

Supplementary Materials

Radiomic Signatures Associated with CD8⁺ Tumour-Infiltrating Lymphocytes: A Systematic Review and Quality Assessment Study

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Figures

- **Figure S1:** QUADAS-2 and RQS assessments by the first reviewer.
- **Figure S2:** QUADAS-2 and RQS assessments by the second reviewer.

Tables (*refer to Excel sheet*)

- **Table S1:** PRISMA checklist.
- **Table S2:** Data extraction table for studies included in systematic review.
- **Table S3:** Study eligibility decision trail (for systematically-searched and manually-included articles) from the first reviewer.
- **Table S4:** Study eligibility decision trail (for systematically-searched and manually-included articles) from the second reviewer.
- **Table S5:** Description of technical radiomics terminology used in this systematic review.
- **Table S6:** List of relevant radiomics signatures from studies included in this systematic review.
- **Table S7:** Inter-rater agreement statistics for QUADAS-2 and RQS ratings.

Rater 1
(S.R.)

	Risk of bias				Applicability		
	Patient selection	Index test	Reference standard	Flow & timing	Patient selection	Index test	Reference standard
Lopci (2016)	⚠	😊	😊	⚠	😊	?	😊
Castello (2018)	⚠	😊	😊	⚠	😊	?	😊
Sun (2018)	⚠	😊	😊	?	😊	😊	😊
Chen (2019)	⚠	😊	😊	😊	😊	⚠	😊
Liao (2019)	⚠	😊	😊	😊	😊	⚠	😊
Zhang (2020)	⚠	😊	😊	?	?	⚠	😊
Jiang (2020)	⚠	😊	😊	😊	😊	😊	😊
Mazzaschi (2020)	⚠	😊	😊	⚠	😊	⚠	😊
Mitchell (2020)	⚠	⚠	😊	😊	😊	?	😊
Katsoulakis (2020)	⚠	😊	😊	?	😊	😊	😊
Hsu (2020)	⚠	⚠	😊	?	?	⚠	😊
Wen (2020)	⚠	😊	😊	?	😊	⚠	😊
Zhang (2021)	⚠	😊	😊	😊	😊	?	😊
Toulmonde (2020)	?	😊	😊	?	😊	?	😊
Kim (2021)	?	😊	😊	😊	⚠	?	😊
Wang (2021)	⚠	😊	😊	?	😊	⚠	⚠
Ligero (2021)	⚠	😊	😊	⚠	😊	😊	😊
Zhou (2021a)	⚠	😊	😊	😊	😊	?	😊
Aoude (2021)	⚠	😊	😊	?	?	?	😊
Arefan (2021)	⚠	😊	😊	?	?	⚠	😊
Li (2021)	⚠	😊	😊	?	😊	⚠	😊
Bian (2021a)	⚠	😊	😊	😊	😊	⚠	😊
Jeon (2021)	⚠	😊	😊	😊	😊	⚠	😊
Chaddad (2021)	?	😊	😊	?	😊	⚠	😊
Bian (2021b)	⚠	😊	😊	😊	😊	⚠	😊
Min (2021)	⚠	😊	😊	😊	😊	⚠	😊
Zhou (2021b)	⚠	😊	😊	😊	😊	⚠	😊

