



10 May 2022

MotionFree Brain for SIGNA™ PET/MR – no matter the motion.

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Patients move, our images don't.





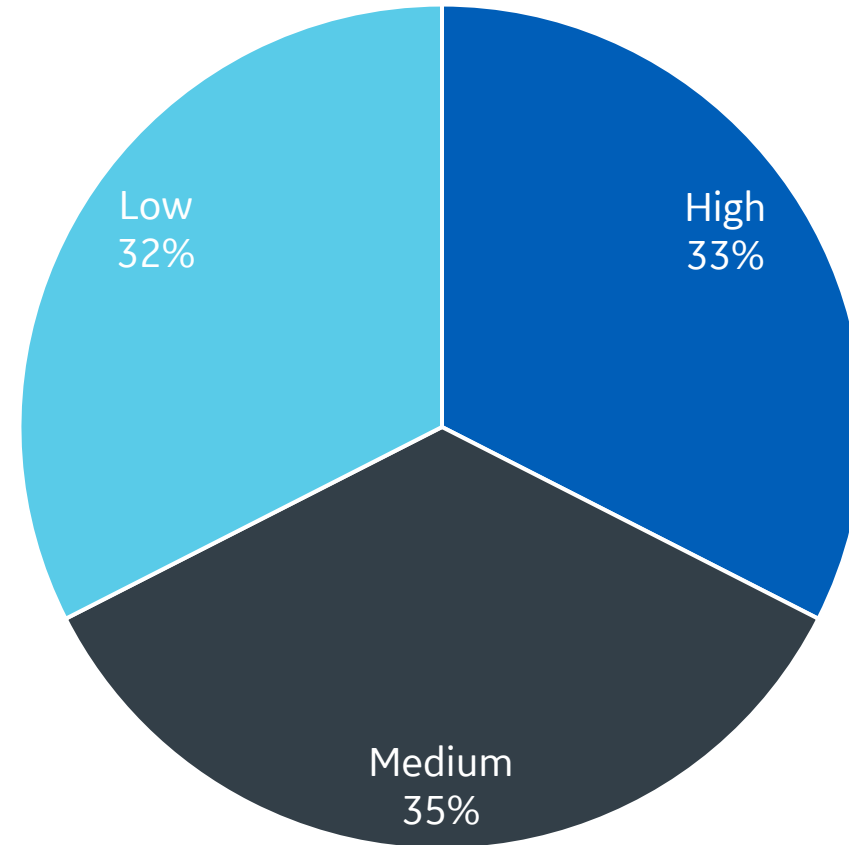
- PET is highly quantitative and highly sensitive, but it has a low spatial resolution.
- Data used for PET images span minutes, thus it is susceptible to motion.





Patients move

Motion categorization for 40 standard data sets from a clinical study.



High motion: Motion blurring is evident in the image.



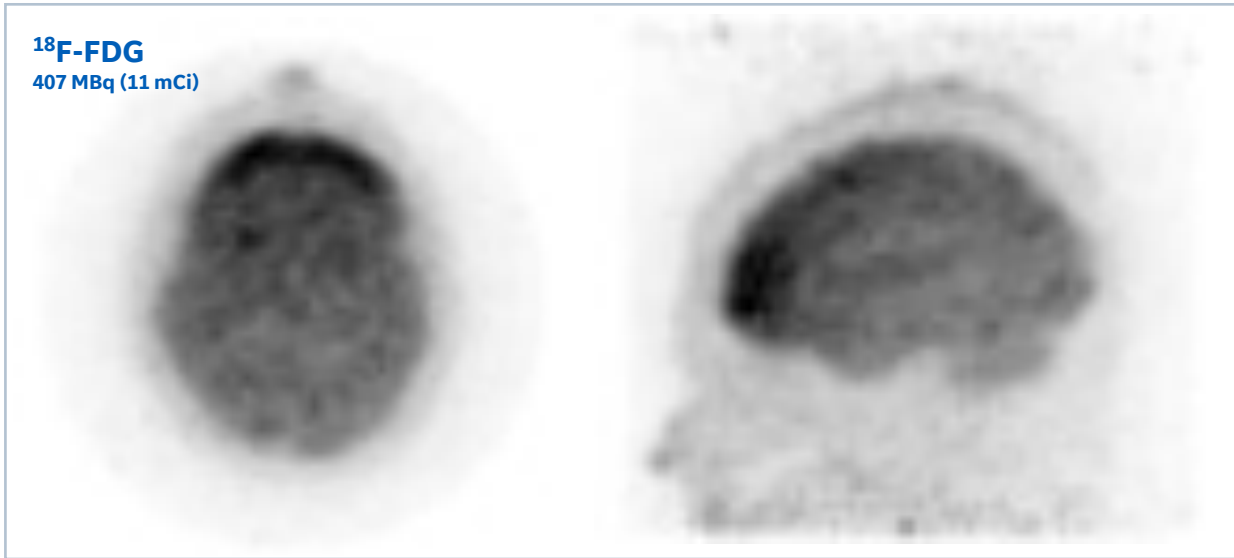
— MotionFree Brain for SIGNA™ PET/MR*

- No external markers or hardware – completely PET data-driven.
- No extra scan time, no discarded data, completely retrospective.
- Up to 60% improvement in quantitation accuracy.
- Motion estimation with <1.0 sec temporal resolution**, and <1.0 mm accuracy.
- Compatible with all SIGNA™ PET/MR features: Q.Clear, ZTE MRAC, etc.

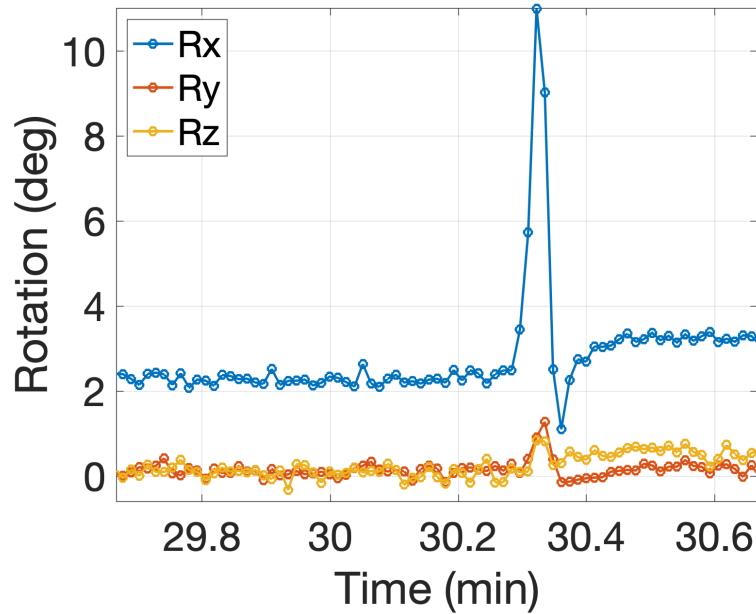
* 510(k) cleared in the USA. Not yet CE marked. Not available for sale in all regions.

