

## Supplementary Online Content

Miriam C, Ovesen T. Systemic vs intratympanic corticosteroids in first-line treatment of idiopathic sudden sensorineural hearing loss: a systematic review and meta-analysis. *JAMA Otolaryngol*. Published online March 12, 2020.  
doi:10.1001/jamaoto.2020.0047

**eTable 1.** Study and patient characteristics

**eTable 2.** Risk of bias in the included studies investigating the effect of systemic *or* intratympanic treatment with corticosteroids as first-line therapy of ISSNHL

**eTable 3.** Risk of bias in the included studies investigating the effect of systemic *or* intratympanic *or* combined treatment with corticosteroids as first-line therapy of ISSNHL

**eFigure.** Study inclusion parameters

**eReferences.**

This supplementary material has been provided by the authors to give readers additional information about their work.

**eTable 1.** Study and patient characteristics.

Study and year	Number of patients	Follow up	Mean time to treatment $\pm$ SD	Goodman's criteria	Mean Age $\pm$ SD
Rauch et al. [1]	IT: 129 ST: 121	2 months	IT: 7.0 $\pm$ NA ST: 6.7 $\pm$ NA	Severe	IT: 51.3 $\pm$ NA ST: 50.4
Hong, Park, and Lee. [2]	IT: 32 ST: 31	3 months	IT: 3.4 $\pm$ NA ST: 3.9 $\pm$ NA	Severe	IT: 56.9 $\pm$ NA ST: 56.2 $\pm$ NA
Swachia, Sharma, and Singh. [3]	IT: 20 ST: 22	2 months	IT: NA ST: NA	Moderate to severe	NA
Gundogan et al. [4]	ST: 36 CB: 37	1 month	ST: 5.1 $\pm$ 3.5 CB: 4.7 $\pm$ 4.0	Severe	ST: 51.6 $\pm$ 16.8 CB: 52.3 $\pm$ 12.9
Tsounis et al. [5]	IT: 34 ST: 35 CB: 33	90 days	IT: 4.6 $\pm$ 3.0 ST: 3.1 $\pm$ 3.0 CB: 4.0 $\pm$ 3.9	Severe	IT: 53.2 $\pm$ 12.0 ST: 50.1 $\pm$ 17.3 CB: 51.7 $\pm$ 15.8
Ahn et al. [6]	ST: 60 CB: 60	NA	ST: 7.1 $\pm$ 4.1 CB: 6.5 $\pm$ 3.9	Severe	ST: 45.9 $\pm$ 14.7 CB: 48.6 $\pm$ 15.4
Lim et al. [7]	IT: 20 ST: 20 CB: 20	IT: 21 d ST: 17 d CB: 21 d	IT: 10.1 $\pm$ 8.1 ST: 5.4 $\pm$ 3.1 CB: 9.6 $\pm$ 7.5	Moderate to severe	IT: 53.3 $\pm$ 15.3 ST: 51.3 $\pm$ 14.5 CB: 47.8 $\pm$ 14.2

**eTable 2.** Risk of bias in the included studies investigating the effect of systemic *or* intratympanic treatment with corticosteroids as first-line therapy of ISSNHL.

