Database	Search string (complete, unabridged; including MeSH terms, keywords, field tags, Boolean operators, and filters)
PubMed/MEDLINE	(**“Nose”[MeSH Terms]** OR “nasal”[All Fields]) AND (“reconstruction”[All Fields] OR “reconstructive surgical procedures”[MeSH Terms] OR “flap”[All Fields] OR “graft”[All Fields]) AND (“distal”[All Fields] OR “tip”[All Fields] OR “ala”[All Fields] OR “alar”[All Fields]) AND (“outcomes”[All Fields] OR “complications”[All Fields] OR “necrosis”[All Fields] OR “infection”[All Fields]) Filters: Humans, English, no date restrictions
Embase (Ovid)	('nose reconstruction'/exp OR 'nasal reconstruction':ab,ti OR 'nasal flap':ab,ti OR 'forehead flap':ab,ti OR 'nasolabial flap':ab,ti) AND ('distal nose':ab,ti OR 'nasal tip':ab,ti OR 'alar':ab,ti) AND ('complication':ab,ti OR 'outcome':ab,ti OR 'necrosis':ab,ti OR 'infection':ab,ti)
Scopus	(TITLE-ABS-KEY((nasal OR nose) AND (reconstruction OR flap OR graft) AND (distal OR tip OR ala OR alar) AND (outcome OR complication OR necrosis OR infection)))
Cochrane Library	(nasal OR nose) in Title Abstract Keyword AND (reconstruction OR flap OR graft) in Title Abstract Keyword AND (distal OR tip OR ala OR alar) in Title Abstract Keyword
Google Scholar	“distal nasal reconstruction” OR “nasal tip reconstruction” OR “forehead flap” OR “nasolabial flap” OR “bilobed flap” AND (outcomes OR complications) — first 200 results screened

Table S1. Complete search strategy.

Outcome	No. of Studies	No. of Patients	Effect Estimate (95% CI)	Certainty of Evidence (GRADE)	Key Reasons for Rating
Complication rate	38	1362	11% (8–14%)	Moderate ⊕⊕⊕◯	Risk of bias in included studies; some heterogeneity
Flap/graft necrosis	35	1200	3% (2–5%)	High ⊕⊕⊕⊕	Consistent results, low risk of bias
Revision surgery	36	1300	7% (5–10%)	Moderate ⊕⊕⊕◯	Some inconsistency among studies; imprecision in estimates

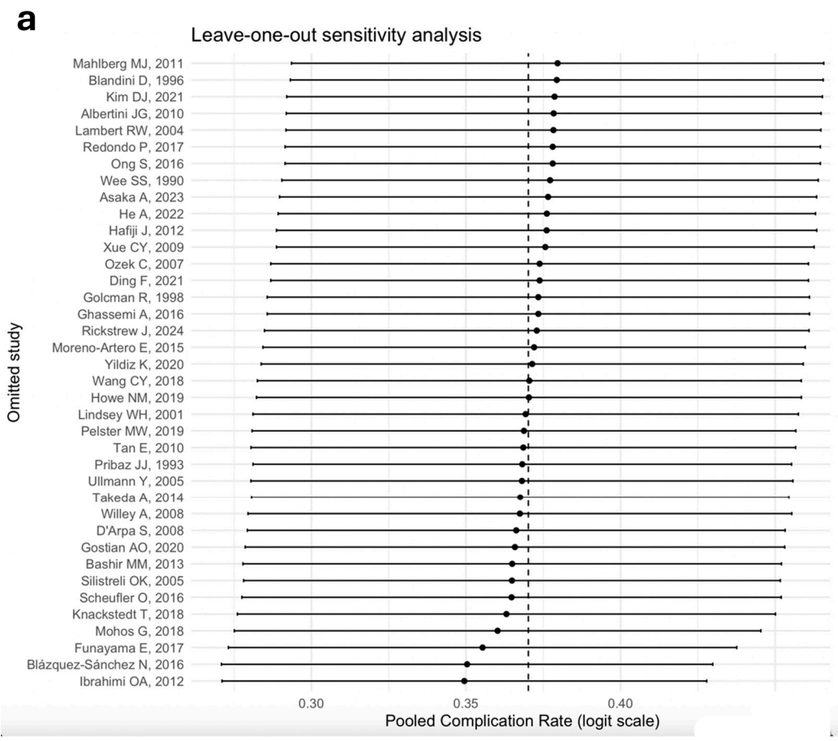
Table S2. GRADE assesment.

