

Supplementary Table 1 Meta-analyses of observational studies in epidemiology checklist

Reporting Criteria	Reported (Yes/No)	Reported on Page No.
Reporting of Background		
Problem definition	Yes	4
Hypothesis statement	No	
Description of Study Outcome(s)	Yes	9-13
Type of exposure or intervention used	Yes	6-7
Type of study design used	Yes	6-7
Study population	Yes	6-7
Reporting of Search Strategy		
Qualifications of searchers (eg, librarians and investigators)	No	
Search strategy, including time period included in the synthesis and keywords	Yes	6
Effort to include all available studies, including contact with authors	No	
Databases and registries searched	Yes	6
Search software used, name and version, including special features used (eg, explosion)	Yes	6-7
Use of hand searching (eg, reference lists of obtained articles)	No	
List of citations located and those excluded, including justification	Yes	6-7
Method for addressing articles published in languages other than English	Yes	6-7
Method of handling abstracts and unpublished studies	Yes	6-7
Description of any contact with authors	No	
Reporting of Methods		
Description of relevance or appropriateness of studies assembled for assessing the hypothesis to be tested	No	
Rationale for the selection and coding of data (eg, sound clinical principles or convenience)	No	
Documentation of how data were classified and coded (eg, multiple raters, blinding, and interrater reliability)	Yes	6-7
Assessment of confounding (eg, comparability of cases and controls in studies where appropriate)	No	

Reporting Criteria	Reported (Yes/No)	Reported on Page No.
Assessment of study quality, including blinding of quality assessors; stratification or regression on possible predictors of study results	No	
Assessment of heterogeneity	Yes	9-13
Description of statistical methods (eg, complete description of fixed or random effects models, justification of whether the chosen models account for predictors of study results, dose-response models, or cumulative meta-analysis) in sufficient detail to be replicated	Yes	8
Provision of appropriate tables and graphics	Yes	9-13
Reporting of Results		
Table giving descriptive information for each study included	Yes	Table 1
Results of sensitivity testing (eg, subgroup analysis)	Yes	13
Indication of statistical uncertainty of findings	No	
Reporting of Discussion		
Quantitative assessment of bias (eg, publication bias)	Yes	9
Justification for exclusion (eg, exclusion of non-English-language citations)	Yes	7
Assessment of quality of included studies	Yes	9
Reporting of Conclusions		
Consideration of alternative explanations for observed results	Yes	13-17
Generalization of the conclusions (ie, appropriate for the data presented and within the domain of the literature review)	Yes	13-17
Guidelines for future research	Yes	13-17
Disclosure of funding source	Yes	17

Once you have completed this checklist, please save a copy and upload it as part of your submission. DO NOT include this checklist as part of the main manuscript document. It must be uploaded as a separate file. A reporting checklist for authors, editors, and reviewers of meta-analyses of Observational Studies. You must report the page number in your manuscript where you consider each of the items listed in this checklist. If you have not included this information, either revise your manuscript accordingly before submitting or note N/A.

Supplementary Table 2 Search strategies in Pubmed

#	searches
1	"Atrial Fibrillation"[Mesh]
2	((((((((((((((((((((((Atrial Fibrillations[Title/Abstract]) OR (Fibrillation, Atrial[Title/Abstract])) OR (Fibrillations, Atrial[Title/Abstract])) OR (Auricular Fibrillation[Title/Abstract])) OR (Auricular Fibrillations[Title/Abstract])) OR (Fibrillation, Auricular[Title/Abstract])) OR (Fibrillations, Auricular[Title/Abstract])) OR (Persistent Atrial Fibrillation[Title/Abstract])) OR (Atrial Fibrillation, Persistent[Title/Abstract])) OR (Atrial Fibrillations, Persistent[Title/Abstract])) OR (Fibrillation, Persistent Atrial[Title/Abstract])) OR (Fibrillations, Persistent Atrial[Title/Abstract])) OR (Persistent Atrial Fibrillations[Title/Abstract])) OR (Familial Atrial Fibrillation[Title/Abstract])) OR (Atrial Fibrillation, Familial[Title/Abstract])) OR (Atrial Fibrillations, Familial[Title/Abstract])) OR (Familial Atrial Fibrillations[Title/Abstract])) OR (Fibrillation, Familial Atrial[Title/Abstract])) OR (Fibrillations, Familial Atrial[Title/Abstract])) OR (Paroxysmal Atrial Fibrillation[Title/Abstract])) OR (Atrial Fibrillation, Paroxysmal[Title/Abstract])) OR (Atrial Fibrillations, Paroxysmal[Title/Abstract])) OR (Fibrillation, Paroxysmal Atrial[Title/Abstract])) OR (Fibrillations, Paroxysmal Atrial[Title/Abstract])) OR (Paroxysmal Atrial Fibrillations[Title/Abstract])
3	#1 OR #2
4	"Mental Health"[Mesh]
5	((((Mental health[Title/Abstract]) OR (Health, Mental[Title/Abstract])) OR (Mental Hygiene[Title/Abstract])) OR (Hygiene, Mental[Title/Abstract])
6	#4 OR #5
7	"Depression"[Mesh]
8	(((((Depressive Symptoms[Title/Abstract]) OR (Depressive Symptom[Title/Abstract])) OR (Symptom, Depressive[Title/Abstract])) OR (Symptoms, Depressive[Title/Abstract])) OR (Emotional Depression[Title/Abstract])) OR (Depression, Emotional[Title/Abstract])
9	#7 OR #8
10	"Depressive Disorder"[Mesh]
11	((((((((((((((((((((((Depressive Disorders[Title/Abstract]) OR (Disorder, Depressive[Title/Abstract])) OR (Disorders, Depressive[Title/Abstract])) OR (Neurosis, Depressive[Title/Abstract])) OR (Depressive Neuroses[Title/Abstract])) OR (Depressive Neurosis[Title/Abstract])) OR (Neuroses, Depressive[Title/Abstract])) OR (Depression, Endogenous[Title/Abstract])) OR (Depressions, Endogenous[Title/Abstract])) OR (Endogenous Depression[Title/Abstract])) OR (Endogenous Depressions[Title/Abstract])) OR (Depressive Syndrome[Title/Abstract])) OR (Depressive Syndromes[Title/Abstract])) OR (Syndrome, Depressive[Title/Abstract])) OR (Syndromes, Depressive[Title/Abstract])) OR (Depression, Neurotic[Title/Abstract])) OR (Depressions, Neurotic[Title/Abstract])) OR (Neurotic Depression[Title/Abstract])) OR (Neurotic Depressions[Title/Abstract])) OR (Melancholia[Title/Abstract])) OR (Melancholias[Title/Abstract])) OR (Unipolar Depression[Title/Abstract])) OR (Depression, Unipolar[Title/Abstract])) OR (Depressions, Unipolar[Title/Abstract])) OR (Unipolar Depressions[Title/Abstract])
12	#10 OR #11
13	"Anxiety"[Mesh]
14	(((((Angst[Title/Abstract]) OR (Social Anxiety[Title/Abstract])) OR (Anxieties, Social[Title/Abstract])) OR (Anxiety, Social[Title/Abstract])) OR (Social Anxieties[Title/Abstract])) OR (Hypervigilance[Title/Abstract])) OR (Nervousness[Title/Abstract])) OR (Anxiousness[Title/Abstract])
15	#13 OR #14
16	"Anxiety Disorders"[Mesh]
17	((((((((((Anxiety Disorder[Title/Abstract]) OR (Disorder, Anxiety[Title/Abstract])) OR (Disorders, Anxiety[Title/Abstract])) OR (Neuroses, Anxiety[Title/Abstract])) OR (Anxiety Neuroses[Title/Abstract])) OR (Anxiety States,

Neurotic[Title/Abstract])) OR (Anxiety State, Neurotic[Title/Abstract])) OR
(Neurotic Anxiety State[Title/Abstract])) OR (Neurotic Anxiety
States[Title/Abstract])) OR (State, Neurotic Anxiety[Title/Abstract])) OR (States,
Neurotic Anxiety[Title/Abstract])
18 #16 OR #17
19 "Affective Symptoms"[Mesh]
20 (((((((Affective Symptom[Title/Abstract]) OR (Symptom,
Affective[Title/Abstract])) OR (Symptoms, Affective[Title/Abstract])) OR
(Alexithymia[Title/Abstract])) OR (Alexithymias[Title/Abstract])) OR (Emotional
Disturbances[Title/Abstract])) OR (Disturbance, Emotional[Title/Abstract])) OR
(Disturbances, Emotional[Title/Abstract])) OR (Emotional
Disturbance[Title/Abstract])
21 #19 OR #20
22 "Mood Disorders"[Mesh]
23 (((((((Disorder, Mood[Title/Abstract]) OR (Disorders, Mood[Title/Abstract])) OR
(Mood Disorder[Title/Abstract])) OR (Affective Disorders[Title/Abstract])) OR
(Affective Disorder[Title/Abstract])) OR (Disorder, Affective[Title/Abstract])) OR
(Disorders, Affective[Title/Abstract])
24 #22 OR #23
25 "Psychological Distress"[Mesh]
26 (((Distress, Psychological[Title/Abstract]) OR (Emotional
Distress[Title/Abstract])) OR (Distress, Emotional[Title/Abstract])) OR
(Emotional Stress[Title/Abstract])) OR (Stress, Emotional[Title/Abstract])
27 #25 OR #26
28 (((anxi*[Title/Abstract]) OR (internali*[Title/Abstract])) OR (psychological
symptoms[Title/Abstract])) OR (suicide ideation[Title/Abstract])) OR
((suicides[Title/Abstract]) OR ("Suicide"[Mesh]))
29 #6 OR #9 OR #12 OR #15 OR #18 OR #21 OR #24 OR #27 OR #28
((((((((((((((((((((Mental health[Title/Abstract]) OR (Health,
Mental[Title/Abstract])) OR (Mental Hygiene[Title/Abstract])) OR (Hygiene,
Mental[Title/Abstract])) OR ("Mental Health"[Mesh])) OR ("Depression"[Mesh]))
OR (((((((Depressive Symptoms[Title/Abstract]) OR (Depressive
Symptom[Title/Abstract])) OR (Symptom, Depressive[Title/Abstract])) OR
(Symptoms, Depressive[Title/Abstract])) OR (Emotional
Depression[Title/Abstract])) OR (Depression, Emotional[Title/Abstract])))) OR
("Depressive Disorder"[Mesh])) OR (((((((((((((((((((Depressive
Disorders[Title/Abstract]) OR (Disorder, Depressive[Title/Abstract])) OR
(Disorders, Depressive[Title/Abstract])) OR (Neurosis,
Depressive[Title/Abstract])) OR (Depressive Neuroses[Title/Abstract])) OR
(Depressive Neurosis[Title/Abstract])) OR (Neuroses, Depressive[Title/Abstract]))
OR (Depression, Endogenous[Title/Abstract])) OR (Depressions,
Endogenous[Title/Abstract])) OR (Endogenous Depression[Title/Abstract])) OR
(Endogenous Depressions[Title/Abstract])) OR (Depressive
Syndrome[Title/Abstract])) OR (Depressive Syndromes[Title/Abstract])) OR
(Syndrome, Depressive[Title/Abstract])) OR (Syndromes,
Depressive[Title/Abstract])) OR (Depression, Neurotic[Title/Abstract])) OR
(Depressions, Neurotic[Title/Abstract])) OR (Neurotic
Depression[Title/Abstract])) OR (Neurotic Depressions[Title/Abstract])) OR
(Melancholia[Title/Abstract])) OR (Melancholias[Title/Abstract])) OR (Unipolar
Depression[Title/Abstract])) OR (Depression, Unipolar[Title/Abstract])) OR
(Depressions, Unipolar[Title/Abstract])) OR (Unipolar
Depressions[Title/Abstract])) OR ("Anxiety"[Mesh])) OR
((((((((Angst[Title/Abstract]) OR (Social Anxiety[Title/Abstract])) OR (Anxieties,
Social[Title/Abstract])) OR (Anxiety, Social[Title/Abstract])) OR (Social
Anxieties[Title/Abstract])) OR (Hypervigilance[Title/Abstract])) OR
(Nervousness[Title/Abstract])) OR (Anxiousness[Title/Abstract])) OR ("Anxiety
Disorders"[Mesh])) OR (((((((((((Anxiety Disorder[Title/Abstract]) OR (Disorder,
Anxiety[Title/Abstract])) OR (Disorders, Anxiety[Title/Abstract])) OR (Neuroses,

Anxiety[Title/Abstract])) OR (Anxiety Neuroses[Title/Abstract])) OR (Anxiety States, Neurotic[Title/Abstract])) OR (Anxiety State, Neurotic[Title/Abstract])) OR (Neurotic Anxiety State[Title/Abstract])) OR (Neurotic Anxiety States[Title/Abstract])) OR (State, Neurotic Anxiety[Title/Abstract])) OR (States, Neurotic Anxiety[Title/Abstract])) OR ("Affective Symptoms"[Mesh])) OR (((((((((Affective Symptom[Title/Abstract]) OR (Symptom, Affective[Title/Abstract])) OR (Symptoms, Affective[Title/Abstract])) OR (Alexithymia[Title/Abstract])) OR (Alexithymias[Title/Abstract])) OR (Emotional Disturbances[Title/Abstract])) OR (Disturbance, Emotional[Title/Abstract])) OR (Disturbances, Emotional[Title/Abstract])) OR (Emotional Disturbance[Title/Abstract])) OR ("Mood Disorders"[Mesh])) OR (((((((Disorder, Mood[Title/Abstract]) OR (Disorders, Mood[Title/Abstract])) OR (Mood Disorder[Title/Abstract])) OR (Affective Disorders[Title/Abstract])) OR (Affective Disorder[Title/Abstract])) OR (Disorder, Affective[Title/Abstract])) OR (Disorders, Affective[Title/Abstract])) OR ("Psychological Distress"[Mesh])) OR (((Distress, Psychological[Title/Abstract]) OR (Emotional Distress[Title/Abstract])) OR (Distress, Emotional[Title/Abstract])) OR (Emotional Stress[Title/Abstract])) OR (Stress, Emotional[Title/Abstract])) OR (((anxi*[Title/Abstract]) OR (internali*[Title/Abstract])) OR (psychological symptoms[Title/Abstract])) OR (suicide ideation[Title/Abstract])) OR ((suicides[Title/Abstract]) OR ("Suicide"[Mesh]))) AND (((((((((((((((((((((((Atrial Fibrillations[Title/Abstract]) OR (Fibrillation, Atrial[Title/Abstract])) OR (Fibrillations, Atrial[Title/Abstract])) OR (Auricular Fibrillation[Title/Abstract])) OR (Auricular Fibrillations[Title/Abstract])) OR (Fibrillation, Auricular[Title/Abstract])) OR (Fibrillations, Auricular[Title/Abstract])) OR (Persistent Atrial Fibrillation[Title/Abstract])) OR (Atrial Fibrillation, Persistent[Title/Abstract])) OR (Atrial Fibrillations, Persistent[Title/Abstract])) OR (Fibrillation, Persistent Atrial[Title/Abstract])) OR (Fibrillations, Persistent Atrial[Title/Abstract])) OR (Persistent Atrial Fibrillations[Title/Abstract])) OR (Familial Atrial Fibrillation[Title/Abstract])) OR (Atrial Fibrillation, Familial[Title/Abstract])) OR (Atrial Fibrillations, Familial[Title/Abstract])) OR (Familial Atrial Fibrillations[Title/Abstract])) OR (Fibrillation, Familial Atrial[Title/Abstract])) OR (Fibrillations, Familial Atrial[Title/Abstract])) OR (Paroxysmal Atrial Fibrillation[Title/Abstract])) OR (Atrial Fibrillation, Paroxysmal[Title/Abstract])) OR (Atrial Fibrillations, Paroxysmal[Title/Abstract])) OR (Fibrillation, Paroxysmal Atrial[Title/Abstract])) OR (Fibrillations, Paroxysmal Atrial[Title/Abstract])) OR (Paroxysmal Atrial Fibrillations[Title/Abstract])) OR ("Atrial Fibrillation"[Mesh]))

