

## Supplementary Materials

**Table S1.** Full Search Strategy.

<b>PubMed</b>
#1 sepsis"[MeSH Terms] OR "sepsis"[All Fields] OR "septicaemias"[All Fields] OR "septicemias"[All Fields] OR "septicaemia"[All Fields] OR "septicemia"[All Fields]
#2 "bacteraemia"[All Fields] OR "bacteremia"[MeSH Terms] OR "bacteremia"[All Fields] OR "bacteraemias"[All Fields] OR "bacteremias"[All Fields]
#3 "septic"[All Fields] OR "septics"[All Fields]
#4 #1 OR #2 OR #3
#5 ("atrial fibrillation"[MeSH Terms] OR ("atrial"[All Fields] AND "fibrillation"[All Fields])) OR "atrial fibrillation"[All Fields]
#6 #4 AND #5
<b>EMBASE</b>
#1 'sepsis'/exp OR 'sepsis' OR 'septicemia' OR 'bacteremia' OR septic
#2 'atrial fibrillation'
#3 #1 AND #2

**Table S2.** Bias Assessment—NOS for incidence of new onset Atrial Fibrillation.

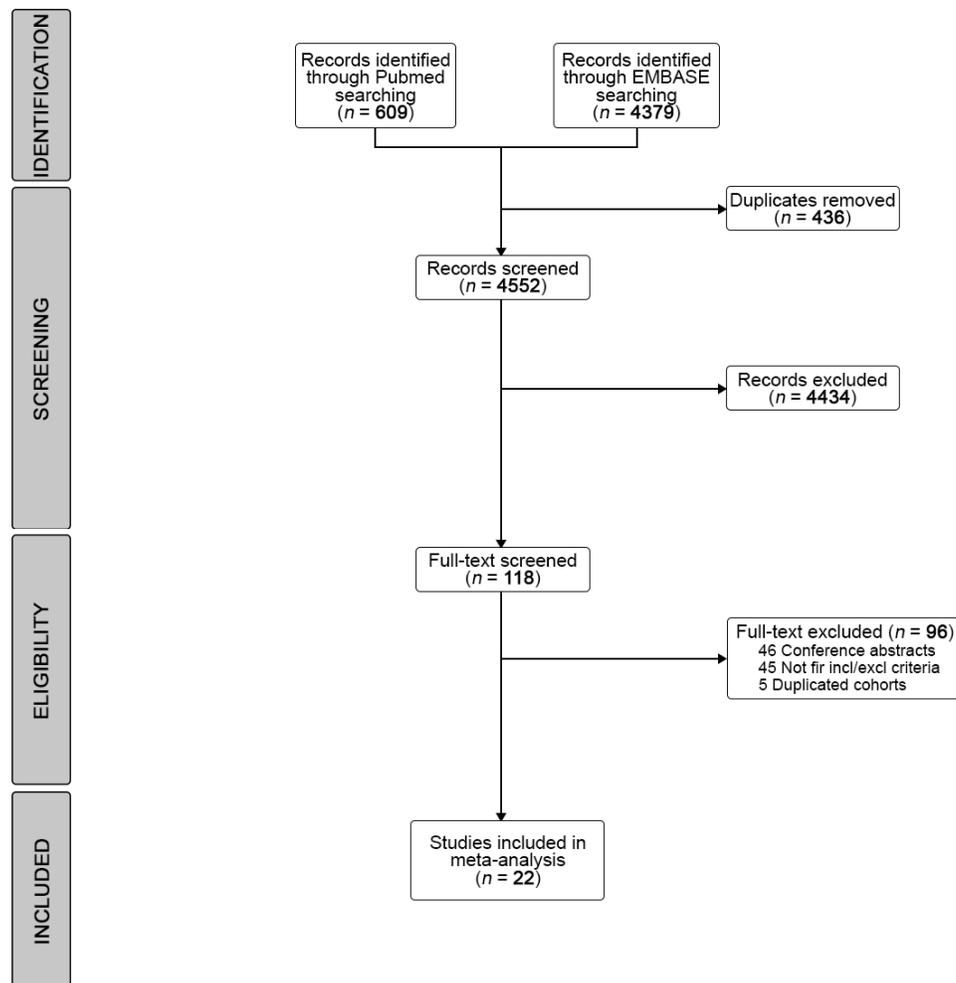
<b>Study</b>	<b>Selection (2)</b>	<b>Comparability (1)</b>	<b>Outcome (2)</b>	<b>Total (5)</b>
Arunachalam 2020* [18]	1	0	1	2
Bosch 2019 [19]	2	1	2	5
Chen 2015* [20]	1	0	1	2
Christian 2008* [21]	2	1	1	4
Fernando 2020* [22]	1	0	1	2
Guenancia 2015** [23]	1	1	2	4
Hayase 2016*,** [24]	1	0	1	2
Klein Klouwenberg 2017 [25]	2	1	2	5
Koyfman 2015* [26]	2	0	1	3
Launey 2019*** [27]	1	1	2	5
Lewis 2016 [28]	2	1	2	5
Liu 2016 [29]	2	1	2	5
Meierhenrich 2010 [30]	1	1	2	4
Moss 2017* [31]	2	1	1	4
Para 2020*,** [32]	0	0	1	1
Personett 2012*,# [33]	2	1	1	4
Salman 2008** [34]	1	1	2	4
Seemann 2015**,# [35]	1	1	1	3
Shaver 2015* [36]	1	1	1	3
Walkey 2014 [37]	2	1	2	5
Walkey 2011# [12]	2	1	1	4
Wieruszewski 2021*,# [38]	1	1	1	3