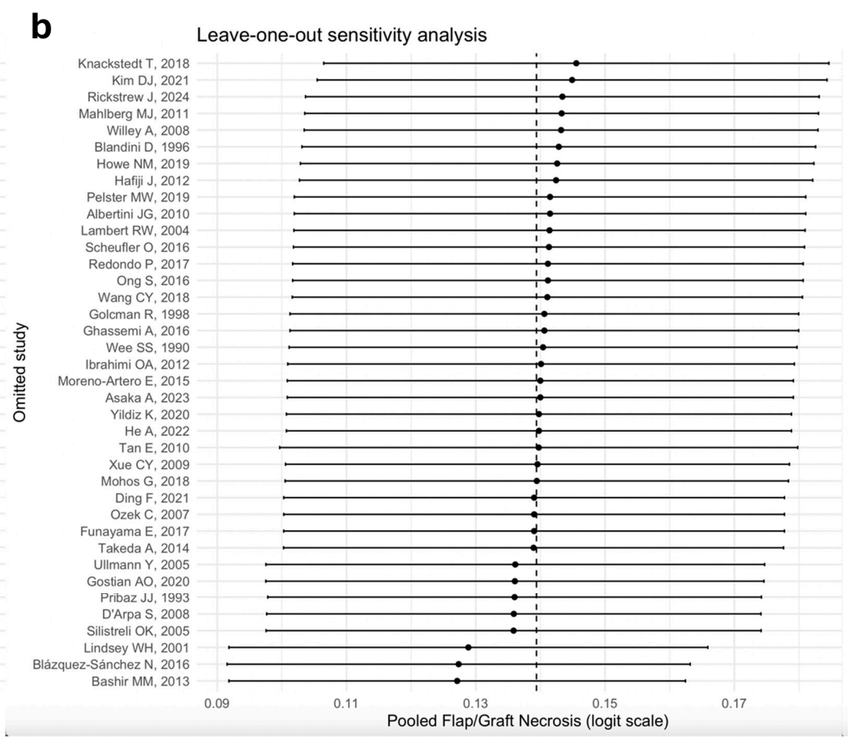
Author, Year	Selection	Comparison	Outcome
Rickstrew J, 2024	xxx	x	xx
Asaka A, 2023	xxx	xx	xx
He A, 2022	xxx	x	xxx
Ding F, 2021	xxx	x	xxx
Kim DJ, 2021	xxx	x	xxx
Gostian AO, 2020	xxx	x	xx
Yildiz K, 2020	xxx	x	xx
Pelster MW, 2019	xxx	x	xxx
Howe NM, 2019	xxx	x	xxx
Knackstedt T, 2018	xxx	xx	xx
Mohos G, 2018	xxx	x	xxx
Wang CY, 2018	xxx	x	xxx

