Article Title: Dosimetry of ^{18}F-Labeled Tyrosine Kinase Inhibitor SKI-249380, a Dasatinib-Tracer for PET Imaging

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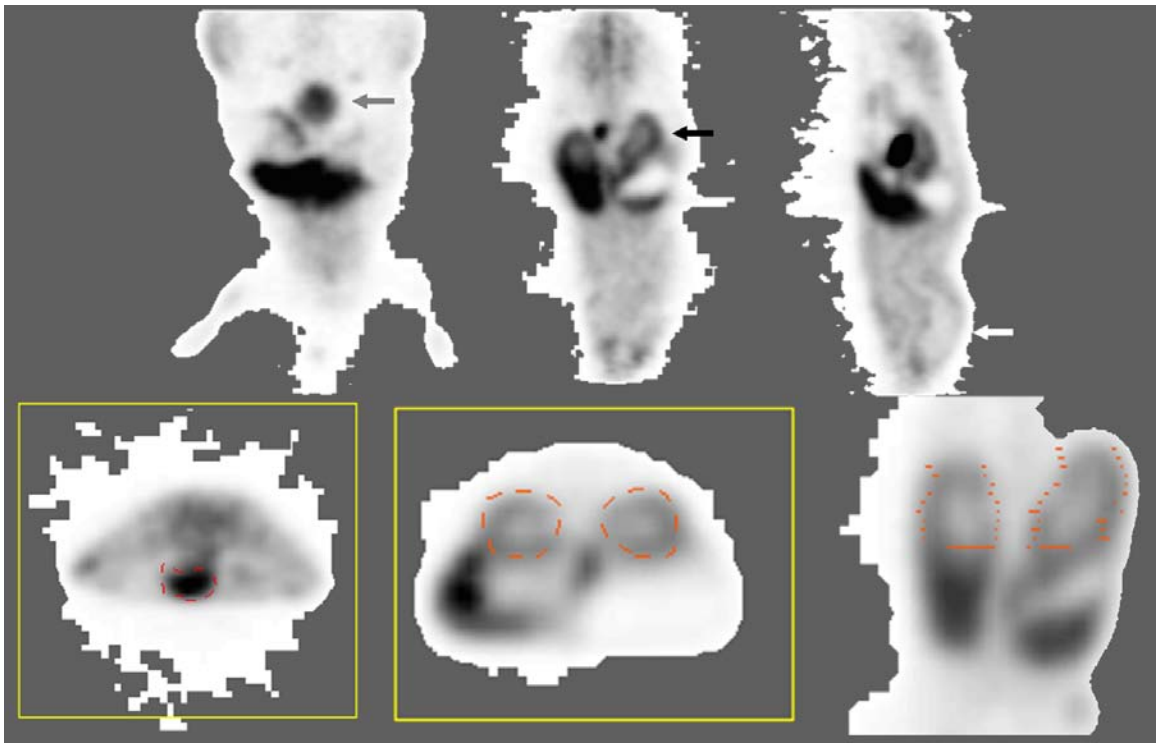

Online Resource 2. Example of animal ^{18}F-SKI-249380 PET imagery used for data analyses. In each mouse, 60 minutes of PET data was reconstructed and summed. Murine organs were selected for special organ-level dosimetric analysis when these

demonstrated high or low activity, relative to the remainder of the body, scintigraphically; accounting for all other injected activity, including radioactive excreta, as described in Methods (in main article, see Methods: *Organ Time Integrated Activity Coefficients*). *Top row:* coronal (left, middle) and sagittal (right) sections illustrating, e.g., distinct levels of activity in the urinary bladder (grey arrow); renal cortex (black arrow); and brain (white arrow; i.e., distinctly-low brain-uptake —a 'deficit' organ). *Bottom row:* transaxial (left, middle) PET sections with example digital VOI placements, as used for estimate fractional tracer-excretions (see Methods); showing VOIs used for measurement of all activity in the abdomen and pelvis, A_{ap} (yellow rectangle); and for measuring A_{kb} (red dashed circles,) the combined activity (%IA) in the urinary bladder (left) and kidney (middle) regions, including renal collecting systems. VOIs comprised 2-dimensional regions-of-interests placed on contiguous PET axial sections to encompass whole organs while minimizing overlap with adjacent organ activity; e.g., as shown in the coronal PET section (right), where the red dashes indicate the boundaries of the multiple ROIs, placed on the transaxial sections, outlining the kidneys and renal collecting systems, for the A_{kb} VOI (which also included bladder ROIs).