** For typical ¹⁸F-FDG scans.

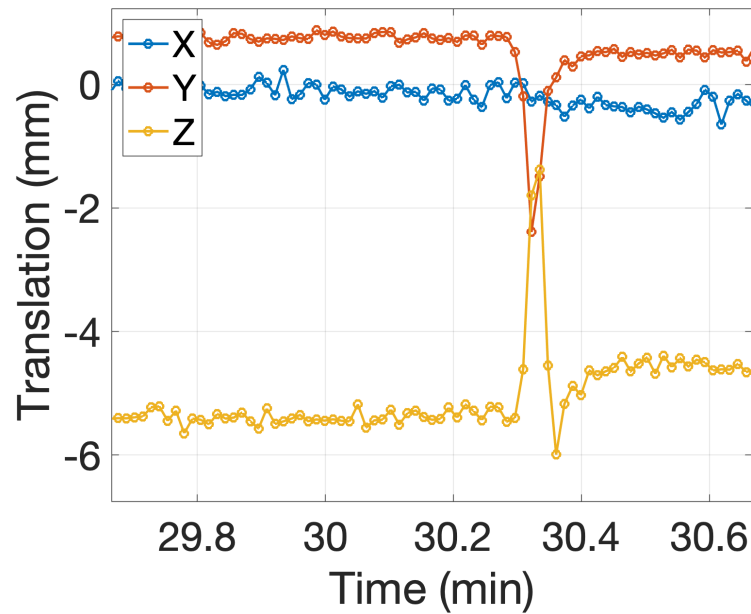




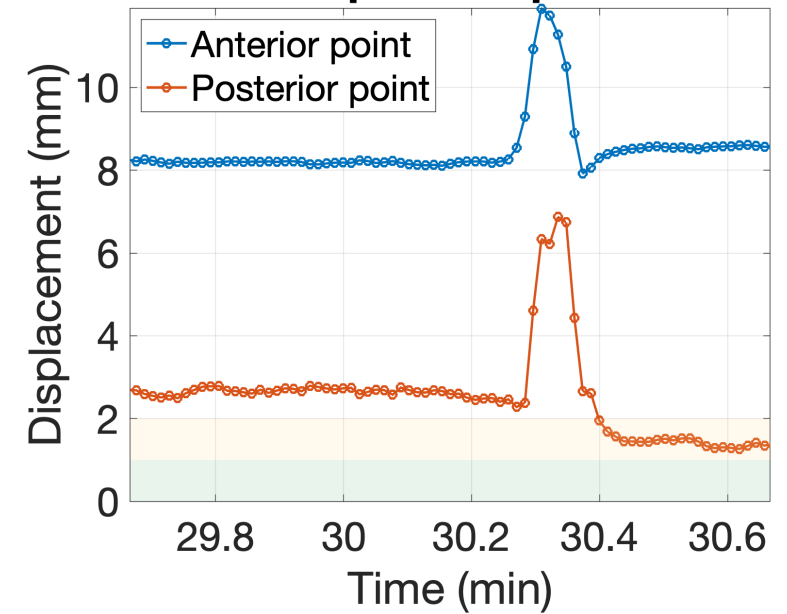
Rotations



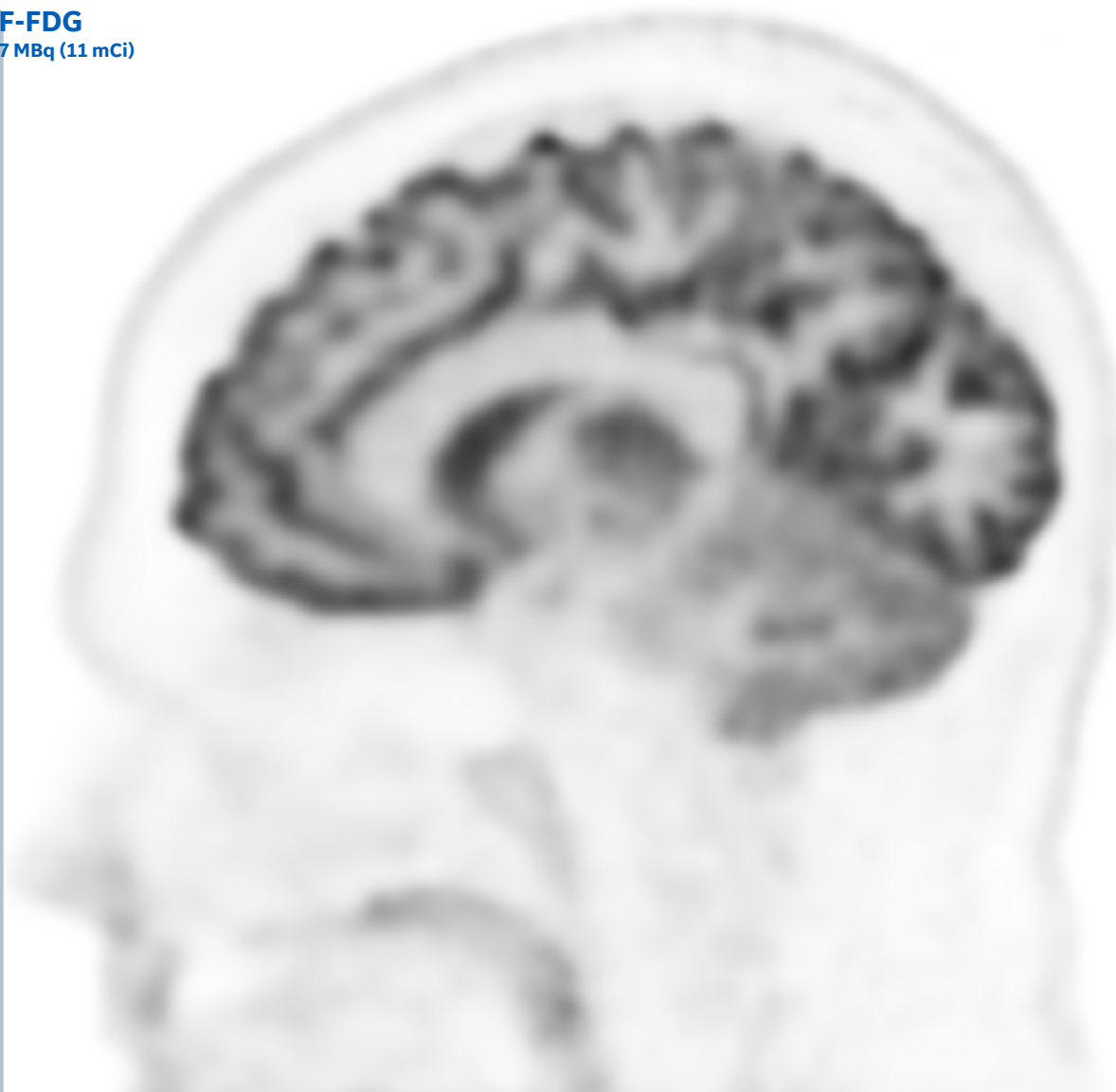
