

Table S1 Judgments on Bias and Applicability according to QUADAS 2

Domain		Risk and bias (Signaling question)	Applicability
Patient Selection	Could the Selection of Patients Have Introduced Bias?	Was a consecutive or random sample of patients enrolled?	Are there any differences in TNM stage or age among patients using different mapping methods in SLNB?
		Was a case-control design avoided?	
		Did the study avoid inappropriate exclusions?	
		Did the spectrum of patients enrolled represented the patient population who will actually be tested for the indicator?	
Index Test	Could the Conduct or Interpretation of the Index Test Have Introduced Bias?	Were the index test results interpreted without knowledge of the results of the reference standard?	Are there concerns that the index test, its conduct, or its interpretation differ from the review question? Were patients mapped with patent blue or isosulfan blue excluded?
		If a threshold was used, was it prespecified?	
Reference Standard	Could the Reference Standard, Its Conduct, or Its Interpretation Have Introduced Bias?	Was the reference standard likely to correctly classify the target condition?	Are there concerns that the target condition as defined by the reference standard does not match the question?
		Were the reference standard results interpreted without knowledge of the results of the index test?	
Flow and Timing	Could the Patient Flow Have Introduced Bias?	Did all patients receive ALND?	
		Was there an appropriate interval between the index test and reference standard?	
		Did all patients receive the same reference standard?	
		Were all patients included in the analysis?	
		Was the calculation method or outcome of IR, AR, SEN or FNR in this study consistent with other studies ?	

SLNB, sentinel lymph node biopsy; ALND, axillary lymph node dissection; IR, identification rate; AR, accuracy rate; SEN, sensitivity; FNR, false-negative rate.

Table S2 Results of quality assessment of the included studies according to QUADAS 2

No.	Study	Risk and bias				Applicability		
		Patient Selection	Index Test	Reference Standard	Flow and Timing	Patient Selection	Index Test	Reference Standard
1	Tang <i>et al.</i> (9)	☹️	😊	😊	😊	😊	😊	😊
2	Zhao <i>et al.</i> (10)	☹️	😊	😊	😊	😊	😊	😊
3	Lu <i>et al.</i> (11)	☹️	😊	😊	😊	😊	😊	😊
4	D'Eredita <i>et al.</i> (12)	☹️	😊	😊	😊	😊	😊	😊
5	Liu <i>et al.</i> (13)	☹️	😊	😊	😊	😊	😊	😊
6	Lin <i>et al.</i> (14)	☹️	😊	😊	😊	😊	😊	😊
7	Somashekhar <i>et al.</i> (15)	☹️	😊	😊	😊	😊	😊	😊
8	Wang <i>et al.</i> (16)	☹️	😊	😊	😊	😊	😊	😊
9	Chen <i>et al.</i> (17)	☹️	😊	😊	😊	😊	😊	😊
10	Yang <i>et al.</i> (18)	☹️	😊	😊	😊	😊	😊	😊
11	Liu <i>et al.</i> (19)	☹️	😊	😊	😊	😊	😊	😊
12	Chen <i>et al.</i> (20)	☹️	😊	😊	😊	😊	😊	😊
13	Coskun <i>et al.</i> (21)	☹️	😊	😊	😊	😊	😊	😊
14	Lu <i>et al.</i> (22)	☹️	😊	😊	😊	😊	😊	😊
15	Tian <i>et al.</i> (23)	☹️	😊	😊	☹️	😊	😊	😊
16	Cao <i>et al.</i> (24)	☹️	😊	😊	😊	😊	😊	😊
17	Zhang <i>et al.</i> (25)	☹️	😊	😊	☹️	😊	😊	😊
18	Ji <i>et al.</i> (26)	☹️	😊	😊	☹️	😊	😊	😊
19	Lei <i>et al.</i> (27)	☹️	😊	😊	☹️	😊	😊	😊
20	Yuan <i>et al.</i> (28)	☹️	😊	😊	☹️	😊	😊	😊
21	Zhang <i>et al.</i> (29)	☹️	😊	😊	😊	😊	😊	😊
22	Liu <i>et al.</i> (30)	☹️	😊	😊	😊	😊	😊	😊
23	Cui <i>et al.</i> (31)	☹️	😊	😊	😊	😊	😊	😊
24	Tang <i>et al.</i> (32)	☹️	😊	😊	?	😊	😊	😊
25	Zhang <i>et al.</i> (33)	☹️	😊	😊	☹️	😊	😊	😊
26	Guo <i>et al.</i> (5)	☹️	😊	😊	☹️	😊	😊	😊
27	Ji <i>et al.</i> (34)	☹️	😊	😊	☹️	😊	😊	😊
28	Heng <i>et al.</i> (35)	☹️	😊	😊	😊	😊	😊	😊
29	Sun <i>et al.</i> (36)	☹️	😊	😊	☹️	😊	😊	😊
30	Yuan <i>et al.</i> (37)	☹️	😊	😊	😊	😊	😊	😊
31	Agarwal <i>et al.</i> (38)	☹️	😊	😊	😊	😊	😊	😊
32	Shen <i>et al.</i> (39)	☹️	😊	😊	☹️	😊	😊	😊
33	Li <i>et al.</i> (40)	☹️	😊	😊	?	😊	😊	😊
34	Zhang <i>et al.</i> (41)	☹️	😊	😊	?	😊	😊	😊
35	Lei <i>et al.</i> (42)	☹️	😊	😊	?	😊	😊	😊
36	Gupta <i>et al.</i> (43)	☹️	😊	😊	😊	😊	😊	😊
37	Qin <i>et al.</i> (44)	☹️	😊	😊	😊	😊	😊	😊
38	Zhou <i>et al.</i> (45)	☹️	😊	😊	☹️	😊	😊	😊
39	Zhu <i>et al.</i> (46)	☹️	😊	😊	☹️	😊	😊	😊
40	Zhu <i>et al.</i> (47)	☹️	😊	😊	?	😊	😊	😊
41	Zhao <i>et al.</i> (48)	☹️	😊	😊	😊	😊	😊	😊
42	Liu <i>et al.</i> (49)	☹️	😊	😊	?	😊	😊	😊
43	Zhou <i>et al.</i> (50)	☹️	😊	😊	?	😊	😊	😊
44	Gong <i>et al.</i> (51)	☹️	😊	😊	😊	😊	😊	😊
45	Huang <i>et al.</i> (52)	☹️	😊	😊	☹️	😊	😊	😊
46	Bai <i>et al.</i> (53)	☹️	😊	😊	😊	😊	😊	😊
47	Huang <i>et al.</i> (54)	☹️	😊	😊	?	😊	😊	😊
48	Zhang <i>et al.</i> (55)	☹️	😊	😊	😊	😊	😊	😊
49	Fang <i>et al.</i> (56)	☹️	😊	😊	?	😊	😊	😊

😊 = low risk; ☹️ = high risk; ? = unclear risk.