

Figure S1 Risk of bias graph: review authors' judgements about each risk of bias item presented as percentages across all included studies.

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
01 Sabrina Donati Zeppa 2021	?	?	?	+	?	+	+
02 Ayane S. Resende 2021	+	?	?	+	?	+	+
03 Laura Mancin 2022	?	?	?	+	?	+	+
04 Nazareth Castellanos 2020	+	+	+	+	?	+	+
05 Fei Zhong 2022	+	?	?	+	+	+	+
06 Rebecca J. H. M. Verheggen 2021	?	?	?	+	?	+	+
07 Lucas Moitinho-Silva 2021	+	?	?	+	?	+	+
08 Siobhan F Clarke 2014	?	?	?	+	+	+	+
09 L. Torquati 2022	+	?	?	+	+	+	+
10 Viktor Bielik 2022	?	?	?	+	+	+	+
11 Elizabeth A Rettedal 2020	?	?	?	+	+	+	+
12 YeonGyun Jung 2020	?	?	+	+	+	+	+
13 Mariangela Tabone 2021	?	?	?	+	+	+	+
14 Owen Cronin 2018	+	+	?	+	+	+	+
15 Eveliina Munukka 2022	?	?	?	+	+	+	+
16 Shadong Wei 2021	?	?	+	+	+	+	+
17 C. J. Stewart 2016	?	?	?	+	+	+	+
18 Carlo Bressa 2017	?	?	?	+	+	+	+
19 Xueqing Zhang 2023	+	+	+	+	+	+	+
20 Camilla J William 2023	?	?	+	+	?	?	+
21 Runtan Cheng 2023	?	?	?	+	?	+	+
22 Kristen S. Smith 2023	?	?	?	+	+	+	+
23 Dongyang Kang 2023	?	?	+	+	?	+	+
24 Yuping Zhu 2023	+	+	+	+	+	?	+
25 Shrushti Shah 2023	?	+	+	+	+	?	+

Figure S2 Risk of bias summary: review authors' judgements about each risk of bias item for each included study.

