

**Electronic Supplementary Material**

**PSMA-based [<sup>18</sup>F]DCFPyL PET/CT is Superior to Conventional Imaging for  
Lesion Detection in Patients with Metastatic Prostate Cancer**

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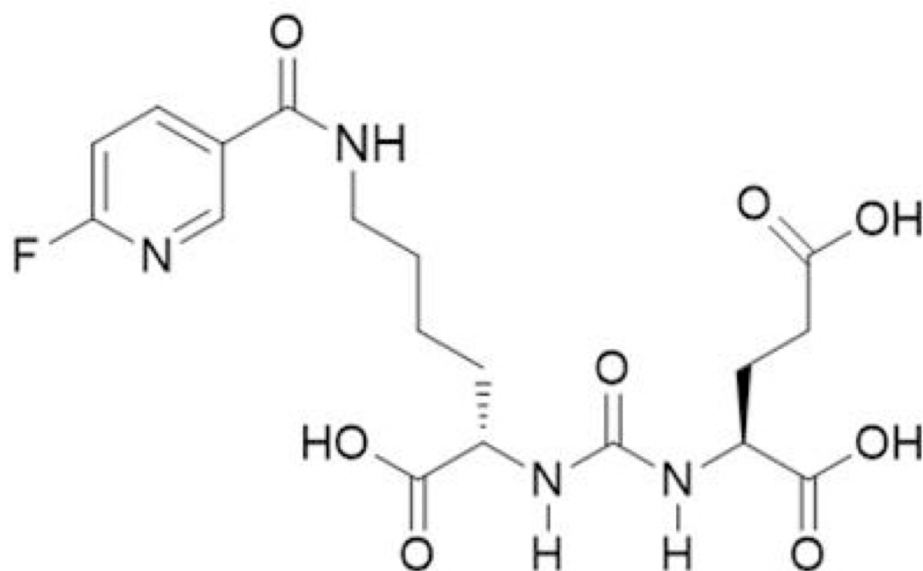
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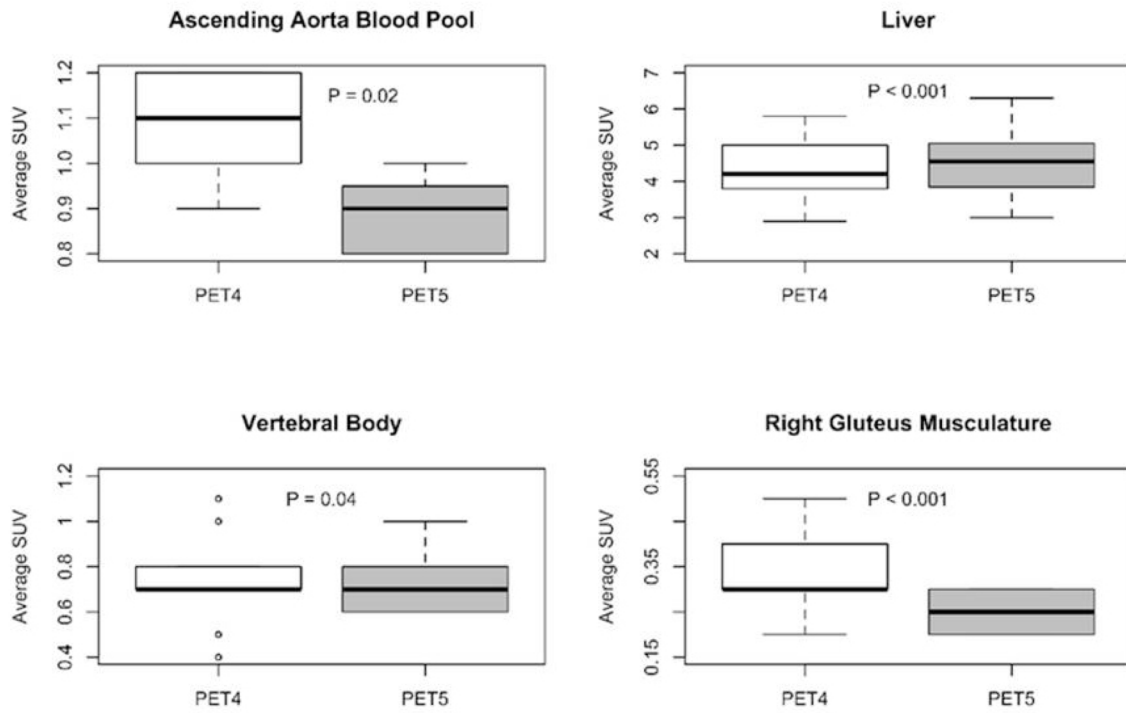
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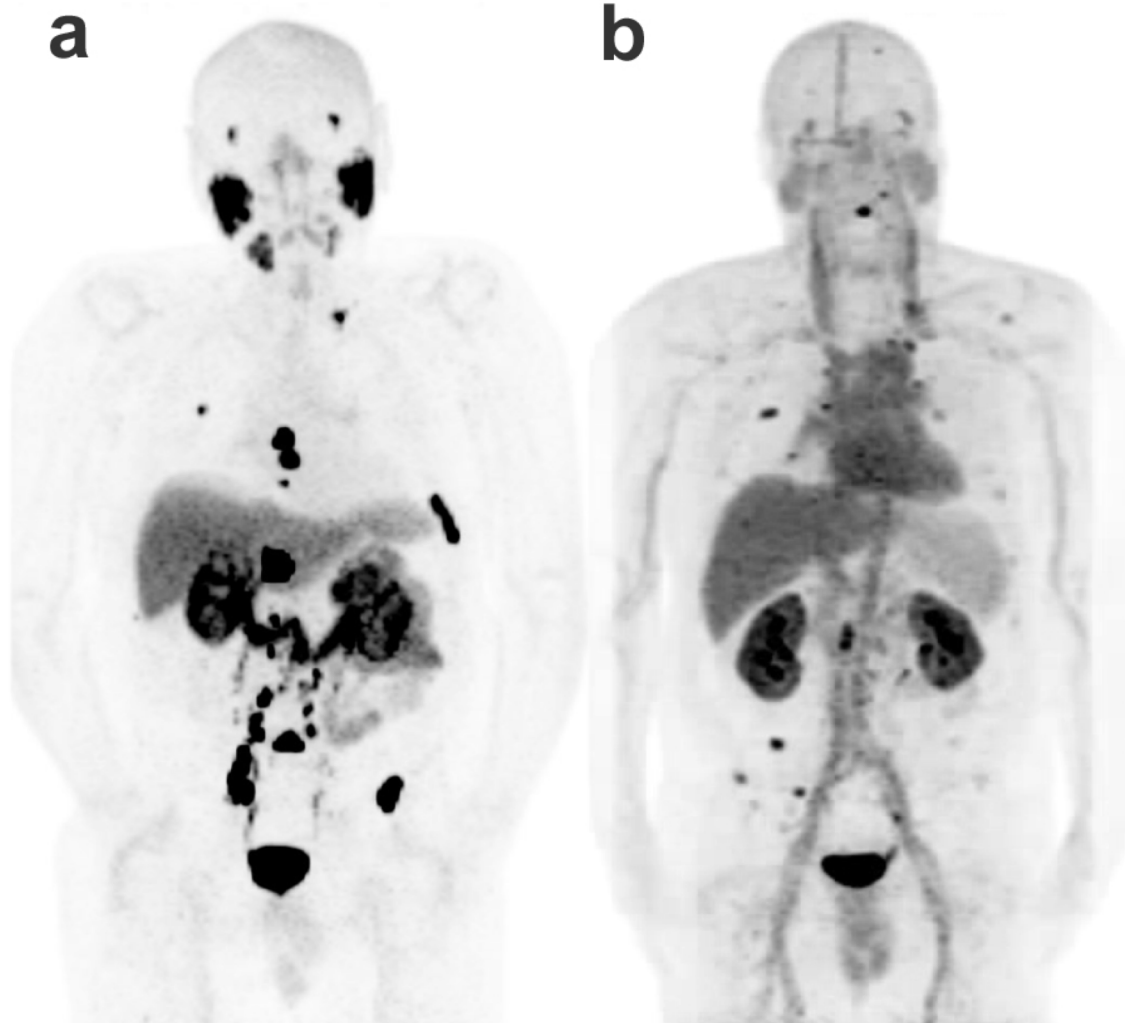
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**Supplementary Fig. 1.** Chemical structure of [ $^{18}\text{F}$ ]DCFPyL, the PSMA-targeted PET radiotracer evaluated in this study.



**Supplementary Fig. 2.** Box plot of average normal organ  $SUV_{mean}$  at the PET4 and PET5 time points (~60 and at 120 minutes post injection, respectively) for blood pool, liver, vertebral body and skeletal muscle.



**Supplementary Fig. 3.** Coronal MIP images comparing PET scans imaged with DCFPyL (a) and  $^{18}\text{F}$ -DCFBC (b), our first generation PSMA-targeted PET radiotracer. Both patients had multiple bone and lymph node lesions presumed to be metastatic prostate cancer. DCFPyL is notable for markedly less blood pool activity with relatively higher uptake within suspected metastatic foci.