Translations

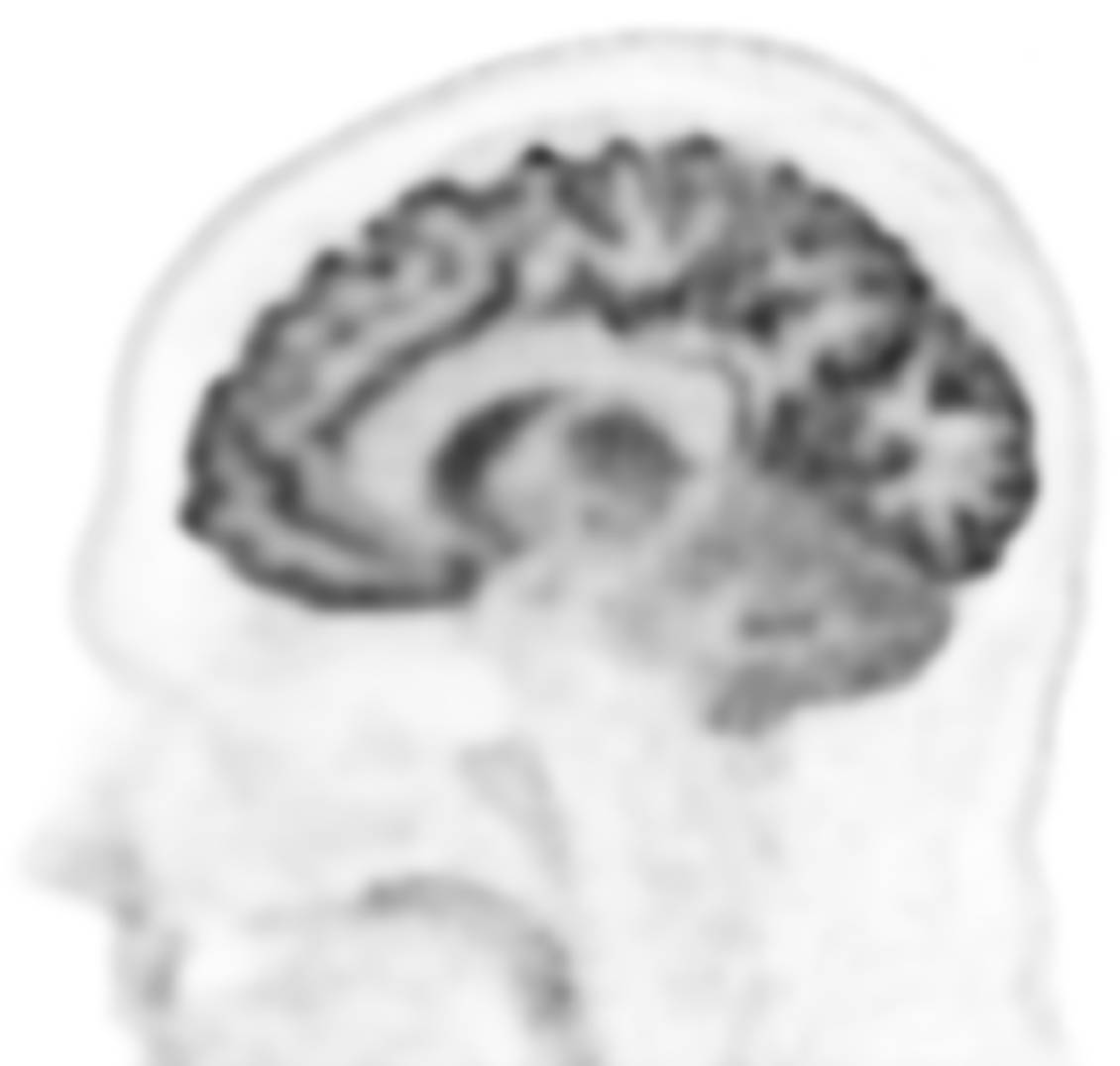
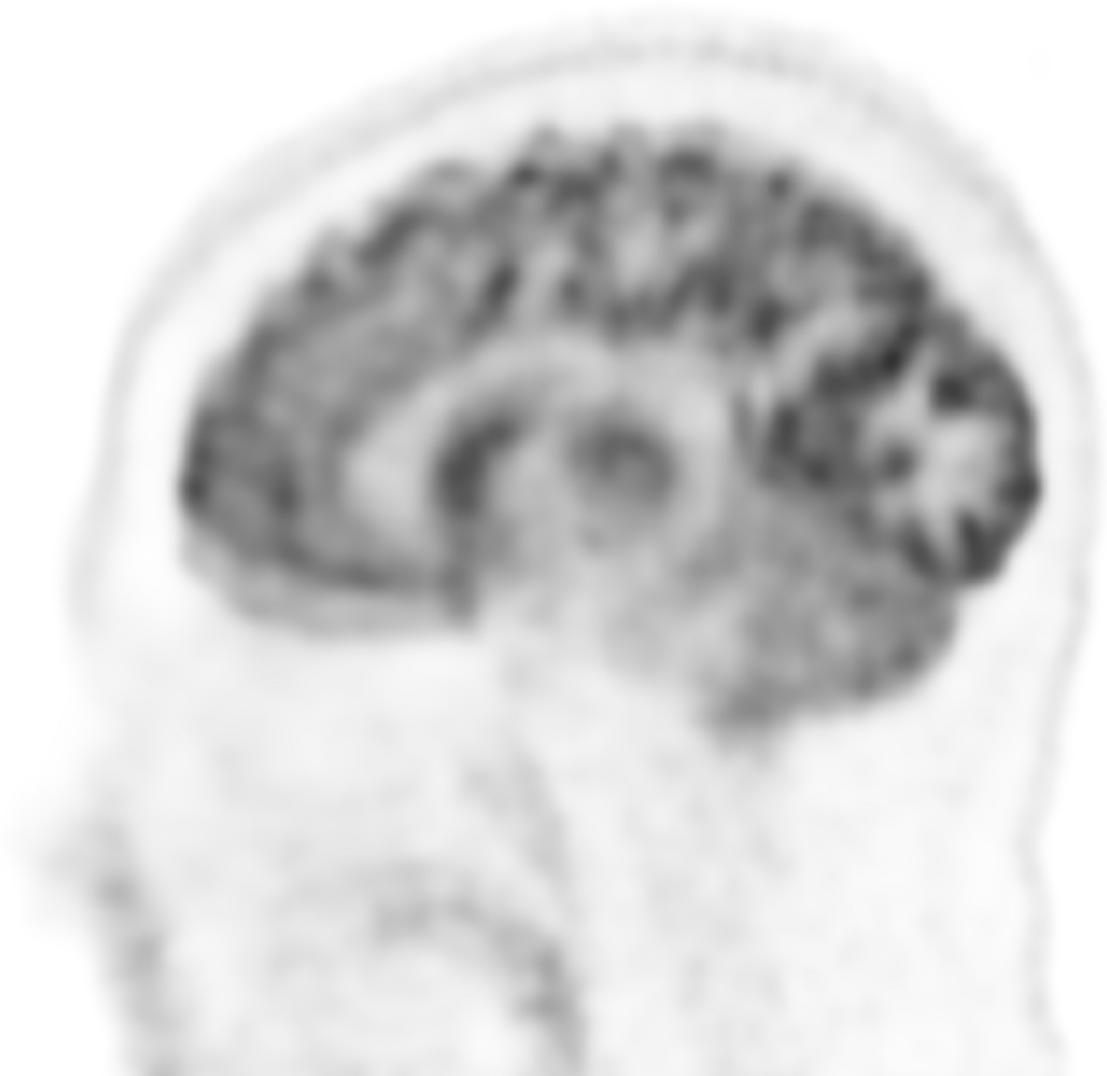


Absolute point displacement



¹⁸F-FDG
407 MBq (11 mCi)