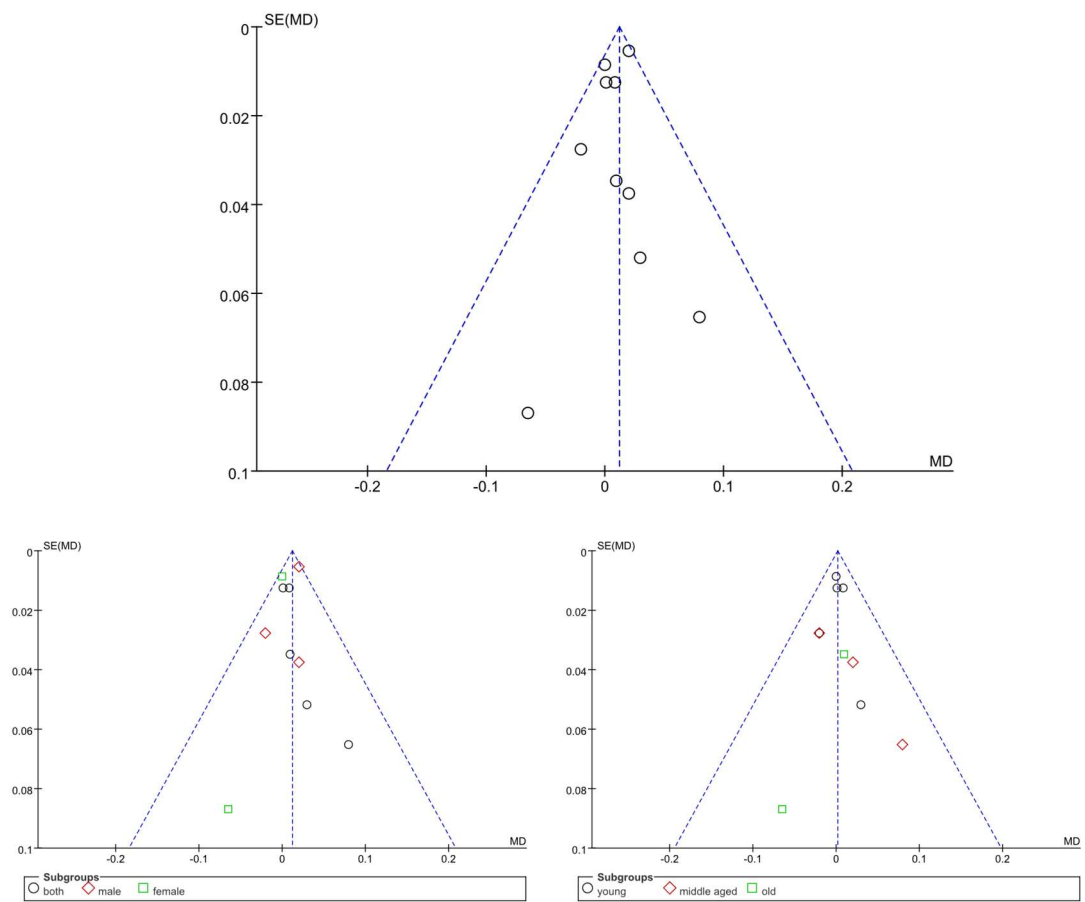


Figure S3 Funnel Plot for Shannon Index

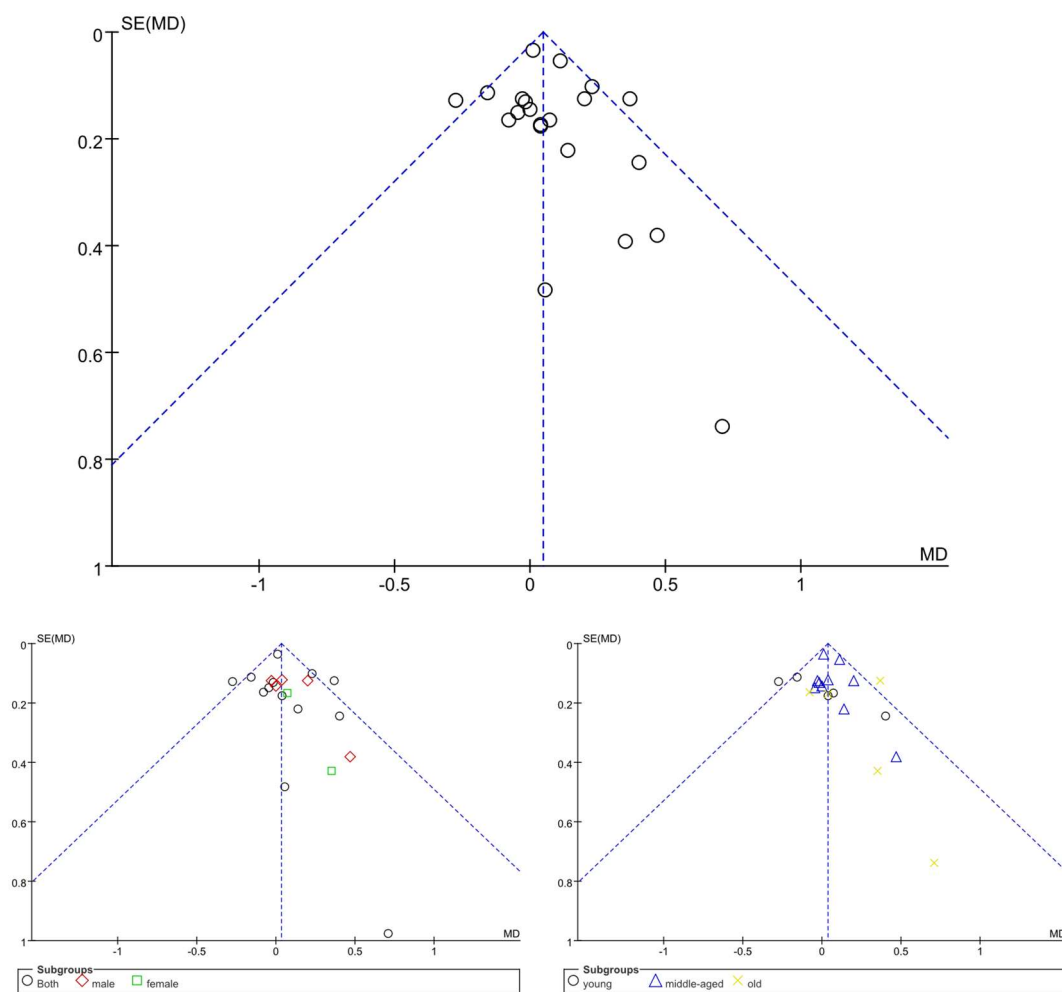


