

Table SI. Search Strategy for Searching PubMed and Embase via Ovid.

1	Tumor	(“basal“ AND “cell“ AND “carcinom*”) OR “BCC*” OR “basaliom*” OR (“skin” AND (“tumor*” OR “tumour*”)) OR “MOH*”
2	Diagnostic accuracy measures	“sensitivit*” OR “specificit*” OR (“positive” AND “predictive” AND “value*”) OR “PPV” OR (“negative” AND “predictive” AND “value*”) OR “NPV”) OR “accurac*”
3	Imaging modalities	(“confocal” AND “microscop*”) OR “CLSM” OR (“laser” AND (“scanning” OR “scan”) AND “microscop*”) OR “LSCM” OR “LSM” OR “FCM” OR (“fluorescence” AND “microscop*”) OR (“fluorescence” OR “reflectance”) AND “mode” OR “RCM” OR (“confocal” OR (“ex” AND “vivo”)) AND “imag*” OR (“ex” AND “vivo” AND “histology”) OR “EVCN” OR (“optical” AND “sectioning” AND “microscop*”) OR (“digital” AND “microscop*”) OR “OCT” OR (“optical” AND “coherence” AND “tomography”) OR (“optical” AND “coherence”) OR “coherent”) AND “imag*” OR “LC-OCT” OR (“line” AND “field”) OR “line-field”) AND “confocal” AND “optical” AND “coherence” AND “tomography” OR (“multimodal” AND “imag*”)
4	Final search	1 AND 2 AND 3

BCC = basal cell carcinoma; MOH = Micrographic (Mohs) Surgery; PPV = positive predictive value; NPV = negative predictive value; CLSM = confocal laser scanning microscopy; LSCM = laser scanning confocal microscopy; LSM = laser scanning microscopy; FCM = fluorescence confocal microscopy; RCM = reflectance confocal microscopy; EVCN = ex vivo confocal microscopy; OCT = optical coherence tomography; LC-OCT = line-field optical coherence tomography.

Table SII. QUADAS-2 assessment of risk of bias and applicability concerns across included studies.

QUADAS-2 = Quality Assessment of Diagnostic Accuracy Studies 2 tool.

STUDY	RISK OF BIAS				APPLICABILITY CONCERNS		
	Patient Selection	Index Test	Reference Standard	Flow and Timing	Patient Selection	Index Test	Reference Standard
Bennassar et al., 2014	●	●	●	●	●	●	●
Bergeret et al., 2022	●	●	●	●	●	●	●
Espinasse et al., 2017	●	●	●	●	●	●	●
Gellrich et al., 2024	●	●	●	●	●	●	●
Grizzetti et al., 2022	●	●	●	●	●	●	●
Grupp et al., 2021	●	●	●	●	●	●	●
Hartmann et al., 2018	●	●	●	●	●	●	●
Karen et al., 2009	●	●	●	●	●	●	●
Larson et al., 2013	●	●	●	●	●	●	●
Longo et al., 2019	●	●	●	●	●	●	●
Messner et al., 2024	●	●	●	●	●	●	●
Mu et al., 2016	●	●	●	●	●	●	●
Peters et al., 2019	●	●	●	●	●	●	●
Ruini et al., 2021	●	●	●	●	●	●	●
Vladimirova et al., 2022	●	●	●	●	●	●	●
Ziefle et al., 2010	●	●	●	●	●	●	●

● Low Risk ● High Risk ● Unclear Risk