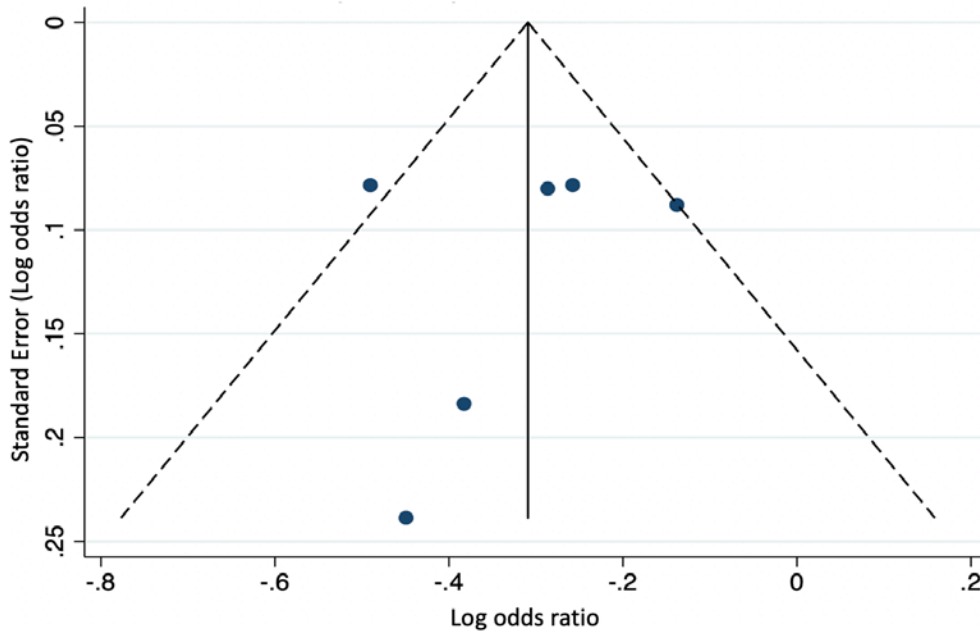
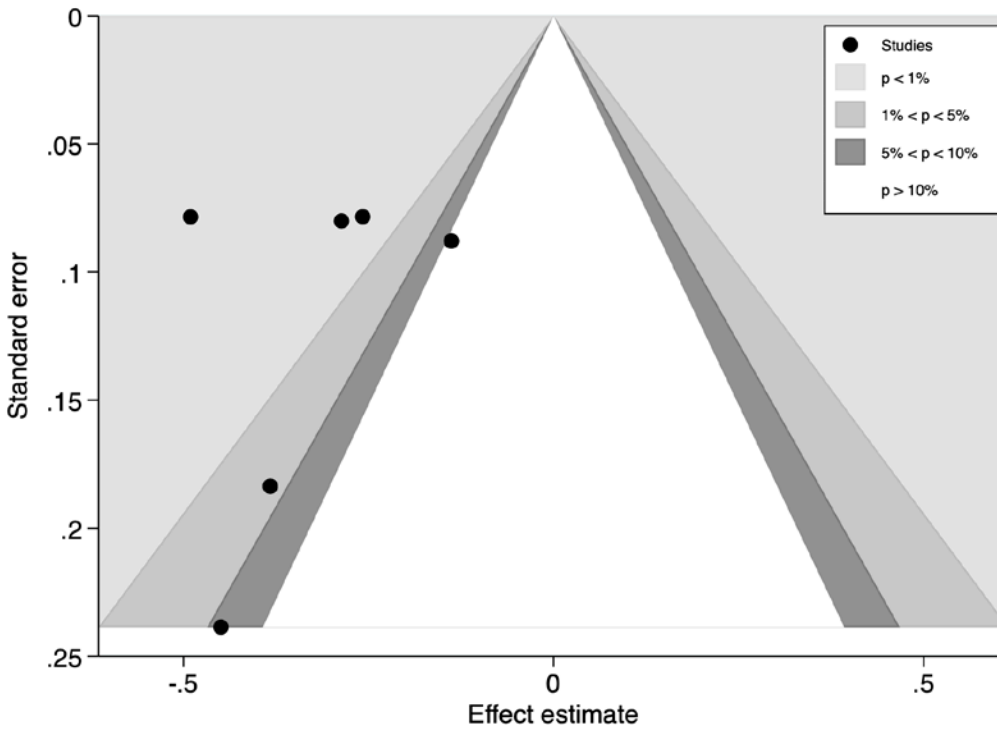


SUPPLEMENTAL MATERIAL

Supplemental Figure 1. Funnel Plot to Assess Small-Study Effects (Fixed Effects Model)



Supplemental Figure 2. Contour Enhanced Funnel Plot to Assess Publication or Reporting Bias



Supplemental Table 1. Detailed Search Strategy

Ovid MEDLINE(R) ALL 1946 to Sept 3, 2019

#	Searches	Results
1	atrial fibrillation/	51334
2	catheter ablation/	30433
3	pulmonary veins/	13536
4	radiofrequency ablation/	440
5	2 or 3 or 4	41293
6	(tim* adj3 ablat*).tw.	1650
7	(diagnos* adj3 ablat*).tw.	292
8	DAT.tw.	7293
9	(tim* adj3 (ablat* and diagnos*)).tw.	1007
10	((diagnosis-to-ablation) adj3 time).tw.	5
11	6 or 7 or 8 or 9 or 10	10132
12	1 and 5 and 11	378

