

**Supplementary Table 1. Summary of risk of bias assessment**

Study ID	Risk of bias							Quality score	Risk of bias
	D1	D2	D3	D4	D5	D6	D7		
Olaleye et al., <sup>49)</sup> 1995	1	1	NR	1	0	1	NR	4	Moderate
Olaleye et al., <sup>50)</sup> 1999	1	1	NR	1	1	1	NR	5	Moderate
Forbi and Odetunde <sup>51)</sup> 2007	1	1	NR	1	0	1	NR	4	Moderate
Okoye et al., <sup>52)</sup> 2014	1	1	NR	1	1	1	NR	5	Moderate
Abu et al., <sup>53)</sup> 2014	1	1	NR	1	0	1	NR	4	Moderate
Iyalla et al., <sup>54)</sup> 2015	1	1	NR	1	0	1	NR	4	Moderate
Opaleye et al., <sup>55)</sup> 2016	1	1	NR	1	0	1	NR	4	Moderate
Udeze et al., <sup>56)</sup> 2018	1	1	NR	1	0	1	NR	4	Moderate
Hananiya et al., <sup>57)</sup> 2019	1	1	NR	1	1	1	NR	5	Moderate
Olusola et al., <sup>43)</sup> 2019	1	1	NR	0	0	1	NR	3	High
Dangana et al., <sup>58)</sup> 2021	1	1	NR	1	1	1	NR	5	Moderate
Nkup et al., <sup>34)</sup> 2021	1	1	NR	1	0	1	NR	4	Moderate

D1: Was the research question or objective in this paper clearly stated?; D2: Was the study population clearly specified and defined?; D3: Was the participation rate of eligible persons at least 50%?; D4: Were all the subjects selected or recruited from the same or similar populations (including the same time period)? Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?; D5: Was a sample size justification, power description, or variance and effect estimates provided?; D6: Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?; D7: Were the outcome assessors blinded to the exposure status of participants?; NR, not reported; Low, 7–6; Moderate, 5–4; High, >3.