

Online Supplementary file 3 – Data extraction form

Data items extracted from each processed article during the full-text scoping review, and associated qualifications for each item.

Item	Qualifications
Authors	
Title	
Journal	
Volume	
Issue	(if applicable)
Pages	(if applicable)
Year	
Location	
URL / DOI	
Type of publication	<ul style="list-style-type: none"> • Research article • Meeting abstract • Review
Study population and sample size	(if applicable)
Methodology / Study Design	<ul style="list-style-type: none"> • Case-control study • Cases only stratification study <p>(+ further qualification, e.g. treatment response prediction, tumor subtype categorization, recurrence/relapse prediction, survival prediction, tissue-of-origin prediction)</p>
Outcome assessment	<ul style="list-style-type: none"> • Performance measures (e.g. accuracy, sensitivity, specificity, Kohen's Kappa, F-score, AUC) • Validation scheme (cross-validation approach, external validation approach, single cohort or multiple cohorts)
Generic machine learning category	<ul style="list-style-type: none"> • Supervised learning • Unsupervised learning • Other / mixed approaches
Name of specific machine learning approach	(if applicable)

Main results / key findings that relate to the research question	short description
---	-------------------