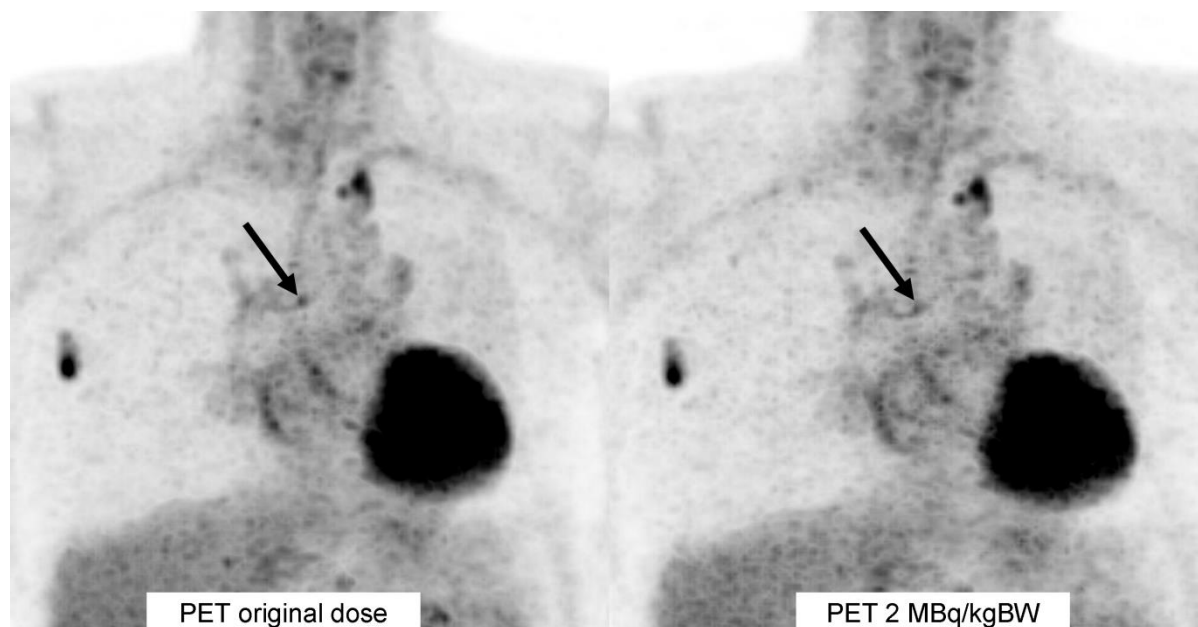


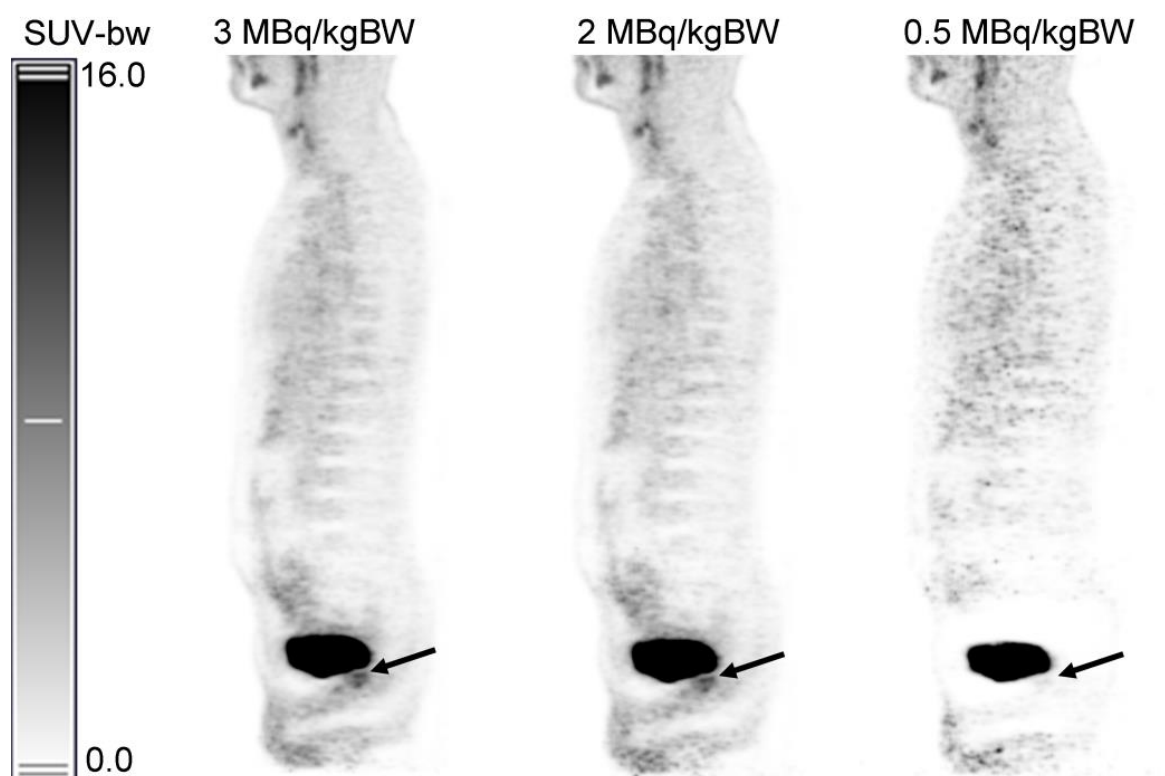
SUPPLEMENTAL MATERIAL



Supplemental Figure 1 Example of 54 y/o male patient with lung cancer. One mediastinal lymph node (arrow) in the low dose PET (2 MBq/kgBW, right hand side) was missed in the oncologic reading from the nuclear medicine physician; however, in the full dose PET (left hand side) this lymph node was rated with the lowest Likert score of diagnostic confidence (4=possibly a malignant lesion).



Supplemental Figure 2 Example of a 38 y/o female patient (BMI 24) with lymphoma also presenting photopenic areas in the abdomen / pelvis region at a dose of 1.5 MBq/kgBW if reconstructed with scatter correction (left hand side); If the same data is reconstructed without scatter correction (center) or without scatter scaling (right hand side) this artifact was not observed. This indicates that the scatter correction (scatter scaling) is the primary reason for these photopenic areas.



Supplemental Figure 3 Example of a 40 y/o male patient with rectal carcinoma. Caused by increasing artifacts around the urinary bladder, the lesion almost completely disappears at very low doses.