



Supplemental Figure 1. Set of images of two patients demonstrating the contribution of ^{68}Ga -PSMA-HBED-CC PET imaging to the final diagnosis. Upper row: 46 year old patient after radical prostatectomy (08/2011) and secondary radiation therapy (11/2011) presenting with a PSA-value of 1.2 ng/mL (03/2014): CT (A) demonstrates a nodular lesion in the former prostate fossa adjacent the bladder indicating local recurrence. PET (B) and fused PET/CT (C) images show intense uptake further confirming local recurrence. Lower row: 63 year old patient after radical prostatectomy (2003) and secondary radiation therapy (2009) presenting with a PSA-value of 0.9 ng/mL: CT (D) provides no suspicious finding. PET (E) and fused PET/CT (F) images show intense uptake facilitating lesion conspicuity and detection at the base of the former seminal vesicle indicating local recurrence.