30 #3 AND #29

((((((((((((((((((((((((Mental health[Title/Abstract]) OR (Health, Mental[Title/Abstract])) OR (Mental Hygiene[Title/Abstract])) OR (Hygiene, Mental[Title/Abstract])) OR ("Mental Health"[Mesh])) OR ("Depression"[Mesh])) OR ((((((Depressive Symptoms[Title/Abstract]) OR (Depressive Symptom[Title/Abstract])) OR (Symptom, Depressive[Title/Abstract])) OR (Symptoms, Depressive[Title/Abstract])) OR (Emotional Depression[Title/Abstract])) OR (Depression, Emotional[Title/Abstract])) OR ("Depressive Disorder"[Mesh])) OR (((((((((((((((((((Depressive Disorders[Title/Abstract]) OR (Disorder, Depressive[Title/Abstract])) OR (Disorders, Depressive[Title/Abstract])) OR (Neurosis, Depressive[Title/Abstract])) OR (Depressive Neuroses[Title/Abstract])) OR (Depressive Neurosis[Title/Abstract])) OR (Neuroses, Depressive[Title/Abstract])) OR (Depression, Endogenous[Title/Abstract])) OR (Depressions, Endogenous[Title/Abstract])) OR (Endogenous Depression[Title/Abstract])) OR (Endogenous Depressions[Title/Abstract])) OR (Depressive Syndrome[Title/Abstract])) OR (Depressive Syndromes[Title/Abstract])) OR (Syndrome, Depressive[Title/Abstract])) OR (Syndromes, Depressive[Title/Abstract])) OR (Depression, Neurotic[Title/Abstract])) OR (Depressions, Neurotic[Title/Abstract])) OR (Neurotic

Depression[Title/Abstract])) OR (Neurotic Depressions[Title/Abstract])) OR
(Melancholia[Title/Abstract])) OR (Melancholias[Title/Abstract])) OR (Unipolar
Depression[Title/Abstract])) OR (Depression, Unipolar[Title/Abstract])) OR
(Depressions, Unipolar[Title/Abstract])) OR (Unipolar
Depressions[Title/Abstract])) OR ("Anxiety"[Mesh])) OR
(((((((Angst[Title/Abstract]) OR (Social Anxiety[Title/Abstract])) OR (Anxieties,
Social[Title/Abstract])) OR (Anxiety, Social[Title/Abstract])) OR (Social
Anxieties[Title/Abstract])) OR (Hypervigilance[Title/Abstract])) OR
(Nervousness[Title/Abstract])) OR (Anxiousness[Title/Abstract])) OR ("Anxiety
Disorders"[Mesh])) OR (((((((((Anxiety Disorder[Title/Abstract]) OR (Disorder,
Anxiety[Title/Abstract])) OR (Disorders, Anxiety[Title/Abstract])) OR (Neuroses,
Anxiety[Title/Abstract])) OR (Anxiety Neuroses[Title/Abstract])) OR (Anxiety
States, Neurotic[Title/Abstract])) OR (Anxiety State, Neurotic[Title/Abstract]))
OR (Neurotic Anxiety State[Title/Abstract])) OR (Neurotic Anxiety
States[Title/Abstract])) OR (State, Neurotic Anxiety[Title/Abstract])) OR (States,
Neurotic Anxiety[Title/Abstract])) OR ("Affective Symptoms"[Mesh])) OR
((((((((Affective Symptom[Title/Abstract]) OR (Symptom,
Affective[Title/Abstract])) OR (Symptoms, Affective[Title/Abstract])) OR
(Alexithymia[Title/Abstract])) OR (Alexithymias[Title/Abstract])) OR (Emotional
Disturbances[Title/Abstract])) OR (Disturbance, Emotional[Title/Abstract])) OR
(Disturbances, Emotional[Title/Abstract])) OR (Emotional
Disturbance[Title/Abstract])) OR ("Mood Disorders"[Mesh])) OR (((((((Disorder,
Mood[Title/Abstract]) OR (Disorders, Mood[Title/Abstract])) OR (Mood
Disorder[Title/Abstract])) OR (Affective Disorders[Title/Abstract])) OR
(Affective Disorder[Title/Abstract])) OR (Disorder, Affective[Title/Abstract])) OR
(Disorders, Affective[Title/Abstract])) OR ("Psychological Distress"[Mesh])) OR
((((Distress, Psychological[Title/Abstract]) OR (Emotional
Distress[Title/Abstract])) OR (Distress, Emotional[Title/Abstract])) OR
(Emotional Stress[Title/Abstract])) OR (Stress, Emotional[Title/Abstract])) OR
((((anxi*[Title/Abstract]) OR (internali*[Title/Abstract])) OR (psychological
symptoms[Title/Abstract])) OR (suicide ideation[Title/Abstract])) OR
((suicides[Title/Abstract]) OR ("Suicide"[Mesh])))) AND
((((((((((((((((((((((((Atrial Fibrillations[Title/Abstract]) OR (Fibrillation,
Atrial[Title/Abstract])) OR (Fibrillations, Atrial[Title/Abstract])) OR (Auricular
Fibrillation[Title/Abstract])) OR (Auricular Fibrillations[Title/Abstract])) OR
(Fibrillation, Auricular[Title/Abstract])) OR (Fibrillations,
Auricular[Title/Abstract])) OR (Persistent Atrial Fibrillation[Title/Abstract])) OR
(Atrial Fibrillation, Persistent[Title/Abstract])) OR (Atrial Fibrillations,
Persistent[Title/Abstract])) OR (Fibrillation, Persistent Atrial[Title/Abstract])) OR
(Fibrillations, Persistent Atrial[Title/Abstract])) OR (Persistent Atrial
Fibrillations[Title/Abstract])) OR (Familial Atrial Fibrillation[Title/Abstract])) OR
(Atrial Fibrillation, Familial[Title/Abstract])) OR (Atrial Fibrillations,
Familial[Title/Abstract])) OR (Familial Atrial Fibrillations[Title/Abstract])) OR
(Fibrillation, Familial Atrial[Title/Abstract])) OR (Fibrillations, Familial
Atrial[Title/Abstract])) OR (Paroxysmal Atrial Fibrillation[Title/Abstract])) OR
(Atrial Fibrillation, Paroxysmal[Title/Abstract])) OR (Atrial Fibrillations,
Paroxysmal[Title/Abstract])) OR (Fibrillation, Paroxysmal Atrial[Title/Abstract]))
OR (Fibrillations, Paroxysmal Atrial[Title/Abstract])) OR (Paroxysmal Atrial
Fibrillations[Title/Abstract])) OR ("Atrial Fibrillation"[Mesh]))

31 "Incidence"[Mesh]

32 (((((((((((((((((((((((incidence[Title/Abstract]) OR (Incidences[Title/Abstract])) OR
(Scndary Attack Rate[Title/Abstract])) OR (Attack Rate, Scndary[Title/Abstract]))
OR (Rate, Scndary Attack[Title/Abstract])) OR (Scndary Attack
Rates[Title/Abstract])) OR (Incidence Proportion[Title/Abstract])) OR (Incidence
Proportions[Title/Abstract])) OR (Proportion, Incidence[Title/Abstract])) OR (Attack
Rate[Title/Abstract])) OR (Attack Rates[Title/Abstract])) OR (Rate,
Attack[Title/Abstract])) OR (Cumulative Incidence[Title/Abstract])) OR (Cumulative
Incidences[Title/Abstract])) OR (Incidence, Cumulative[Title/Abstract])) OR
(Incidence Rate[Title/Abstract])) OR (Incidence Rates[Title/Abstract])) OR (Rate,

(Emotional Stress[Title/Abstract])) OR (Stress, Emotional[Title/Abstract])) OR
((((anxi*[Title/Abstract]) OR (internali*[Title/Abstract])) OR (psychological
symptoms[Title/Abstract])) OR (suicide ideation[Title/Abstract])) OR
((suicides[Title/Abstract]) OR ("Suicide"[Mesh])) AND (((((((((((((((((((Atrial
Fibrillations[Title/Abstract]) OR (Fibrillation, Atrial[Title/Abstract])) OR
(Fibrillations, Atrial[Title/Abstract])) OR (Auricular Fibrillation[Title/Abstract])) OR
(Auricular Fibrillations[Title/Abstract])) OR (Fibrillation, Auricular[Title/Abstract]))
OR (Fibrillations, Auricular[Title/Abstract])) OR (Persistent Atrial
Fibrillation[Title/Abstract])) OR (Atrial Fibrillation, Persistent[Title/Abstract])) OR
(Atrial Fibrillations, Persistent[Title/Abstract])) OR (Fibrillation, Persistent
Atrial[Title/Abstract])) OR (Fibrillations, Persistent Atrial[Title/Abstract])) OR
(Persistent Atrial Fibrillations[Title/Abstract])) OR (Familial Atrial
Fibrillation[Title/Abstract])) OR (Atrial Fibrillation, Familial[Title/Abstract])) OR
(Atrial Fibrillations, Familial[Title/Abstract])) OR (Familial Atrial
Fibrillations[Title/Abstract])) OR (Fibrillation, Familial Atrial[Title/Abstract])) OR
(Fibrillations, Familial Atrial[Title/Abstract])) OR (Paroxysmal Atrial
Fibrillation[Title/Abstract])) OR (Atrial Fibrillation, Paroxysmal[Title/Abstract])) OR
(Atrial Fibrillations, Paroxysmal[Title/Abstract])) OR (Fibrillation, Paroxysmal
Atrial[Title/Abstract])) OR (Fibrillations, Paroxysmal Atrial[Title/Abstract])) OR
(Paroxysmal Atrial Fibrillations[Title/Abstract])) OR ("Atrial Fibrillation"[Mesh]))
AND (((("Incidence"[Mesh]) OR (((((((((((((((((((Incidence[Title/Abstract]) OR
(Incidences[Title/Abstract])) OR (Secondary Attack Rate[Title/Abstract])) OR (Attack
Rate, Secondary[Title/Abstract])) OR (Rate, Secondary Attack[Title/Abstract])) OR
(Secondary Attack Rates[Title/Abstract])) OR (Incidence Proportion[Title/Abstract]))
OR (Incidence Proportions[Title/Abstract])) OR (Proportion,
Incidence[Title/Abstract])) OR (Attack Rate[Title/Abstract])) OR (Attack
Rates[Title/Abstract])) OR (Rate, Attack[Title/Abstract])) OR (Cumulative
Incidence[Title/Abstract])) OR (Cumulative Incidences[Title/Abstract])) OR
(Incidence, Cumulative[Title/Abstract])) OR (Incidence Rate[Title/Abstract])) OR
(Incidence Rates[Title/Abstract])) OR (Rate, Incidence[Title/Abstract])) OR (Person-
time Rate[Title/Abstract])) OR (Person time Rate[Title/Abstract])) OR (Person-time
Rates[Title/Abstract])) OR (Rate, Person-time[Title/Abstract])))) OR
(("Epidemiology"[Mesh]) OR (((((Social Epidemiology[Title/Abstract]) OR
(Epidemiologies, Social[Title/Abstract])) OR (Epidemiology, Social[Title/Abstract]))
OR (Social Epidemiologies[Title/Abstract])) OR (Epidemiology[Title/Abstract]))))
OR (("Prevalence"[Mesh]) OR (((((((Prevalence[Title/Abstract]) OR
(Prevalences[Title/Abstract])) OR (Period Prevalence[Title/Abstract])) OR (Period
Prevalences[Title/Abstract])) OR (Prevalence, Period[Title/Abstract])) OR (Point
Prevalence[Title/Abstract])) OR (Point Prevalences[Title/Abstract])) OR (Prevalence,
Point[Title/Abstract]))))

Supplementary Table 3 Search strategies in Embase

#	searches
1	'psoriasis'/exp
2	'psoriasis':ti,ab OR 'Pustulosis of Palms and Soles':ti,ab OR 'Pustulosis Palmaris et Plantaris':ti,ab OR 'Palmoplantaris Pustulosis':ti,ab OR 'Pustular Psoriasis of Palms and Soles':ti,ab OR 'Erythrodermic psoriasis':ti,ab
3	#1 OR #2
4	'mental health'/exp
5	'mental health':ti,ab OR 'Health, Mental':ti,ab OR 'Mental Hygiene':ti,ab OR 'Hygiene, Mental':ti,ab
6	#4 OR #5
7	'depression'/exp
8	'depressive symptoms':ti,ab OR 'depressive symptom':ti,ab OR 'symptom, depressive':ti,ab OR 'symptoms, depressive':ti,ab OR 'emotional depression':ti,ab OR 'depression, emotional':ti,ab OR ' Depressive Disorders':ti,ab OR ' depressive disorder ':ti,ab OR ' Disorder, Depressive':ti,ab OR ' Disorders, Depressive':ti,ab OR 'Neurosis, Depressive':ti,ab OR ' Depressive Neuroses':ti,ab OR ' Depressive Neurosis':ti,ab OR 'Neuroses, Depressive':ti,ab OR 'Depression, Endogenous':ti,ab OR 'Depressions, Endogenous':ti,ab OR 'Endogenous Depression':ti,ab OR 'Endogenous Depressions':ti,ab OR 'Depressive Syndrome':ti,ab OR 'Depressive Syndromes':ti,ab OR 'Syndrome, Depressive':ti,ab OR 'Syndromes, Depressive':ti,ab OR 'Depression, Neurotic':ti,ab OR 'Depressions, Neurotic':ti,ab OR 'Neurotic Depression':ti,ab OR 'Neurotic Depressions':ti,ab OR 'Melancholia':ti,ab OR 'Melancholias':ti,ab OR 'Unipolar Depression':ti,ab OR 'Depression, Unipolar':ti,ab OR 'Depressions, Unipolar':ti,ab OR 'Unipolar Depressions':ti,ab
9	#7 OR #8
10	'anxiety'/exp
11	'Angst':ti,ab OR 'Social Anxiety':ti,ab OR ' Anxieties, Social':ti,ab OR 'Anxiety, Social':ti,ab OR 'Social Anxieties':ti,ab OR 'Hypervigilance':ti,ab OR 'Nervousness':ti,ab OR 'Anxiousness':ti,ab
12	#10 OR #11
13	'anxiety disorder'/exp
14	'Anxiety Disorder':ti,ab OR 'Disorder, Anxiety':ti,ab OR 'Disorders, Anxiety':ti,ab OR 'Neuroses, Anxiety':ti,ab OR 'Anxiety Neuroses':ti,ab OR 'Anxiety States, Neurotic':ti,ab OR 'Anxiety State, Neurotic':ti,ab OR 'Neurotic Anxiety State':ti,ab OR 'Neurotic Anxiety States':ti,ab OR ' State, Neurotic Anxiety':ti,ab OR 'States, Neurotic Anxiety':ti,ab
15	#13 OR #14
16	'emotional disorder'/exp
17	'affective symptom':ti,ab OR 'symptom, affective':ti,ab OR 'symptoms, affective':ti,ab OR 'alexithymia':ti,ab OR 'alexithymias':ti,ab OR 'emotional disturbances':ti,ab OR 'disturbance, emotional':ti,ab OR 'disturbances, emotional':ti,ab OR 'emotional disturbance':ti,ab
18	#16 OR #17
19	'mood'/exp
20	'mood disorder'/exp
21	'Disorder, Mood':ti,ab OR 'Disorders, Mood':ti,ab OR 'Mood Disorder':ti,ab OR ' Affective Disorders':ti,ab OR 'Affective Disorder':ti,ab OR 'Disorder, Affective':ti,ab OR 'Disorders, Affective':ti,ab
22	#19 OR #20 OR #21
23	'distress syndrome'/exp
24	'psychological distress':ti,ab OR 'Distress, Psychological':ti,ab OR 'Emotional Distress':ti,ab OR 'Distress, Emotional':ti,ab OR 'Emotional Stress':ti,ab OR 'Stress, Emotional':ti,ab OR 'psychological symptoms':ti,ab OR 'internali*':ti,ab OR 'suicide ideation':ti,ab OR 'anxi*':ti,ab
25	#23 OR #24
26	'suicide'/exp