Legend: \*No/missing baseline characteristics/information for the whole cohort of sepsis patients; \*\*Sample size less than 100 patients. \*\*\*Selected african/american patients. #Possible bias in definition of noAF NOS = Newcastle-Ottawa Scale.

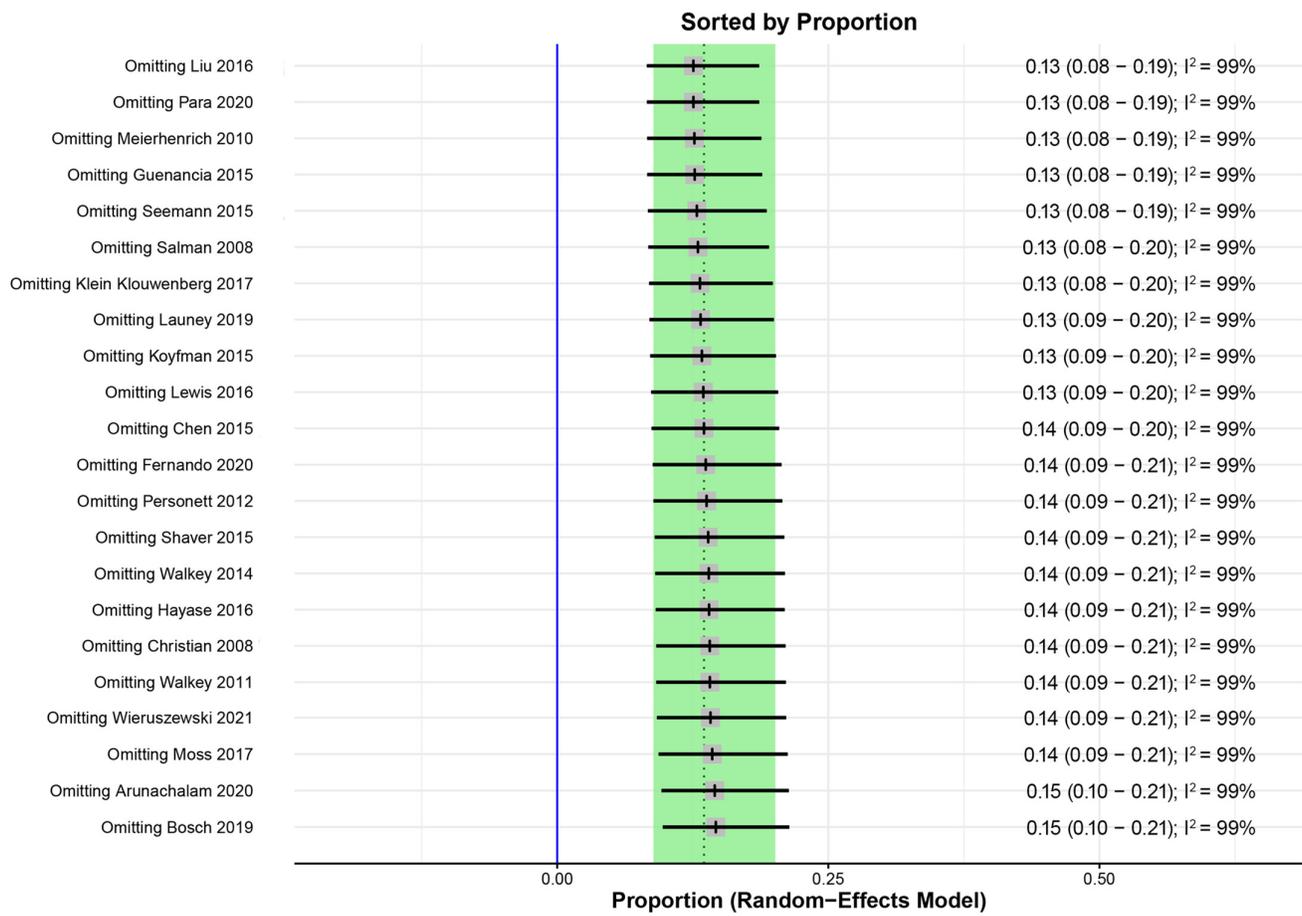
**Table S3.** Bias Assessment—NOS for outcomes according to new onset Atrial Fibrillation.

