

Effectiveness of secukinumab in patients with moderate to severe Hidradenitis Suppurativa: results from a meta-analysis

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KEY FINDINGS & CONCLUSIONS

- Results reinforce the effectiveness of secukinumab in HS patients who failed or presented contraindications to anti-TNF-α treatment in a real-world setting.
- The pooled results are aligned with the results published in the SUNRISE and SUNSHINE studies, when comparing HiSCR data at week 16.
- These findings should be interpreted with caution, because of the limitations of the studies included, and further observational studies with larger sample size should be implemented.

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INTRODUCTION

- Hidradenitis suppurativa (HS) is a chronic inflammatory disease with a major impact on patients' quality of life.
- Data from key phase III studies (SUNRISE and SUNSHINE)¹ demonstrated HiSCR at week 16 between 41.8% and 46,1% in patients with moderate to severe disease.
- Evidence published using real world data demonstrated the effectiveness of secukinumab in patients with moderate to severe HS, previously treated with anti-tumor necrosis factor (TNF)-α. Although the evidence is consistent amongst studies, the number of patients enrolled in each study is relatively small.
- The objective of this analysis is to assess the effectiveness of secukinumab in patients with moderate to severe HS who failed or presented contraindications to anti-TNF-α.

METHODS

- We conducted a scoping review with meta-analysis (MA), searching two electronic databases (PubMed and Ovid) for observational studies on the effectiveness of secukinumab in patients with moderate to severe HS, who failed or presented contraindications to anti-TNF-α treatment.
- Search terms: 'secukinumab', 'Hidradenitis Suppurative', 'HS'.
- The search and extraction were conducted in June 2024. The primary outcome was the achievement of Hidradenitis Suppurativa Clinical Response (HiSCR) at week 16.
- Two authors independently selected studies and extracted data for analysis.
- A proportional meta-analysis was conducted for calculation of a pooled result using a fixed-effects model with a 95%CI. The analysis was conducted in R, version 4.4.1, package 'meta'.

RESULTS

A total of four studies published between 2021 and 2024 were included in the meta-analysis, with 3 of them having as primary outcome the proportion of patients achieving HiSCR at week 16 of treatment. The meta-analysis involved a total of 119 patients, who previously failed to treatment or presented contraindication to adalimumab, being more than half female (57%).