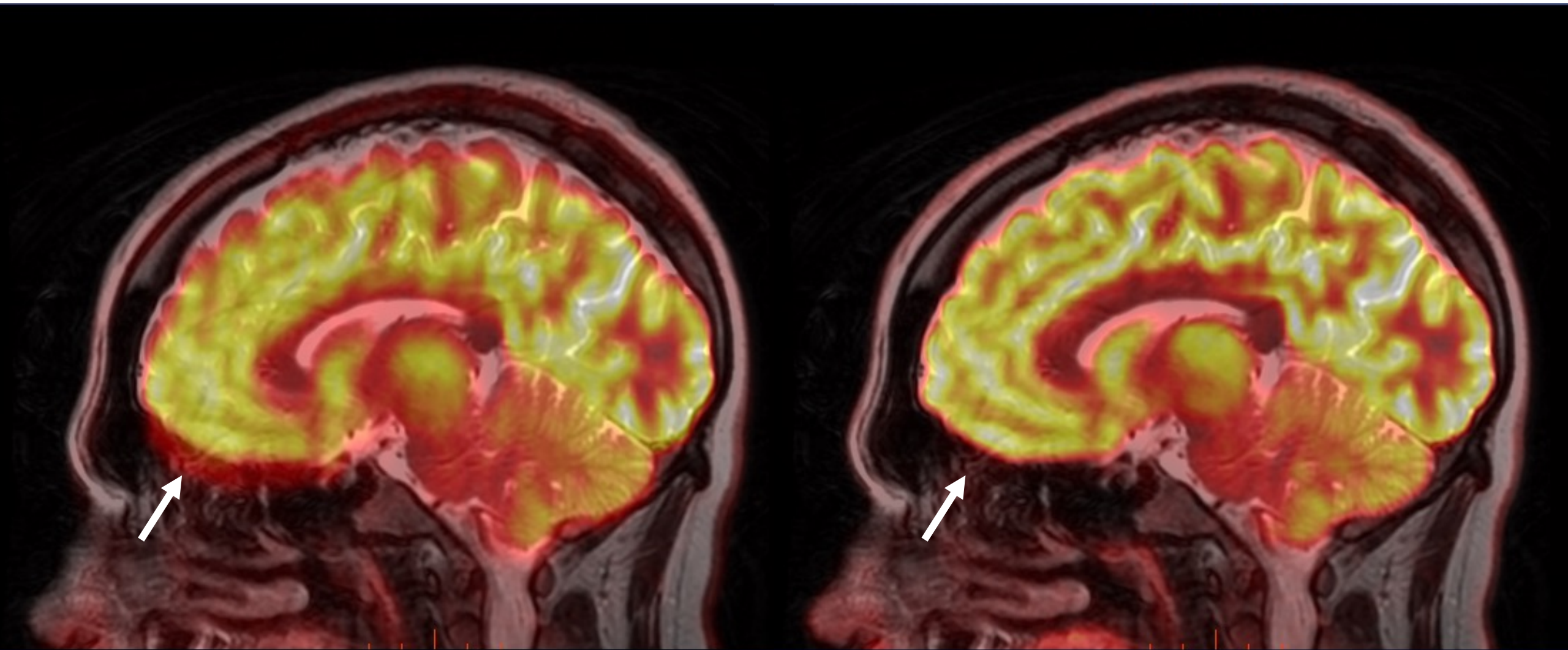


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Not yet CE marked. Not available for sale in all regions.

Sagittal T2 FSE



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Not yet CE marked. Not available for sale in all regions.



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Whatever the motion,
we can recover the images.



MOTION LEVEL

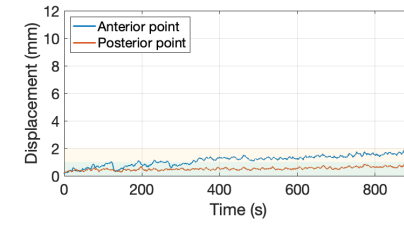
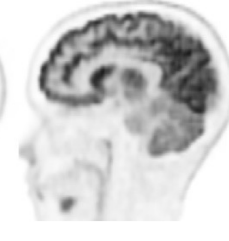
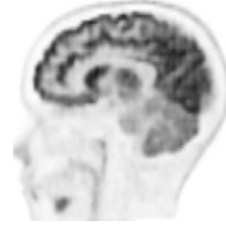
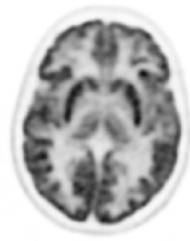
LOW

No MoCo

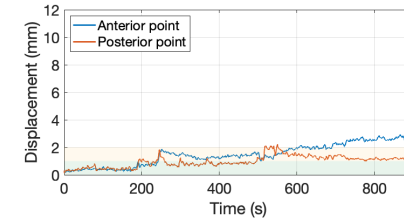
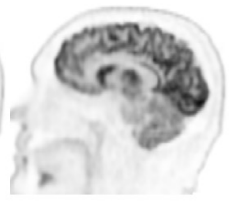
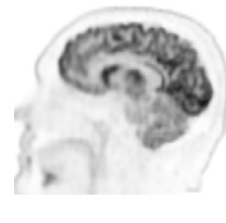
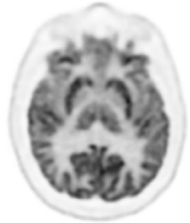
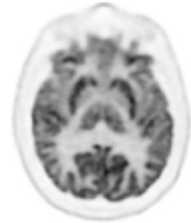
MoCo

No MoCo

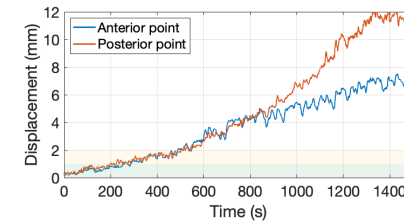
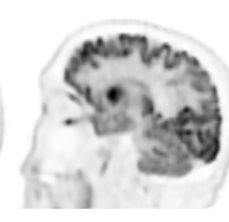
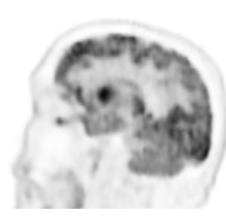
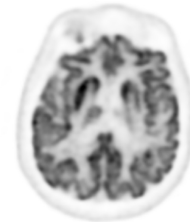
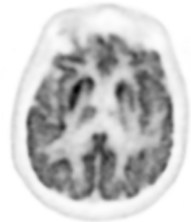
MoCo



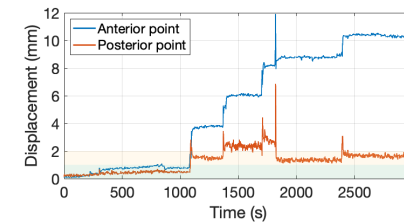
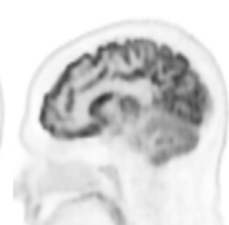
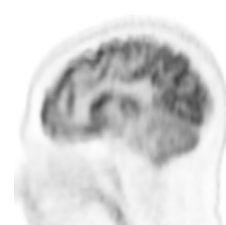
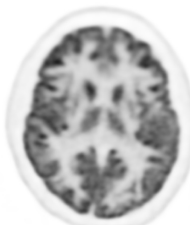
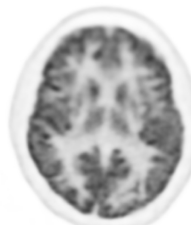
MEDIUM



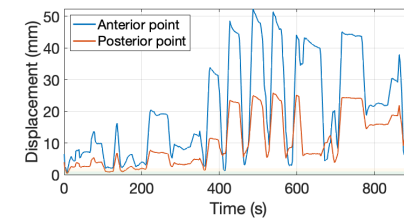
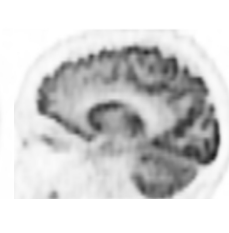
HIGH

