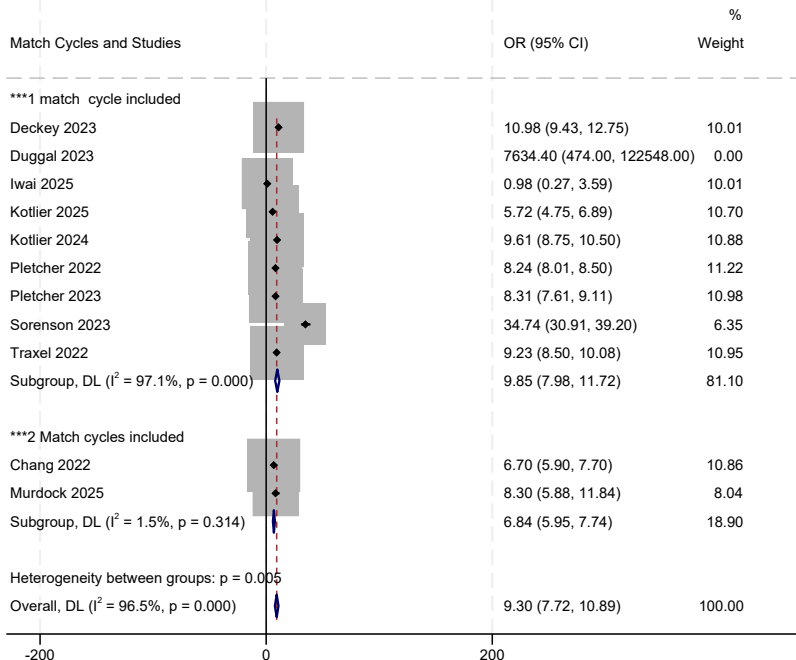


Supplement Table 1 Quality score for included studies

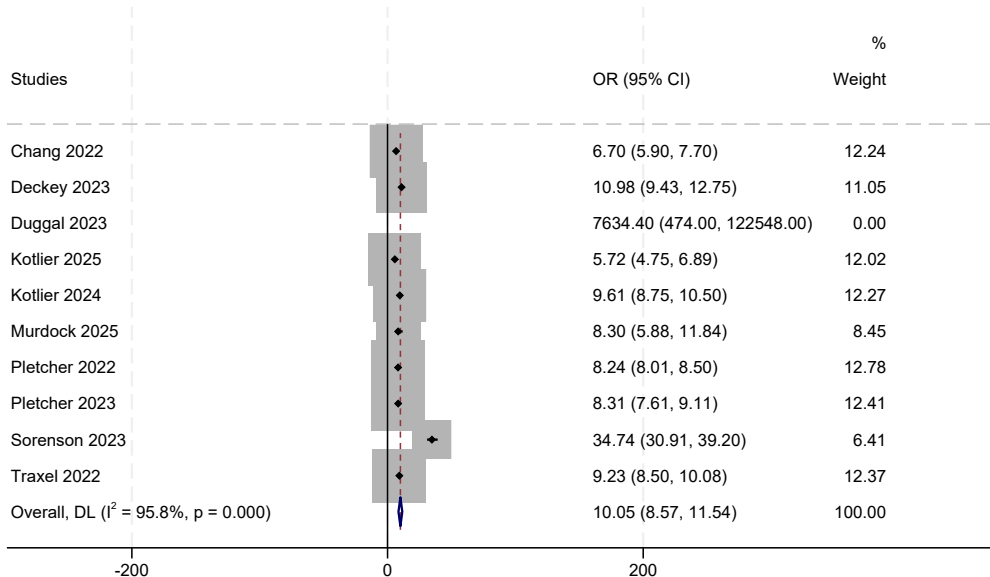
Study	WMY	XY	Average score
Chang 2022 ^[18]	95.45	85.00	90.23
Deckey 2023 ^[19]	96.36	82.72	89.54
Duggal 2023 ^[20]	97.27	85.00	91.14
Iwai 2025 ^[21]	94.55	96.82	95.69
Kotlier 2025 ^[22]	95.91	86.45	91.18
Kotlier 2024 ^[23]	96.36	80.64	88.50
Murdock 2025 ^[24]	95.45	81.45	88.45
Pletcher 2022 ^[5]	97.27	81.45	89.36
Pletcher 2023 ^[25]	95.45	97.75	96.60
Sorenson 2023 ^[1]	94.55	81.45	88.00
Traxel 2022 ^[10]	96.36	85.00	90.68

