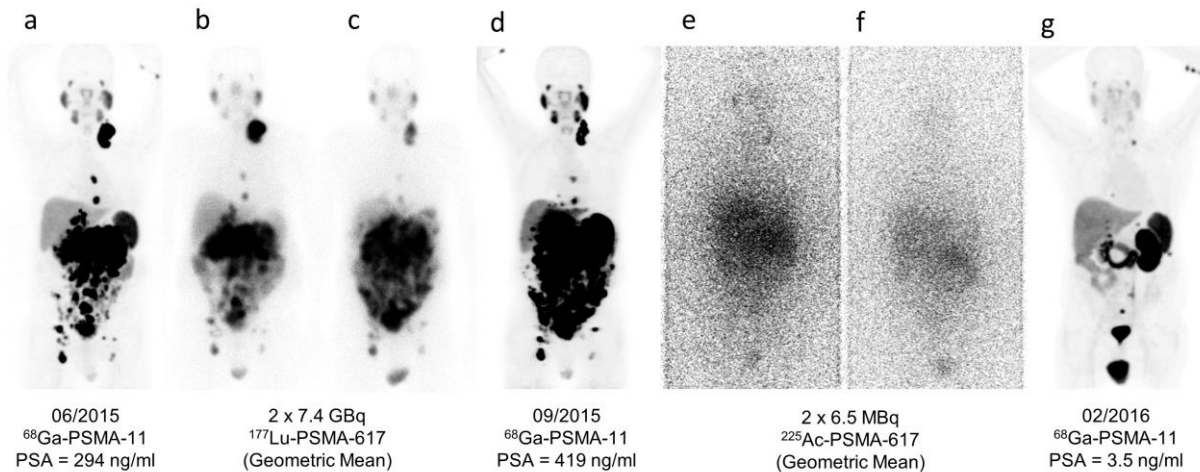


Supplemental Figure 1: Posttherapeutic planar scans based on the coemission of photons during alpha-decay acquired 24 h after cycles 1-3 demonstrate sufficient tumor targeting and stepwise response over the conducted treatment fractions.



Supplemental Figure 2: Posttherapeutic planar scans after 2 cycles of 7.4 GBq of ^{177}Lu -PSMA-617 (geometric mean) demonstrate that nonresponse was not caused by insufficient tumor targeting. Emission scans during ^{225}Ac -PSMA-617 treatment already imply a stepwise tumor response.