

Parameters	Signa Excite, GE Healthcare	Achieva, Philips Healthcare
Repetition Time (ms)	3.8	4.4
Echo Time (ms)	1.8	2.1
Flip Angle (degrees)	12	10
Number of slices	92–116	83–110
Slice Thickness (mm)	4.4	5
Reconstruction Interval (mm)	2.2	2.3
Acquisition Matrix	256 x 256	270 x 188
Field of View (mm)	350–400 x 350–400	350–400 x 350–400
Number of Excitations	0.71	1

Supplementary Table S1: Acquisition parameters of post-contrast axial T1-weighted three-dimensional gradient-recalled echo sequences with fat suppression at 1.5T MRI scanners.

	Prediction of complete response		Prediction of objective response	
	Feature	<i>p</i> value	Feature	<i>p</i> value
PVP	original_glszm_SmallAreaEmphasis	0.017	wavelet-HHL_glszm_SizeZoneNonUniformityNormalized	0.049
	wavelet.LHH_firstorder_Skewness	0.011		
3' TP	Platelet count	0.023	wavelet.HLL_glcmm_ClusterShade	0.027
	TP hypointensity	0.030	wavelet.LHH_glszm_SmallAreaEmphasis	0.044
	wavelet.LLH_ngtdm_Strength	0.038	wavelet.LLH_firstorder_Mean	0.020
HBP	Platelet count	0.034	TP hypointensity	0.034
	wavelet.HHH_firstorder_Skewness	0.027	original_glszm_LargeAreaHighGrayLevelEmphasis	0.044
	wavelet.LLH_glcmm_Correlation	0.031	wavelet.HHL_glcmm_Idmn	0.041
			wavelet.HHL_ngtdm_Contrast	0.022
			wavelet.LHL_glcmm_Imc1	0.012
			wavelet.LHL_glcmm_Imc2	0.014
			wavelet.LHL_gldm_LargeDependenceLowGrayLevelEmphasis	0.049

Supplementary Table S2: Most discriminant features identified by using a first features selection performed identified by the statistical model by a logistic regression with elastic net penalty (radiomics model 1), while the final model was a logistic model with ridge penalty on the selected features in order to find an uncorrelated solution of clinical variables for reduction and selection of clinical variables, LI-RADS qualitative features, and radiomics features according to the post-treatment response. **Abbreviations:** PVP: Portal Venous Phase; 3' TP: 3 minutes Transitional Phase; HBP: Hepatobiliary Phase.

	Prediction of complete response		Prediction of objective response	
	Feature	<i>p</i> value	Feature	<i>p</i> value
PVP	wavelet-LLH_glcM_Imc2	0.002	wavelet-	<
	wavelet-LLH_glcM_MCC	0.005	HHL_glszm_SizeZoneNonUniformityNormalized	0.001
			wavelet-HHL_glcM_MCC	<
			wavelet-HHL_glcM_Imc2	0.001
3' TP	wavelet-	0.009	wavelet-LHH_gldm_LowGrayLevelEmphasis	0.009
	HLH_gldm_DependenceVariance	0.005	wavelet-LHH_glrM_LowGrayLevelRunEmphasis	0.030
	wavelet-LLH_firstorder_Median	<		
	Platelet count	0.001		
HBP	wavelet-HHL_glcM_Correlation	0.001		
	wavelet-HLH_glcM_Imc1	0.002	wavelet-LLL_firstorder_Kurtosis	0.021
	wavelet-HHH_firstorder_Skewness	<	original_firstorder_Kurtosis	0.041
	wavelet-HHH_glcM_Correlation	0.001		
	wavelet-HHH_glcM_InverseVariance	<		
		0.001		
		<		
		0.001		

Supplementary Table S3: Most discriminant features identified by the computational system based on point-biserial-correlation coefficient (radiomics model 2) for reduction and selection of clinical variables, LI-RADS qualitative features, and radiomics features according to post-treatment response. **Abbreviations:** PVP: Portal Venous Phase; 3' TP: 3 minutes Transitional Phase; HBP: Hepatobiliary Phase.