Embase 1974 to 2019 August 30

#	Searches	Results
1	atrial fibrillation/	51489
2	catheter ablation/	32809
3	pulmonary vein isolation/	8040
4	radiofrequency ablation/	30920
5	2 or 3 or 4	64877
6	(tim* adj3 ablat*).tw.	3601
7	(diagnos* adj3 ablat*).tw.	540
8	DAT.tw.	10949
9	(tim* adj3 (ablat* and diagnos*)).tw.	2438
10	((diagnosis-to-ablation) adj3 time).tw.	23
11	6 or 7 or 8 or 9 or 10	17211
12	1 and 5 and 11	347

Cochrane (Search on Sept 3, 2019)

#	Searches	Results
1	atrial fibrillation/	4048
2	catheter ablation/	1391
3	pulmonary veins/	411
4	radiofrequency ablation/	24
5	2 or 3 or 4	1522
6	(tim* adj3 ablat*).tw.	9622
7	(diagnos* adj3 ablat*).tw.	9622
8	DAT.tw.	2
9	(tim* adj3 (ablat* and diagnos*)).tw.	9622
10	((diagnosis-to-ablation) adj3 time).tw.	9622
11	6 or 7 or 8 or 9 or 10	9622
12	1 and 5 and 11	9

Table S2. Risk of Bias Assessment

Study ID	Selection				Comparability	Outcome			Total (★)
	Representativeness of exposed cohort	Selection of non-exposed cohort	Ascertainment of exposure	Outcome shown to be absent at study start	Comparability of cohorts	Assessment of Outcome	Adequacy of Follow up Duration	Adequacy of Cohort Follow Up	
Bisbal (2019)	A (★)	A (★)	A (★)	A (★)	B (★)	A (★)	A (★)	D	7
Bunch (2013)	A (★)	A (★)	A (★)	B	B (★)	B (★)	B (★)	D	6
De Greef (2018)	A (★)	A (★)	A (★)	A (★)	-	A (★)	A (★)	D	6
Hussein (2016)	A (★)	A (★)	A (★)	A (★)	-	A (★)	A (★)	D	6
Kawaji (2019)	A (★)	A (★)	A (★)	A (★)	B (★)	A (★)	A (★)	D	7
Lunati (2018)	C	A (★)	A (★)	A (★)	-	A (★)	A (★)	D	5

Newcastle Ottawa Quality Assessment Form for Cohort Studies

(Reference: Wells GA et al. *The Newcastle-Ottawa Scale (NOS) for assessing the quality of non-randomised studies in meta-analyses*. Available at http://www.ohri.ca/programs/clinical_epidemiology/oxford.asp)

Note: A study can be awarded a maximum of one star for each numbered item within the Selection and Outcome categories. A maximum of two stars can be given for comparability. Each star indicates higher quality within the domain being assessed.

Selection

1) Representativeness of the exposed cohort

- a) truly representative of the average _____ (describe) in the community ★
- b) somewhat representative of the average _____ in the community ★
- c) selected group of users eg nurses, volunteers
- d) no description of the derivation of the cohort

2) Selection of the non exposed cohort

- a) drawn from the same community as the exposed cohort ★

- b) drawn from a different source
- c) no description of the derivation of the non exposed cohort

3) Ascertainment of exposure

- a) secure record (eg surgical records) ★
- b) structured interview ★
- c) written self report
- d) no description

4) Demonstration that outcome of interest was not present at start of study (defined in the present study as successful pulmonary vein isolation with AF ablation)

- a) yes ★
- b) no

Comparability

1) Comparability of cohorts on the basis of the design or analysis

- a) study controls for _____ (select the most important factor) ★
- b) study controls for any additional factor ★ (This criteria could be modified to indicate specific control for a second important factor.)

Outcome

1) Assessment of outcome

- a) independent blind assessment ★
- b) record linkage ★
- c) self report
- d) no description

2) Was follow-up long enough for outcomes to occur

- a) yes (select an adequate follow up period for outcome of interest) ★
- b) no

3) Adequacy of follow up of cohorts

- a) complete follow up - all subjects accounted for ★
- b) subjects lost to follow up unlikely to introduce bias - small number lost - > ____ % (select an adequate %) follow up, or description provided of those lost) □
- c) follow up rate < ____% (select an adequate %) and no description of those lost
- d) no statement

Table S3. Sensitivity Analysis with Stepwise Exclusion of Studies

Excluded Study	Random Effects Pooled Relative Risk (95% Confidence Interval)	P value	Cochran's Q	I²
Bisbal (2019)	0.74 (0.65, 0.84)	<0.001	0.04	59.1%
Bunch (2013)	0.70 (0.63, 0.78)	<0.001	0.24	26.2%
De Greef (2018)	0.72 (0.62, 0.84)	<0.001	0.05	58.2%
Hussein (2016)	0.78 (0.71, 0.85)	<0.001	0.55	0%
Kawaji (2019)	0.73 (0.62, 0.85)	<0.001	0.04	60.1%
Lunati (2018)	0.74 (0.65, 0.84)	<0.001	0.04	59.9%