

Computation of Global Brain Standardized Uptake Value (SUV)

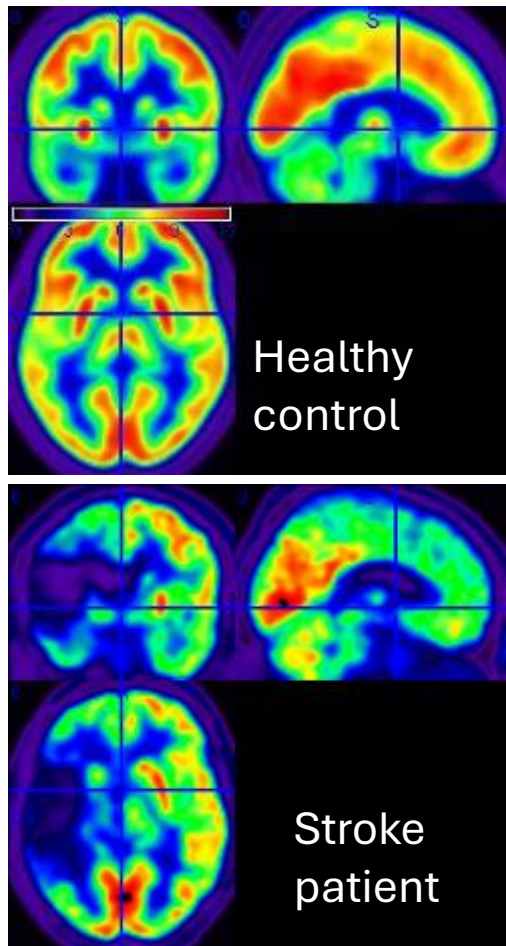
Arianna Sala

Coma Science Group &
NeuroRecovery Lab, GIGA Institute, Uliège

Clinique de la Conscience
et NeuroRevalidation,
Service de Neurologie,
CHU Liege



Voxel-level PET image analysis