Average

0.410.5200.042.111.000.740.851.630.5600.221.701.9300.0711.78

⚠ High risk/concern

😊 Low risk/concern

? Unclear risk/concern

Radiomics Quality Score

Imaging protocol quality	Multiple segmentation	Phantom study	Multi time-point imaging	Feature reduction/robustness	Multivariable analysis	Biological correlates	Cut-off analyses	Discrimination statistics	Calibration statistics	Prospective study	Validation	'Gold standard' comparison	Potential clinical utility	Cost-effectiveness analysis	Open science	Overall RQS
0	0	0	0	-3	1	1	1	0	0	0	-5	0	2	0	0	-3
0	0	0	0	-3	1	1	1	2	0	0	-5	2	2	0	0	1
1	1	0	0	3	1	1	1	2	0	0	5	2	2	0	0	19
1	1	0	0	3	1	1	1	2	1	0	2	2	2	0	0	17
1	1	0	0	3	1	1	1	2	0	0	2	2	2	0	0	16
0	0	0	0	3	1	0	1	2	0	0	2	2	2	0	1	14
1	1	0	0	3	1	1	1	2	2	0	5	2	2	0	1	22
0	0	0	0	3	1	1	1	2	0	0	2	2	2	0	0	14
0	1	0	0	-3	1	1	0	0	0	0	-5	2	2	0	0	-1
0	0	0	0	3	1	1	1	2	0	0	3	2	2	0	0	15
0	0	0	0	3	1	1	1	1	0	0	2	2	2	0	0	13
1	1	0	0	3	1	0	0	2	0	0	2	2	2	0	0	14
1	1	0	0	3	1	1	1	2	2	0	-5	2	2	0	0	11
0	0	0	0	3	1	0	0	1	0	?	-5	0	2	0	0	2
0	0	0	0	3	1	1	1	2	0	?	-5	2	2	0	0	7
0	0	0	0	3	1	1	1	2	0	0	2	2	2	0	0	14
1	1	0	0	3	1	1	1	2	2	0	3	2	2	0	0	19
0	0	0	1	3	1	1	1	2	0	0	-5	2	2	0	0	8
0	0	0	0	-3	1	0	0	0	0	0	-5	2	2	0	0	-3
1	0	0	0	3	1	0	1	1	0	0	2	0	2	0	0	11
1	1	0	0	3	1	1	1	2	2	0	2	2	2	0	0	18
1	1	0	0	3	1	0	1	2	2	0	2	2	2	0	0	17
0	1	0	0	3	1	1	1	2	0	0	2	2	2	0	0	15
0	0	0	0	3	1	1	1	2	0	?	2	2	0	0	0	12
1	1	0	0	3	1	0	1	2	2	0	2	2	2	0	0	17
0	1	0	0	3	1	1	1	1	0	0	2	0	2	0	0	12
0	1	0	0	3	1	1	1	2	2	0	2	2	2	0	0	17

Figure S1: QUADAS-2 and RQS assessments by the first reviewer.

