

Validation Plan:

What is the intended use of the product?

To aid a radiologist in Hippocampal Volume Quantification in Alzheimer's Progression

How was the training data collected?

"Hippocampus" dataset from the Medical Decathlon competition. They are NIFTI files, where one file represents one volume. They are cropped hippocampus regions from the original T2 MRI full brain scans.

There are a total of 260 files, after the outliers were removed.

How did you label your training data?

All data has been labeled verified by an expert human rater (Radiologist), and with the best effort to mimic the accuracy required for clinical use. This is the silver standard.

How was the training performance of the algorithm measured and how is the real-world performance going to be estimated?

The metrics used to determine performance are Jaccard and Dice similarity to the ground truth. Real life will be the same but with Radiologist verifying as well.

What data will the algorithm perform well in the real world and what data it might not perform well on?

It will perform on MRI scans on hippocampus stored in the DICOM format and not work with other formats or MRI scan regions. Using different image equipment might affect the image and algorithm accuracy.