 40.27,94 40.27,94 40.27,94 40.27,94 40.27,94 40.27,94 40.27,94 40.27,94 40.27,94 40.07 367.84 367.83 367.83 367.83 376.85 377.94 40.27,94 40.07 367.84 367.84 367.84 367.84 367.84 367.84 377.94 367.94 377.94 367.94 377.94 367.94 377.94	1.2 1.2 1.66, df 91.337) 87.62 91.33 98.6 1 0.5 86 1.2 87.62 138.48 81.71 101.3 82.6 76.2 138.48 81.71 101.3 82.6 76.2 138.48 81.71 101.3 82.6 78.07 90.03 83.3 83.3 83.47 76.02 83.3 83.47 77.58 83.3 83.77 537.62 65 80.53 0.27 77.88 80.53 1.22 1.22	$\begin{array}{c} 66\\ 91\\ =1 \end{array} (P^{-1}) \\ 710\\ 45\\ 60\\ 35\\ 98\\ 202\\ 56\\ 35\\ 40\\ 35\\ 60\\ 35\\ 61\\ 88\\ 107\\ 100\\ 63\\ 35\\ 60\\ 35\\ 74\\ 47\\ 95\\ 74\\ 47\\ 95\\ 64\\ 45\\ 80\\ 31\\ 392\\ 200\\ 64\\ 45\\ 80\\ 31\\ 392\\ 200\\ 64\\ 45\\ 80\\ 31\\ 392\\ 200\\ 64\\ 45\\ 80\\ 31\\ 392\\ 21\\ 50\\ 64\\ 45\\ 80\\ 31\\ 392\\ 21\\ 50\\ 64\\ 45\\ 80\\ 31\\ 392\\ 20\\ 64\\ 45\\ 80\\ 31\\ 392\\ 20\\ 64\\ 45\\ 80\\ 31\\ 392\\ 20\\ 64\\ 45\\ 80\\ 31\\ 392\\ 20\\ 64\\ 45\\ 80\\ 31\\ 392\\ 20\\ 64\\ 45\\ 80\\ 67\\ 77\\ 45\\ 80\\ 61\\ 61\\ 67\\ 77\\ 77\\ 45\\ 80\\ 61\\ 61\\ 61\\ 61\\ 61\\ 61\\ 61\\ 61\\ 61\\ 61$	$\begin{array}{c} 5.9\\ 322.323\\ 380.67\\ 1052\\ 42\\ 5.87\\ 302.86\\ 4.6\\ 302.86\\ 4.6\\ 302.86\\ 4.6\\ 302.86\\ 4.6\\ 248.97\\ 289.4\\ 228.94\\ 229.94\\ 230.07\\ 241\\ 229.94\\ 230.07\\ 261\\ 220.2\\ 245.65\\ 209.04\\ 199.54\\ 220.2\\ 245.65\\ 220.2\\ 245.65\\ 220.2\\ 245.65\\ 220.2\\ 245.65\\ 220.2\\ 245.65\\ 220.2\\ 245.65\\ 220.2\\ 245.65\\ 222.5\\ 66\\ 225.66\\ 265\\ 225.66\\ 255\\ 225.66\\ 255\\ 225\\ 255\\ 225\\ 255\\ 255\\ 255\\ 2$	1.9 $l^2 = 91\%$ 87.58 94.97 105.2 0.9 1.01 105.2 0.9 1.01 174.1 1.6.3 79 1.01 1.6.3 1.15.73 74.12 90.1 1.6.3 1.13.28 95.51 1.13.28 95.51 1.13.28 95.52 1.13.28 95.52 1.13.28 95.52 1.13.28 95.52 1.13.28 1.13.28 95.52 1.13.28 1.13.28 95.52 1.13.28 1.13.28 95.52 1.13.28 1.14.44 1.14.45 1.14.22 1.14.62 1.14.21 1.12.20	163         249           3187         58           60         30           198         202           3111         1348           121         1311           1348         55           54         311           100         418           85         56           54         79           70         100           50         78           40         60           60         60           60         50           25682         2000           120         50           50         225682           207%         32639           396%         120	1.5 2.9 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	0.86 [0.57, 1.16] 0.41 [-0.50, 1.33] -0.21 [-0.29, -0.13] -0.12 [-0.51, 0.27] 0.03 [-0.33, 0.38] 0.10 [-0.38, 0.59] 0.19 [-0.00, 0.39] 0.27 [-0.11, 0.65] 0.30 [0.15, 0.64] 0.30 [0.15, 0.64] 0.30 [0.15, 0.64] 0.42 [0.23, 0.62] 0.44 [0.06, 0.12] 0.57 [0.24, 0.074] 0.47 [0.20, 0.74] 0.47 [0.20, 0.74] 0.47 [0.20, 0.74] 0.49 [0.18, 0.79] 0.54 [0.06, 1.02] 0.57 [0.24, 0.91] 0.75 [0.43, 1.02] 0.75 [0.43, 1.02] 1.42 [1.00, 1.84] 1.42 [1.00, 1.84] 1.42 [1.00, 1.84] 1.54 [1.05, 2.03] 1.67 [1.12, 2.21] 2.21 [1.16, 6.246] 0.89 [0.64, 1.13] 0.70 [0.54, 0.86]	





