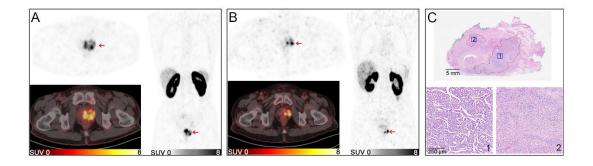
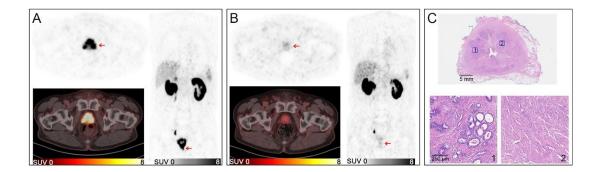
## Supplemental Data

## Supplemental Figure 1



Supplemental Figure 1: Representative [68Ga]PSMA PET/CT images before and after neoadjuvant therapy and whole-mount pathological specimen after radical prostatectomy one patient with biochemical recurrence in the 36-month follow-up. This patient was a 64-year-old man with a high-risk locally advanced disease (Gleason score 4+4, initial PSA 124.6 ng/ml, clinical T stage T3b). He had a baseline SUVmax of 36.9 (A) and visible residual tumors with SUVmax 9.9 on [68Ga]PSMA PET/CT after 6-month of neoadjuvant therapy (ADT + Abiraterone) (B). Whole-mount specimen after RP showed two residual tumors larger than 5 mm (C). He experienced biochemical progression at 33 months.

## Supplemental Figure 2



Supplemental Figure 2: Representative [68Ga]PSMA PET/CT images before and after neoadjuvant therapy and whole-mount pathological specimen after radical prostatectomy of one patient without biochemical recurrence in the 36-month follow-up. He was a 73-year-old man with a high-risk advanced disease (Gleason score 4+5, initial PSA 34.09 ng/ml, clinical T stage T3b). He had a baseline SUVmax of 22.9 (A) but an invisible tumor on [68Ga]PSMA PET/CT (SUVmax 4.1) after 6-month of neoadjuvant therapy (ADT + Abiraterone) (B). The whole-mount specimen showed a complete pathological response (pCR) after treatment (C). He had not experienced biochemical progression yet, with a follow-up of 36 months.