27 #6 OR #9 OR #12 OR #15 OR #18 OR #22 OR #25 OR #26
 28 #3 AND #27
 29 'incidence'/exp
 30 'incidence':ti,ab OR 'incidences':ti,ab OR 'scondary attack rate':ti,ab OR 'attack rate,
 scondary':ti,ab OR 'rate, scondary attack':ti,ab OR 'scondary attack rates':ti,ab OR
 'incidence proportion':ti,ab OR 'incidence proportions':ti,ab OR 'proportion,
 incidence':ti,ab OR 'attack rate':ti,ab OR 'attack rates':ti,ab OR 'rate, attack':ti,ab OR
 'cumulative incidence':ti,ab OR 'cumulative incidences':ti,ab OR 'incidence,
 cumulative':ti,ab OR 'incidence rate':ti,ab OR 'incidence rates':ti,ab OR 'rate,
 incidence':ti,ab OR 'person-time rate':ti,ab OR 'person time rate':ti,ab OR 'person-
 time rates':ti,ab OR 'rate, person-time':ti,ab
 31 #29 OR #30
 32 'prevalence'/exp
 33 'Prevalence':ti,ab OR 'Prevalences':ti,ab OR 'Period Prevalence':ti,ab OR 'Period
 Prevalences':ti,ab OR 'Prevalence, Period':ti,ab OR 'Point Prevalence':ti,ab OR
 'Point Prevalences':ti,ab OR 'Prevalence, Point':ti,ab
 34 #33 OR #34
 35 'epidemiology'/exp
 36 'epidemiology':ti,ab OR 'social epidemiology':ti,ab OR 'epidemiologies, social':ti,ab
 OR 'epidemiology, social':ti,ab OR 'social epidemiologies':ti,ab
 37 #35 OR #36
 38 #31 OR #34 OR #37
 39 #14 AND #34

Supplementary Table 4 Search strategies in Sinomed (in Chinese)

#	searches
1	"Atrial fibrillation"[unweighted:extended]
2	(""Atrial fibrillation""[Core field:Smart] OR ""Atrial fibrillation""[Core field:Smart] OR ""Paroxysmal atrial fibrillation""[Core field:Smart] OR ""Persistent atrial fibrillation""[Core field:Smart] OR ""Palpitations""[Core field:Smart] ""Stunned""[Core field:Smart])
3	#1 OR #2
4	"Mental health"[unweighted:extended]
5	(""Mental health""[Core field:Smart] OR ""Mental health""[Core field:Smart])
6	#4 OR #5
7	"Depression"[unweighted:extended]
8	""Depression"" [core field:smart]
9	#7 OR #8
10	"Depression" [unweighted:extended]
11	"depression, endogenous" OR "depression, neurotic" OR "depression, monophasic" OR "depressive syndrome" OR "depression" OR "depression" OR "neurosis" OR "depressive" OR "monophasic depression"
12	#10 OR #11
13	"Anxiety" [unweighted:extended]
14	"Anxiety disorder" [unweighted:extended]
15	"Anxiety neurosis" OR "Anxiety state, neurotic" OR "Neurosis, anxiety"
16	#13 OR #14 OR #15
17	"Emotion" [unweighted:extended]
18	"Emotional disorders"[unweighted:extended]
19	""Emotional Disorders"" [Core field:Smart]
20	#17 OR #18 OR #19
21	#6 OR #9 OR #12 OR #16 OR #20
22	#3 AND #21
23	"Epidemiological studies"[unweighted:extended]
24	(""Epidemiology""[Chinese title: Intelligent] OR ""Epidemiological studies""[Chinese title: Intelligent])
25	#23 OR #25

- 26 "Prevalence rate "[unweighted: expanded]
 - 27 "Incidence rate "[unweighted: expanded]
 - 28 "Cohort Study "[unweighted: expanded]
 - 29 "cohort study" OR "incidence rate" OR "fixed cohort study" OR "fixed cohort analysis"
OR "concurrent study" OR "historical cohort study" OR "incidence rate study" OR
"prevalence rate"
 - 30 #26 OR #27 OR #28 OR #29
 - 31 #25 OR #30
 - 32 #22 AND #31
-

Supplementary Table 5 Search strategies in CNKI (in Chinese)

#	searches
1	((Atrial Fibrillation OR Paroxysmal atrial fibrillation OR Persistent atrial fibrillation OR Palpitations OR(of the heart) palpitating with fear) AND (Incidence OR Prevalence OR Epidemiology OR Cohort Study OR Cohort Study OR Cohort Analysis OR Concurrent Study OR Historical Cohort Study OR Incidence Study OR Epidemiological Study)) AND (Mental Health OR Mental Health OR Depression OR Depressive Disorder OR Depression OR Depressive Disorder OR Depressive Syndrome OR Anxiety OR Anxiety Disorder OR Anxiety Neurosis OR Mood OR Mood Disorder OR Mood Disorder OR Suicide)

Supplementary Table 6 Search strategies in Wanfang (in Chinese)

#	searches
1	((Psoriasis) OR Niu pi xuan) OR Bai bi
2	
3	#1 AND #2
4	
5	#3 AND #4

Supplementary Table 7 Risk-of-bias of cross-sectional studies

<i>Studies</i>	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>Q4</i>	<i>Q5</i>	<i>Q6</i>	<i>Q7</i>	<i>Q8</i>	<i>Q9</i>	<i>Q10</i>	<i>Q11</i>	<i>Scores</i>
von Eisenhart Rothe, A. F. <i>et al</i> 2014	Y	Y	Y	U	N	N	Y	U	N	Y	Y	6
Uchmanowicz, I. <i>et al</i> 2020	Y	Y	Y	U	N	N	U	N	U	Y	Y	5
Piwoński, J. <i>et al</i> 2019	Y	Y	Y	U	N	U	U	U	U	Y	Y	5
Zhang, X. Y. 2017	Y	Y	Y	Y	N	U	N	Y	N	Y	Y	7

Questions (Q):

Q1 Define the source of information (survey, record review)

Q2 List inclusion and exclusion criteria for exposed and unexposed subjects (cases and controls) or refer to previous publications

Q3 Indicate time period used for identifying patients

Q4 Indicate whether or not subjects were consecutive if not population-based

Q5 Indicate if evaluators of subjective components of study were masked to other aspects of the status of the participants

Q6 Describe any assessments undertaken for quality assurance purposes (e.g., test/retest of primary outcome measurements)

Q7 Explain any patient exclusions from analysis

Q8 Describe how confounding was assessed and/or controlled

Q9 If applicable, explain how missing data were handled in the analysis

Q10 Summarize patient response rates and completeness of data collection

Q11 Clarify what follow-up, if any, was expected and the percentage of patients for which incomplete data or follow-up was obtained

Y, Yes; N, No; U, Unclear.

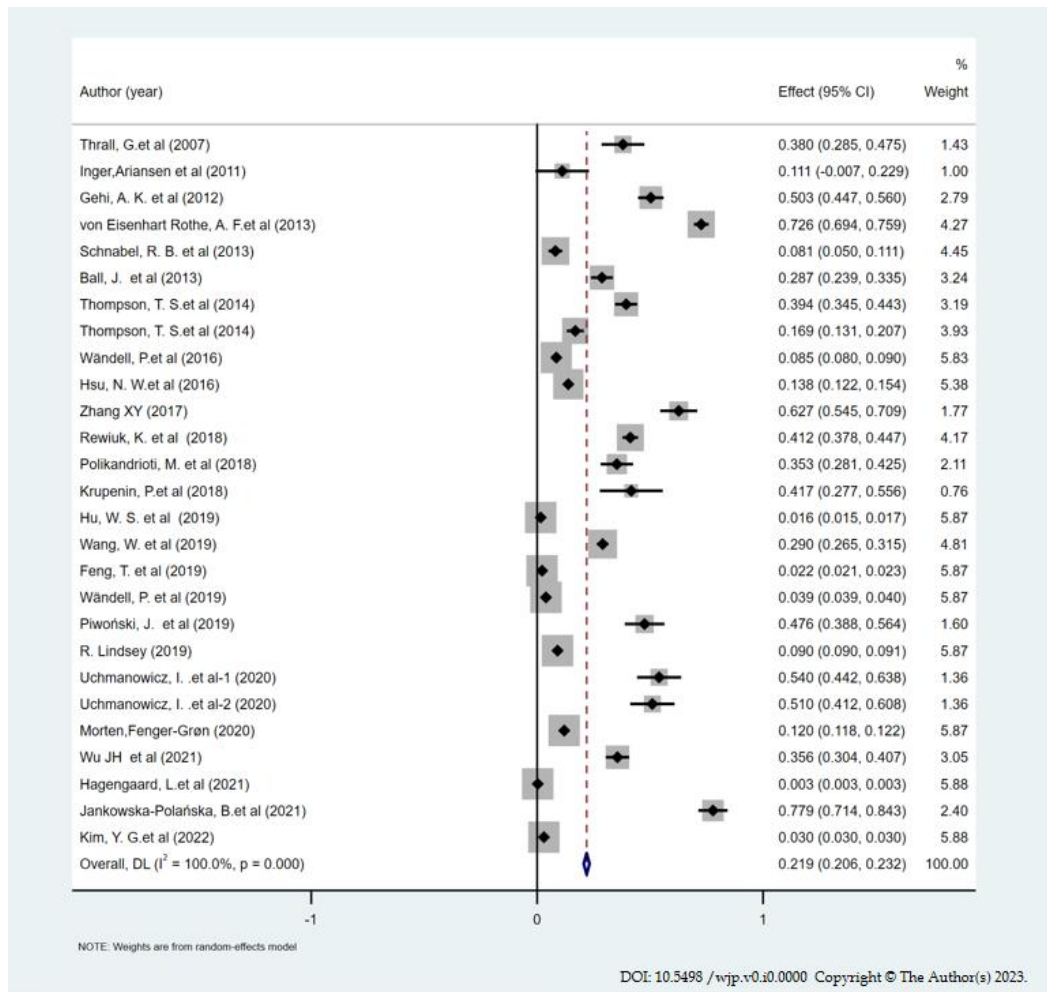
Supplementary Table 8 Quality assessment of the cohort and case-control studies using the Newcastle-Ottawa Scale

<i>Studies</i>	<i>Selection</i>			<i>Demonstration that the outcome of interest was not present at the start of study</i>	<i>Comparability</i>		<i>Outcome</i>		<i>Total score</i>
	<i>Representativeness of the exposed cohort</i>	<i>Selection of the non-exposed cohort</i>	<i>Ascertainment of exposure</i>		<i>Comparability of cohorts on the basis of the design or analysis</i>	<i>Assessment of outcome</i>	<i>Follow-up long enough for outcomes to occur</i>	<i>Adequacy of follow-up of cohorts</i>	
Gehi, A. K. <i>et al</i> 2012	*	-	*	-	-	*	*	-	4
Thompson, T. S. <i>et al</i> 2014	*	-	*	-	*	*	*	-	5
Wändell, P. <i>et al</i> 2016	*	-	*	-	-	*	*	-	4
Hagengaard, L. <i>et al</i> 2021	*	*	*	-	*	*	*	-	6
Kim, Y. G. <i>et al</i> 2022	*	-	*	-	-	*	*	-	4
Jankowska-Polańska, B. <i>et al</i> 2021	*	-	*	-	*	*	*	-	5
Bamgbade, B. A. <i>et al</i> 2020	*	-	*	-	*	*	*	-	5
Hu, W. S. <i>et al</i> 2019	*	*	*	-	*	*	*	*	7
Wändell, P. <i>et al</i> 2016	*	-	*	-	*	*	*	-	5
Lindsey, Rosman 2019	*	-	*	-	*	*	*	-	5

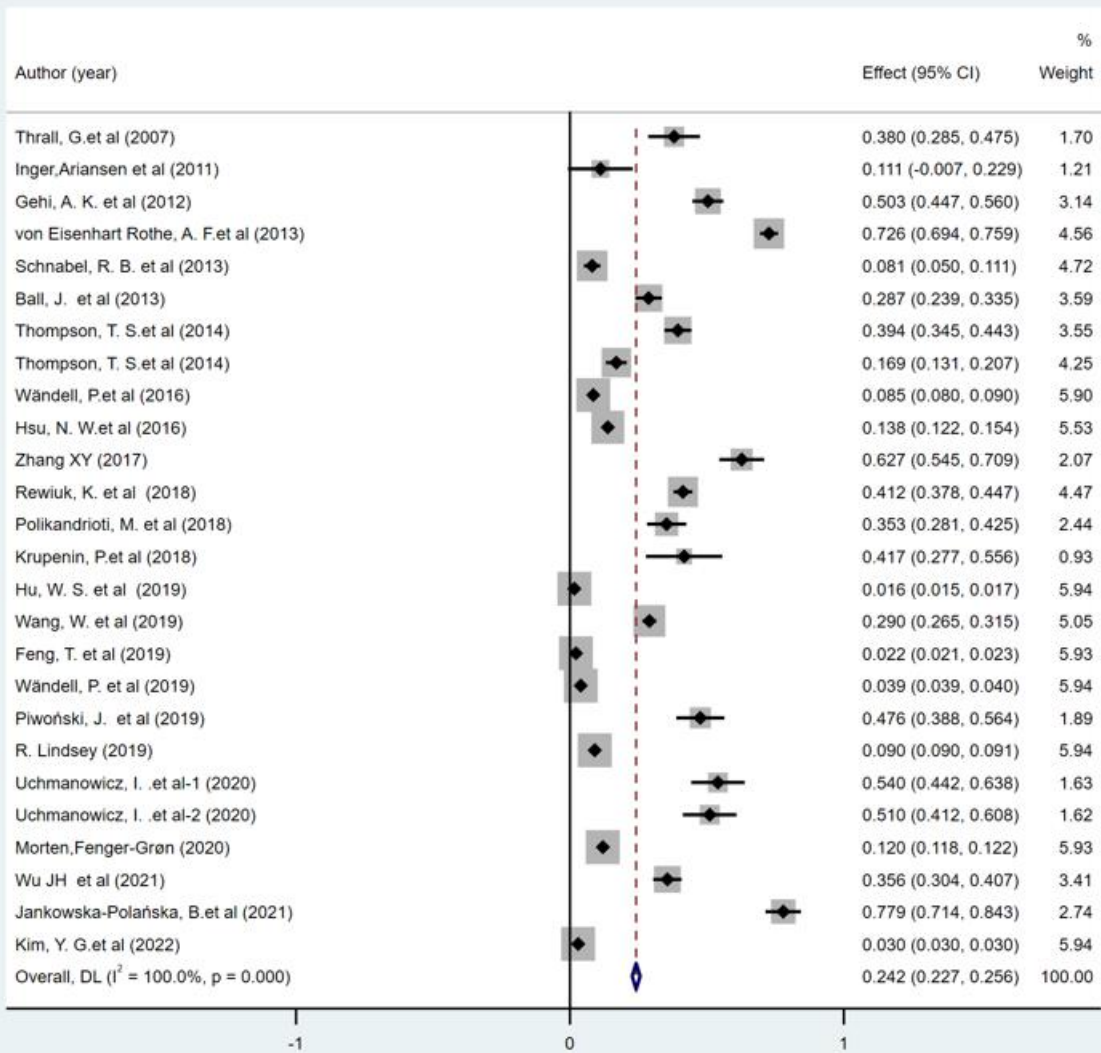
Supplementary Table 9 Characteristic of involved studies (atrial fibrillation in depression)

Author/publication year	Study year	Study type	Region (country)	Type of AF	Diagnostic criteria of AF	Generation	MH(n)	P (AF in MH) Total(M/F)
Rizzi, S. A. et al 2021	2003-2015	Retrospective observational study	North America(USA)	AF	ICD-9/ICD-10	Adult	6055	46.37%

AF Atrial Fibrillation; ICD: International classification of diseases; P: Prevalence.