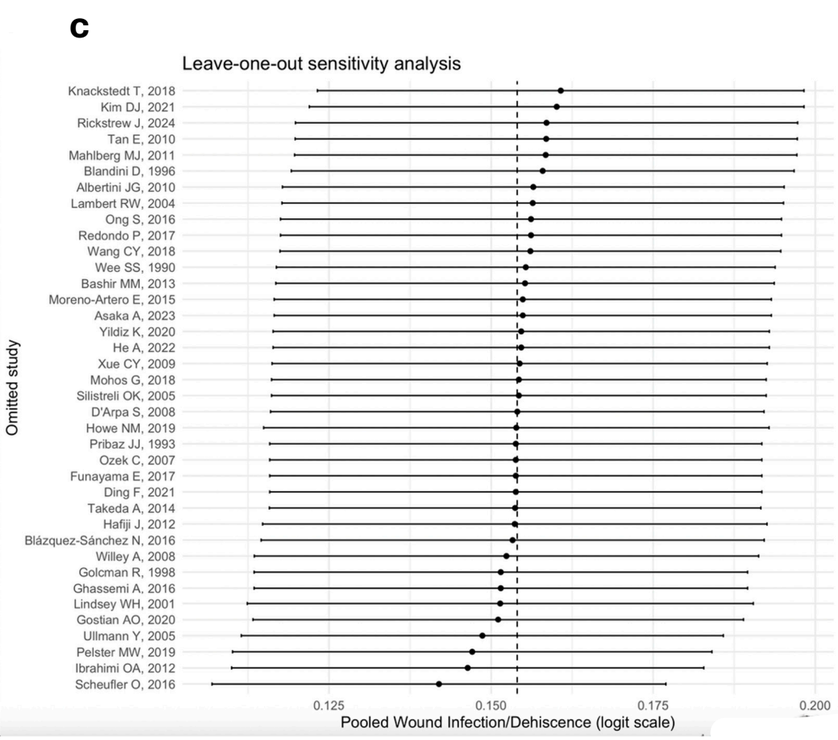
Funayama E, 2017	xxx	x	xxx
Redondo P, 2017	xxx	x	xxx
Blázquez-Sánchez N, 2016	xxx	x	xxx
Ghassemi A, 2016	xxx	xx	xxx
Lu X, 2016	xx	xx	xx
Ong S, 2016	xxx	x	xxx
Scheufler O, 2016	xxx	x	xxx
Moreno-Artero E, 2015	xxx	x	xxx
Takeda A, 2014	xxx	x	xxx
Bashir MM, 2013	xxx	x	xxx
Constantine FC, 2013	xx	xx	xx
Hafiji J, 2012	xxx	x	xxx
Ibrahimi OA, 2012	xxx	x	xxx
Mahlberg MJ, 2011	xxx	x	xxx
Albertini JG, 2010	xxx	x	xxx
Tan E, 2010	xxx	x	xxx
Xue CY, 2009	xxx	x	xxx
D'Arpa S, 2008	xxx	x	xxx
Willey A, 2008	xxx	x	xxx
Ozek C, 2007	xxx	x	xxx
Silistreli OK, 2005	xxx	x	xxx
Ullmann Y, 2005	xxx	x	xxx
Lambert RW, 2004	xxx	x	xxx
Lindsey WH, 2001	xx	x	xx
Golcman R, 1998	xx	x	xx

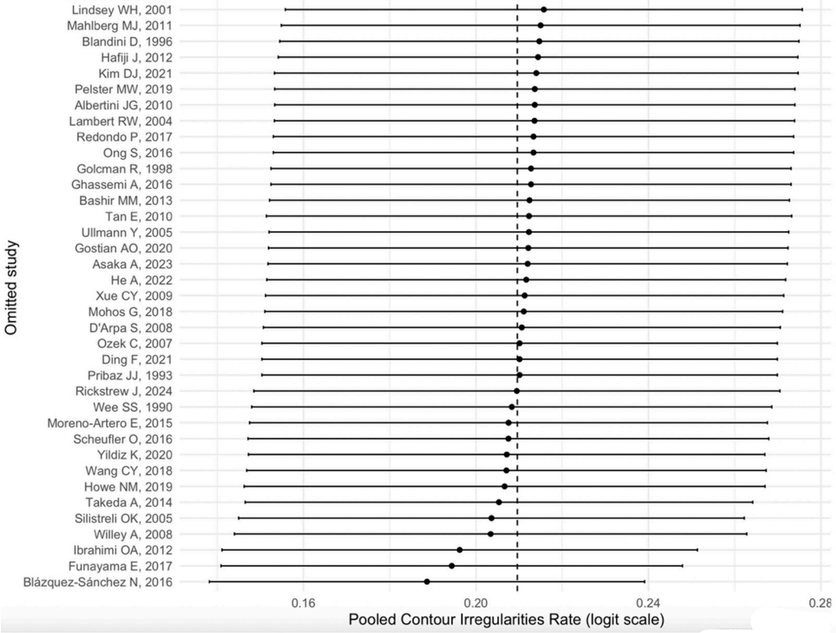
Blandini D, 1996	xx	x	xx
Pribaz JJ, 1993	xx	x	xx
Wee SS, 1990	xx	x	xx

