



Istituto di Bioimmagini e Fisiologia Molecolare (IBFM)

In vivo study with D02S2A-⁶⁴Cu complex

Resp. Loc.
Giorgio Russo



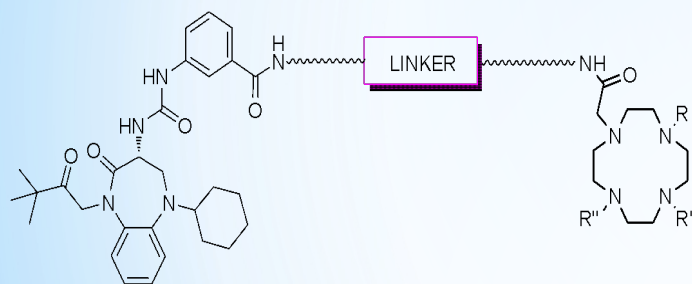
UNIVERSITÀ
degli STUDI
di CATANIA



ISOLPI IARM_EIRA
TASK 3 - BIOLOGY

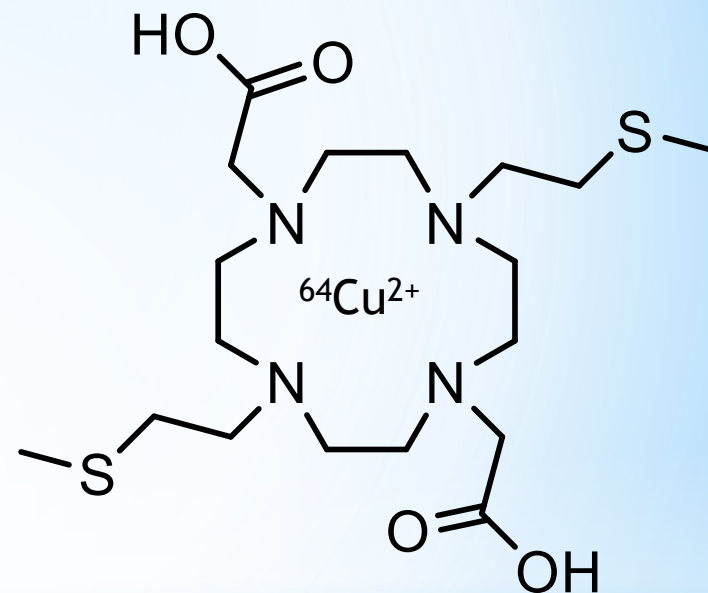


Chemical structure of the molecules used in the experimentation.



Z-360

- 1) $R=R'=R''=CH_2COOH$
- 2) $R=R''=CH_2CH_2SCH_3$; $R'=CH_2COOH$
- 3) $R=R'=R''=CH_2CH_2SCH_3$



DO2A2S

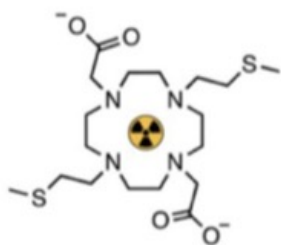
Biodistribution of DO2A2S in 9 mice \rightarrow 1h \rightarrow 4h \rightarrow 24h
Organs evaluation

Radiochemistry Activities at Cannizzaro Hospital Research Laboratory



A New Preclinical Decision Support System Based on PET Radiomics: A Preliminary Study on the Evaluation of an Innovative ^{64}Cu -Labeled Chelator in Mouse Models

