

Appendix 2. Risk of bias assessment

Table 1. AMSTAR score for included systematic reviews

Study (Author, Year)	Was there duplicate study selection and data extraction?	Was a comprehensive literature search performed?	Were the characteristics of the included studies provided?	Was the scientific quality of the included studies assessed and documented?	Were the methods used to combine the findings of studies appropriate?	Was the conflict of interest stated?	Was publication bias formally assessed?
Section: Bile Acid Sequestrants							
Hansen, 2017 (safety only)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Section: Ezetimibe							
Hong, 2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Toyota, 2019	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zhan, 2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Section: Fibrates							
Jakob, 2016	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Keene, 2014	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wang, 2015	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Section: Niacin							
D'Andrea, 2019	No	Yes	Yes	Yes	Yes	Yes	No
Garg, 2017	No	Yes	Yes	No	Yes	Yes	No
Jenkins, 2021	Yes	Yes	Yes	Yes	YES	Yes	YES
Riaz, 2019	Yes	Yes	Yes	Yes	No	Yes	Yes
Schandelmaier, 2017	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Section: Omega 3s							
Aung, 2018	No	Yes	Yes	Yes	Yes	Yes	Yes
Cabiddu, 2020	Yes	Yes	No	No	No	Yes	No
Casula, 2020	No	Yes	Yes	Yes	Yes	Yes	Yes
Gencer, 2021	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hu, 2019	No	No	Yes	No	Yes	Yes	No

Wang, 2021	No	Yes	Yes	Yes	Yes	Yes	Yes
Zhao, 2020	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zhao, 2019	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zhu, 2019	Yes	Yes	Yes	Yes	No	Yes	Yes
Section: Statins							
Byrne, 2022	Yes	Yes	Yes	Yes	Yes	Yes	No
Cai, 2021	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Davis, 2021	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Domecq, 2019	Yes	Yes	Yes	Yes	Yes	Yes	No
Engeda, 2019	Yes	Yes	Yes	Yes	No	Yes	Yes
Fang, 2017	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Irwin, 2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Khan, 2019	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kim, 2020	Yes	No	Yes	No	Yes	Yes	Yes
Koskinas, 2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Liang, 2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Li, 2019	Yes	Yes	Yes	Yes	No	Yes	Yes
Manktelow, 2009	Yes	Yes	Yes	Yes	Yes	Yes	No
Milionis, 2020	No	No	Yes	No	Yes	Yes	No
Palmer, 2014	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ponce, 2014	Yes	Yes	Yes	Yes	Yes	Yes	No
Riaz, 2017	No	Yes	Yes	No	Yes	Yes	Yes
Sandwith, 2021	No	Yes	Yes	No	Yes	Yes	No
Singh, 2020	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Squizzato 2011	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Taylor, 2013	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tramacere, 2019	Yes	Yes	Yes	Yes	Yes	Yes	No
Vale, 2014	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Villani, 2019	No	Yes	Yes	Yes	Yes	Yes	Yes
Wang, 2017	No	Yes	Yes	Yes	Yes	Yes	Yes

Yebyo, 2019	Yes	No	Yes	Yes	Yes	No	Yes
Yin, 2022	No	Yes	Yes	Yes	Yes	Yes	Yes
Zhao, 2019	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zhong, 2017	Yes	Yes	Yes	No	Yes	Yes	No
Zhou, 2020	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 2. Risk of Bias of randomized controlled trials

Study (Author, Year)	Random Sequence Generation	Allocation Concealment	Blinding of Participants	Blinding of Personnel	Blinding of Outcome Assessors	Incomplete Outcome Data	Selective Outcome Reporting
Section: Bile Acid Sequestrants							
Lipid Research Clinics Program, 1984	Low Risk	Low Risk	Low Risk	Low Risk	Low Risk	Low Risk	High Risk
Brensike, 1984	Low Risk	Low Risk	Low Risk	Low Risk	Low Risk	Low Risk	Low Risk
Dorr, 1978	Low Risk	Low Risk	Low Risk	Low Risk	Low Risk	Unclear Risk	Unclear Risk
Watts, 1992	Unclear Risk	Unclear Risk	Unclear Risk	Unclear Risk	Unclear Risk	High Risk	Unclear Risk