FIGURE 3: (a) Forest plot of subclinical hypothyroidism and uric acid. (b) Subgroup analysis of subclinical hypothyroidism, grouped by area. (c) Subgroup analysis of subclinical hypothyroidism, grouped by age. (d) Subgroup analysis of subclinical hypothyroidism, grouped by basic diseases. (e) Funnel plot of subclinical hypothyroidism.



(b) FIGURE 4: Continued.

Studie on Subanoun		SH		Control			Weight	Std. Mean Difference	S	Std. Mean Differ	ence	
study of Subgroup	Mean	SD	Total	Mean	SD	Total	(%)	IV, Random, 95% CI	I	V, Random, 95%	6 CI	
20.1.1 Age <45 years old												
Abdel-Gayoum A A2014	213.54	17.29	24	209.04	20.37	14	13.1	0.24 [-0.42, 0.90]			_	
Qing Chen2010	264.67	92.98	119	230.07	99.26	79	14.5	0.36 [0.07, 0.65]				
Rong Huang2013	267.13	71.54	172	340.26	56.12	18167	14.8	-1.30 [-1.45, -1.15]				
Wen Cao2014	315.51	74.59	50	292.07	62.32	110	14.4	0.35 [0.01, 0.69]			-	
Subtotal (95% CI)			365			18370	56.8	-0.10 [-1.17, 0.97]	-			
Heterogeneity: $Tau^2 = 1.13$	5; Chi <sup>2</sup> = 1	158.30,	df = 3	(P < 0.00)	$001); I^2$	= 98%						
Test for overall effect: $Z =$	0.18 (P =	0.86)										
20.1.2 45 <age <60="" o<="" td="" years=""><td>ld</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></age>	ld											
Afsar B2017	6.8	1.3	27	5.9	1.9	163	14.2	0.49 [0.08, 0.90]			_	
Wenjuan jiang2016	304.2	73.7	100	333.2	90.1	100	14.6	-0.35 [-0.63, -0.07]				
Subtotal (95% CI)			127			263	28.7	0.06 [-0.77, 0.88]				
Heterogeneity: $Tau^2 = 0.32$	2; Chi <sup>2</sup> = 1	11.03, d	f = 1 (l)	P < 0.000	9); $I^2 =$	91%						
Test for overall effect: $Z =$	0.13 (P =	0.89)										
20.1.3 Age >60 years old												
Subtotal (95% CI)			49			200	14.5	0.29 [-0.02, 0.60]				
Heterogeneity: Not applic	able											
Test for overall effect: $Z =$	1.81 (P =	0.07)										
Total (95% CI)	2		541			18833	100.0	0.00 [-0.67, 0.67]				
Heterogeneity: $Tau^2 = 0.79$	9; Chi <sup>2</sup> = 1	219.80,	df = 6	(P < 0.00)	001); <i>I</i> ~	= 97%			2	1 0	1	
Test for overall effect: $Z =$	0.00 (P =	1.00)			2				-2 -	-1 0	1	2
Test for subgroup differen	SH		control									