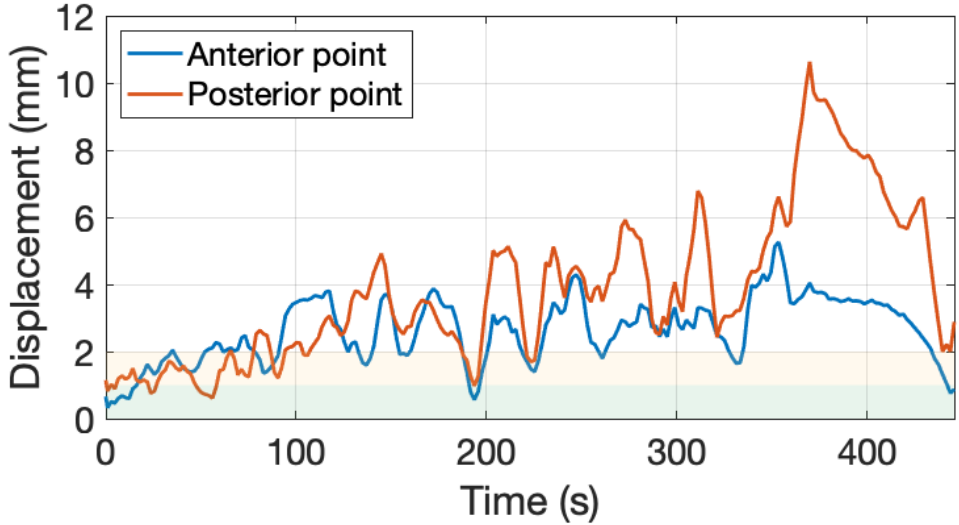
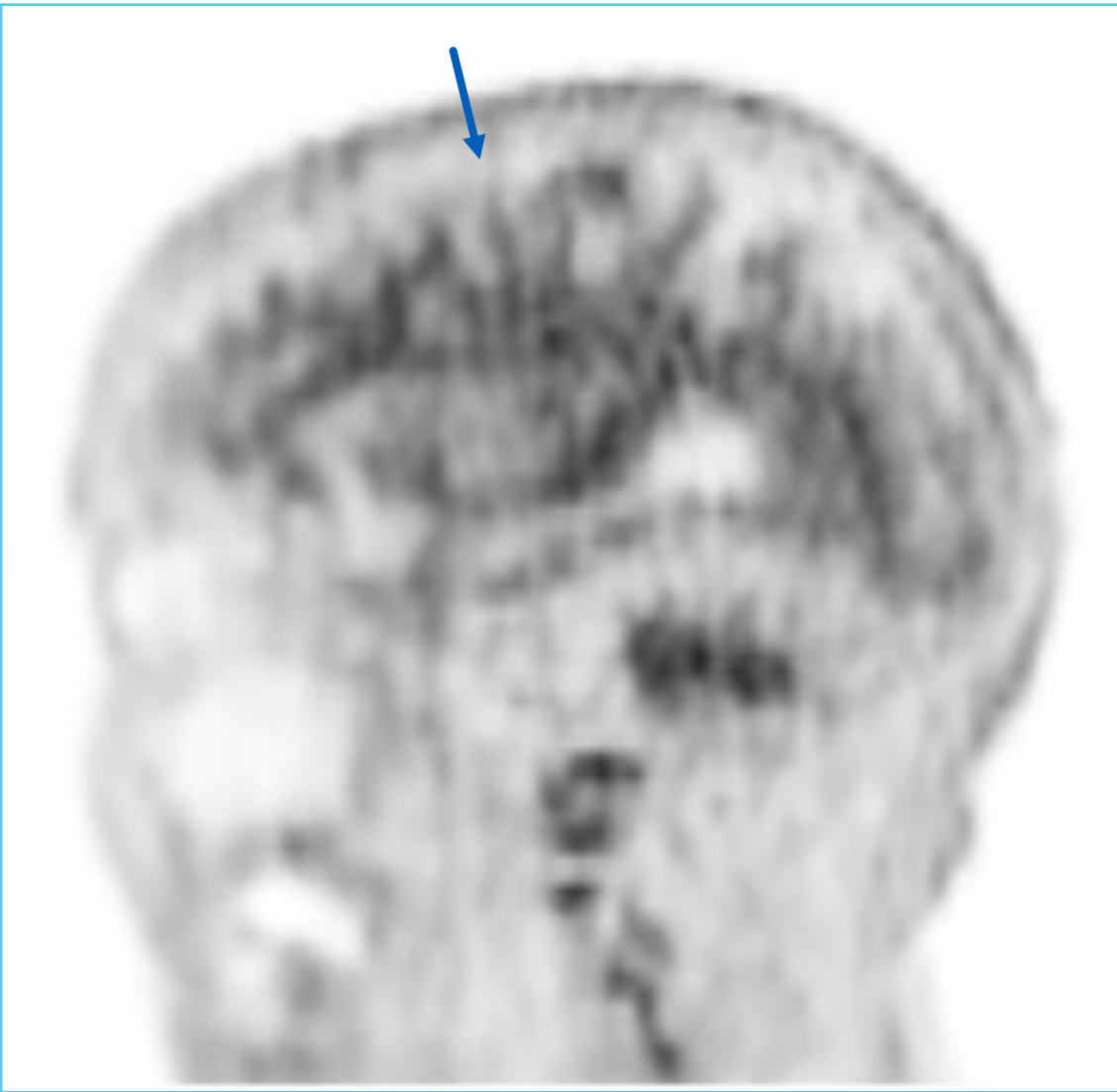
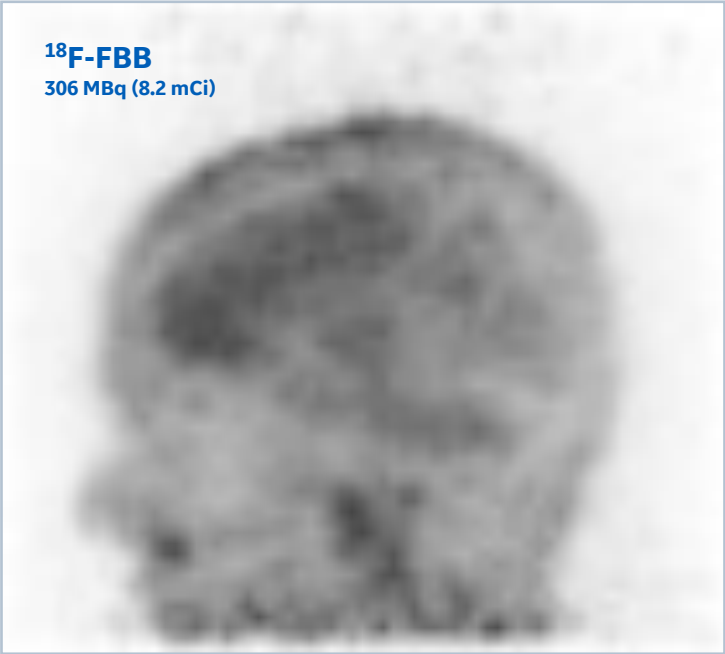


