

Table S1 Literature search strings

PubMed	<p>(((((head and neck cancer*) OR (head and neck scc)) AND (radiotherapy)) AND (radiomic*)) AND (cone beam ct)) OR (mvct) AND (response)</p> <p>(((((head and neck cancer*) OR (head and neck scc)) AND (radiotherapy)) AND (radiomic*)) AND (cone beam ct)) OR (mvct) AND (toxicity)</p> <p>(((((head and neck cancer*) OR (head and neck scc)) AND (radiotherapy)) AND (radiomic*)) AND (cone beam ct)) OR (mvct) AND (survival)</p>
Scopus	<p>head and neck cancer* OR scc AND radiotherapy OR cone beam ct OR cbct AND radiomic* AND toxicity OR prognostic* OR survival OR recurrence</p>
WOS	<p>(((((ALL=(head and neck cancer*) OR ALL=(head and neck scc)) AND ALL=(radiotherapy)) OR ALL=(radiation therapy)) AND ALL=(radiomic*)) AND ALL=(cone beam ct)) OR ALL=(mvct) AND ALL=(prognos*))</p> <p>(((((ALL=(head and neck cancer*) OR ALL=(head and neck scc)) AND ALL=(radiotherapy)) AND ALL=(radiomic*)) AND ALL=(cone beam ct)) OR ALL=(mvct) AND ALL=(survival))</p> <p>(((((ALL=(head and neck cancer*) OR ALL=(head and neck scc)) AND ALL=(radiotherapy)) OR ALL=(radiation therapy)) AND ALL=(radiomic*)) AND ALL=(cone beam ct)) OR ALL=(mvct) AND ALL=(toxicity)</p>

Table S2 Total RQS according to six key domain

Author & year	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	Total
Iliadou V, 2022 (18)	3	3	0	0	0	0	6 (17%)
Morgan HE, 2021 (19)	3	-1	1	3	0	4	10 (28%)
Abe K, 2023 (20)	2	5	1	4	0	3	15 (42%)
Sellami S, 2022 (21)	2	5	2	4	0	1	14 (39%)
Berger T, 2022 (22)	2	5	0	4	1	2	14 (39%)
Berger T, 2023 (23)	3	5	2	4	0	2	16 (44%)

RQS, radiomics quality score.

Table S3 Radiomics quality scores, reviewer 1

Author & year	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13	Item 14	Item 15	Item 16	RQS (total)
Iliadou V, 2022 (18)	1	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	6
Morgan HE, 2021 (19)	1	1	0	1	-3	0	1	0	2	1	0	2	0	0	0	4	10
Abe K, 2023 (20)	1	0	0	1	3	1	0	1	1	2	0	2	0	0	0	3	15
Sellami S, 2022 (21)	1	0	0	1	3	1	1	1	2	1	0	2	0	0	0	1	14
Berger T, 2022 (22)	0	1	0	1	3	0	0	0	2	2	0	2	0	0	1	2	14
Berger T, 2023 (23)	1	1	0	1	3	1	1	0	2	2	0	2	0	0	0	2	16

RQS, radiomics quality score.

Table S4 Radiomics quality scores, reviewer 2

Author & year	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13	Item 14	Item 15	Item 16	RQS (total)
Iliadou V, 2022 (18)	1	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	6
Morgan HE, 2021 (19)	1	1	0	1	-3	0	0	2	1	0	2	0	0	0	3	0	9
Abe K, 2023 (20)	1	0	0	1	3	1	1	1	2	0	2	0	0	0	3	1	16
Sellami S, 2022 (21)	1	0	0	1	3	1	1	2	1	0	2	0	0	0	1	1	14
Berger T, 2022 (22)	0	1	0	1	3	0	0	2	2	0	2	0	0	0	2	0	13
Berger T, 2023 (23)	1	1	0	1	3	1	0	2	2	0	2	0	0	0	2	0	16

RQS, radiomics quality score.