Figure S4 Funnel Plot for Simpson Index

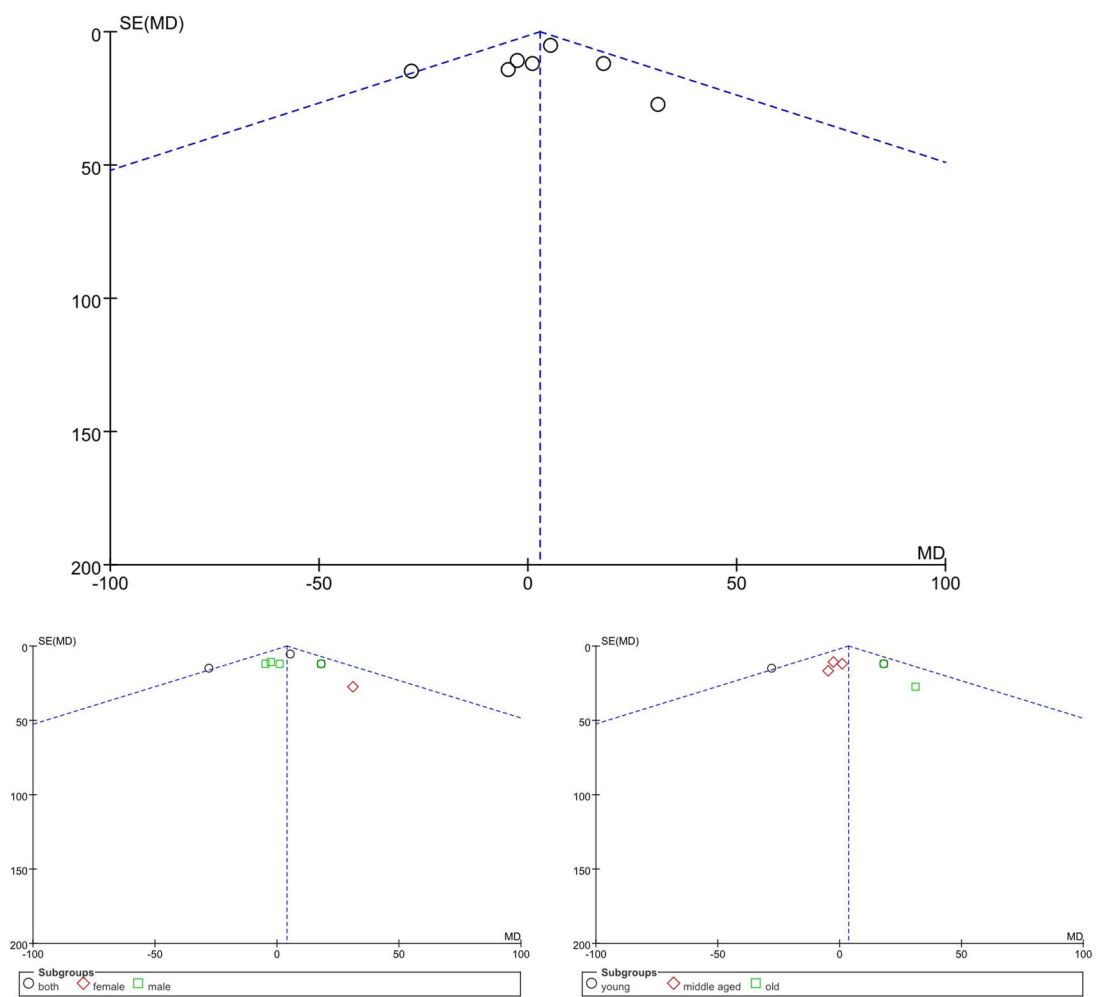


Figure S5 Funnel Plot for Observed OUT

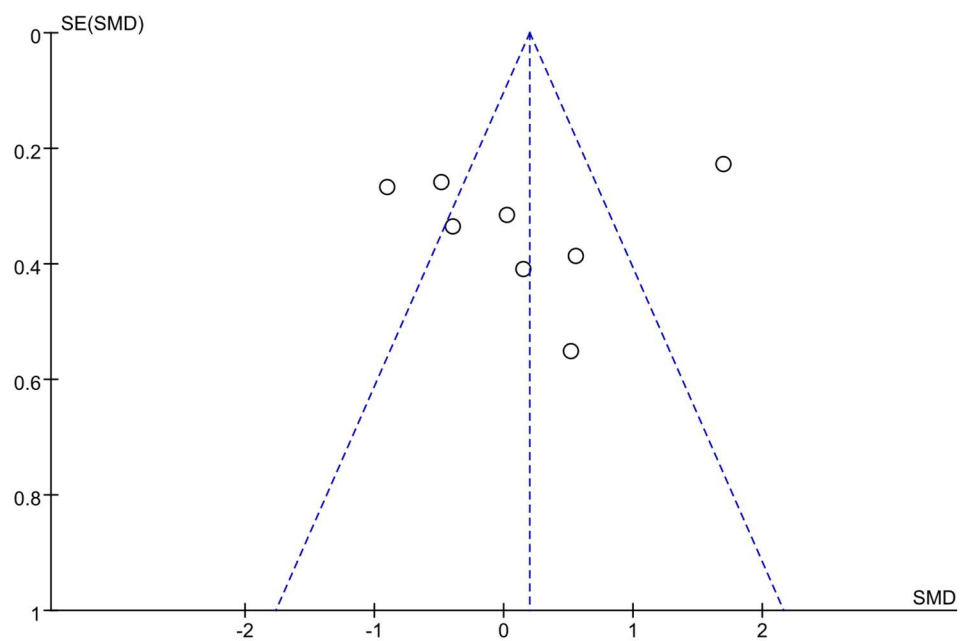