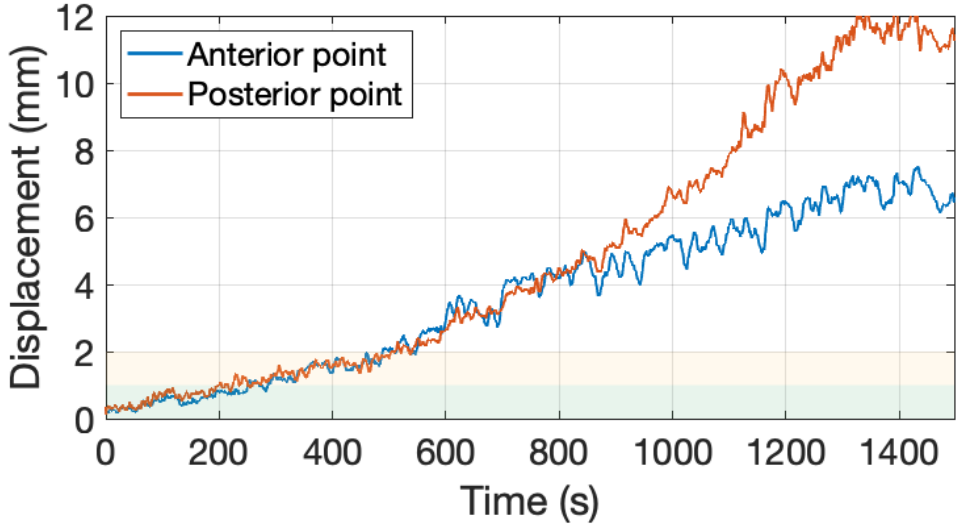
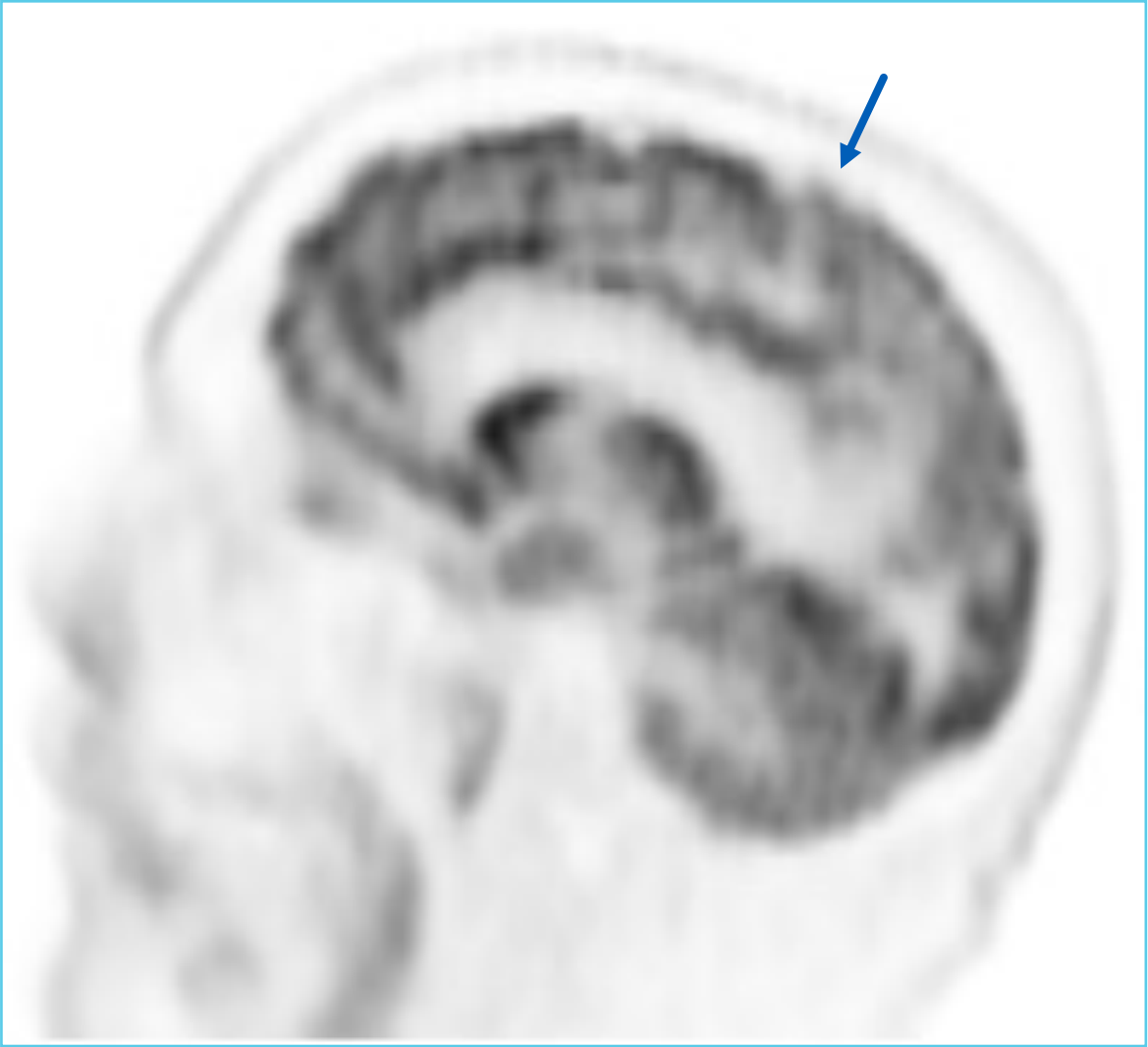
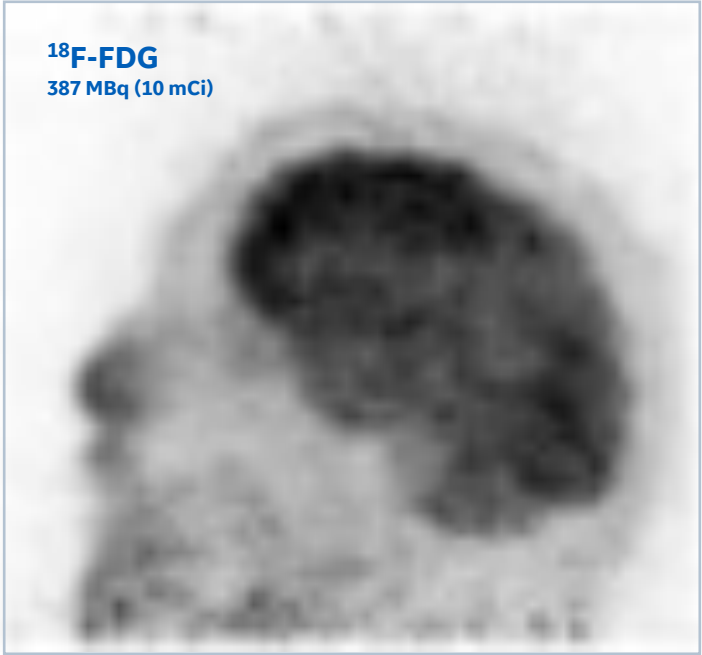
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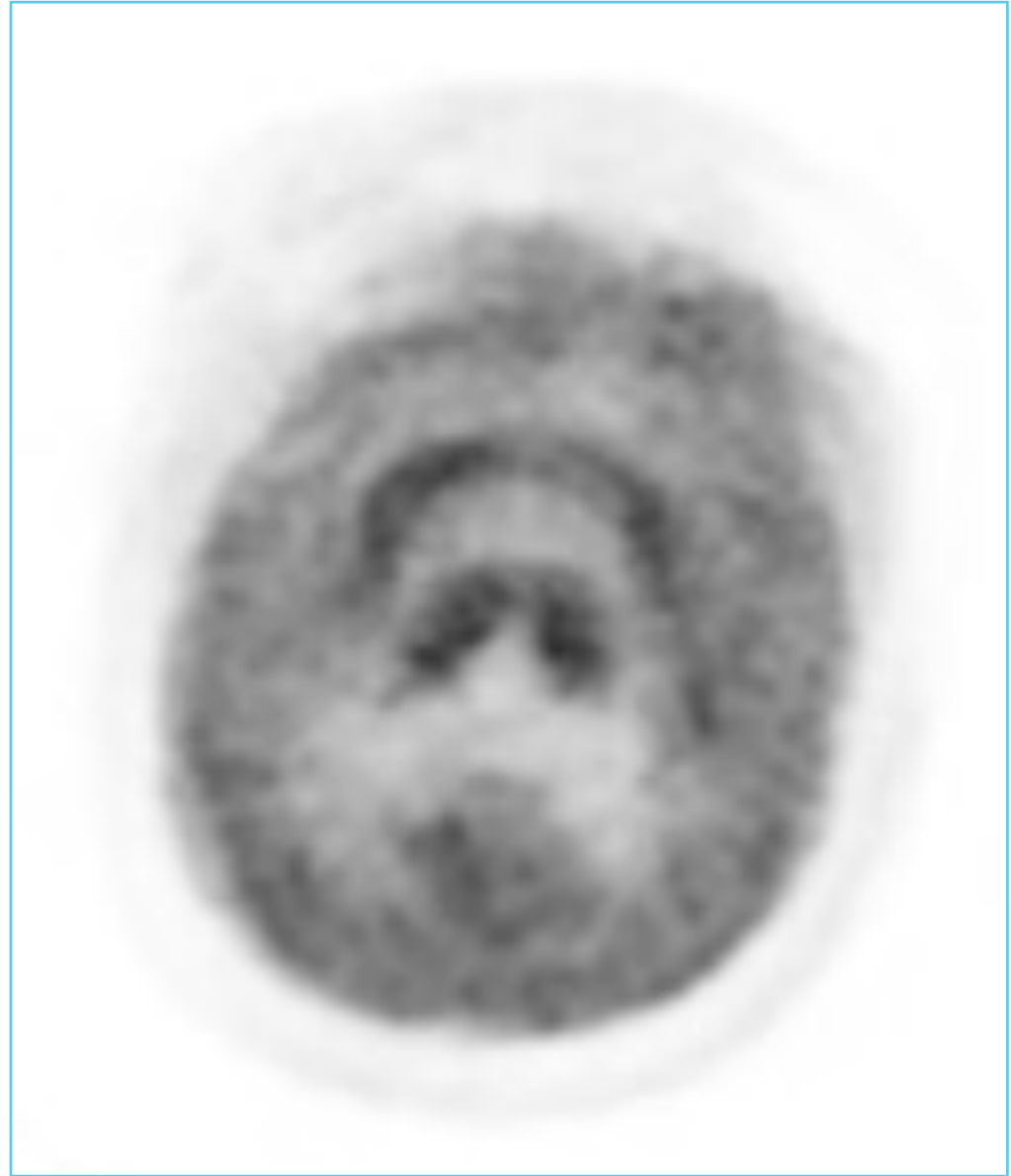
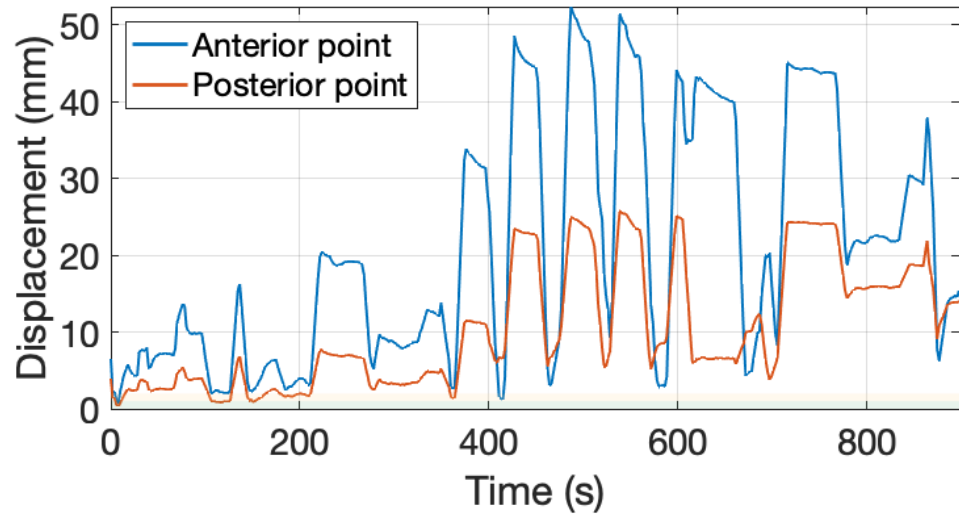
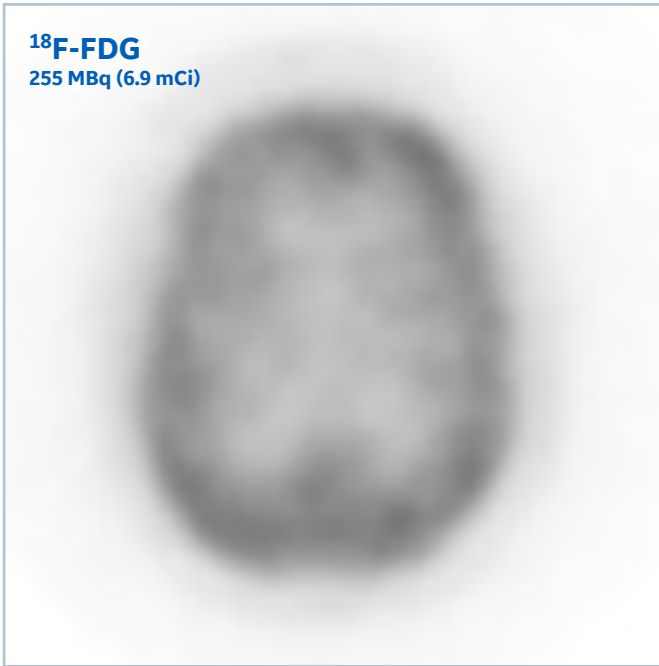