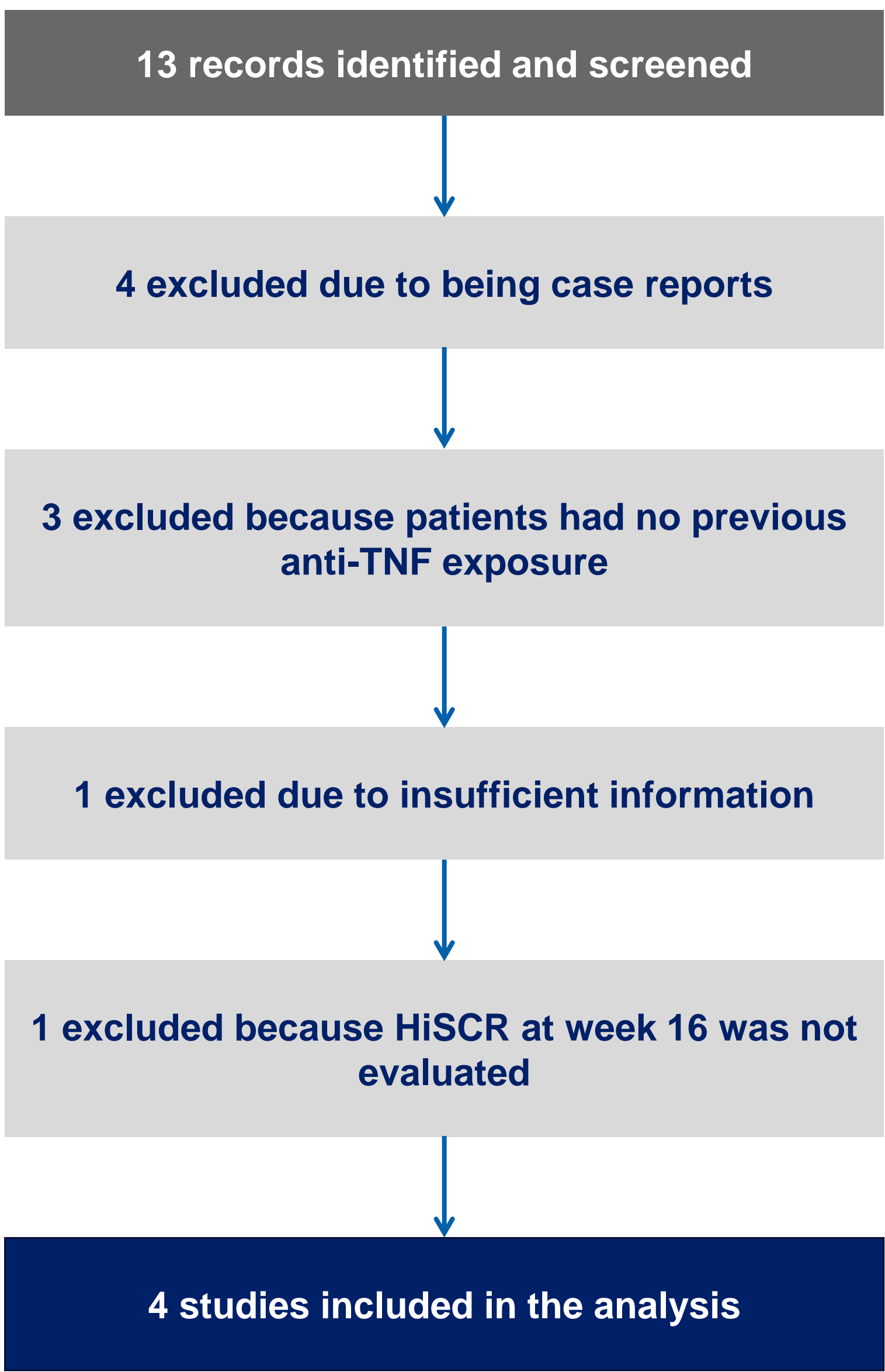


Table 1. Characteristics of the studies included in the meta-analysis

Author	Year	Publication	Patient Population	Previous Therapies	Primary Outcome
Reguiat et al.	2020	Effectiveness of secukinumab in hidradenitis suppurativa: an open study (20 cases) ²	Patients who were previously treated with multiple courses of antibiotics (antibiotic combinations and ertapenem), anti-TNF-a (all patients had a failure or intolerance to at least one anti-TNF: infliximab or adalimumab: 4–24 months) and for one of the patients anakinra for 2 years had failed	Multiple courses of antibiotic, anti-TNF-a (infliximab or adalimumab) and anakinra	Proportion of subjects who achieved a HiSCR after 16 weeks of treatment
Ribero et al.	2021	Effectiveness of Secukinumab in the treatment of moderate–severe hidradenitis suppurativa: results from an Italian multicentric retrospective study in a real-life setting ³	Patients who had failed or presented contraindications to at least one anti-TNF-α	Anti-TNF-a	Achievement of clinical response (HiSCR) at week 28
Fernandez-Crehuet et al.	2023	Short-Term Effectiveness, Safety, and Potential Predictors of Response of Secukinumab in Patients with Severe Hidradenitis Suppurativa Refractory to Biologic Therapy: A Multicenter Observational Retrospective Study ⁴	Patients with a lack of response or contraindication to adalimumab treatment	Adalimumab	Proportion of participants who achieved HiSCR at week 16 of treatment
Martora et al.	2024	Secukinumab in Hidradenitis Suppurativa Patients Who Failed Adalimumab: A 52-Week Real-Life Study ⁵	Patients with adalimumab primary or secondary inefficacy, and/or adalimumab discontinuation due to adverse events or adalimumab contraindication	Adalimumab	Proportion of patients reaching HiSCR at 16 weeks.

Figure 1. PRISMA flow diagram of study selection.

The meta-analysis results estimated a global HiSCR rate of 45% at week 16, with a 95% confidence interval of 36% to 55%. Despite the observed heterogeneity among the studies ($I^2 = 74\%$, $p < 0.001$), which indicates variability in the results, this finding underscores the effectiveness observed across various studies. Furthermore, while the funnel plot suggests some publication bias and lower precision in several studies, the substantial overall response rate highlights the potential benefits of the treatment.