Supplement Table 2 The complete Boolean logic

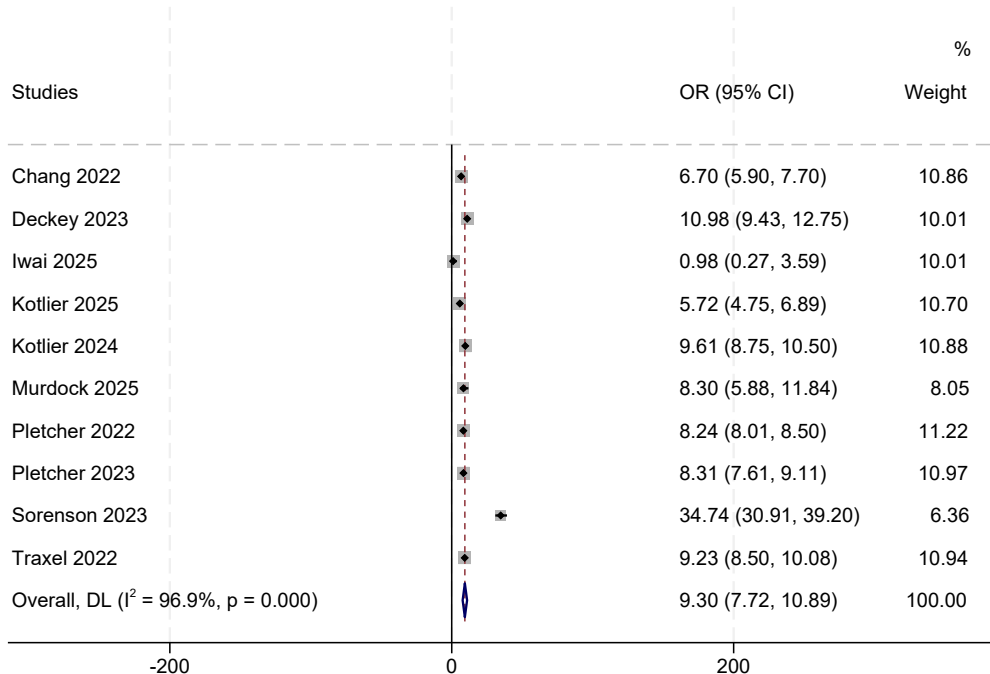
Preference signaling	("Preference Signal*[Title/Abstract] OR "Program Signal*[Title/Abstract] OR "Application Signal*[Title/Abstract] OR "Interview Signal*[Title/Abstract] OR "Love Signal*[Title/Abstract] OR "Signal* of Interest"[Title/Abstract]) OR "Preference Signaling"[MeSH Terms]
surgical match/ Surgery match	("Surgical Match"[Title/Abstract] OR "Match ocess"[Title/Abstract] OR "NRMP"[Title/Abstract] OR "ERAS"[Title/Abstract] OR "Residency Application*[Title/Abstract] OR "Residency Selection"[Title/Abstract] OR "Internship and Residency"[MeSH Terms])
#1 AND #2	AND ("2020/01/01"[Date - Publication] : "2025/12/31"[Date - Publication])



NOTE: Weights and between-subgroup heterogeneity test are from random-effects model



NOTE: Weights are from random-effects model



NOTE: Weights are from random-effects model