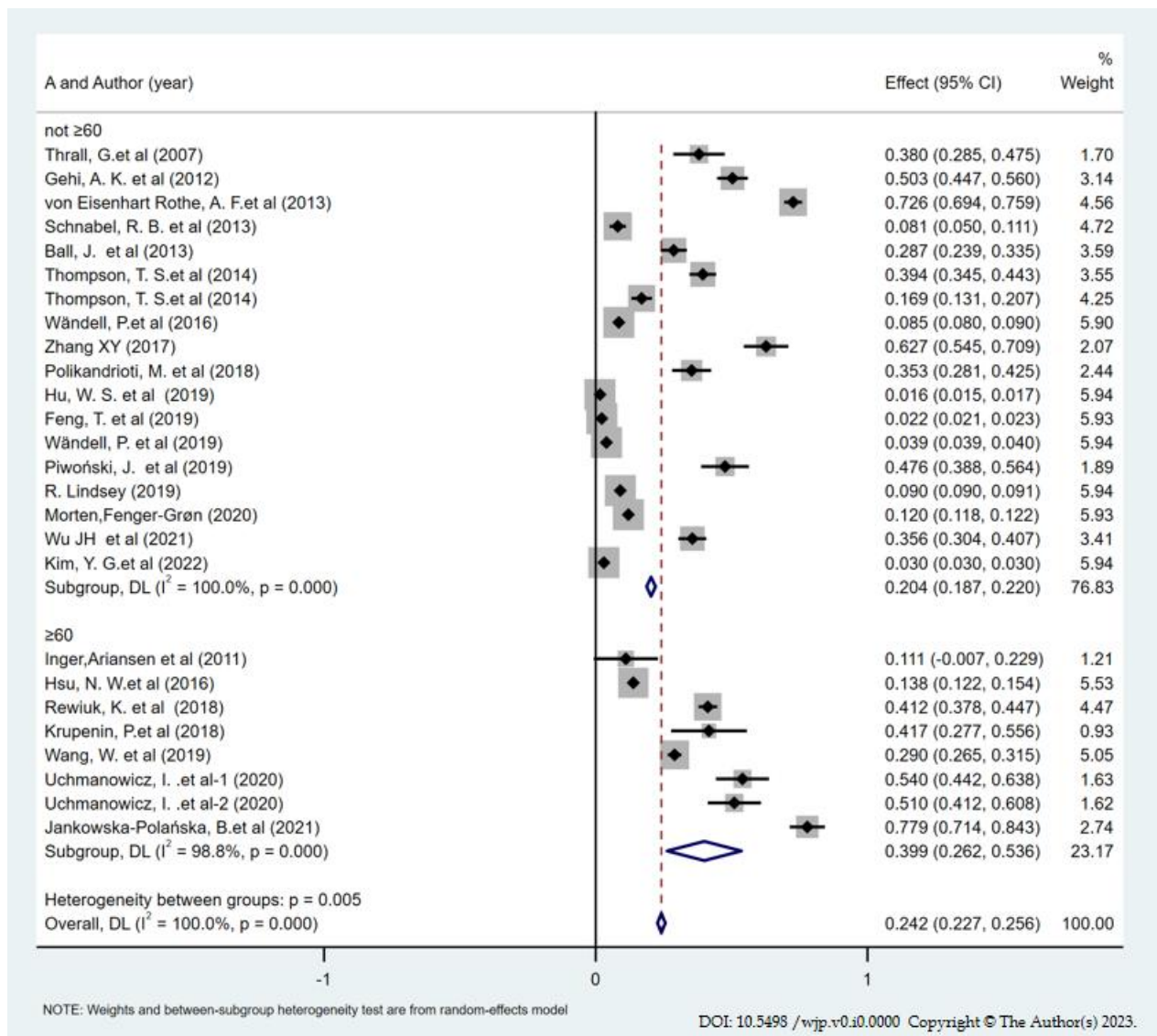
Supplementary Figure 1 Prevalence of depression in atrial fibrillation patients.



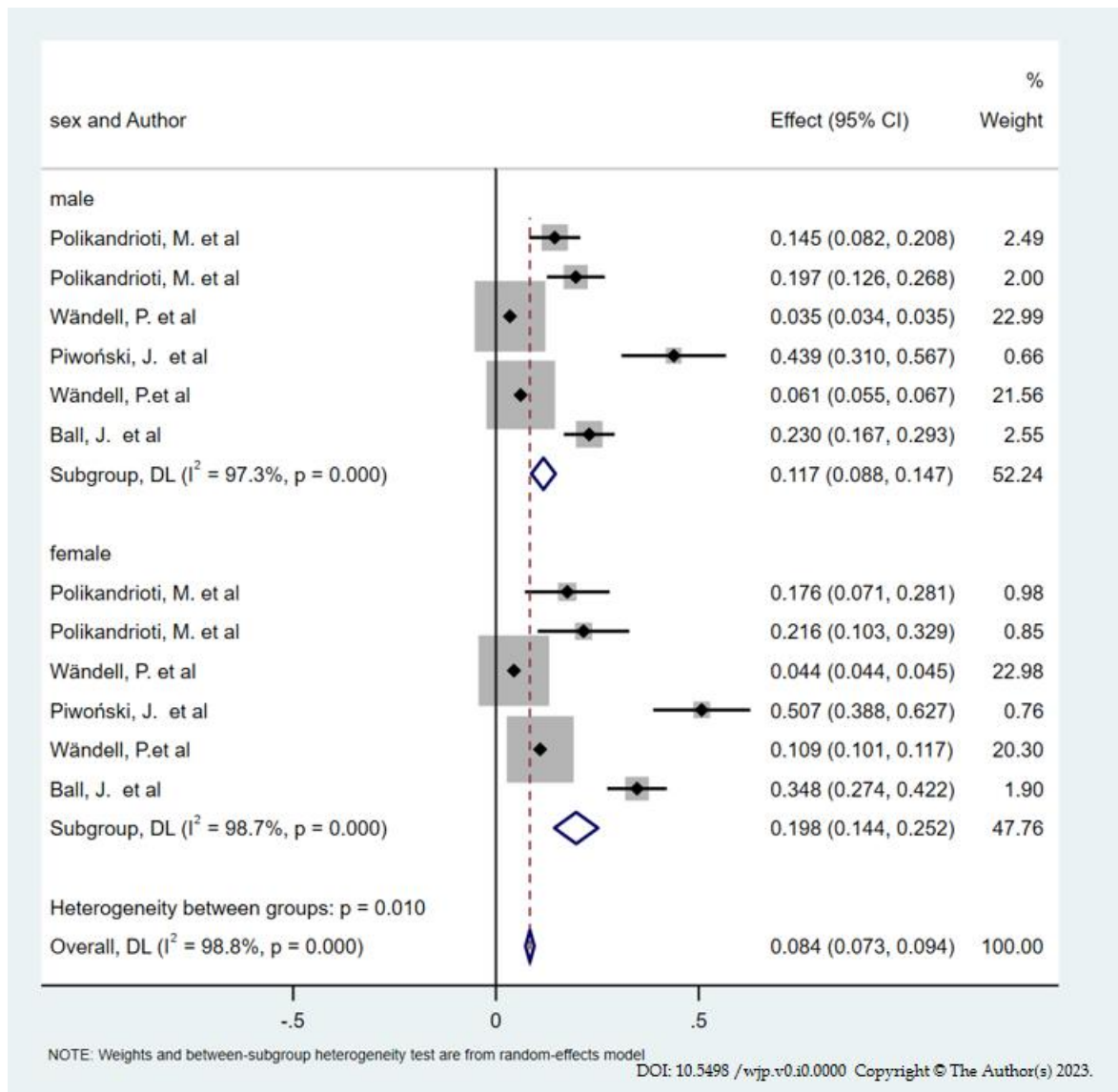
NOTE: Weights are from random-effects model

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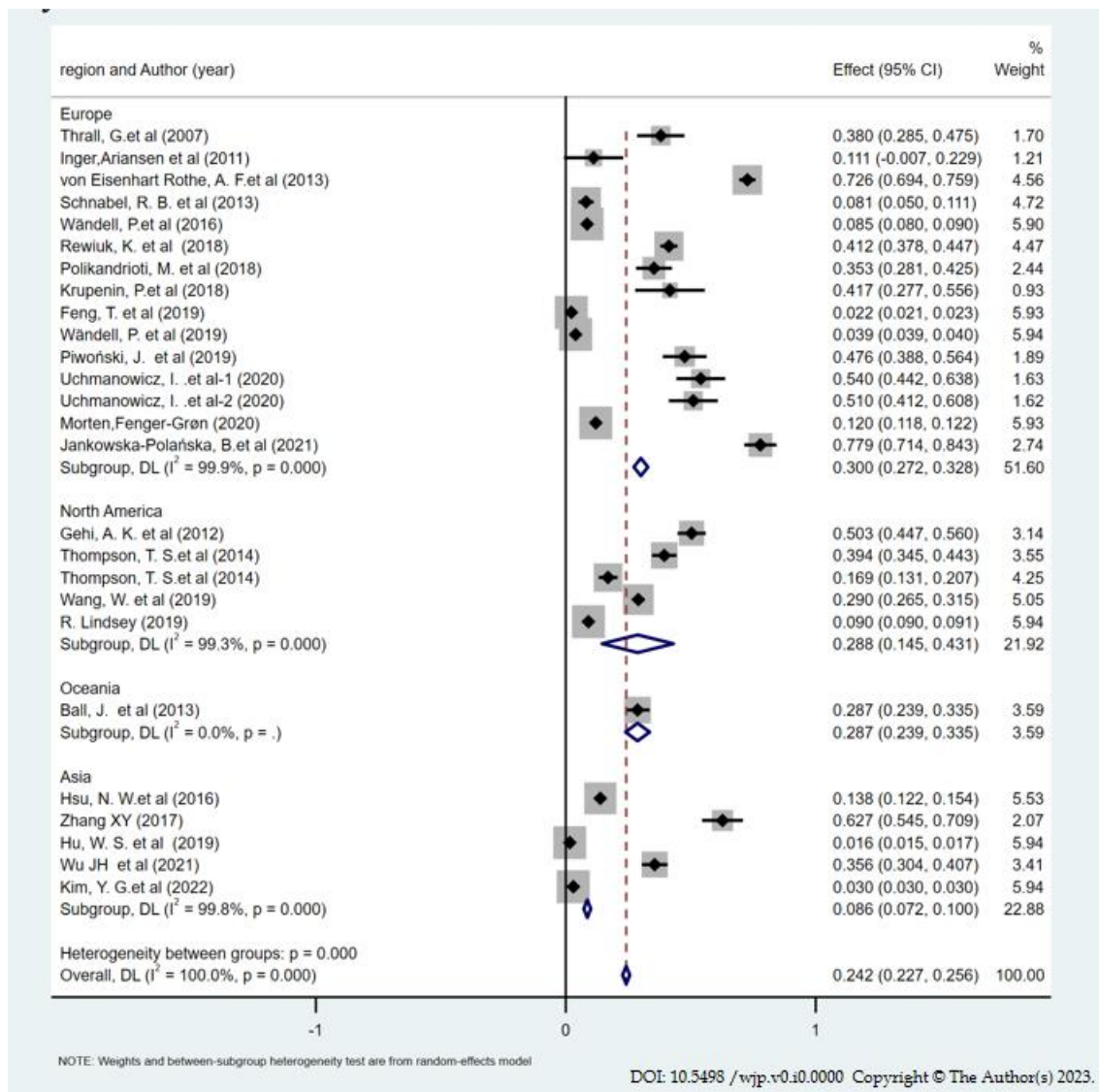
Supplementary Figure 2 Prevalence of depression in atrial fibrillation patients in adults.



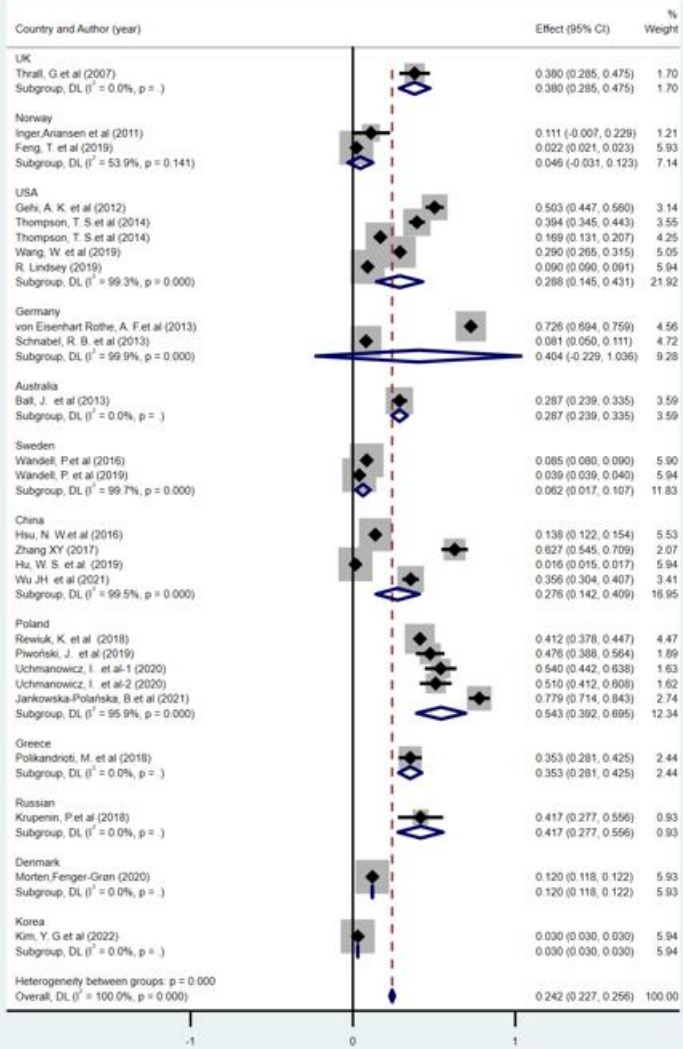
Supplementary Figure 3 Prevalence of depression in atrial fibrillation patients in elderly subjects.