Study	Selection (4)	Comparability (2)	Outcome (3)	Total (9)
Bosch 2019 [19]	4	2	3	9
Chen 2015* [20]	3	0	3	6
Christian 2008* [21]	3	1	3	7
Guenancia 2015 [23]	4	2	3	9
Klein Klouwenberg 2017 [25]	4	2	3	9
Liu 2016 [29]	4	2	3	9
Meierhenrich 2010 [30]	4	1	3	8
Salman 2008 [34]	4	1	3	8
Walkey 2011# [12]	3	2	3	8

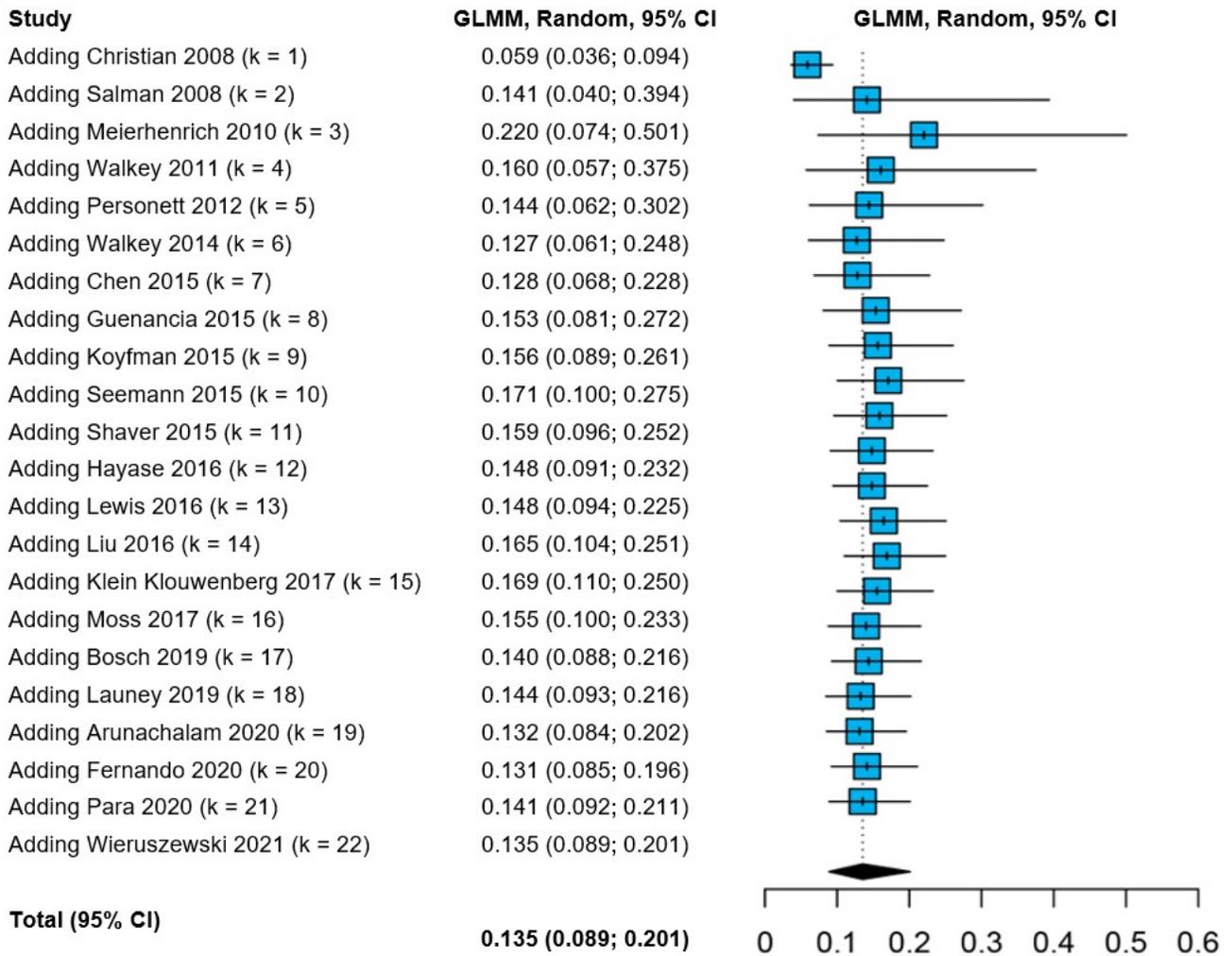
Legend: \*No/Missing baseline characteristics/informations for sepsis patients; #Possible bias in definition of noAF NOS= Newcastle-Ottawa Scale.