Figure S6 Funnel Plot for Chao1 Index

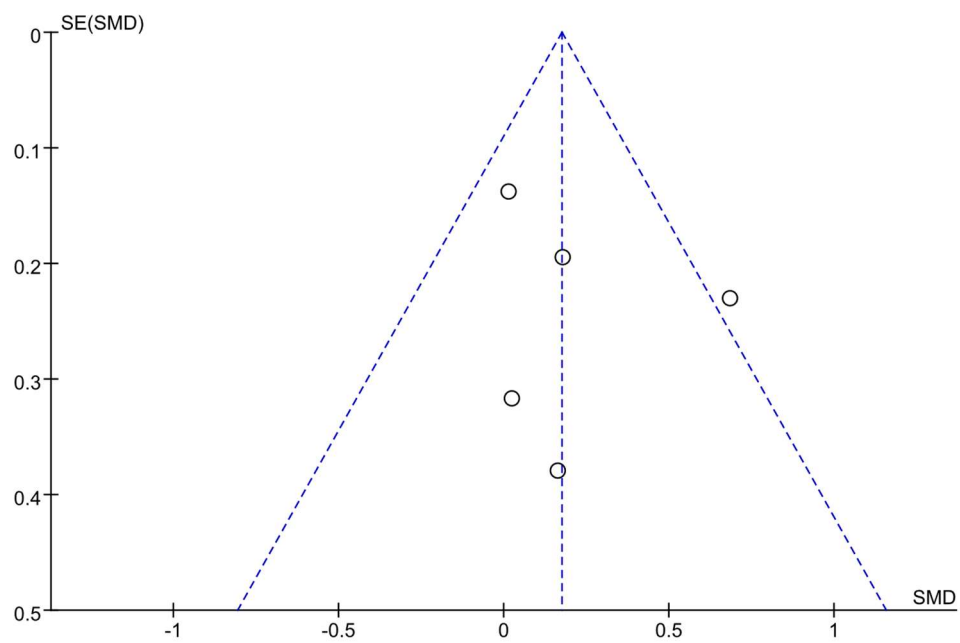


Figure S7 Funnel Plot for PD Index