Supplementary Figure 4 Depression in adult atrial fibrillation patients by gender.



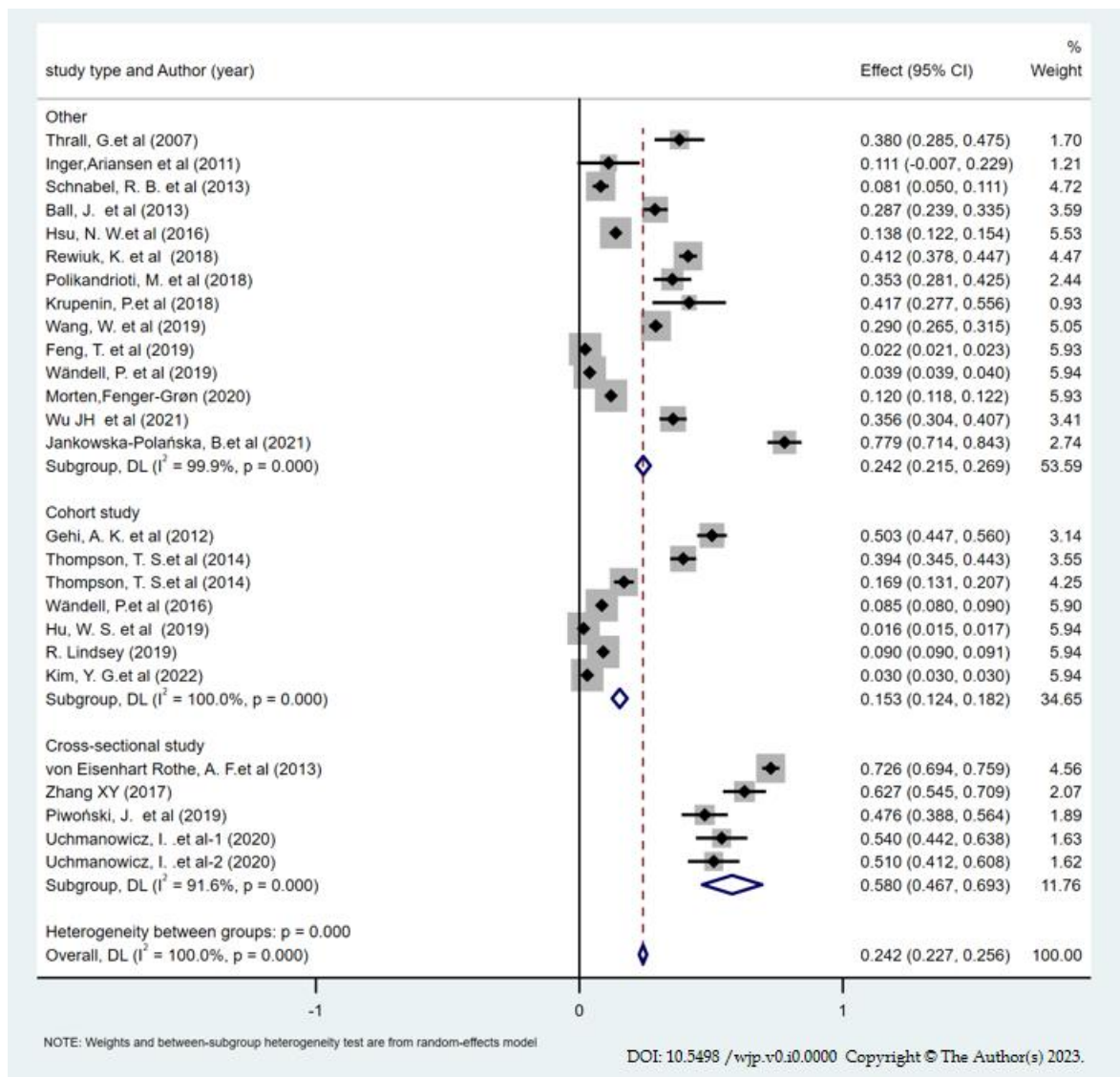
Supplementary Figure 5 Depression in adult atrial fibrillation by continent.



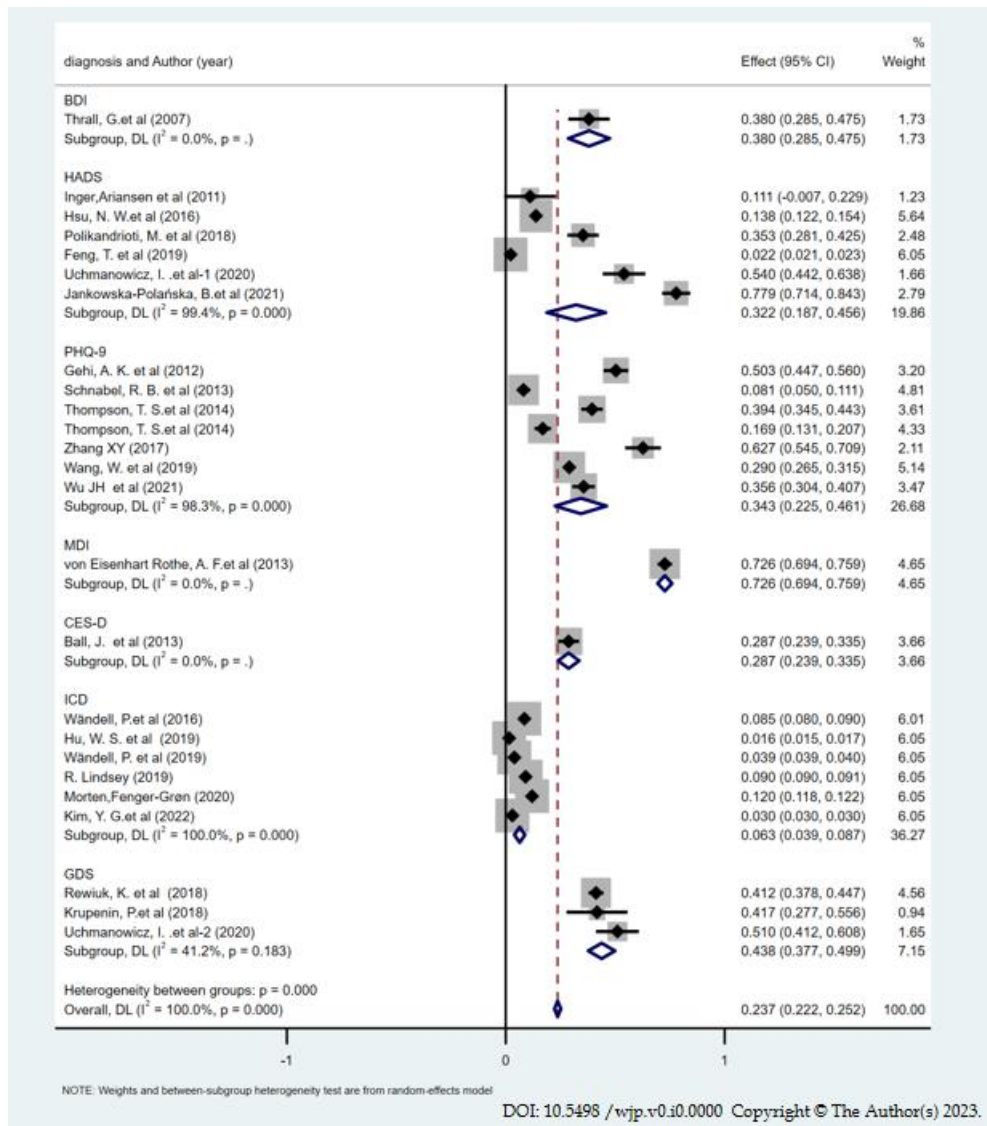
NOTE: Weights and between-subgroup heterogeneity test are from random-effects model

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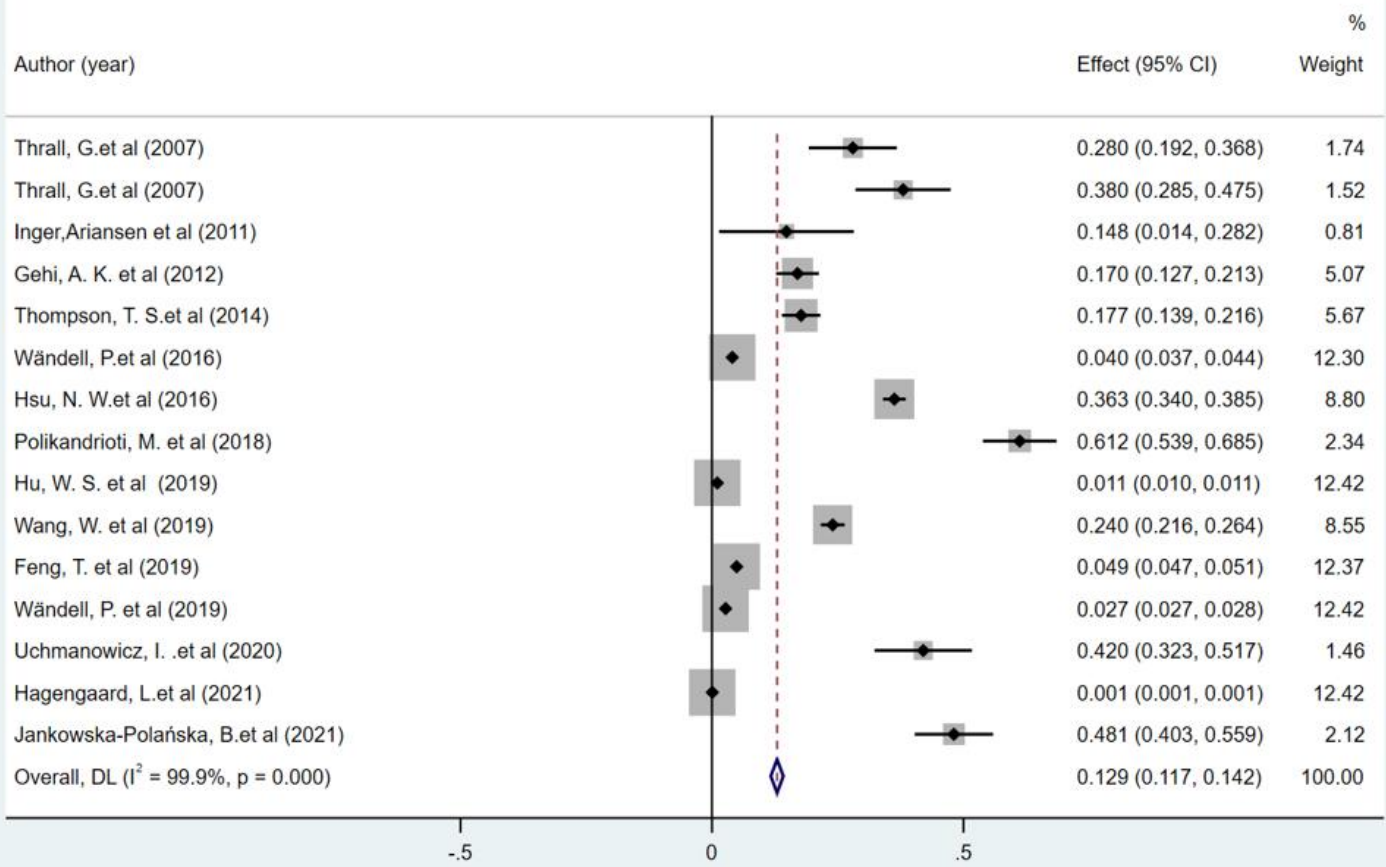
Supplementary Figure 6 Depression in adult atrial fibrillation by country.



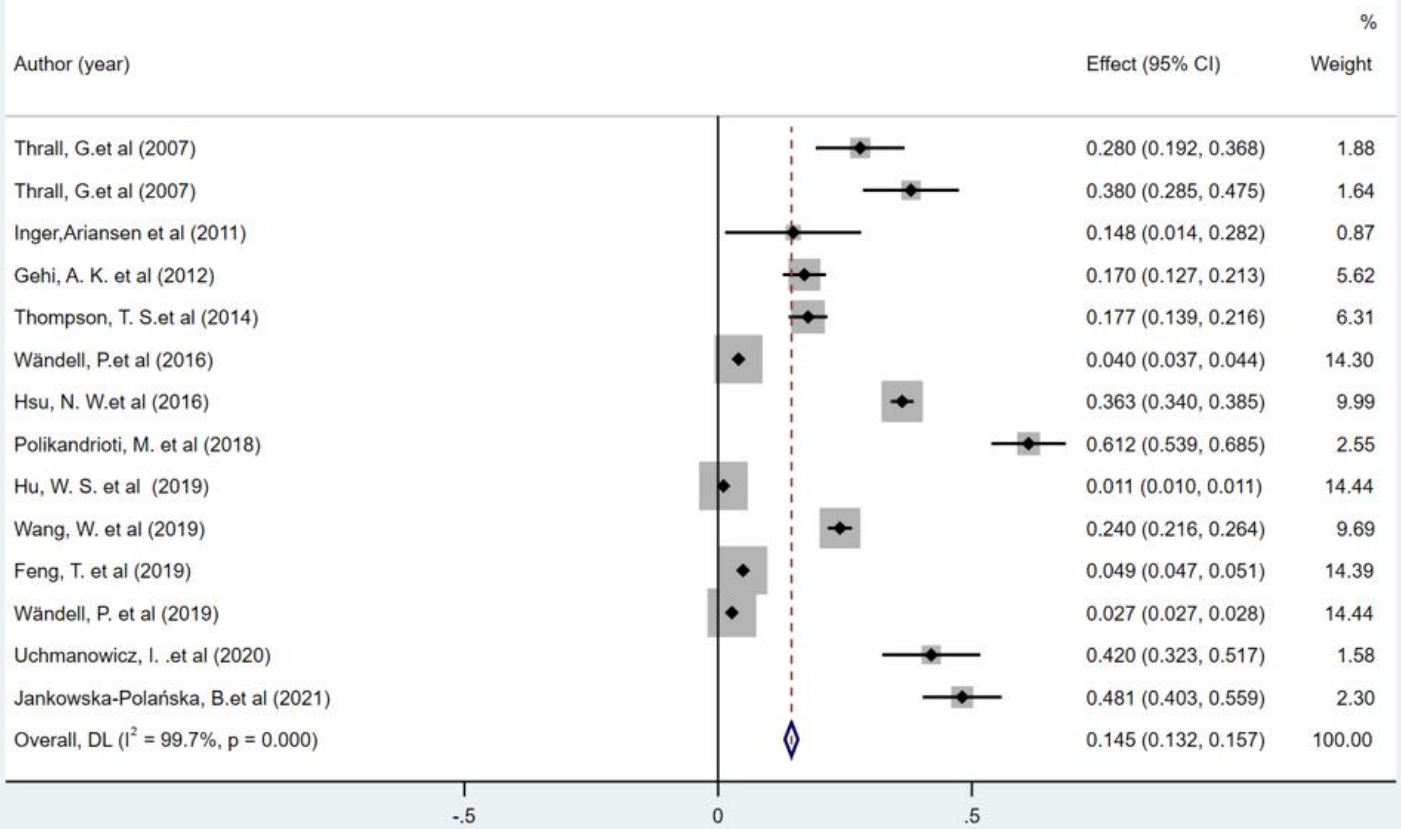
Supplementary Figure 7 Depression in adult atrial fibrillation patients by study type.



Supplementary Figure 8 Depression in adult atrial fibrillation patients by diagnosis scale.