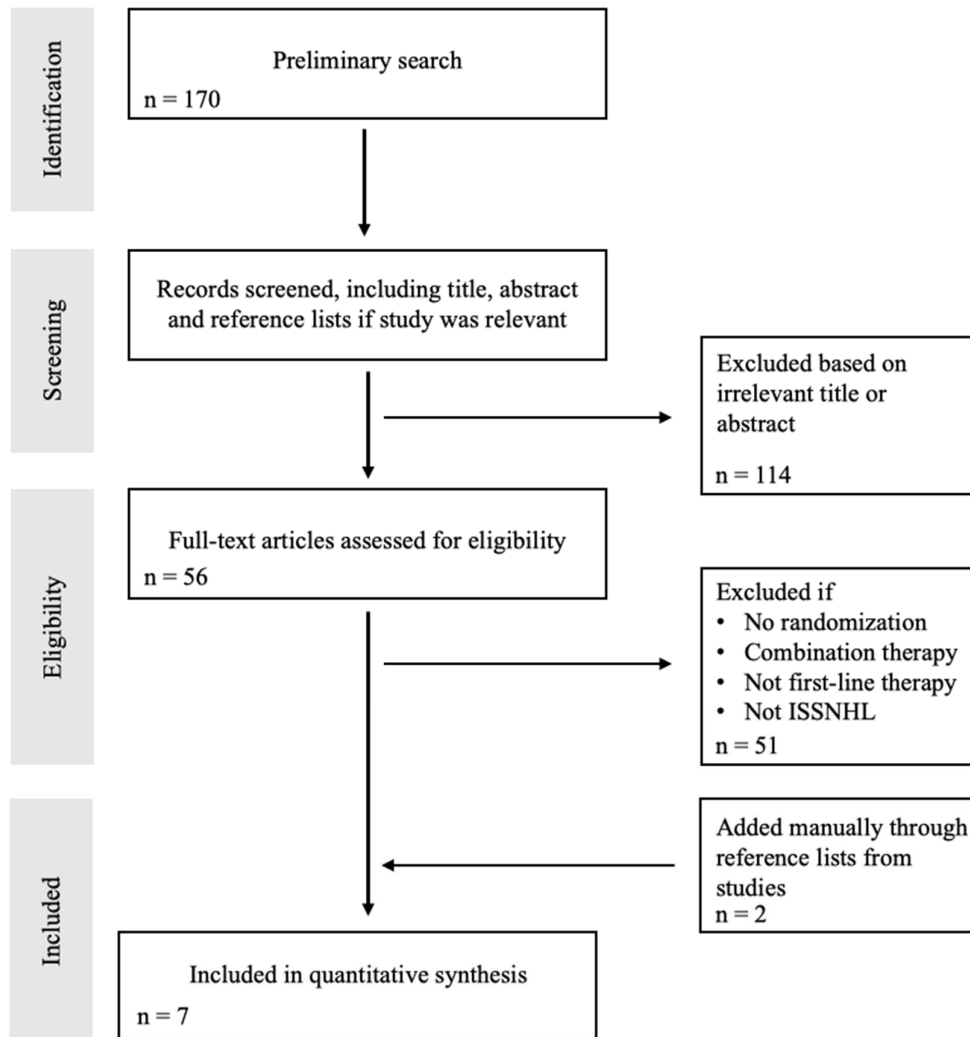
Red, yellow and green correspond to a **high risk**, **unknown risk** and **low risk** of bias, respectively.

Risk of bias	Rauch et al., 2011 [1]	Hong, Park, and Lee, 2009 [2]	Swachia, Sharma, and Singh, 2016 [3]
Random sequence generation (selection bias)	Permuted block randomization. The randomization codes were computer generated.	Quote: “.. treatment was assigned for patients alternatively and randomly”	Random sequence generation was not described
Allocation concealment (selection bias)	Only personnel at the data coordinating center had access to the randomization codes.	Allocation was not concealed	Allocation concealment was not described
Blinding of participants and personnel (performance bias)	Randomization was known to key staff and patients	Randomization was known to physicians and patients	Randomization was known to key staff and patients
Blinding of outcome assessment (detection bias)	Outcome assessors were blinded	Outcome assessors were blinded	Blinding of outcome assessor was not described
Incomplete outcome data addressed (attrition bias)	16/250 withdraw and was well described	4/38 and 5/37 was lost to follow-up and was not elaborated.	There was no incomplete or missing data
Selective reporting bias (reporting bias)	Consistency between outcome measure in methods and results	Consistency between outcome measure in methods and results	Consistency between outcome measure in methods and results

**eTable 3.** Risk of bias in the included studies investigating the effect of systemic *or* intratympanic *or* combined treatment with corticosteroids as first-line therapy of ISSNHL.

Risk of bias	Gundogan et al., 2013 [4]	Tsounis et al., 2018 [5]	Ahn et al., 2008 [6]	Lim et al., 2013 [7]
Random sequence generation (selection bias)	Block randomization	Randomization sequence was computer generated	Random sequence generation was not described	Consecutive allocated by visit sequence but was not described further
Allocation concealment (selection bias)	Allocation was not concealed	Random numbers placed in closed envelopes and given sequentially to patients	Allocation concealment was not described	Allocation was due to alternation or rotation
Blinding of participants and personnel (performance bias)	Randomization was known to key staff and patients	Randomization was known to key staff and patients	Randomization was known to key staff and patients	Randomization was known to key staff and patients
Blinding of outcome assessment (detection bias)	Blinding of outcome assessor was not described	Blinding of outcome assessor was not described – audiological assessor was blinded	Blinding of outcome assessor was not described	Outcome assessors were blinded
Incomplete outcome data addressed (attrition bias)	3/40 and 3/39 was lost to follow and was unlikely to influence outcome	5/40, 6/40 and 7/40 withdraw but was well described and unlikely to influence outcome	No missing data	No missing data
Selective reporting bias (reporting bias)	Consistency between outcome measure in methods and results	Consistency between outcome measure in methods and results	Length of follow up was not reported	Consistency between outcome measure in methods and results

**eFigure.** Study Inclusion Parameters



## eReferences

- [1] Rauch SD, Halpin CF, Antonelli PJ, Babu S, Carey JP, Gantz BJ, et al. Oral vs intratympanic corticosteroid therapy for idiopathic sudden sensorineural hearing loss: a randomized trial. *JAMA* 2011;305:2071–9. doi:10.1001/jama.2011.679.
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