

**Supplementary materials:**

## **Effect of corticosteroids on atrial fibrillation after catheter ablation: a meta-analysis**

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### **Data S1 Searching Strategy**

**PubMed:**

#1 ("Atrial Fibrillation"[Mesh]) OR (((atrial fibrillation\*[Title/Abstract]) OR auricular fibrillation\*[Title/Abstract]) OR atrium fibrillation\*[Title/Abstract])

#2 ("Catheter Ablation"[Mesh]) OR ablation\*[Title/Abstract]

#3 ("Steroids"[Mesh]) OR ((((((steroid\*[Title/Abstract]) OR corticosteroid\*[Title/Abstract]) OR glucocorticoid\*[Title/Abstract]) OR dexamethasone\*[Title/Abstract]) OR methylprednisolone\*[Title/Abstract]) OR hydrocortisone\*[Title/Abstract])

#4 ((clinical[tiab] AND trial[tiab]) OR "clinical trials as topic"[mesh] OR "clinical trial"[pt] OR random\*[tiab] OR "random allocation"[mesh] OR "therapeutic use"[sh])

#5 #1 AND #2 AND #3 AND #4

**Embase:**

#1 'atrial fibrillation'/exp

#2 'atrial fibrillation\*' OR 'auricular fibrillation\*' OR 'atrium fibrillation\*':ab,ti

#3 #1 OR #2

#4 'catheter ablation'/exp

#5 'ablation\*':ab,ti

#6 #4 OR #5

#7 'steroid'/exp

#8 'steroid\*' OR 'corticosteroid\*' OR 'glucocorticoid\*' OR 'dexamethasone\*' OR 'methylprednisolone\*' OR 'hydrocortisone\*':ab,ti

#9 #7 OR #8

#10 'clinical':ab,ti AND 'trial':ab,ti OR 'clinical trial'/exp OR random\* OR 'drug therapy':lnk

#11 #3 AND #6 AND #9 AND #10

**Cochrane:**

#1 MeSH descriptor: [Atrial Fibrillation] explode all trees

#2 'atrial fibrillation\*' or 'auricular fibrillation\*' or 'atrium fibrillation\*':ti,ab,kw

#3 #1 or #2

#4 MeSH descriptor: [Catheter Ablation] explode all trees

#5 ablation\*':ti,ab,kw

#6 #4 or #5

#7 MeSH descriptor: [Steroids] explode all trees

#8 'steroid\*' or 'corticosteroid\*' or 'glucocorticoid\*' or 'dexamethasone\*' or 'methylprednisolone\*' or 'hydrocortisone\*':ti,ab,kw

#9 #7 or #8

#10 #3 and #6 and #9

**Table S1 Quality assessment**

**Grade for RCT study**

Study	Adequate sequence generation	Allocation concealment	Blinding(subjective outcomes)	Incomplete outcome data addressed	Free of selective reporting	Free of other bias
Kim YR et al., 2015	No	No	No	No	No	No
Koyama et al., 2010	No	No	Yes	No	No	No

**NOS Score for Cohort Study**

Study	Representativeness of the exposed cohort	Selection of the nonexposed cohort	Ascertainment of exposure	Demonstration that outcome of interest was not present at start of study	Comparability of cohorts on the basis of the design or analysis	Assessment of outcome	Follow-up long enough for outcomes to occur	Adequacy of follow-up of cohort	Total score
Kim DR et al., 2015	1	1	1	1	2	1	1	1	9
Won et al., 2013	1	1	1	1	2	1	1	1	9
Andrade et al., 2013	1	1	1	1	1	1	1	1	8

**References**

- Andrade JG, Khairy P, Nattel S, et al., 2013. Corticosteroid use during pulmonary vein isolation is associated with a higher prevalence of dormant pulmonary vein conduction. *Heart Rhythm*, 10(10):1569-1575.  
<https://doi.org/10.1016/j.hrthm.2013.07.037>
- Kim DR, Won H, Uhm JS, et al., 2015. Comparison of two different doses of single bolus steroid injection to prevent atrial fibrillation recurrence after radiofrequency catheter ablation. *Yonsei Med J*, 56(2):324-331.  
<https://doi.org/10.3349/ymj.2015.56.2.324>
- Kim YR, Nam GB, Han S, et al., 2015. Effect of short-term steroid therapy on early recurrence during the blanking period after catheter ablation of atrial fibrillation. *Circ Arrhythm Electrophysiol*, 8(6):1366-1372.  
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- Koyama T, Tada H, Sekiguchi Y, et al., 2010. Prevention of atrial fibrillation recurrence with corticosteroids after radiofrequency catheter ablation: a randomized controlled trial. *J Am Coll Cardiol*, 56(18):1463-1472.  
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- Won H, Kim JY, Shim J, et al., 2013. Effect of a single bolus injection of low-dose hydrocortisone for prevention of atrial fibrillation recurrence after radiofrequency catheter ablation. *Circ J*, 77(1):53-59.  
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