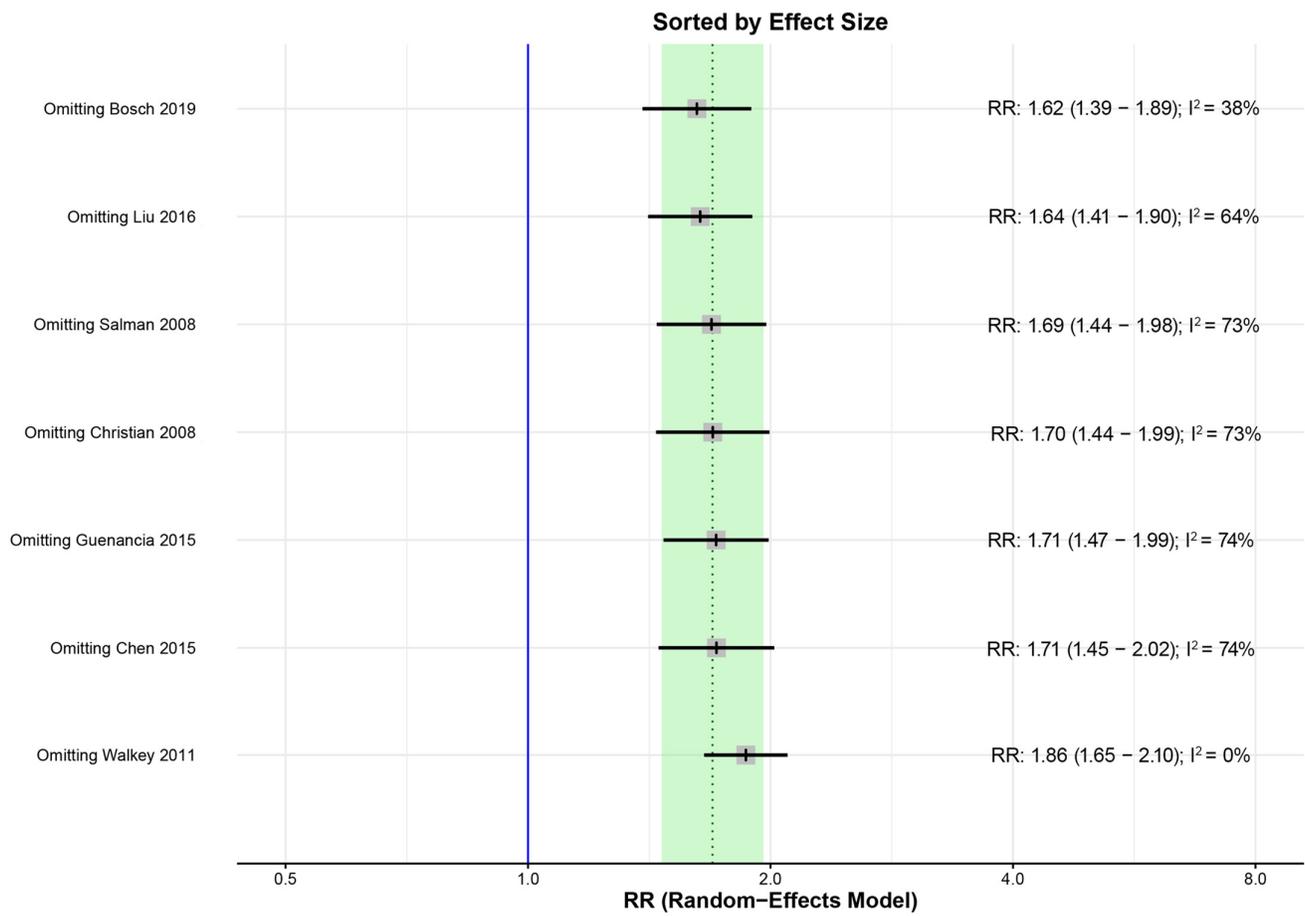
**Figure S1.** PRISMA Flow-Chart of the Study.