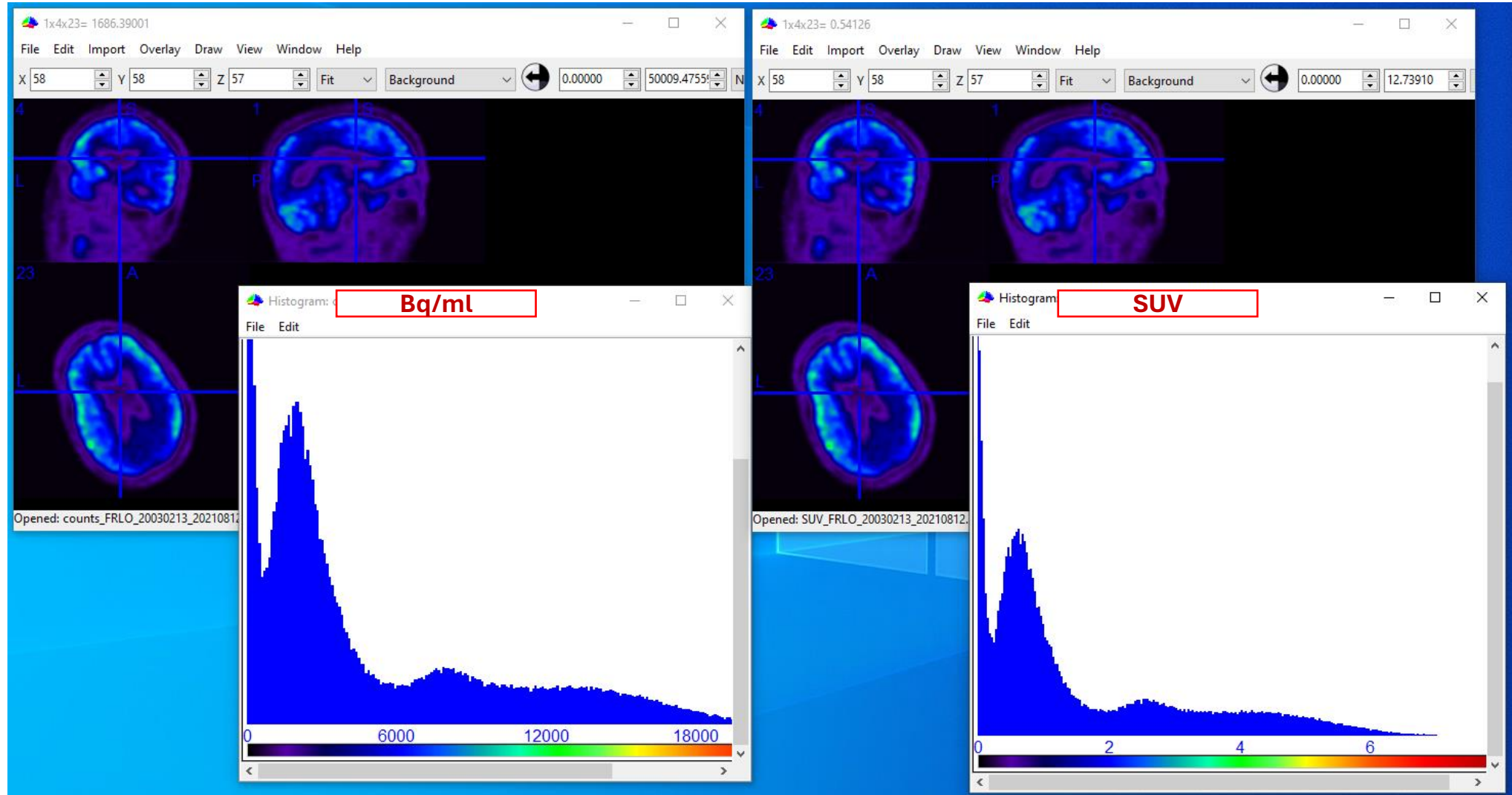
- 1) Spatial Registration, Normalization (or Warping) and Smoothing → to put all the different images in the same “space”, crucial for statistical comparisons

- 2) Creation of a Parametric Image (SUVRs, DVRs, BP...) → to put all the different images in the same «scale»