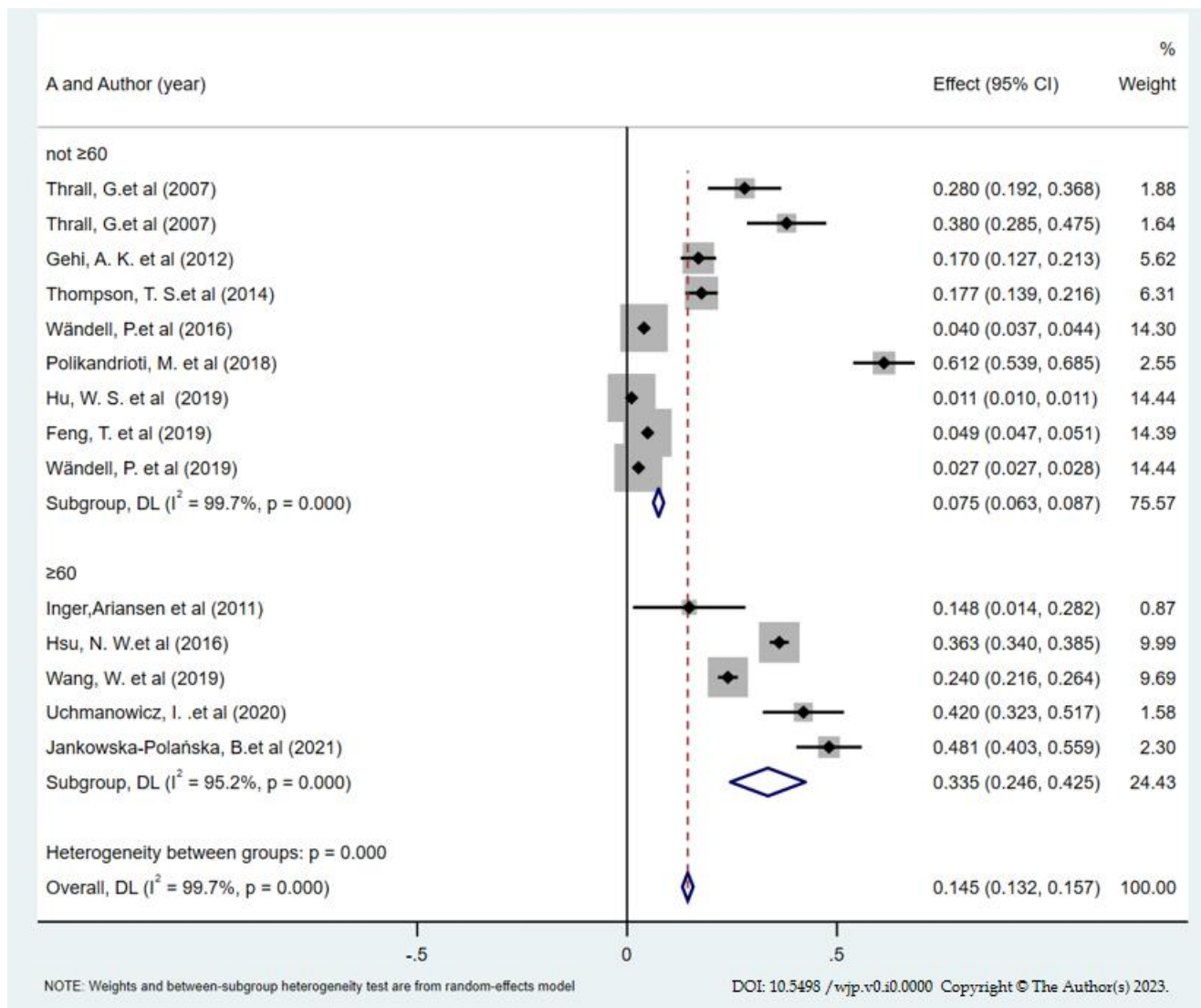
Supplementary Figure 9 Anxiety in atrial fibrillation patients.



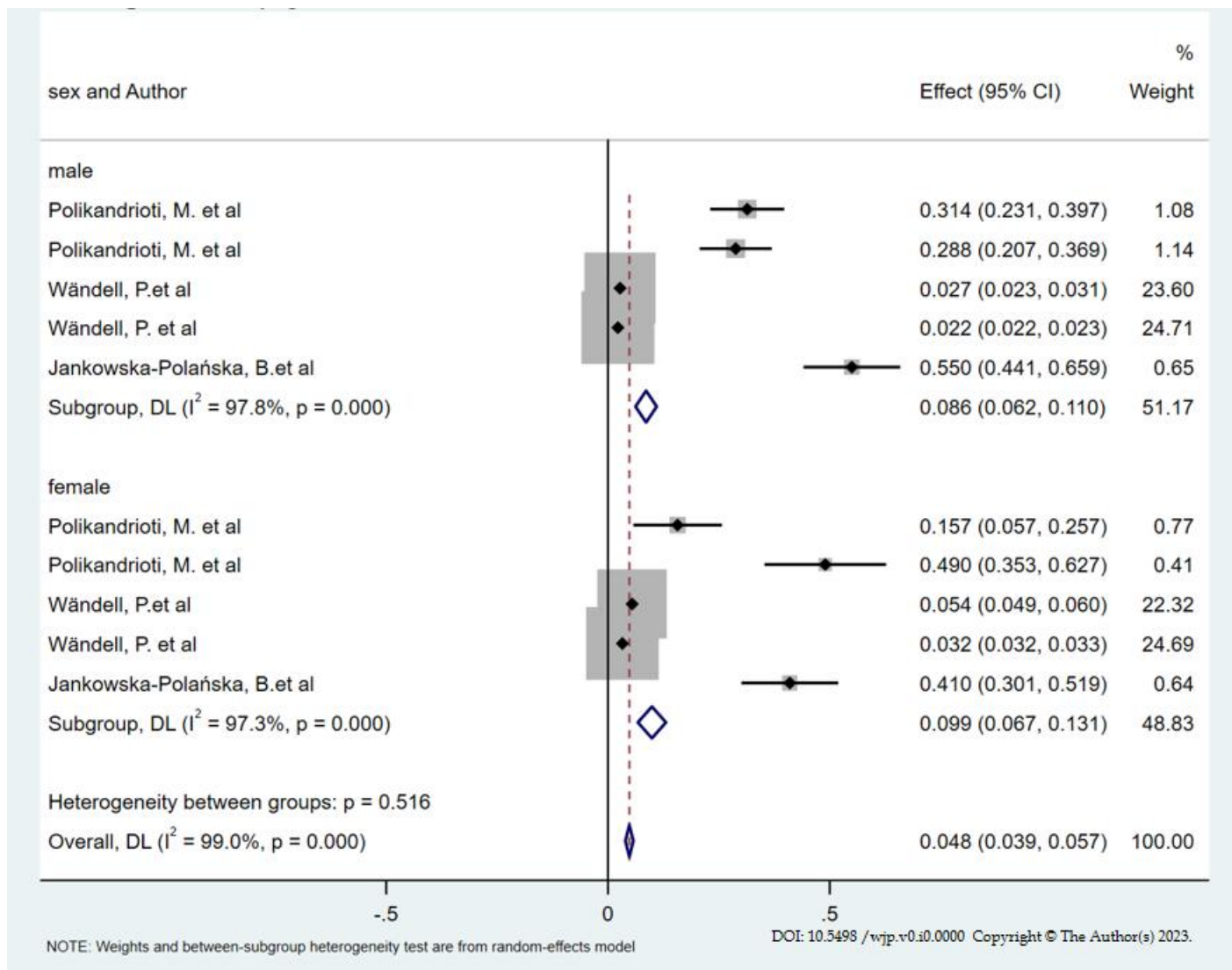
NOTE: Weights are from random-effects model

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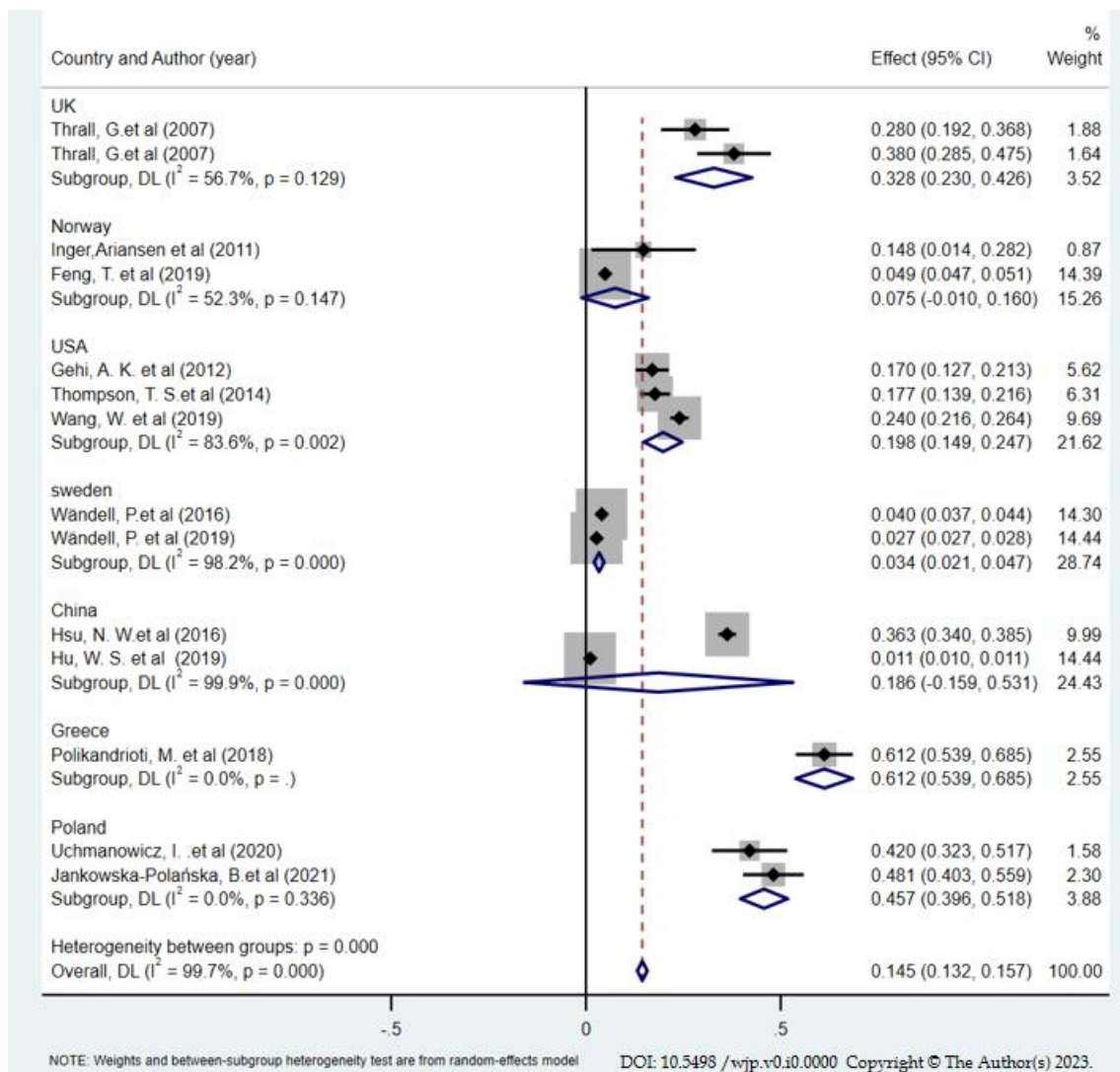
Supplementary Figure 10 Anxiety in adult atrial fibrillation patients.



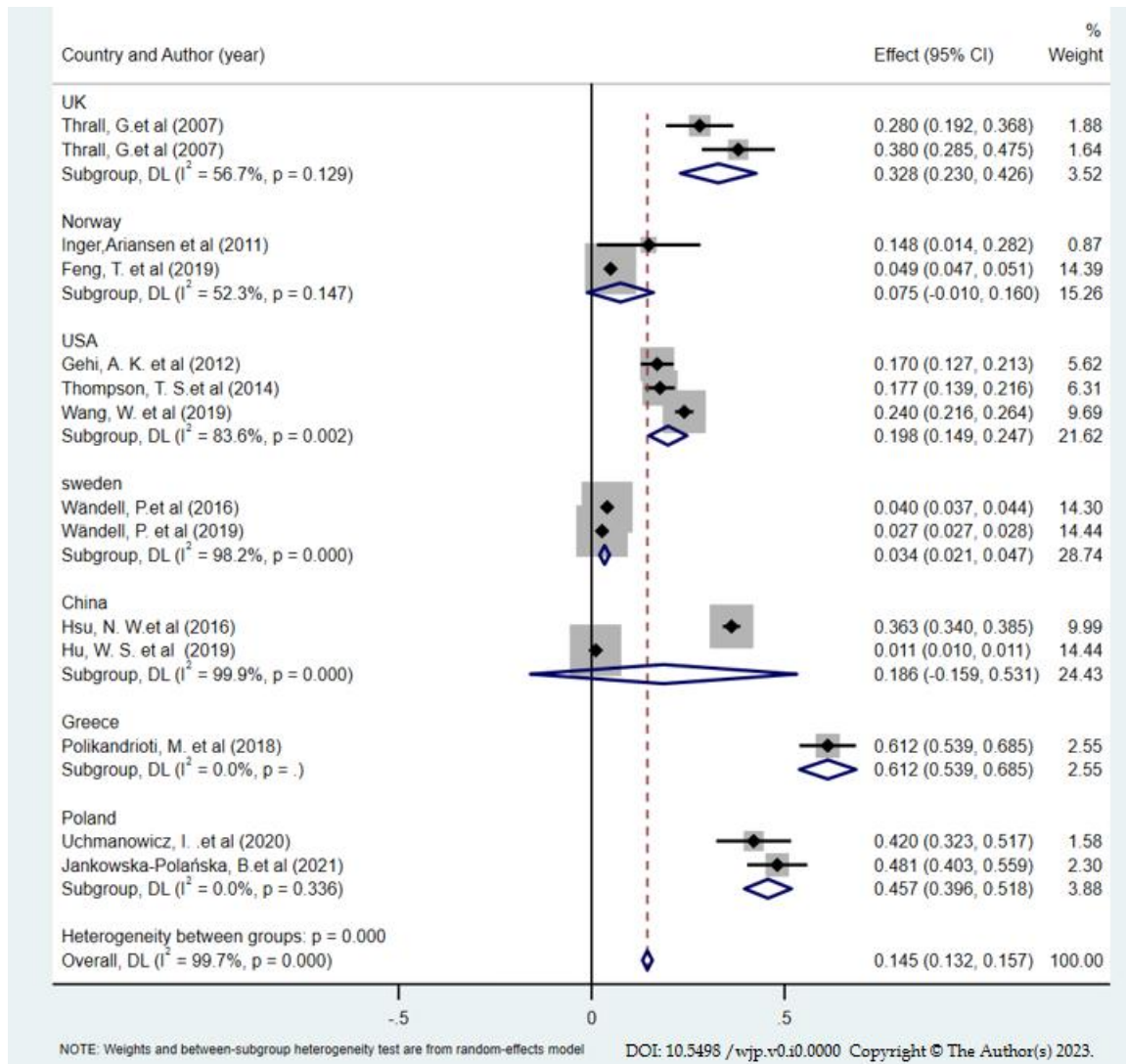
Supplementary Figure 11 Prevalence of anxiety in atrial fibrillation patients in elderly subjects.