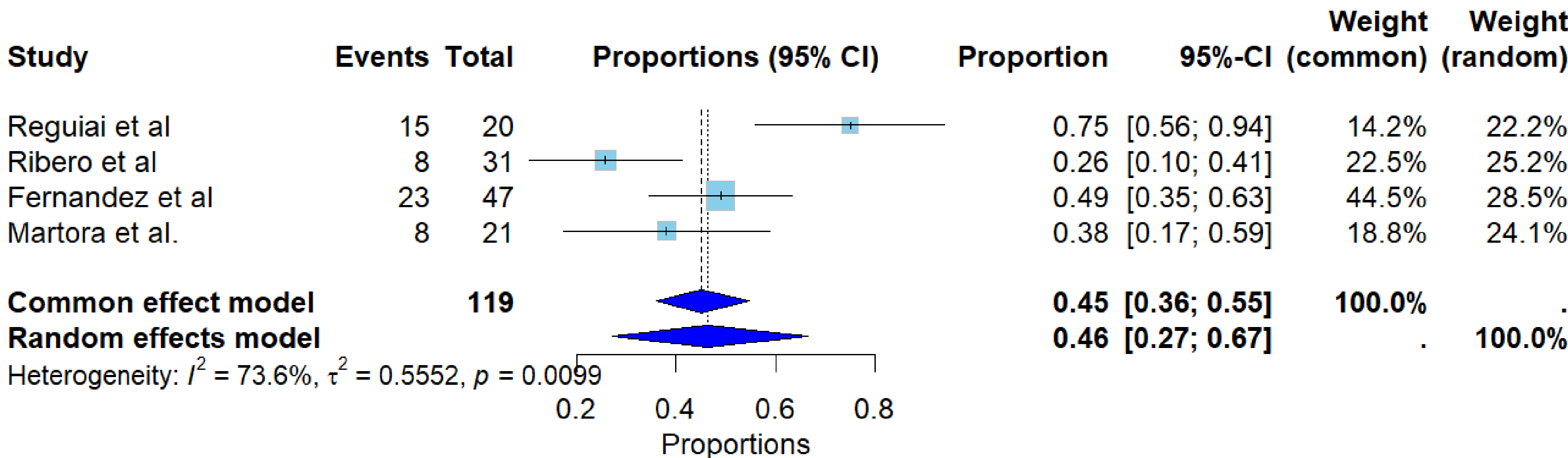


Figure 2. Forest plot of HiSCR at week 16

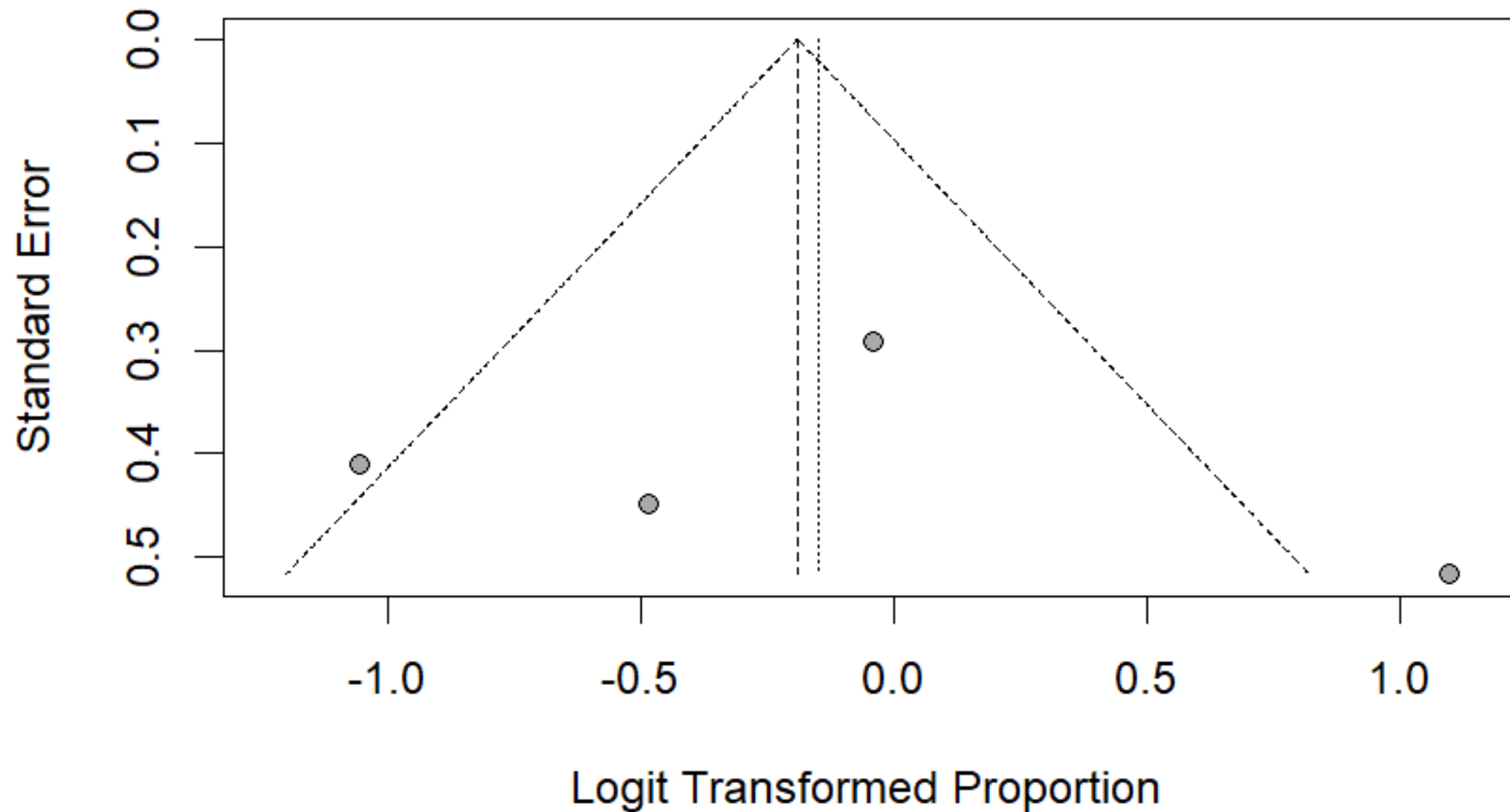


Figure 3. Funnel plot of the publication bias.

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Disclosures

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