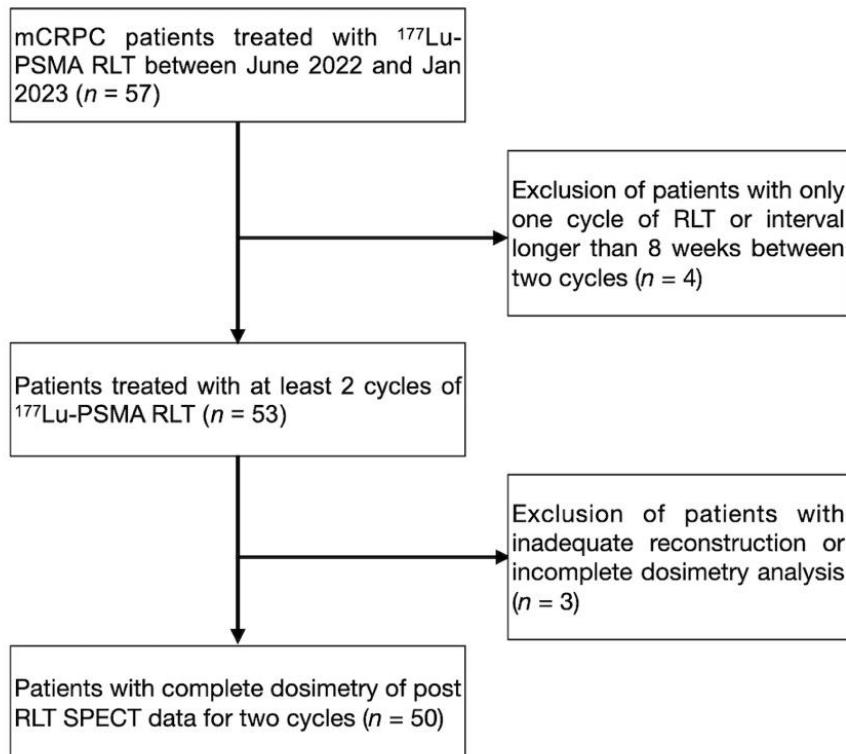


Supplemental Data

Supplemental Figure 1: Patient flow diagram



Supplemental Table 1: Dose-response relationship analysis. All dose variables were analyzed using a log scale.

Dose	Response	Estimated association	Std error	P value	R square
Maximum baseline dose - Index lesions	SPECT _{maximum}	0.07	0.02	0.007	0.03
Mean baseline dose - Index lesions	SPECT _{mean}	0.09	0.02	0.001	0.05
SPECT _{VIP-PSMA} - Most avid lesion	PSA response	0.7	0.1	<0.0001	0.35
SPECT _{VIP-PSMA} - Index lesions	PSA response	0.9	0.16	<0.0001	0.40
Maximum baseline dose - Most avid lesion	PSA response	0.071	0.09	0.48	0.01
Maximum baseline dose - Index lesions	PSA response	0.13	0.08	0.11	0.05
Maximum baseline dose - Most avid lesion	SPECT _{maximum}	0.03	0.04	0.44	0.007
Maximum baseline dose - Most avid lesion	SPECT _{VIP-PSMA}	0.03	0.06	0.52	0.005
Maximum baseline dose - Index lesions	SPECT _{VIP-PSMA}	0.05	0.03	0.11	0.01
Mean baseline dose - Most avid	SPECT _{mean}	0.06	0.04	0.17	0.02
Mean baseline dose - Most avid	SPECT _{VIP-PSMA}	0.05	0.06	0.3	0.009
Mean baseline dose - Index lesions	SPECT _{VIP-PSMA}	0.06	0.03	0.08	0.01

Supplemental Table 2: Lesion-based dosimetry data

	Mean absorbed dose at Cycle 1 (Gy), Mean (SD)	SPECT _{mean} response, Mean (SD)
1) Index lesions		
Total	7.5 (6.8)	36.5 (35.2)%
Osseous	5.9 (4.5)	33.7 (38.4)%
Lymph nodes	8.3 (9.4)	36.9 (35.4)%
Soft tissues	5.6 (4.1)	39.0 (39.2)%
2) Least avid lesions	3.4 (4.2)	30.1 (37.1)%