

Supplements

Supplemental Table S1. ICC values for ADC metrics

	ADC metrics	ICC (95% CI)		
		Multiple-slice restricted ROI	Single-slice restricted ROI	Single-slice tumor ROI
T0	MEAN	0.98 (0.97,0.987)	0.964 (0.947,0.975)	0.978 (0.963,0.986)
	MINIMUM	0.791 (0.655,0.868)	0.821 (0.738,0.877)	0.929 (0.895,0.953)
	MAXIMUM	0.808 (0.73,0.865)	0.83 (0.759,0.881)	0.88 (0.829,0.917)
	PCTL 05	0.942 (0.909,0.962)	0.939 (0.911,0.958)	0.965 (0.947,0.976)
	PCTL 15	0.975 (0.962,0.984)	0.963 (0.946,0.975)	0.975 (0.961,0.984)
	PCTL 25	0.968 (0.953,0.979)	0.954 (0.934,0.969)	0.977 (0.965,0.984)
	PCTL 50	0.981 (0.971,0.987)	0.964 (0.947,0.975)	0.974 (0.956,0.984)
	PCTL 75	0.973 (0.961,0.982)	0.946 (0.922,0.963)	0.964 (0.943,0.976)
	PCTL 95	0.93 (0.906,0.955)	0.92 (0.885,0.945)	0.936 (0.902,0.958)
T1	MEAN	0.983 (0.974,0.988)	0.98 (0.97,0.986)	0.963 (0.941,0.976)
	MINIMUM	0.94 (0.912,0.958)	0.95 (0.925,0.966)	0.952 (0.93,0.967)
	MAXIMUM	0.848 (0.785,0.894)	0.881 (0.831,0.918)	0.929 (0.893,0.952)
	PCTL 05	0.964 (0.948,0.975)	0.961 (0.943,0.973)	0.957 (0.937,0.97)
	PCTL 15	0.968 (0.953,0.978)	0.966 (0.951,0.977)	0.934 (0.905,0.955)
	PCTL 25	0.978 (0.967,0.985)	0.978 (0.967,0.985)	0.955 (0.934,0.969)
	PCTL 50	0.975 (0.96,0.984)	0.974 (0.962,0.982)	0.953 (0.925,0.969)
	PCTL 75	0.971 (0.957,0.98)	0.968 (0.954,0.978)	0.964 (0.945,0.976)
	PCTL 95	0.909 (0.869,0.937)	0.914 (0.876,0.941)	0.937 (0.906,0.957)

Δ ADC%	MEAN	0.973 (0.961,0.982)	0.94 (0.912,0.959)	0.937 (0.908,0.957)
	MINIMUM	0.045 (-0.145,0.232)	0.083 (-0.109,0.27)	0.858 (0.797,0.901)
	MAXIMUM	0.71 (0.599,0.794)	0.723 (0.616,0.804)	0.781 (0.692,0.846)
	PCTL 05	0.909 (0.866,0.939)	0.921 (0.885,0.946)	0.931 (0.9,0.953)
	PCTL 15	0.951 (0.928,0.967)	0.942 (0.915,0.96)	0.885 (0.835,0.921)
	PCTL 25	0.955 (0.934,0.969)	0.944 (0.919,0.962)	0.921 (0.885,0.946)
	PCTL 50	0.961 (0.943,0.974)	0.936 (0.907,0.956)	0.931 (0.899,0.953)
	PCTL 75	0.954 (0.933,0.969)	0.899 (0.854,0.93)	0.917 (0.88,0.943)
	PCTL 95	0.844 (0.778,0.892)	0.784 (0.696,0.848)	0.85 (0.786,0.896)

Supplemental Table S2. AUC values for predicting pCR using ROIs delineated by two readers

PERCENT CHANGE of ADC metrics	AUC (95% CI)					
	Multiple-slice restricted ROI		Single-slice restricted ROI		Single-slice tumor ROI	
	Reader 1	Reader 2	Reader 1	Reader 2	Reader 1	Reader 2
MEAN	0.653 (0.515,0.79)	0.668 (0.529,0.807)	0.638 (0.504,0.773)	0.631 (0.501,0.761)	0.579 (0.45,0.708)	0.559 (0.429,0.689)
MINIMUM	0.619 (0.479,0.758)	0.668 (0.534,0.803)	0.599 (0.471,0.727)	0.591 (0.465,0.716)	0.602 (0.475,0.73)	0.597 (0.467,0.728)
MAXIMUM	0.489 (0.364,0.614)	0.488 (0.367,0.608)	0.541 (0.417,0.664)	0.547 (0.424,0.669)	0.496 (0.374,0.618)	0.384 (0.266,0.503)
PCTL 05	0.591 (0.449,0.734)	0.637 (0.497,0.777)	0.589 (0.454,0.724)	0.599 (0.468,0.731)	0.528 (0.396,0.66)	0.538 (0.403,0.674)
PCTL 15	0.631 (0.493,0.769)	0.63 (0.488,0.772)	0.598 (0.464,0.732)	0.591 (0.457,0.725)	0.561 (0.431,0.692)	0.549 (0.418,0.68)
PCTL 25	0.633 (0.496,0.77)	0.655 (0.514,0.797)	0.611 (0.476,0.746)	0.608 (0.474,0.742)	0.556 (0.421,0.691)	0.578 (0.444,0.712)

PCTL 50	0.627 (0.492,0.762)	0.625 (0.486,0.763)	0.627 (0.493,0.761)	0.611 (0.481,0.742)	0.57 (0.439,0.7)	0.547 (0.417,0.677)
PCTL 75	0.624 (0.491,0.758)	0.622 (0.487,0.758)	0.609 (0.476,0.742)	0.595 (0.466,0.723)	0.554 (0.431,0.677)	0.542 (0.414,0.669)
PCTL 95	0.598 (0.471,0.726)	0.608 (0.479,0.737)	0.615 (0.486,0.743)	0.573 (0.447,0.7)	0.557 (0.434,0.68)	0.48 (0.361,0.6)

Numbers in bold had 95% CI above 0.5