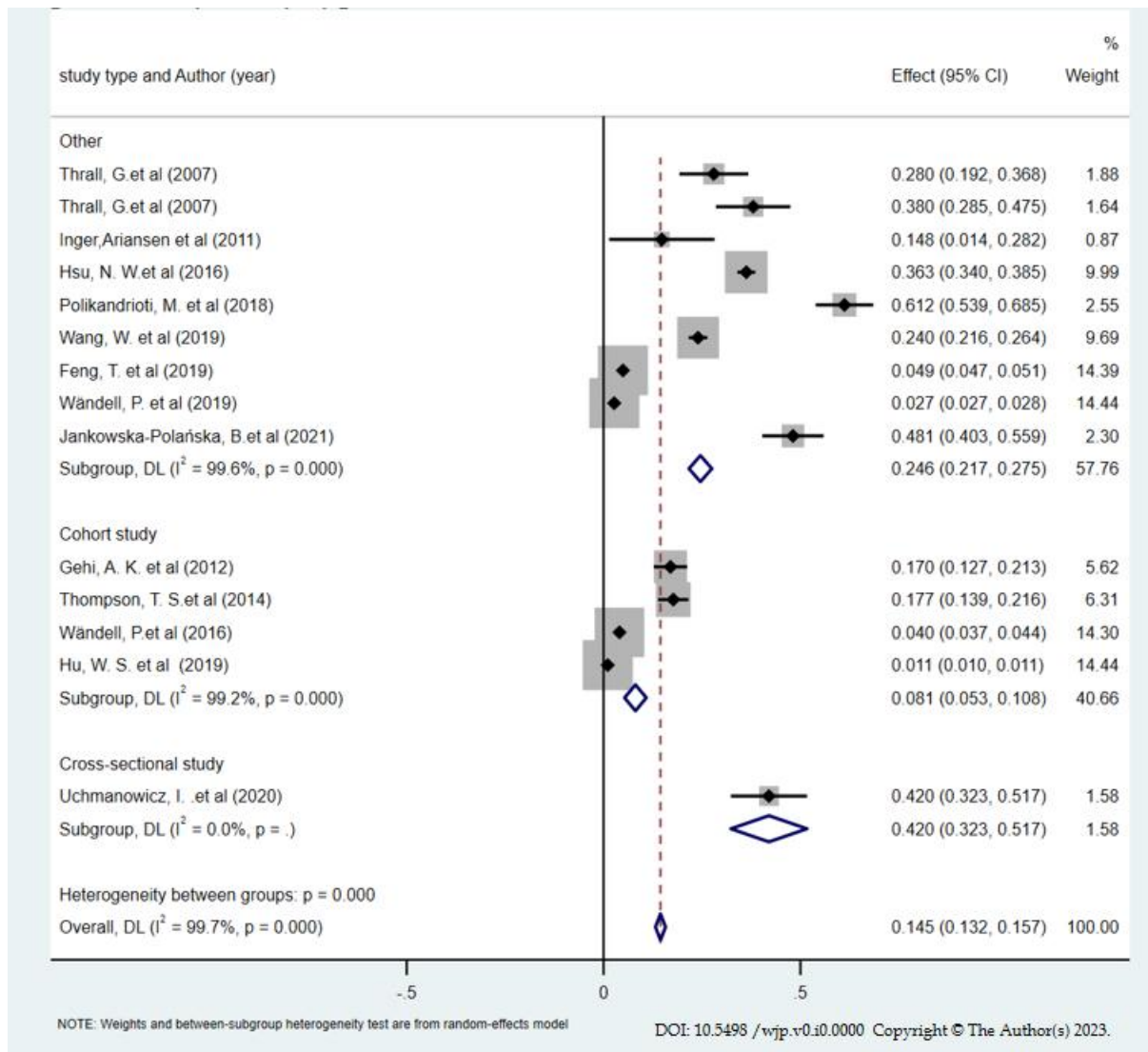
Supplementary Figure 12 Anxiety in adult atrial fibrillation patients by gender.



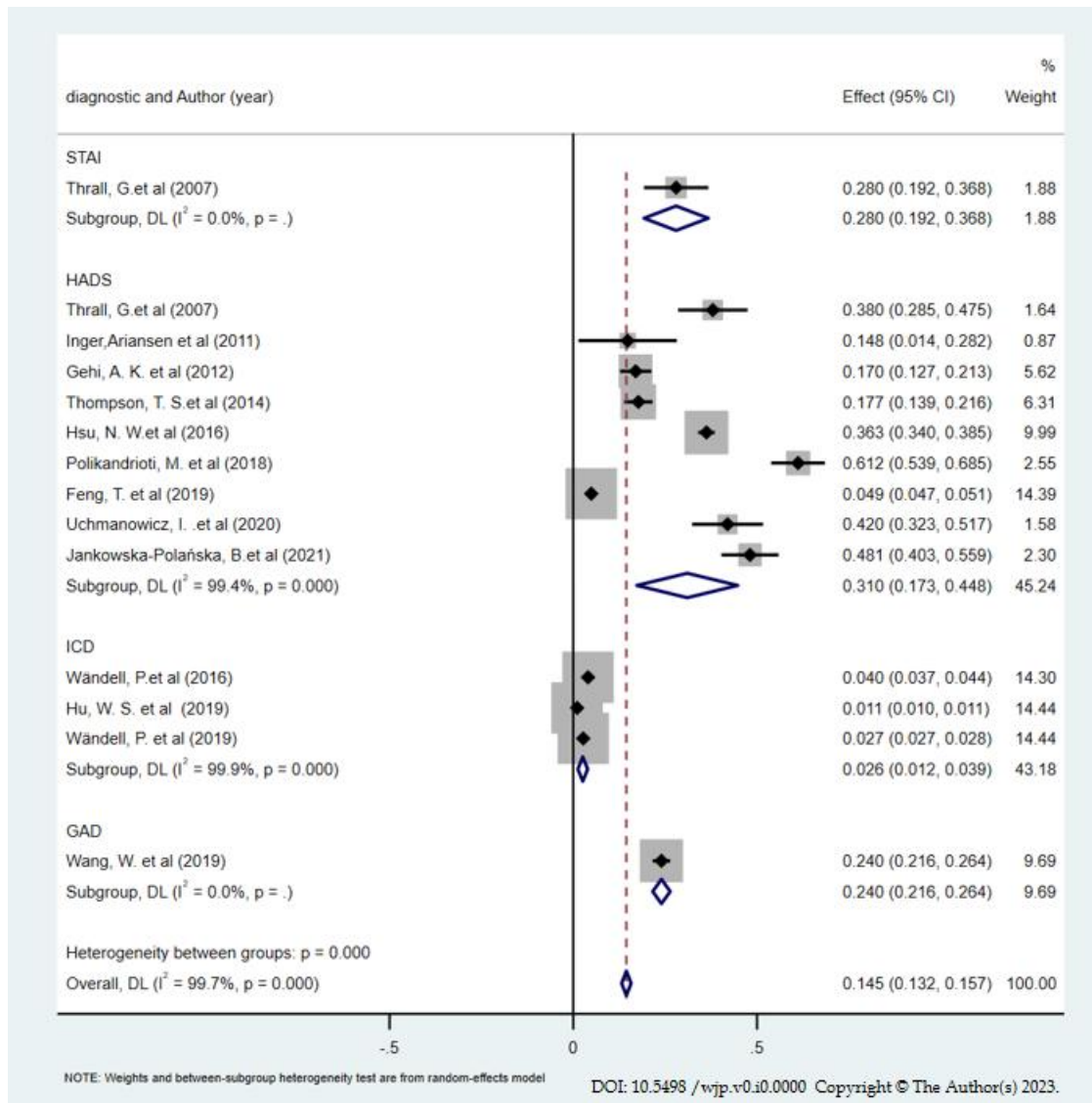
Supplementary Figure 13 Anxiety in adult atrial fibrillation patients by continent.



Supplementary Figure 14 Anxiety in adult atrial fibrillation patients by country.



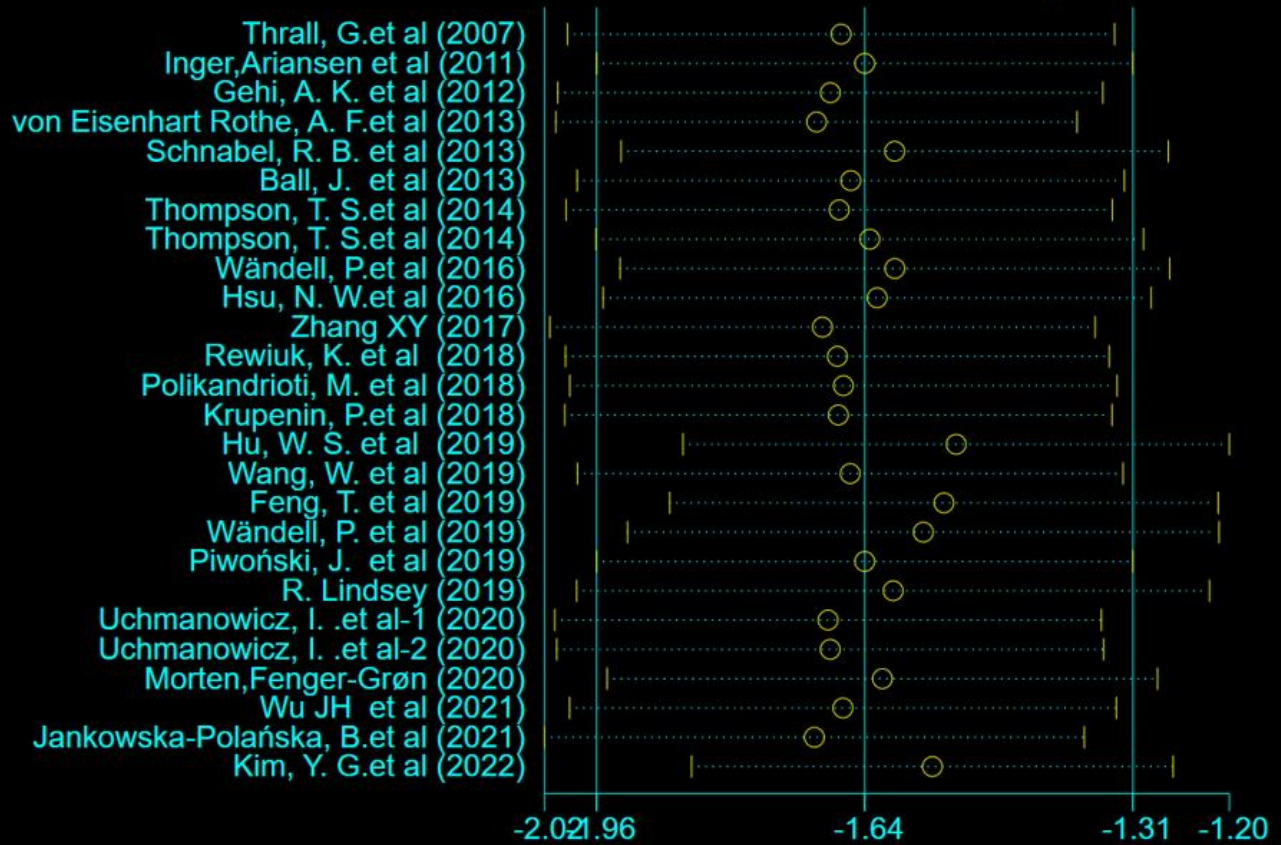
Supplementary Figure 15 Anxiety in adult atrial fibrillation patients by study type.



Supplementary Figure 16 Anxiety in adult atrial fibrillation patients by diagnosis scale.

Meta-analysis estimates, given named study is omitted

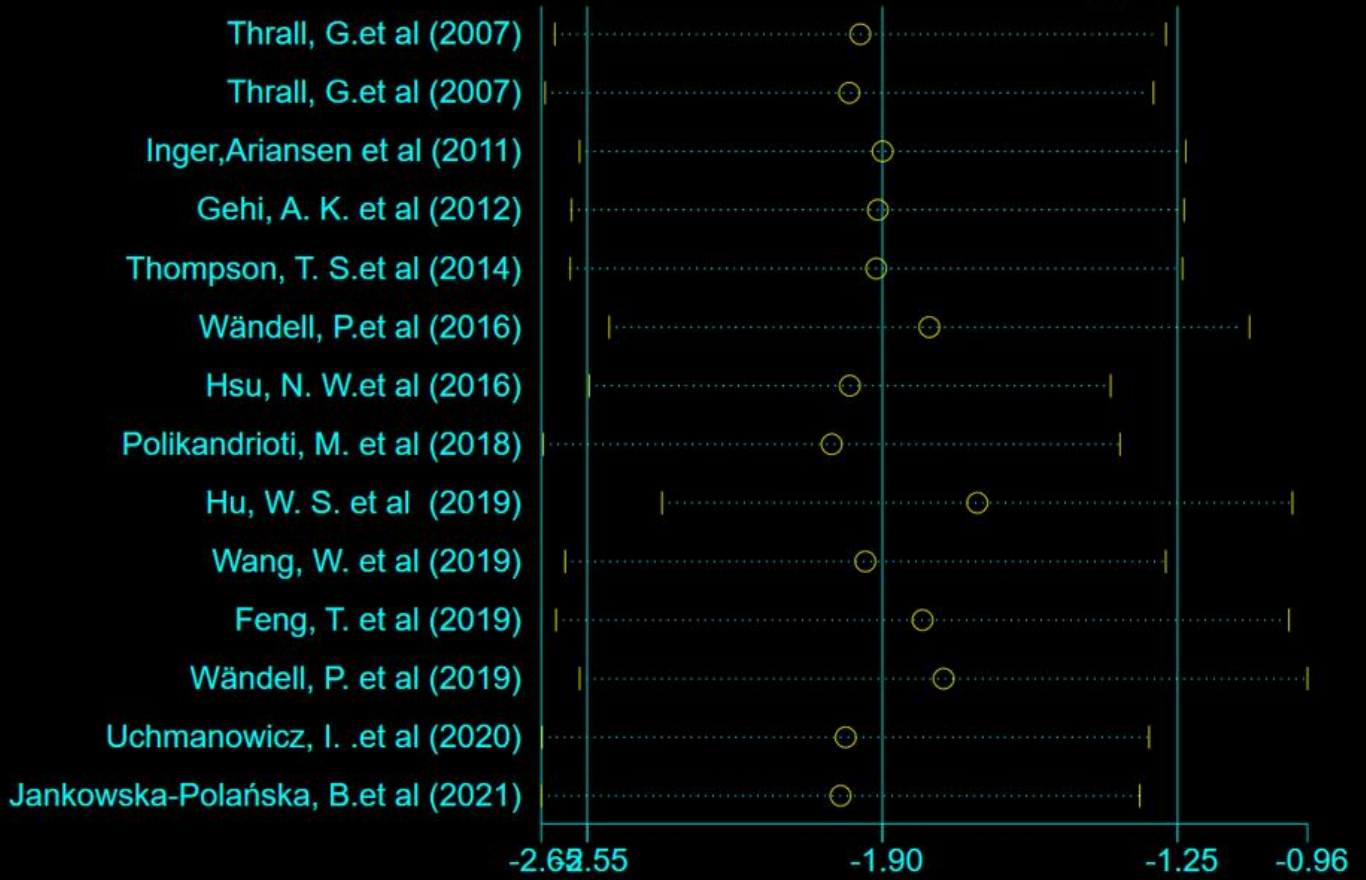
| Lower CI Limit ○ Estimate | Upper CI Limit