FIGURE 4: (a) Forest plot of subclinical hyperthyroidism and uric acid. (b) Subgroup analysis of subclinical hyperthyroidism, grouped by area. (c) Subgroup analysis of subclinical hyperthyroidism, grouped by age. (d) Subgroup analysis of subclinical hyperthyroidism, grouped by basic diseases. (e) Funnel plot of subclinical hyperthyroidism.



FIGURE 5: Relationship between SCH and serum UA levels before and after treatment. (a) Forest plot. (b) Funnel plot.

patients with SCH were significantly higher than that of patients with SCHyper and were higher than that of normal thyroid function subjects, with the difference being statistically significant.

Thyroid diseases include both hypo and hyperthyroidism with types of overt and subclinical [30].The relationship between overt thyroid dysfunction (hyperthyroidism and hypothyroidism) and UA has received considerable attention. Giordano et al. reported the prevalence of hyperuricemia was significantly higher among patients with hyperthyroidism and hypothyroidism compared with the general population [31]. Ford HC et al. also indicated that hyperthyroidism can cause hyperuricemia by increasing UA production or decreasing renal excretion [32]. The association between hypothyroidism and hyperuricemia was first proposed by Kuzell et al. in 1955 [33]; subsequent studies confirmed this association. A previous study showed that hyperthyroidism resulted in elevated levels of UA, but the increase was less than in hypothyroidism [31], which were similar to our results.

UA is the end product of the endogenous and dietary purine metabolism, which may be influenced by the thyroid hormones. It was reported that increased levels of UA were associated with reduced glomerular filtration rate (GFR) and flow plasma hypothyroidism renal in patients [25, 26, 34-38]. Furthermore, SCH could reduce cardiac contractility, and the GFR can decrease by 20-30% to below normal levels, thereby, changing reabsorption and secretion in the tubular, which simultaneously increases the level of uric acid, which results in a decrease in UA excretion [28]. The study by Desideri G et al. suggested that serum UA levels

were significantly lower after replacement therapy with LT-4 in patients with iatrogenic SCH who had undergone thyroidectomy. Furthermore, it seemed that changes of UA levels are directly associated with changes of HOMA-IR. These observations further suggested that the effect of the UA metabolism in patients with recent-onset SCH was mediated by insulin sensitivity [27]. Several reports suggested that hyperuricemia could occur among hyperthyroidism participants. This could be due to the acceleration of the purine nucleotide metabolism during UA production [31, 39, 40].

In conclusion, this study provided a systemic analysis of the association between subclinical thyroid dysfunctions. Moreover, as most of the included studies are from China, our results may be more applicable to Chinese subjects. A limitation of the study is the retrospective data collection. One of the limitations of our study is the lack of a brief description of the purine content of foods with known effects on thyroid function. Inclusion and exclusion criteria for included studies are given in Table S2 in Supplementary Materials. Therefore, prospective longitudinal studies are needed to further confirm these results.

## 5. Conclusion

Subclinical thyroid dysfunction was associated with the higher prevalence of hyperuricemia. The levels of serum UA had significantly increased in SCH compared to SCHyper patients or normal controls. The level of UA decreased after treatment in patients with SCH.

## **Data Availability**

The data used to support this study are included within this article.

## **Conflicts of Interest**

The authors declare that they have no conflicts of interest.

## **Authors' Contributions**

YX retrieved literature, extracted data, developed quality evaluation standard, and wrote articles. YL and LJ retrieved literature and extracted data. MH selected topic and guided writing of the article.

## **Supplementary Materials**

Table S1. Basic characteristics of included studies. Table S2. Inclusion and exclusion criteria and TSH level in patients with SCH/SCHyper of included studies. (*Supplementary Materials*)

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