

# Supplementary material

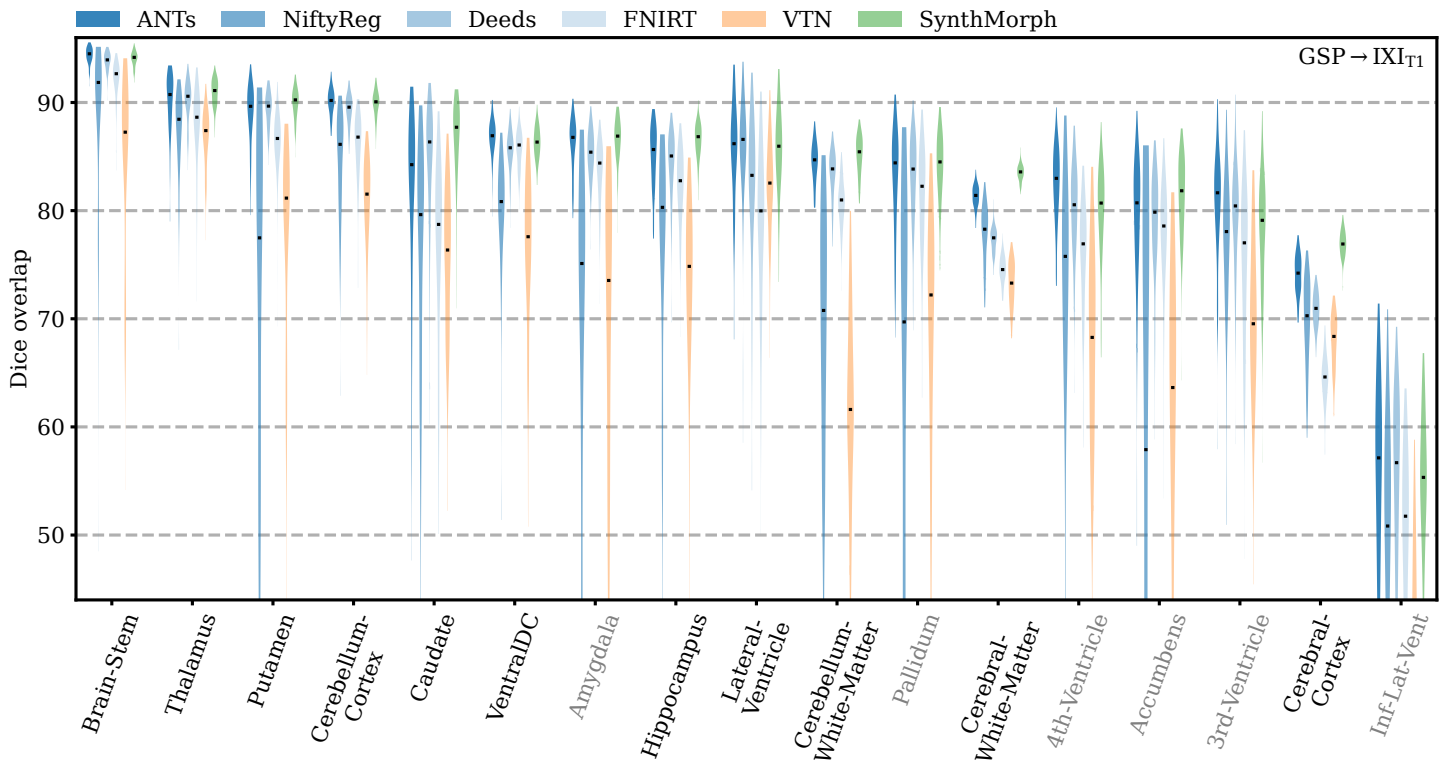


Figure S1. Deformable 3D registration accuracy per structure across testset GSP→IXI<sub>T1</sub> after affine initialization with NiftyReg. We left-right average bilateral brain regions. SynthMorph training did not optimize the overlap of structures shown in gray.