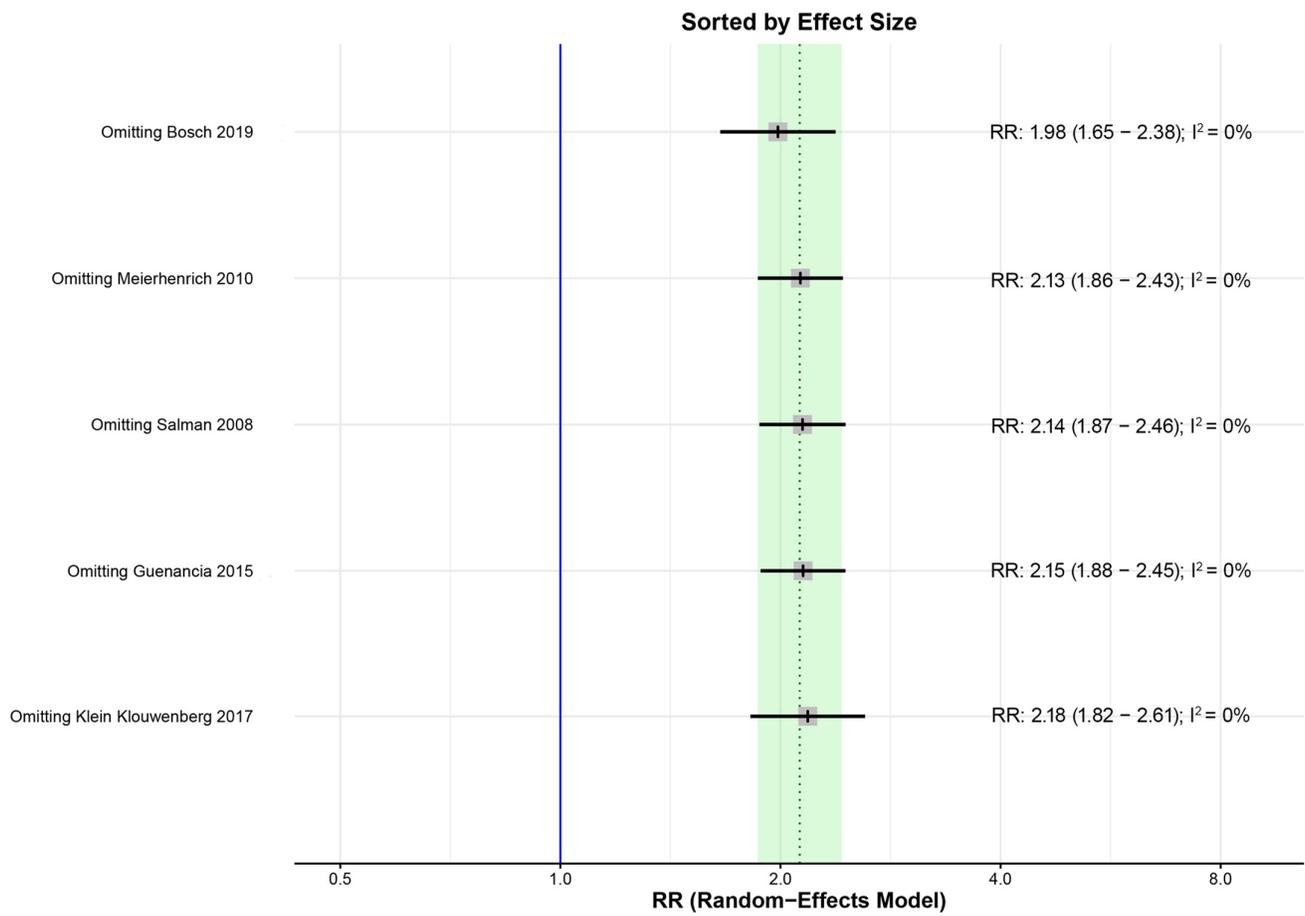
**Figure S2.** Leave one out analysis for NOAF Prevalence [12,18–38]. Abbreviation:  $I^2$  = inconsistency index.



**Figure S3.** Cumulative Meta-Analysis of Prevalence of NOAF based on Study Publication Year [12,18–38]. Abbreviations: GLMM = generalized linear mixed model; CI = confidence interval.



**Figure S4.** Leave one out analysis for in-hospital mortality according to NOAF [12,19–21,23,29,34]. Abbreviation: I<sup>2</sup> = inconsistency index, RR = Risk Ratio.



**Figure S5.** Leave one out analysis for ICU mortality in patients with NOAF [19,23,25,30,34]. Abbreviation: I<sup>2</sup> = inconsistency index, RR = Risk Ratio.