- 3) Statistical Model

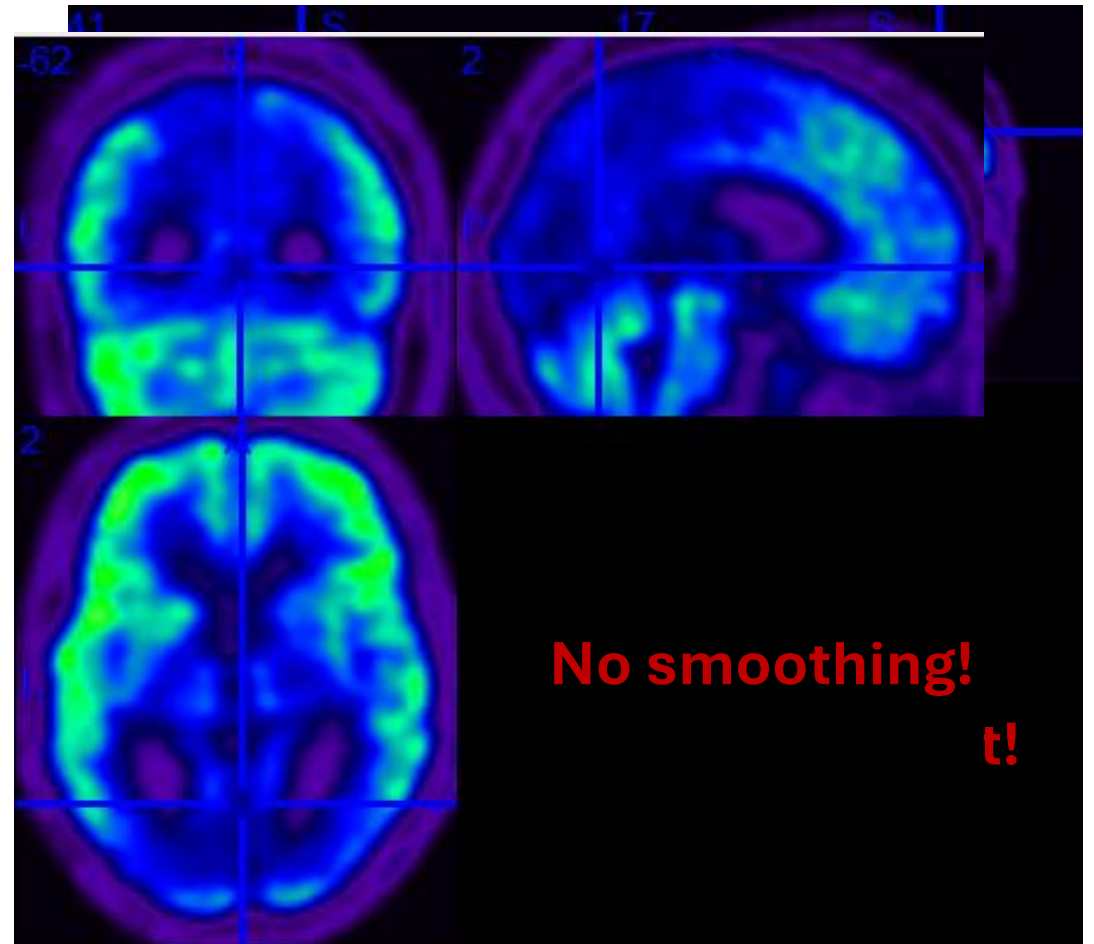


From Bq/ml to SUV images





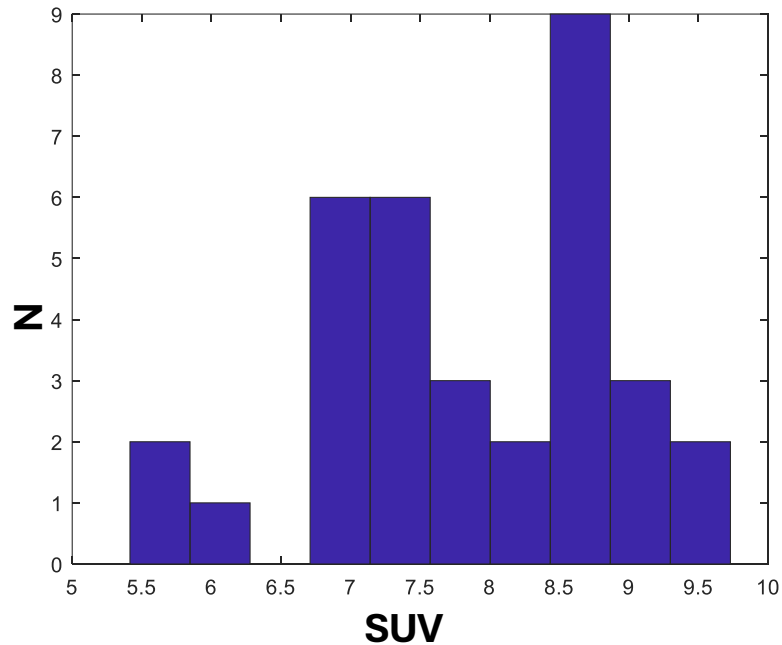
Global Brain SUV





Decrease in Global Brain SUV

SUV distribution in 33 HC



Mean=7.8818397

SD=1.9006524

% SUV Decrease (Patient) =

$$100 - ((\text{SUV}_{\text{glob_patient}} / 7.8818397) * 100)$$