

## Supplementary file

**Table S1.** List of abbreviations (in alphabetical order).

Abbreviation	Meaning
AJCC	American Joint Committee on Cancer
ChT	Chemotherapy
CT	Computed tomography
CTCAE	Common Terminology Criteria for Adverse Events
CTV	Clinical target volume
DFPS	Distant progression free survival
FNCLCC	Fédération Nationale des Centres de Lutte Contre le Cancer
GLCM	Grey level co-occurrence matrix
GLNU	Gray level non-uniformity
GLRM	Grey level run length matrix
GLZLM	Grey level zone length matrix
GTV	Gross tumour volume
Gy	Gray
HGRE	High gray level run emphasis
HGZE	High gray level zone emphasis
HUmin	Minimum intensity value in Hounsfield units
HUpeak	Medium intensity peak in Hounsfield units
IMRT	Intensity modulated radiation therapy
LGRE	Low gray level run emphasis
LGZE	Low gray level zone emphasis
LPFS	Local progression free survival
LRE	Long run emphasis
LRHGE	Long run high gray level emphasis
LRLGE	Long run low gray level emphasis
LZE	Long zone emphasis
LZHGE	Long zone high gray level emphasis
LZLGE	Long zone low gray level emphasis
mL	Millilitres
mm	Millimetres
MRI	Magnetic resonance imaging
NART	Neoadjuvant radiotherapy
NGLDM	Neighbourhood grey level different matrix
OS	Overall survival
p	Probability of obtaining test results at least as extreme as the results actually observed, under the assumption that the null hypothesis is correct
PET	Positron emission tomography
PTV	Planning target volume
RLNU	Run length non-uniformity
RP	Run percentage
RT	Radiotherapy
R0	No cancer cells seen microscopically at the primary tumour site
R1	Cancer cells present microscopically at the primary tumour site
R2	Macroscopic residual tumour at primary cancer site
SRE	Short run emphasis
SRHGE	Short run high gray level emphasis

SRLGE	Short run low gray level emphasis
SZHGE	Short zone high gray level emphasis
SZLGE	Short zone low gray level emphasis
STS	Soft tissue sarcomas
SZE	Short zone emphasis
TNM	Stands for tumour (T), nodes (N) and metastases (M)
VMAT	Volumetric modulated arc therapy
VOI	Volume of interest
WHO	World Health Organization
ZLNU	Zone length non-uniformity
ZP	Zone percentage
3DCRT	Three dimensional conformal radiation therapy

**Table S2.** List of extracted radiomics features.

Method	Feature
Shape	Volume Sphericity Compacity
Histogram	Skewness Kurtosis Excess kurtosis Entropy Energy Mean Minimum Maximum Standard deviation Peak
GLCM	Homogeneity Energy Contrast Correlation Entropy Dissimilarity
GLRLM	SRE LRE LGRE HGRE SRLGE SRHGE LRLGE LRHGE GLNU RLNU RP
GLZLM	SZE LZE LGZE HGZE SZLGE SZHGE LZLGE LZHGE GLNU ZLNU ZP
NGLDM	Coarseness Contrast Busyness