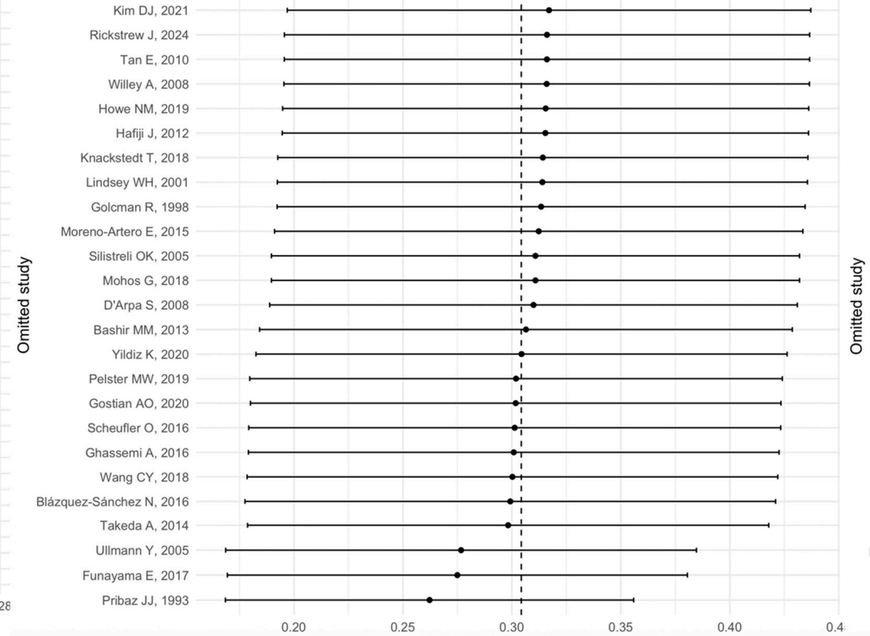
Table S3. Newcastle-Ottawa Quality Assessment Scale scores of the individual studies.











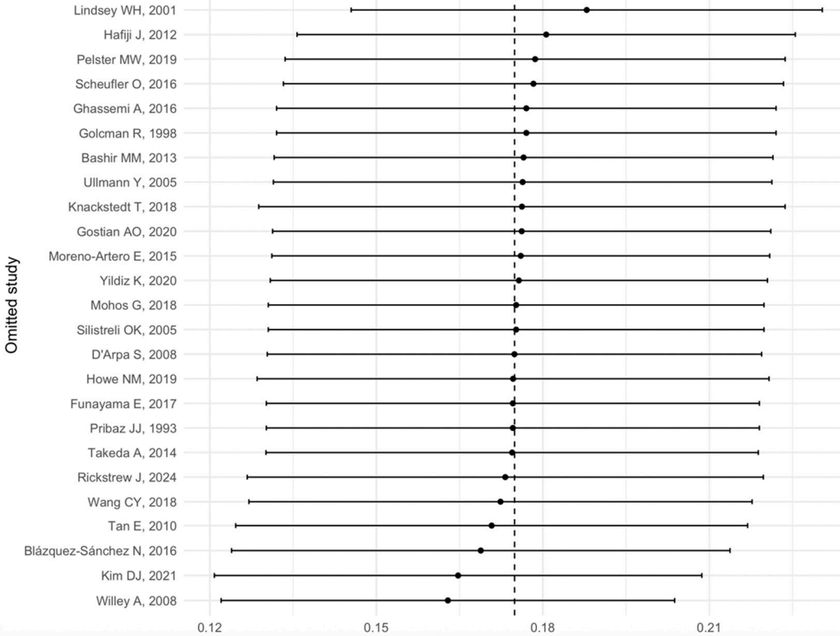


Figure S1. -a. Leave-one-out sensitivity analysis for pooled complication rate; **-b.** Leave-one-out sensitivity analysis for pooled flap/graft necrosis rate; **-c.** Leave-one-out sensitivity analysis for pooled wound infection/dehiscence rate; **-d.** Leave-one-out sensitivity analysis for pooled contour irregularities rate; **-e.** Leave-one-out sensitivity analysis for pooled revision surgery rate; **-f.** Leave-one-out sensitivity analysis for pooled dermabrasion rate.

