

Table S2A: A 4-point score for PSMA PET/MR visual signal intensity

1. Low signal: 0 (corresponding to the white matter of T2WI).
2. Iso-signal: 1 (grey matter).
3. Slightly high signal: 2 (in-between).
4. High signal: 3 (cerebrospinal fluid).

ADC signal score was opposite.

Table S2B: A 4-point score for PSMA PET/MR visual uptake

1. No uptake: 0.
2. Mild uptake: 1.
3. Moderate uptake: 2.
4. Significant uptake: 3.

Table S2C: A 3 level visual scale for the degree of overlap between the extent of uptake on PET and simultaneous MRT1-CE images

1. PET was included entirely in T1-CE and overlapped well: 1.
2. PET was part of in T1-CE: 2.
3. PET was significantly smaller than T1-CE: 3.

Table S2D: A 5-point scale for PSMA PET/MR findings to confirm recurrence and treatment-related changes (TRCs)

1. Not certainty: 0.
2. Need to suspect: 1.
3. Suspected: 2.
4. A great possibility: 3.
5. Certainty: 4.

A score of 3-4 was considered to be the diagnosis of recurrence.

Table S2E: A 4-level scale for the number of PSMA and CD31 stained positive microvessels

1. 0: no expression (0 score).
2. 1-10: low expression (1 score).
3. 11-20: moderate expression (2 score).
4. >20: high expression (3 score).