

Supplementary Table 3. Bias assessment

First author/Year	Was the study target population a close representation of the national population in relation to relevant variables, e.g., age, sex, occupation? (single centre vs. multicentre/national registry)	Was the sampling frame a true representation of the target population? Representative of overall HCC population vs. a subgroup (i.e., resection/transplant recipients)	Was some form of random selection used to select the sample, OR was the subject recruitment consecutive in the sample?	Was the likelihood of non-response bias minimal? Complete data for >75%	Were data collected directly from the subjects (as opposed to a proxy)?	Was an acceptable case definition of MAFLD used in the study? (at minimum, confirm steatosis, diabetes, ethnicity appropriate BMI)	Was the study instrument that measured the parameter of interest shown to have reliability and validity (if necessary)?	Was the same mode of data collection used for all subjects?	Was the length of the shortest prevalence period for the parameter of interest appropriate?	Were the numerator(s) and denominator(s) for the parameter of interest appropriate?	Total
Vitale et al. ² (2023)	0	0	0	0	0	1	0	0	0	0	1
Myers et al. ³ (2021)	0	0	0	0	0	0	0	0	0	0	0
Lin et al. ⁴ (2022)	0	1	0	0	0	1	0	0	0	0	2
Kim et al. ⁵ (2022)	0	0	0	0	0	0	0	0	0	0	0
Shaikh et al. ⁶ (2022)	0	1	0	0	0	1	0	0	0	0	2
Xiong et al. ⁷ (2022)	1	1	0	0	0	0	0	0	0	0	2
Xiong et al. ⁸ (2022)	1	1	0	0	0	0	0	0	0	0	2
Shimose et al. ⁹ (2023)	1	1	0	0	0	0	0	0	0	0	2
Nakagawa et al. ¹⁰ (2023)	1	1	0	0	0	0	0	0	0	0	2
Yun et al. ¹¹ (2022)	0	0	0	0	0	0	0	0	0	0	0
Xue et al. ²² (2022)	1	0	0	0	0	0	0	0	0	0	1

Supplementary Table 3. Continued

First author/Year	Was the study target population a close representation of the national population in relation to relevant variables, e.g., age, sex, occupation? (single centre vs. multicentre/national registry)	Was the sampling frame a true or close representation of the target population? Representative of overall HCC population vs. a subgroup (i.e., resection/transplant recipients)	Was some form of random selection used to select the sample, OR was the subject recruitment consecutive in the sample?	Was the likelihood of non-response bias minimal? Complete data for >75%	Were data collected directly from the subjects (as opposed to a proxy)?	Was an acceptable case definition of MAFLD used in the study? (at minimum, confirm steatosis, diabetes, ethnicity appropriate BMI)	Was the study instrument that measured the parameter of interest shown to have reliability and validity (if necessary)?	Was the same mode of data collection used for all subjects?	Was the length of the prevalence period for the parameter of interest appropriate?	Were the numerator(s) and denominator(s) for the parameter of interest appropriate?	Total
Amano et al. ¹³ (2022)	1	0	0	0	0	1	0	0	0	0	2
Clark-Dickson et al. ¹⁴ (2022)	1	0	0	0	0	1	0	0	0	0	2
Iyer et al. ¹⁵ (2022)	1	0	0	0	0	0	0	0	0	0	1
Lin et al. ¹⁶ (2021)	1	1	0	0	0	0	0	0	0	0	2
Liu et al. ¹⁷ (2022)	1	1	0	0	0	0	0	0	0	0	2
Liu et al. ¹⁸ (2022)	0	0	0	0	0	0	0	0	0	0	0
Rodrigues et al. ¹⁹ (2021)	1	0	0	0	0	0	0	0	0	0	1
van Kleef et al. ²⁰ (2021)	1	0	0	0	0	0	0	0	0	0	1
Vanlerberghe et al. ²¹ (2023)	1	1	0	0	0	0	0	0	0	0	2
Xie et al. ²² (2022)	1	0	0	0	0	0	0	0	0	0	1
Gonzalez-Chagolla et al. ²³ (2021)	0	0	0	0	0	0	0	0	0	0	0

MAFLD, metabolic dysfunction-associated fatty liver disease; HCC, hepatocellular carcinoma; BMI, body mass index.