

Supplementary Material

of

A Molecular Imaging-Derived Biomarker of Cardiac Nerve Integrity —

Introducing High NET Affinity PET Probe ¹⁸F-AF78

Xinyu Chen^{*a,b}, Rudolf A. Werner^{*b,c}, Kazuhiro Koshino^d, Naoko Nose^e, Saskia Mühlig^b, Steven P. Rowe, PhD^c, Martin G. Pomper^c, Constantin Lapa^a, Michael Decker^f, Takahiro Higuchi^{b,e}

^a*Nuclear Medicine, Faculty of Medicine, University of Augsburg, Augsburg, Germany*

^b*Department of Nuclear Medicine and Comprehensive Heart Failure Center, University Hospital of Würzburg, Würzburg, Germany*

^c*Division of Nuclear Medicine, The Russell H Morgan Department of Radiology and Radiological Science, Johns Hopkins University School of Medicine, Baltimore, MD, U.S.*

^d*Department of Systems and Informatics, Hokkaido Information University, Ebetsu, Hokkaido, Japan*

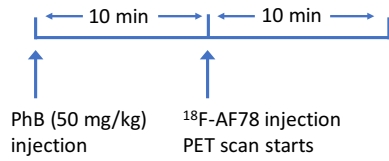
^e*Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, Okayama, Japan*

^f*Institute of Pharmacy and Food Chemistry, University of Würzburg, Würzburg, Germany*

*equal contribution

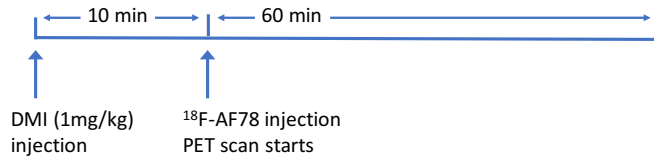
Rat studies

Phenoxybenzamine (PhB) blocking study

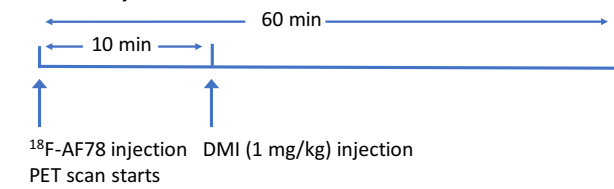


NHP studies

Desipramine (DMI) blocking study



DMI chase study



Tyramine (TYR) chase study

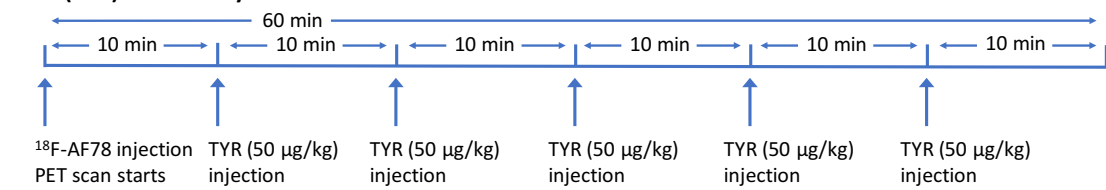


Figure S1. Experimental timeline of rat and non-human primates (NHPs) studies.

PET = positron emission tomography.

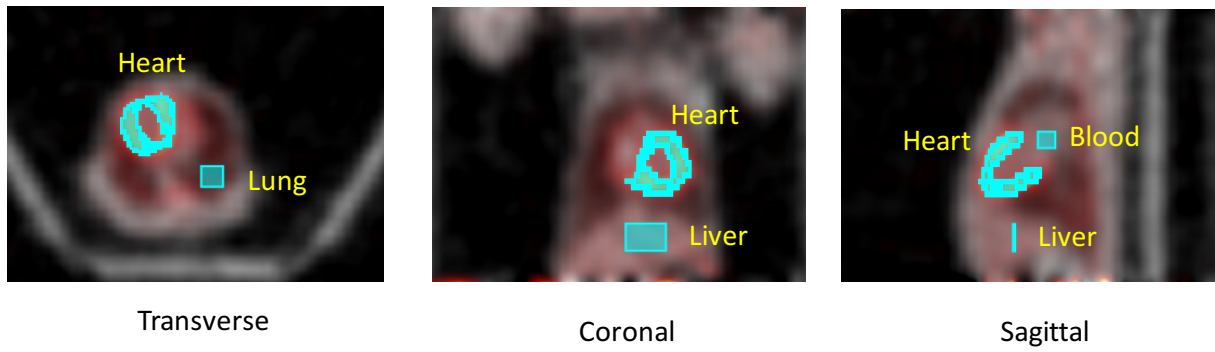


Figure S2. Region of interest placement, exemplified by the positron emission tomography/transmission fused image of ^{18}F -AF78 in control non-human primates. Heart, blood pool, liver and lung have been indicated.