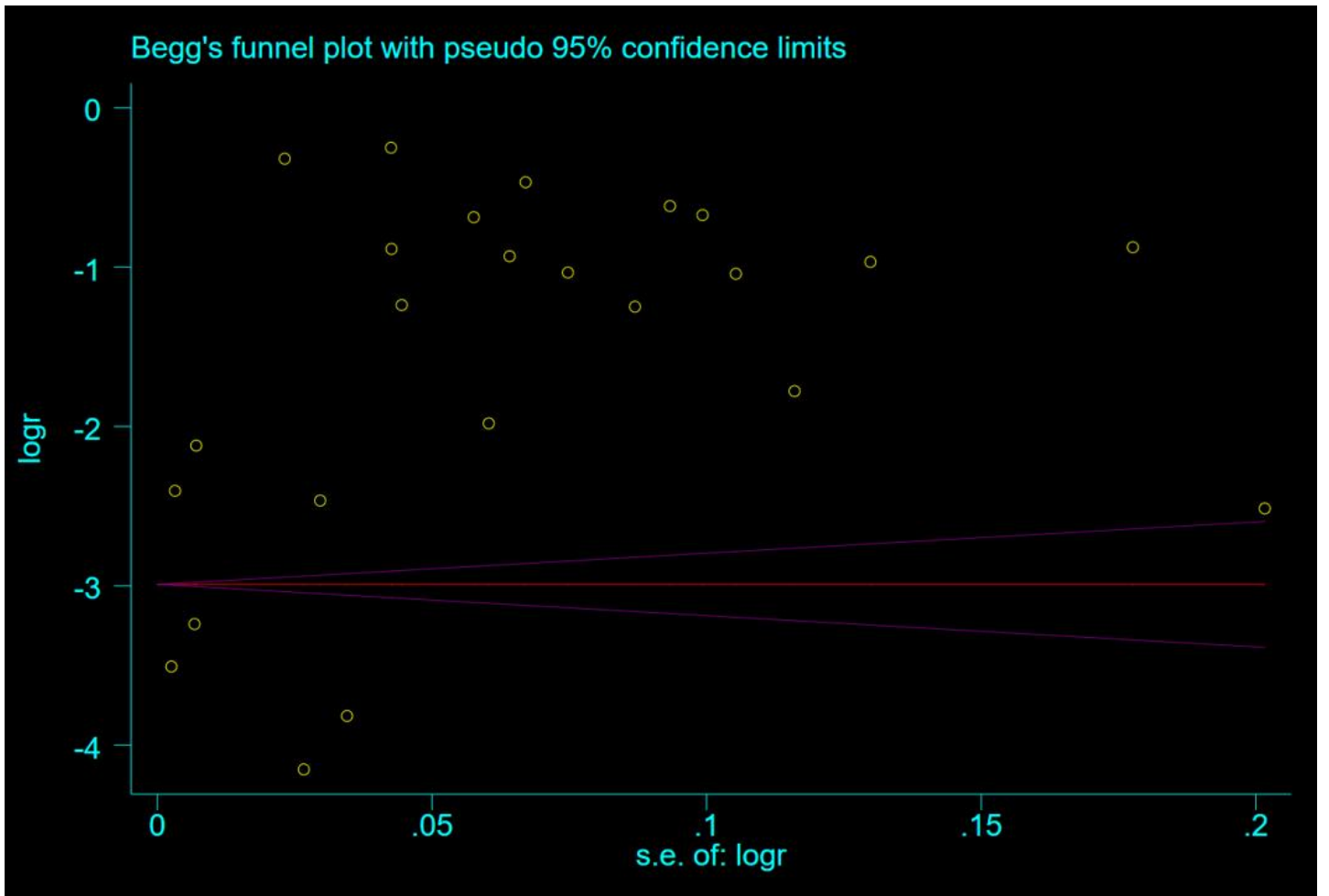
Supplementary Figure 17 Sensitivity analysis of depression.

Meta-analysis estimates, given named study is omitted

| Lower CI Limit ○ Estimate | Upper CI Limit

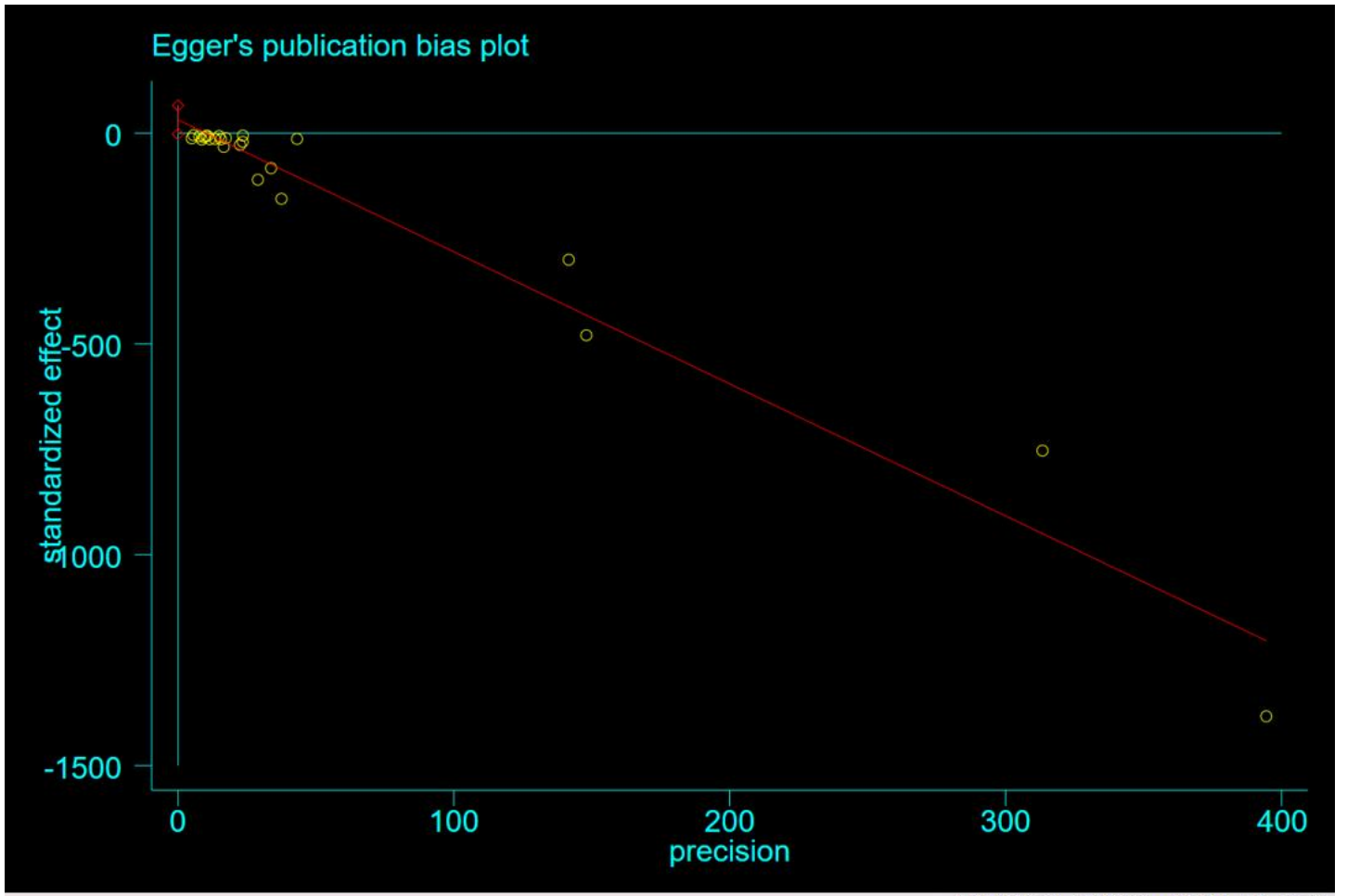


Supplementary Figure 18 Sensitivity analysis of anxiety.



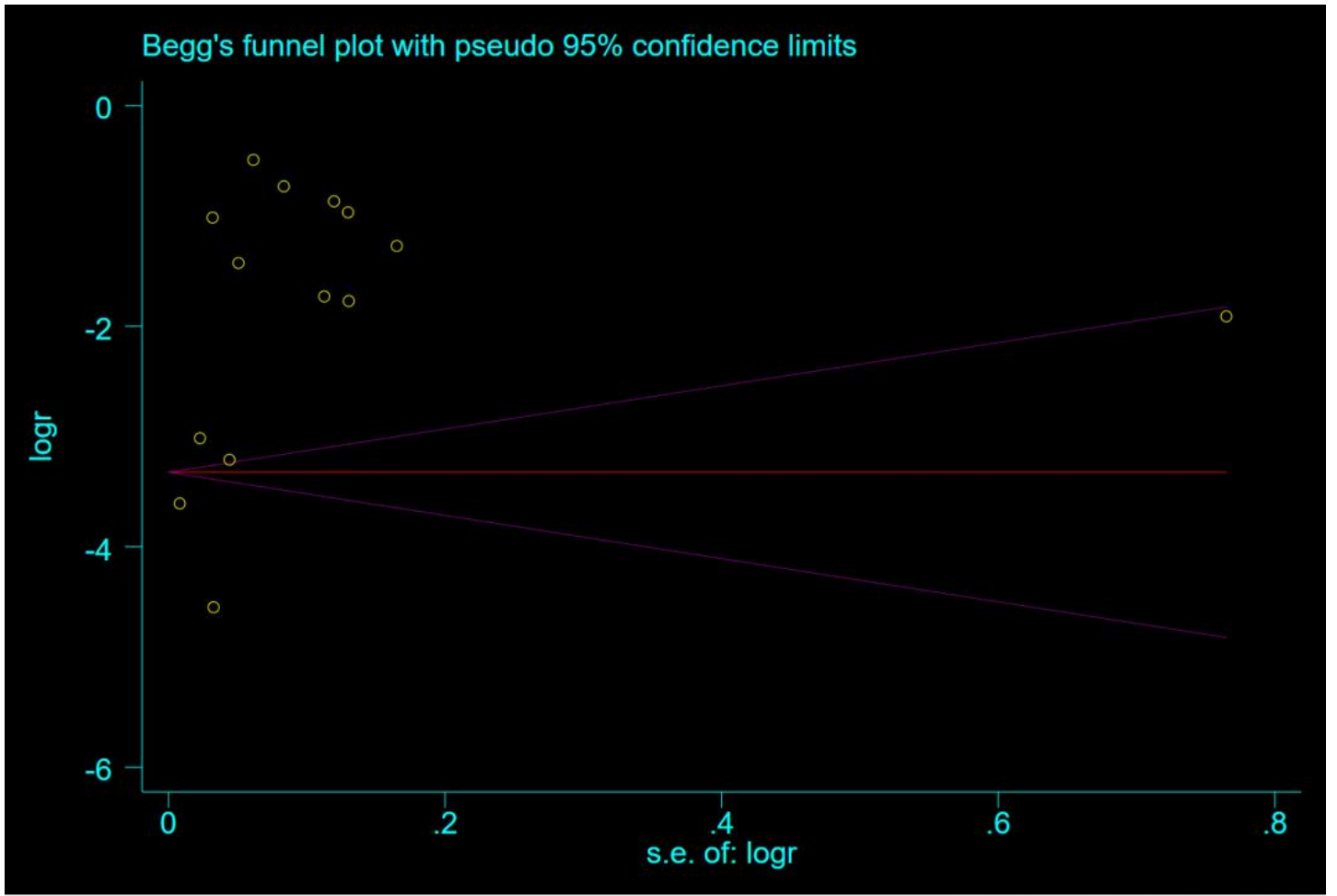
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Supplementary Figure 19 Begg test of depression.

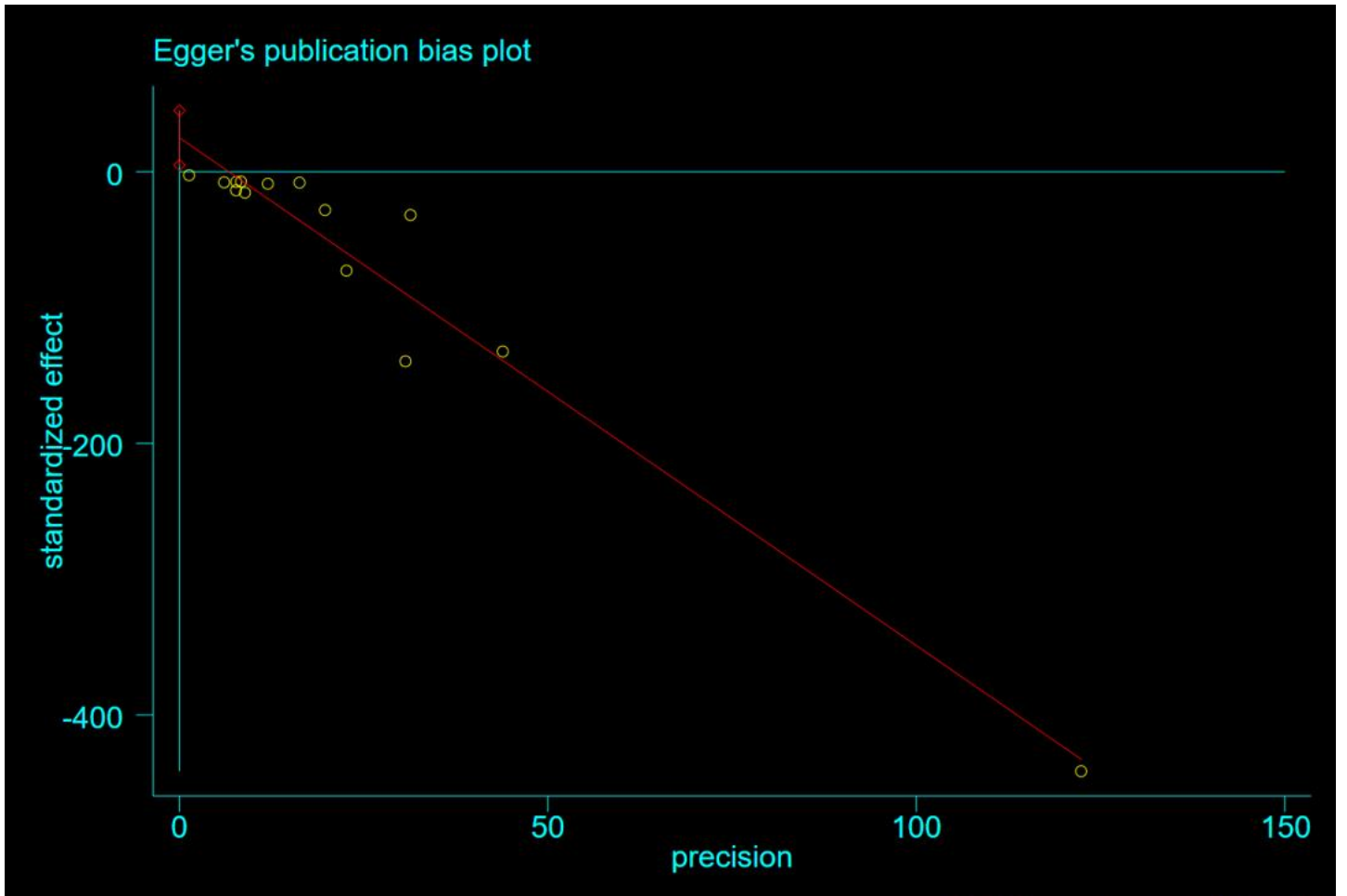


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Supplementary Figure 20 Eggers test of depression.



Supplementary Figure 21 Begg test of anxiety.



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Supplementary Figure 22 Eggers test of anxiety.