

**Additional file.** Information regarding the software, tools, and databases used in the methodology.

<b>Software, tools, and databases</b>	<b>Web page</b>	<b>Version</b>	<b>Reference</b>
NSCLC-Radiogenomics collection	<a href="https://wiki.cancerimagingarchive.net/display/Public/NSCLC+Radiogenomics">https://wiki.cancerimagingarchive.net/display/Public/NSCLC+Radiogenomics</a>		[1]
gcrma human dataset			[2]
Slice-O-Matic	<a href="https://www.tomovision.com/products/sliceomatic.html">https://www.tomovision.com/products/sliceomatic.html</a>	v.5.0	
Cutoff Finder		v1.0	[3]
rpart	<a href="https://cran.r-project.org/web/packages/rpart/index.html">https://cran.r-project.org/web/packages/rpart/index.html</a>	v4.1	
RStudio	<a href="https://www.rstudio.com/">https://www.rstudio.com/</a>	v.4.1.0	
R	<a href="https://cran.r-project.org/">https://cran.r-project.org/</a>	v3.5.1	
easyROC	<a href="http://www.biosoft.hacettepe.edu.tr/easyROC/">http://www.biosoft.hacettepe.edu.tr/easyROC/</a>	v. 1.3.1	[4]
Human Protein Atlas	<a href="http://www.proteinatlas.org">http://www.proteinatlas.org</a>	v18.1	[5]
Cytoscape	<a href="https://cytoscape.org/">https://cytoscape.org/</a>	v3.7.2	[6]
CytoNCA	<a href="https://apps.cytoscape.org/apps/cytonca">https://apps.cytoscape.org/apps/cytonca</a>	v2.1.6	[7]
GTEEx portal	<a href="https://www.gtexpportal.org/">https://www.gtexpportal.org/</a>	V8	[8]
cellxgene Data Portal	<a href="https://cellxgene.cziscience.com">https://cellxgene.cziscience.com</a>	v0.16.0	
The Cancer Imaging Archive	<a href="http://cancerimagingarchive.net">http://cancerimagingarchive.net</a>		[9]
BioGPS	<a href="http://biogps.org/">http://biogps.org/</a>		[10]
SankeyMATIC	<a href="http://sankeymatic.com/">http://sankeymatic.com/</a>		
Cancer Cell Line Encyclopedia portal	<a href="https://portals.broadinstitute.org/ccle">https://portals.broadinstitute.org/ccle</a>		[11]
TCGA-110CL Cell Line Panel	<a href="https://comphealth.ucsf.edu/app/tcga-110">https://comphealth.ucsf.edu/app/tcga-110</a>		[12]
Human Cancer Model Initiative catalog	<a href="https://ocg.cancer.gov/programs/hcmi/">https://ocg.cancer.gov/programs/hcmi/</a>		
CIBERSORTx	<a href="https://cibersortx.stanford.edu/">https://cibersortx.stanford.edu/</a>		[13]
Immune Cell Abundance Identifier	<a href="http://bioinfo.life.hust.edu.cn/ImmuCellAI#!/">http://bioinfo.life.hust.edu.cn/ImmuCellAI#!/</a>		[14]
CellPhoneDB	<a href="https://www.cellphonedb.org/">https://www.cellphonedb.org/</a>		[15]
EnrichR	<a href="https://maayanlab.cloud/Enrichr/">https://maayanlab.cloud/Enrichr/</a>		[16,17]
Biojupies	<a href="https://amp.pharm.mssm.edu/biojupies/">https://amp.pharm.mssm.edu/biojupies/</a>		[18]
ClustVis	<a href="https://biit.cs.ut.ee/clustvis/">https://biit.cs.ut.ee/clustvis/</a>		[19]

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