

1 Supplementary Table 1. Quality assessment

Study	Random sequence generation	Allocation concealment	Blinding of participants and personnel	Blinding of outcome assessment	Incomplete outcome data	Selective reporting	Other bias
Ferris 2018	L	U	U	L	L	L	L
Siu 2018	L	L	U	L	L	L	L
McBride 2020	L	L	L	L	L	L	L

2 L, low risk of bias; U, Unclear; H, high risk of bias

Study	Selection of cohorts				COMPARABILITY	OUTCOME			Score
	Representativeness of the Exposed Cohort	Selection of the Non-Exposed Cohort	Ascertainment of Exposure	Demonstration That Outcome of Interest Was Not Present at Start of Study	Comparability of Cohorts on the Basis of the Design or Analysis	Assessment of Outcome	Was Follow-Up Long Enough for Outcomes to Occur	Adequacy of Follow-Up of Cohorts	
Aggarwal 2021	1	0	1	0	0	1	1	1	5
Bauml 2017	1	0	1	0	0	1	1	1	5
Chow 2016	1	0	1	0	0	1	1	1	5
Colevas 2018	1	0	1	0	0	1	1	1	5
Seiwert 2016	1	0	1	0	0	1	1	1	5
Zandberg 2019	1	0	1	0	0	1	1	1	5
Xu 2022	1	0	1	0	0	1	1	1	5
Yang 2021	1	0	1	0	0	1	1	1	5
Cohen 2021	1	0	1	0	0	1	1	1	5
Guigay 2021	1	0	1	0	0	1	1	1	5

Hughes 2021	1	0	1	0	0	1	1	1	5
Mehra 2018	1	0	1	0	0	1	1	1	5
Arribas 2021	1	1	1	0	1	1	1	1	7
Cristesc u 2018	1	1	1	0	1	1	1	1	7
Dennis 2022	1	1	1	0	1	1	1	1	7
Econom opoulou 2021	1	1	1	0	2	1	1	1	8
Karabaj akian 2020	1	1	1	0	1	1	1	1	7
Park, J. H. 2020	1	1	1	0	2	1	1	1	8
Saada-B ouزيد 2017	1	1	1	0	1	1	1	1	7
Chalker 2022	1	1	1	0	1	1	1	1	7
Kuba 2022	1	1	1	0	1	1	1	1	7
Pan 2022	1	1	1	0	1	1	1	1	7
Takenak a 2022	1	1	1	0	1	1	1	1	7
Wada 2023	1	1	1	0	1	1	1	1	7
Wildsmi th 2023	1	1	1	0	1	1	1	1	7
Chikuie 2021	1	1	1	0	1	1	1	1	7
Ho-1 2018	1	1	1	0	1	1	1	1	7
Ho-2 2018	1	1	1	0	1	1	1	1	7
Kawase 2021	1	1	1	0	1	1	1	1	7
Lee 2020	1	1	1	0	1	1	1	1	7
Matsuki 2020	1	1	1	0	1	1	1	1	7

Matsuo 2022	1	1	1	0	1	1	1	1	7
Minohara 2021	1	1	1	0	1	1	1	1	7
Nenclares 2021	1	1	1	0	1	1	1	1	7
Nishikawa 2020	1	1	1	0	1	1	1	1	7
Niwa 2020	1	1	1	0	1	1	1	1	7
Park 2020	1	1	1	0	1	1	1	1	7
Tachinami 2021	1	1	1	0	1	1	1	1	7
Tanoue 2021	1	1	1	0	1	1	1	1	7
Ueda 2020	1	1	1	0	1	1	1	1	7
Valero 2021	1	1	1	0	1	1	1	1	7
Ali 2023	1	1	1	0	1	1	1	1	7
Willemsen 2022	1	1	1	0	1	1	1	1	7
Xu 2021	1	1	1	0	1	1	1	1	7
Yasumatsu 2018	1	1	1	0	1	1	1	1	7
Zandberg 2021	1	1	1	0	1	1	1	1	7
Zhang 2022	1	1	1	0	1	1	1	1	7

3 Supplementary Table 2. Quality assessment of single-arm studies according to the
4 Newcastle-Ottawa scale.

5 ^aThe studies are scored on the scale of cohort studies of the Newcastle-Ottawa Assessment Scale.

6 Supplementary Figure 1. Forest plots of studies evaluating the SMI and overall survival (A),
7 progression-free survival (B). Forest plots of studies evaluating the TMB and overall survival (C)

