S3 Table provides an individual study quality assessment based on the JBI Critical Appraisal Checklist for Analytical Cross-Sectional Studies.

Authors	**Ref. in article**	**Q1**	**Q2**	**Q3**	**Q4**	**Q5**	**Q6**	**Q7**	**Q8**
Singhal et al. (2025)	[6]	Yes	Yes	Unclear	Unclear	Yes	Yes	Yes	No
Yang et al. (2024)	[25]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Singhal et al. (2023)	[32]	Yes	Yes	Unclear	Unclear	Yes	Yes	Yes	No
Jaganathan et al. (2025)	[56]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Guevara et al. (2024)	[57]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Arroyo et al. (2024)	[58]	Yes	Yes	Yes	Unclear	Yes	Yes	Yes	No
Young et al. (2025)	[59]	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Zhou et al. (2025)	[60]	Yes	Yes	Yes	Yes	No	No	Yes	No
Amin et al. (2024)	[61]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Xia et al. (2024)	[62]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Santomartino et al. (2024)	[63]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Schmidgall et al. (2024)	[64]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Pfohl et al. (2024)	[65]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rawat et al. (2024)	[66]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ji et al. (2025a)	[67]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Gourabathina et al. (2025)	[68]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Levkovich and Elyoseph (2023)	[69]	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Perlis et al. (2024)	[70]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Schnepper et al. (2025)	[71]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bouguettaya et al. (2025)	[72]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Chang et al. (2025)	[73]	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes
Gao et al. (2025)	[74]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Li et al. (2025)	[75]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Achtari et al. (2024)	[76]	Unclear	Yes	Unclear	Unclear	No	No	Yes	No
Devi et al. (2024a)	[77]	Yes	Yes	Unclear	Yes	No	No	Yes	Yes
Devi et al. (2024b)	[78]	Yes	Yes	Unclear	Yes	No	No	Yes	No
Agrawal (2024)	[79]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Logé et al. (2021)	[80]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hanna et al. (2025)	[81]	No	Yes	Yes	Yes	No	No	Yes	Yes
Criss et al. (2024)	[82]	Yes	Yes	Yes	NA	Yes	Yes	Yes	No
Patel et al. (2024)	[83]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Xie et al. (2024)	[84]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shan et al. (2025)	[85]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Aremu et al. (2024)	[86]	Yes	Yes	Yes	Yes	Yes	Yes	Unclear	No
Restrepo et al. (2025)	[87]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

Lee et al. (2025)	[88]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zack et al. (2024)	[89]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Schlicht et al. (2025)	[90]	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Ito et al. (2023)	[91]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Deb et al. (2024)	[92]	Yes	Yes	Yes	Unclear	No	No	Yes	Yes
Liu et al. (2025)	[93]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Omar et al. (2025)	[94]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reis et al. (2024)	[95]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Burns et al. (2024)	[96]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Dietrich et al. (2025)	[97]	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes
Levkovich et al. (2024)	[98]	Yes	Yes	Yes	Yes	Unclear	Yes	Yes	Yes
Soun and Nair (2023)	[99]	Yes	Yes	Yes	No	No	No	Yes	No
Ducel et al. (2025)	[100]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Huang et al. (2025)	[101]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tian et al. (2023)	[102]	Yes	Yes	No	Yes	No	No	Yes	No
Deva et al. (2025)	[103]	Yes	Yes	Unclear	No	Yes	Yes	No	No
Shoval et al. (2024a)	[104]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shoval et al. (2024b)	[105]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Omiye et al. (2023)	[106]	Yes	Yes	NA	Yes	Yes	Yes	Unclear	No

Nastasi et al. (2023)	[107]	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Jin et al. (2024)	[108]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Benkirane et al. (2025)	[109]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lee et al. (2024)	[110]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Armbruster et al. (2024)	[111]	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Levy et al. (2024)	[112]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Raile (2024)	[113]	Yes	Yes	No	No	No	No	No	No
Kim et al. (2023)	[114]	Yes	Yes	Yes	Unclear	Unclear	Unclear	Unclear	No
Ji et al. (2025b)	[115]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ajit-Roger et al. (2024)	[116]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bejan et al. (2025)	[117]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Wan et al. (2025)	[118]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Andreadis et al. (2024)	[119]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zhao et al. (2024)	[120]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Liu et al. (2024)	[121]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Arslan et al. (2025)	[122]	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Ayoub et al. (2024)	[123]	Unclear	Yes	Yes	NA	Yes	Yes	Yes	Yes
Adames et al. (2024)	[124]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Chen et al. (2024)	[125]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

O'Malley et al. (2024)	[126]	Yes	Yes	Yes	Yes	No	No	Yes	Yes

Abbreviations

Q1: Were the criteria for inclusion in the sample clearly defined?
Q2: Were the study subjects and the setting described in detail?
Q3: Was the exposure measured in a valid and reliable way?
Q4: Were objective, standard criteria used for measurement of the condition?
Q5: Were confounding factors identified?
Q6: Were strategies to deal with confounding factors stated?
Q7: Were the outcomes measured in a valid and reliable way?
Q8: Was appropriate statistical analysis used?