Figure S1: Effect of tissue on linearity and signal intensity \(^{18}\)F and \(^{68}\)Ga within the range of \(^{68}\)Ga-PSMA uptake of the prostate tumour according to measurement on the PET/CT scans. Data was acquired with an exposure time of 120s and binning 2 x 2. The goodness-of-fit (\(R^2\)) is displayed at every fit.

Figure S2: Graph representing the signal and the noise floor of \(^{18}\)F (top) and \(^{68}\)Ga (bottom), with and without overlying tissue. The crossing of the signal with background correction (\(\mu_s-\mu_b\)) and standard deviation of the background signal (\(\sigma_b\)) represents the minimal detectable activity concentration for SNR=1. CPS = counts per second.
Figure S3: Three subsequent images of the uniform flood source (A-C) and the image reconstructed of the median values of the three raw images (D), and the three post-processed images (E-G), with the reconstructed median image (H). The use of the median value (H) reduced the influence of gamma strikes (yellow stripes at the red arrows) in E-F. The same intensity scaling was used in all eight images.
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