Inoculation of
 $[^{64}\text{Cu}]\text{DO2A2S}$



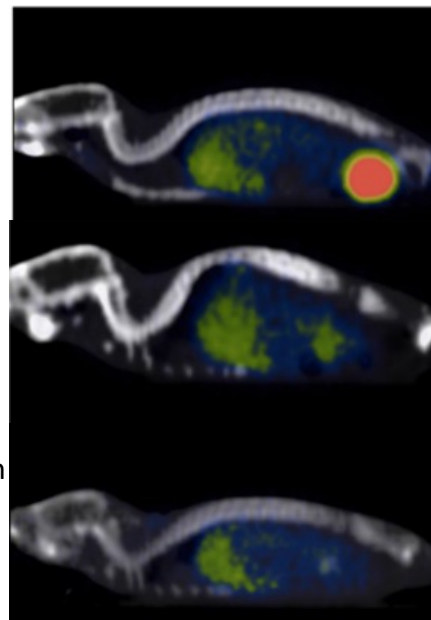
Balb/C nude
strain mice



1h

4h

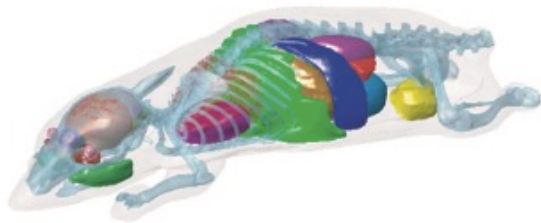
24h



Imaging μPET ALBIRA (CAPIR, Catania)



Algorithms



CT to 3D whole-body
Digimouse Atlas



Volumes of
Interest
extraction



Radiomics



Texture

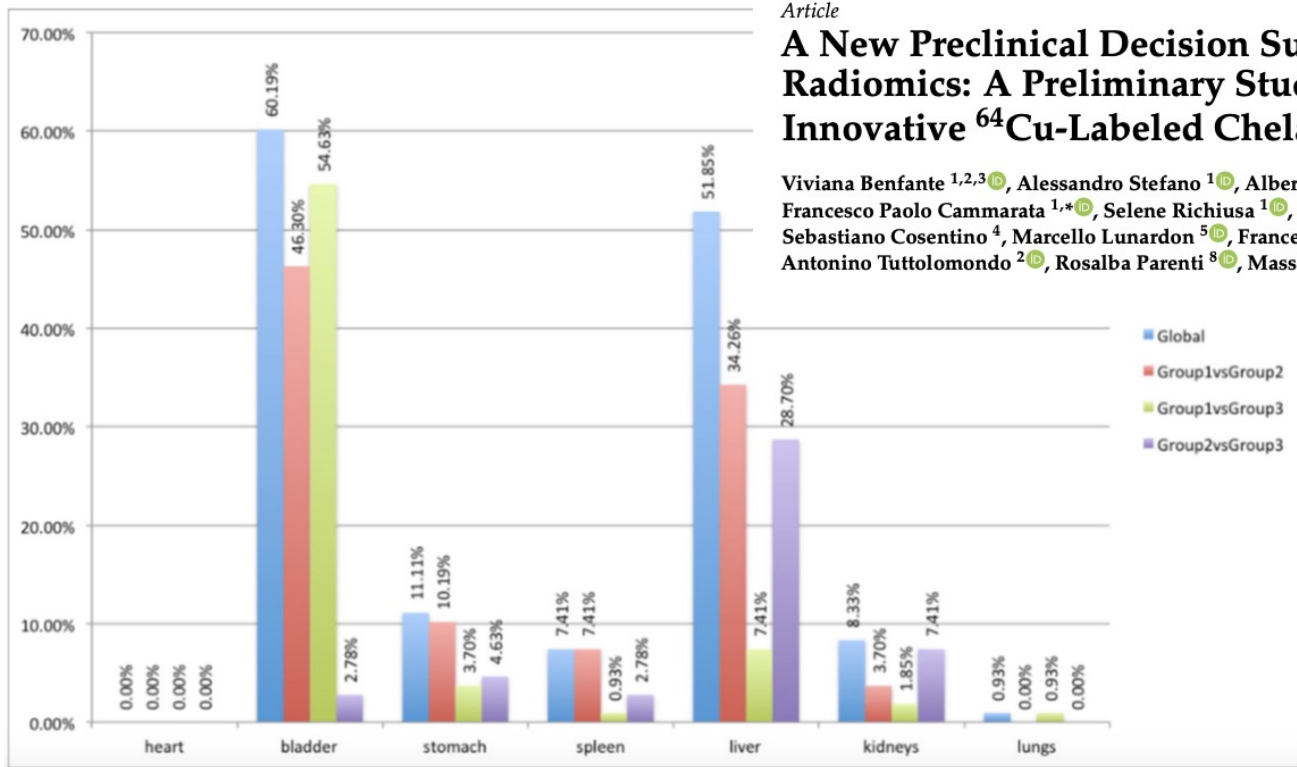
Metrics



Article

A New Preclinical Decision Support System Based on PET Radiomics: A Preliminary Study on the Evaluation of an Innovative ^{64}Cu -Labeled Chelator in Mouse Models

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Thanks for your attention