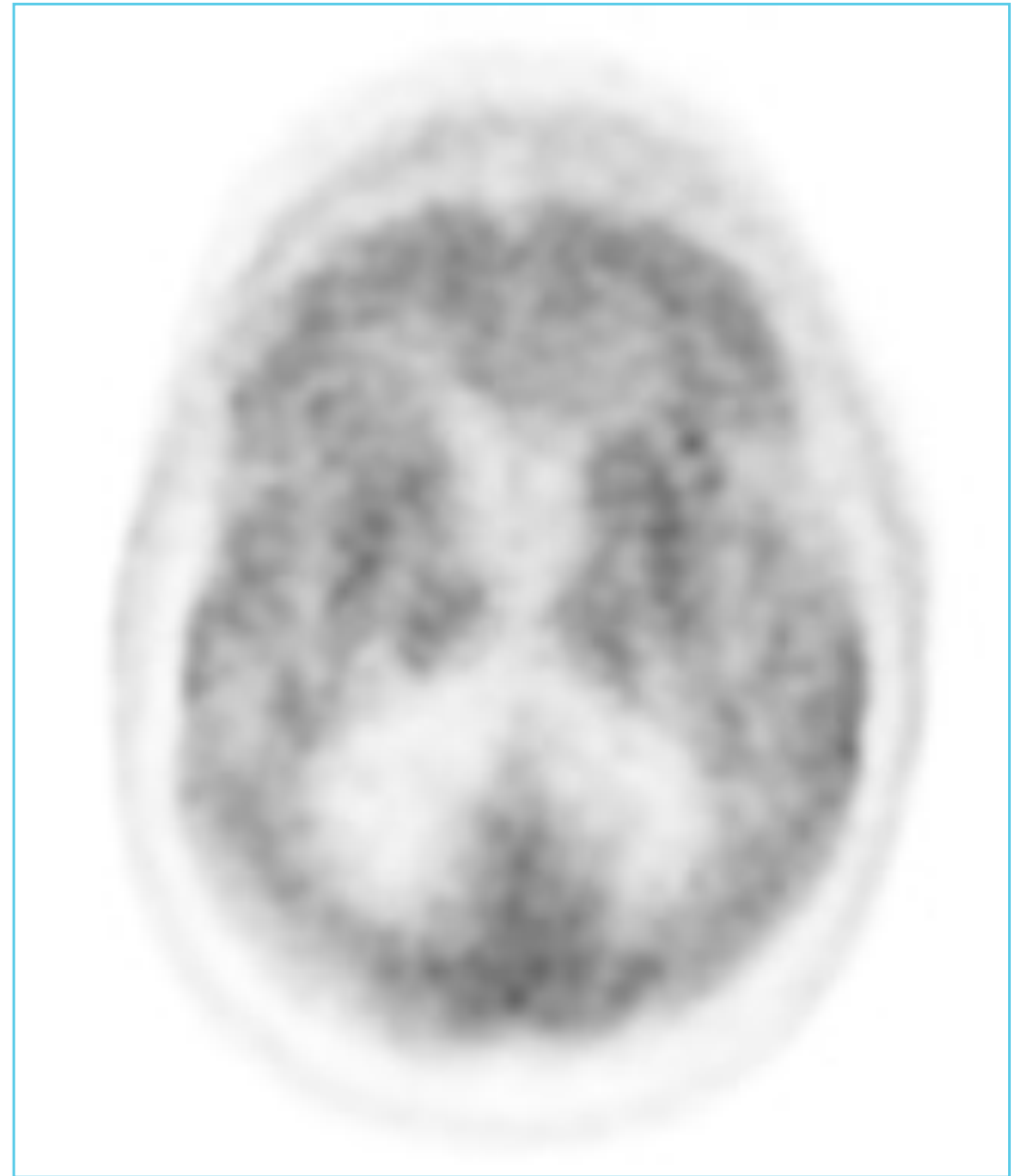
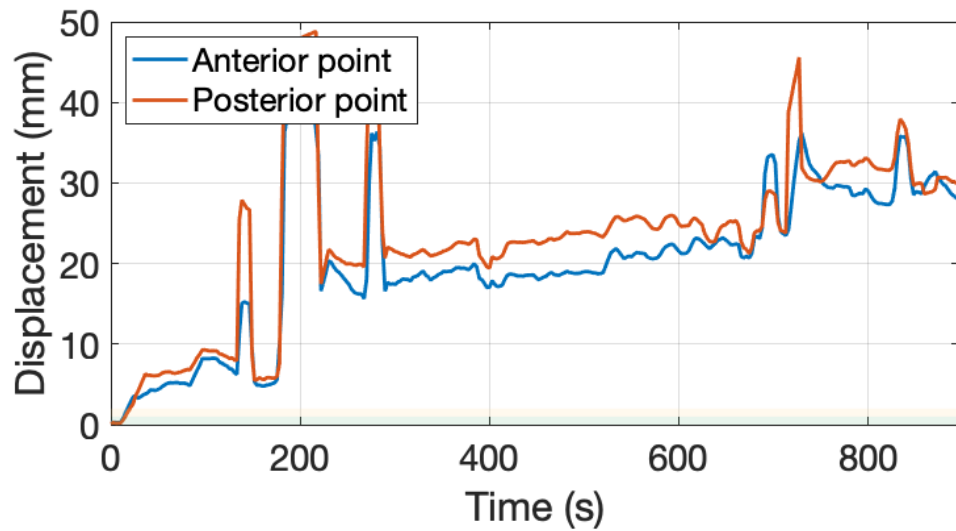
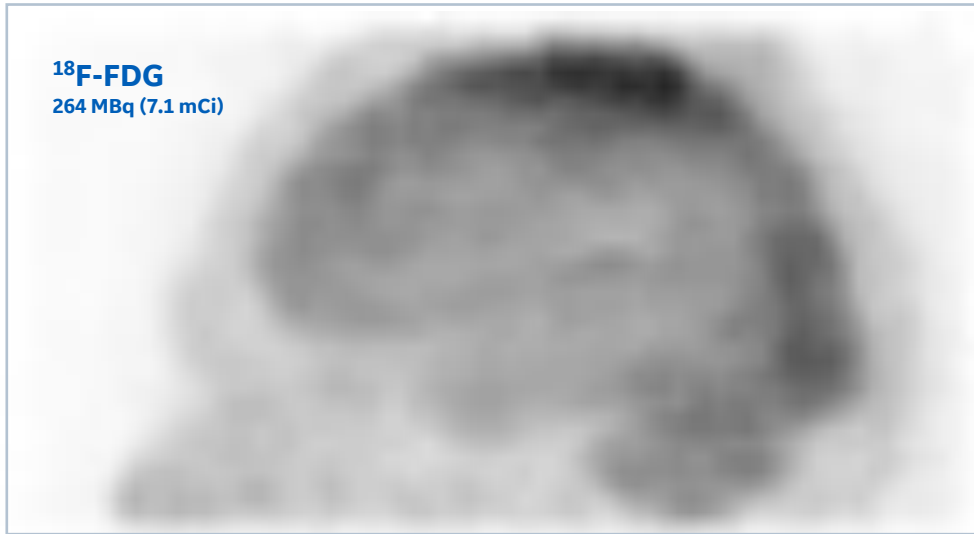
HIGH