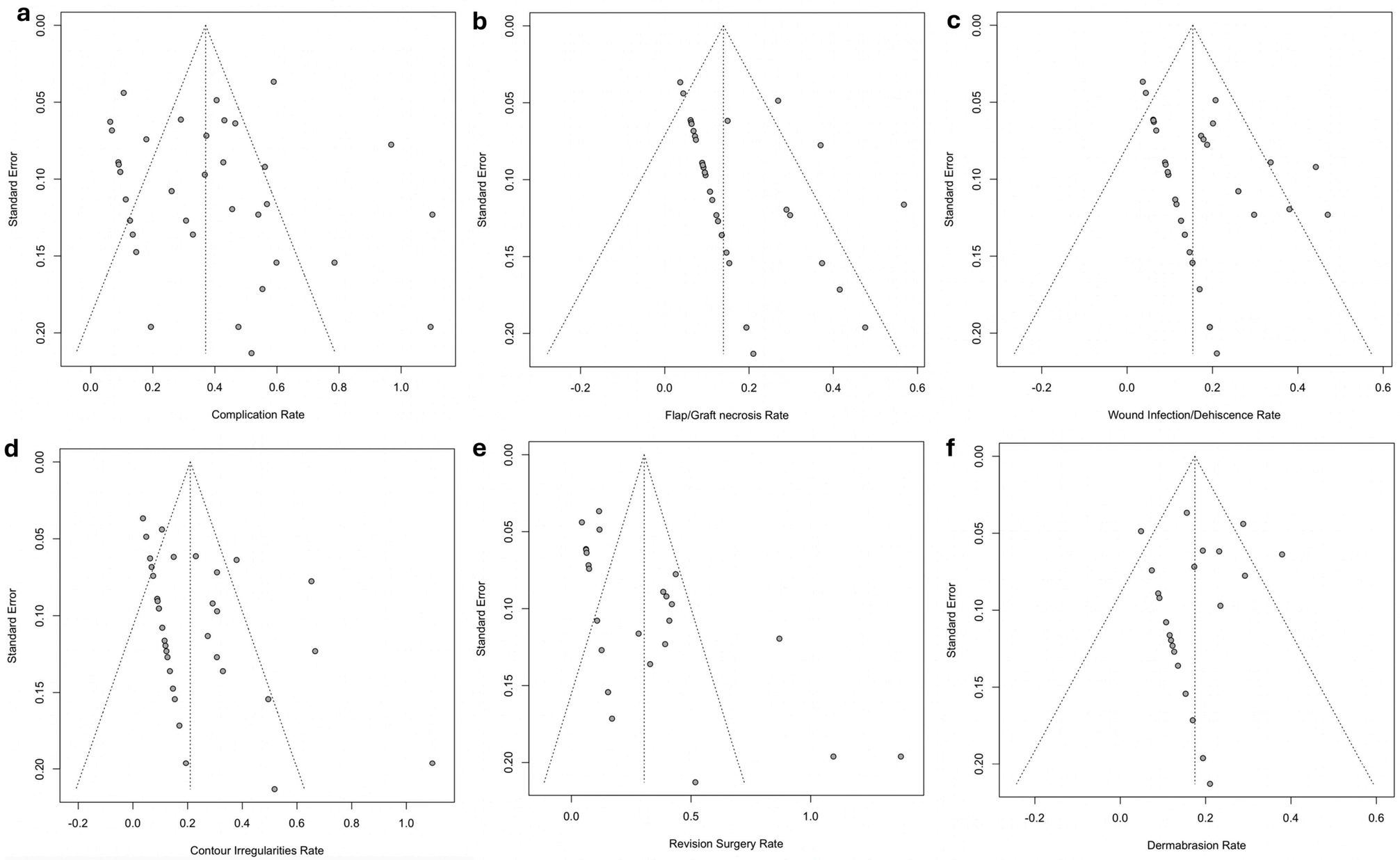


Figure S2. -a. Funnel plot for pooled complication rate; **-b.** Funnel plot for pooled flap/graft necrosis rate; **-c.** Funnel plot for pooled wound infection/dehiscence rate; **-d.** Funnel plot for for pooled contour irregularities rate; **-e.** Funnel plot for for pooled revision surgery rate; **-f.** Funnel plot for for pooled dermabrasion rate.