

Appendix 1***Radiologic response according to RECIST V1.1***

For the entire cohort 5/26 (19.2%), 5/26 (19.2%), 16/26 (61.6%), and 0/26 (0%) had PD, SD, PR, and CR respectively by RECIST criteria. For the glass only cohort 3/17 (17.6%), 2/17 (11.8%), 12/17 (70.6%), and 0/17 (0%) had PD, SD, PR, and CR respectively by RECIST criteria. For the resin only cohort 4/9 (44.45%), 1/9 (11.1%), 4/9 (44.45%), and 0/9 (0%) had PD, SD, PR, and CR respectively by RECIST criteria.

RR and relationship to dose**Entire cohort**

The MTD for PD (5/26, 19.2%), SD (5/26, 19.2%),

and PR (16/26, 61.6%) by RECIST was 331.4173.1 Gy, 482.6673.8 Gy, and 622.9520 Gy respectively (P=0.15).

Glass only

The MTD for PD (3/17, 17.6%), SD (2/17, 11.8%), or PR (12/17, 70.6%) by RECIST was 397.4137.2 Gy, 1,057.61,079.9 Gy and 693.7529.6 Gy, respectively (P=0.22).

Resin only

The MTD for PD (4/9, 44.45%), SD (1/9, 11.1%), and PR (4/9, 44.45%) by RECIST was 10133.6 Gy, 128.40 Gy, and 198.492.7 Gy, respectively (P=0.09).

European Association for the Study of Liver (EASL) criteria

Variable	PD or SD	PR	CR	P value
Particle load (particles)	8,047,689 (IQR:8,754,462)	4,800,000 (IQR:5,379,321)	2,400,000 (IQR:1,200,000)	0.87
Specific activity (Bq)	76 (IQR:132.3)	554.2 (IQR:748.9)	1,467.1 (IQR:848.7)	0.011

Response evaluation criteria in solid tumors (RECIST) version 1.1

Variable	PD	SD	PR	P value
Particle load (particles)	2,400,00 (IQR:9,116,232)	4,979,146 (IQR:4,431,185)	3,600,000 (IQR:8,479,364)	0.1
Specific activity (Bq)	639.8 (IQR:1391)	76 (IQR:529)	845.8 (IQR:1,053.8)	0.27