QUADAS-2								Radiomics Quality Score																		
Rater 2 (D.H.)	Risk of bias				Applicability			Imaging protocol quality	Multiple segmentation	Phantom study	Multi time-point imaging	Feature reduction/ robustness	Multivariable analysis	Biological correlates	Cut-off analyses	Discrimination statistics	Calibration statistics	Prospective study	Validation	'Gold standard' comparison	Potential clinical utility	Cost-effectiveness analysis	Open science	Overall RQS		
	Patient selection	Index test	Reference standard	Flow & timing	Patient selection	Index test	Reference standard																			
Lopci (2016)	⚠	😊	😊	⚠	😊	😊	😊	0	0	0	0	-3	1	1	1	1	0	0	-5	2	2	0	0	0		
Castello (2018)	⚠	😊	😊	?	😊	😊	😊	0	0	0	0	-3	1	1	1	2	0	0	-5	2	2	0	0	1		
Sun (2018)	⚠	😊	😊	😊	😊	⚠	😊	1	1	0	0	3	1	1	1	2	1	0	4	2	2	0	0	19		
Chen (2019)	⚠	😊	😊	😊	😊	⚠	😊	1	1	0	0	3	1	1	1	2	0	0	2	2	2	0	0	16		
Liao (2019)	⚠	?	😊	?	?	⚠	😊	0	0	0	0	3	1	1	1	1	0	0	2	2	2	0	0	13		
Zhang (2020)	⚠	😊	😊	?	😊	?	😊	0	0	0	0	3	1	0	1	2	0	0	3	2	2	0	1	15		
Jiang (2020)	⚠	😊	😊	⚠	😊	⚠	😊	1	1	0	0	3	1	1	1	2	2	0	5	2	2	0	1	22		
Mazzaschi (2020)	⚠	⚠	😊	😊	😊	?	😊	0	0	0	0	3	1	1	1	2	0	0	2	2	2	0	0	14		
Mitchell (2020)	⚠	😊	😊	?	😊	?	😊	0	0	0	0	-3	1	1	0	1	0	0	-5	0	2	0	0	-3		
Katsoulakis (2020)	⚠	😊	😊	?	😊	⚠	😊	1	1	0	0	3	1	1	0	2	0	0	2	2	2	0	0	15		
Hsu (2020)	⚠	😊	😊	😊	😊	?	😊	0	0	0	0	3	1	0	1	2	0	0	2	2	2	0	0	13		
Wen (2020)	⚠	😊	😊	?	?	?	😊	1	1	0	0	3	1	0	0	1	0	0	2	2	2	0	0	13		
Zhang (2021)	⚠	😊	😊	?	?	⚠	😊	0	0	0	0	3	1	0	1	1	0	0	-5	0	2	0	0	3		
Toulmonde (2020)	⚠	😊	😊	😊	😊	⚠	😊	2	0	0	0	3	1	0	0	1	1	0	-5	0	2	0	0	5		
Kim (2021)	⚠	😊	😊	😊	😊	⚠	😊	0	0	0	0	3	1	1	1	2	0	0	-5	2	2	0	0	7		
Wang (2021)	⚠	😊	😊	😊	😊	⚠	😊	0	1	0	0	3	1	1	1	2	0	0	2	2	2	0	0	15		
Ligero (2021)	⚠	😊	😊	?	😊	⚠	😊	1	1	0	0	3	1	1	1	2	1	0	3	2	2	0	0	18		
Zhou (2021a)	⚠	😊	😊	?	😊	⚠	😊	1	1	0	0	3	1	1	1	2	2	0	-5	2	2	0	0	11		
Aoude (2021)	⚠	😊	😊	⚠	😊	?	😊	0	0	0	0	-3	1	1	1	2	0	0	-5	2	2	0	0	1		
Arefan (2021)	⚠	😊	😊	?	😊	⚠	😊	0	1	0	0	3	1	1	1	1	0	0	2	0	2	0	0	12		
Li (2021)	⚠	😊	😊	?	😊	⚠	😊	0	0	0	0	3	1	1	1	2	0	0	2	2	2	0	0	14		
Bian (2021a)	⚠	😊	😊	😊	😊	⚠	😊	1	1	0	0	3	1	1	1	2	2	0	2	2	2	0	0	18		
Jeon (2021)	⚠	😊	😊	😊	😊	⚠	😊	1	1	0	0	3	1	1	1	2	0	0	2	2	2	0	0	16		
Chaddad (2021)	⚠	😊	😊	⚠	😊	?	😊	0	0	0	0	3	1	1	1	2	0	0	3	2	0	0	1	14		
Bian (2021b)	⚠	😊	😊	😊	😊	?	😊	1	1	0	0	3	1	1	1	2	2	0	2	2	2	0	0	18		
Min (2021)	⚠	😊	😊	?	😊	⚠	😊	0	0	0	0	3	1	1	1	2	0	0	2	2	0	0	0	12		
Zhou (2021b)	⚠	😊	😊	?	😊	⚠	😊	1	1	0	0	3	1	1	1	2	2	0	2	2	2	0	0	18		
Average	0.48	0.48	0	0	2.11	1.00	0.81	0.85	1.74	0.48	0	0.22	1.70	1.85	0	0.11	11.85									
<div>⚠ High risk/concern</div> <div>😊 Low risk/concern</div> <div>? Unclear risk/concern</div>																										

Figure S2: QUADAS-2 and RQS assessments by the second reviewer.