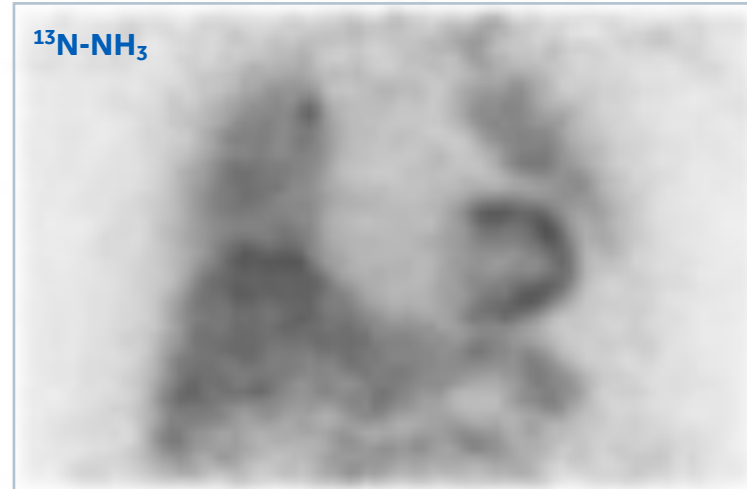




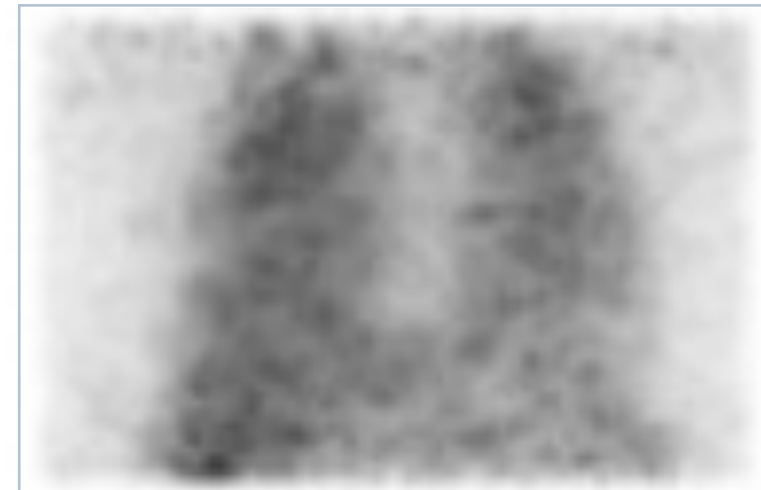
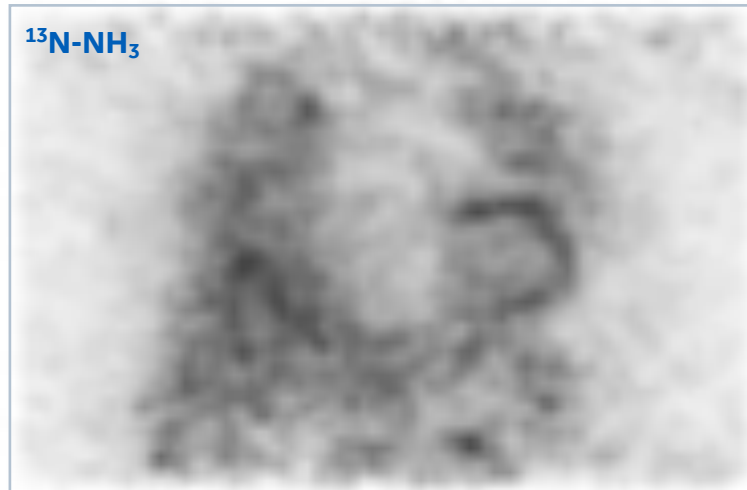




1 SEC FRAMES SHOWING
RESPIRATORY MOTION



0.2 SEC FRAMES SHOWING
CARDIAC MOTION





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The future is MotionFree.