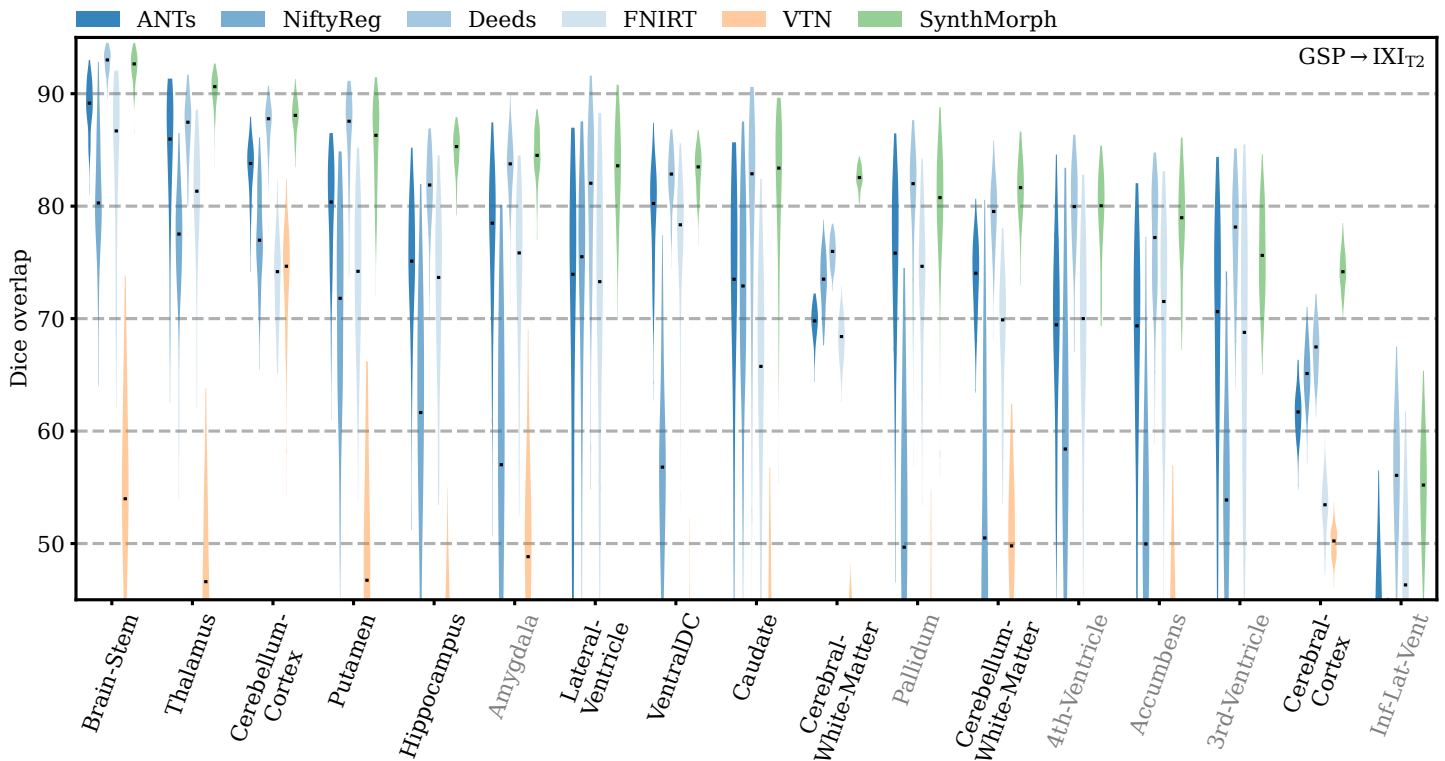
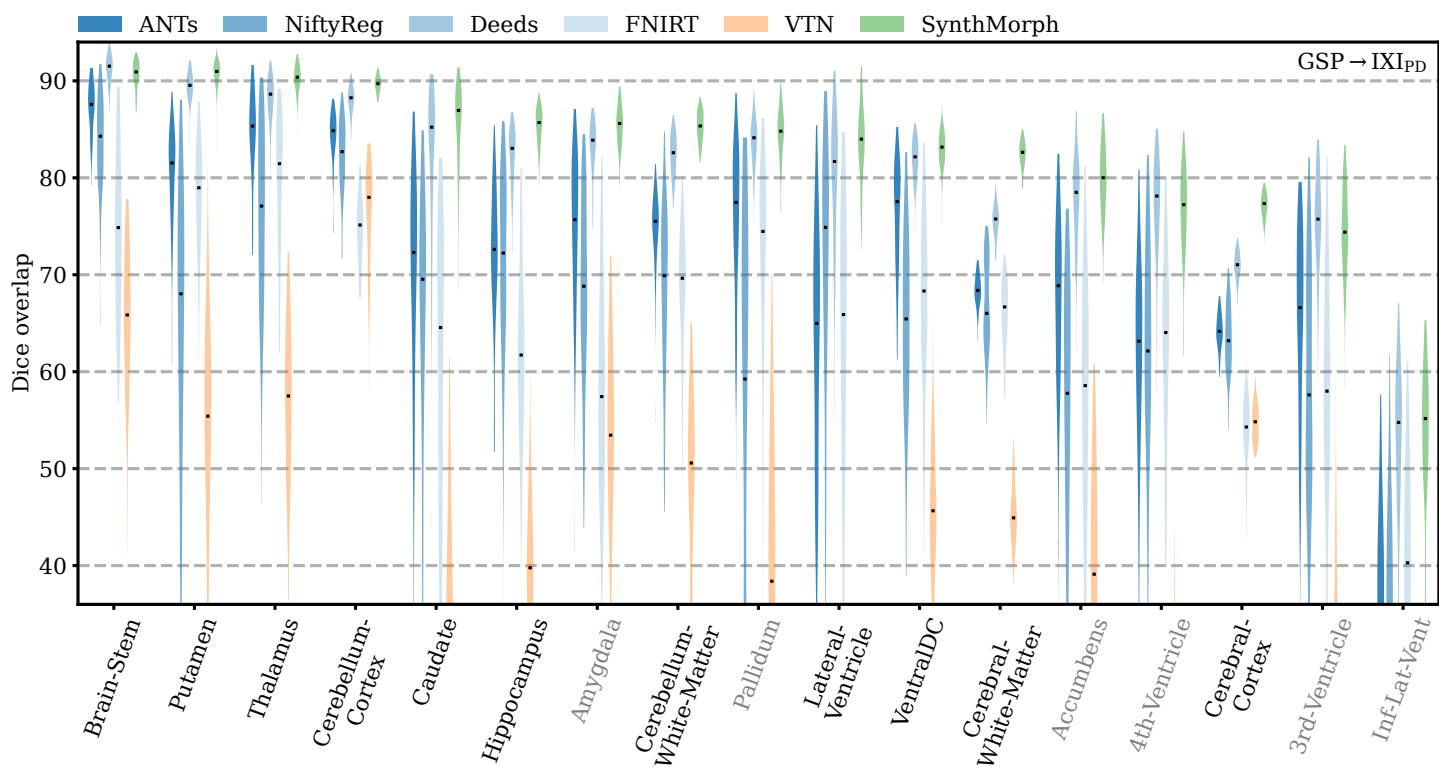
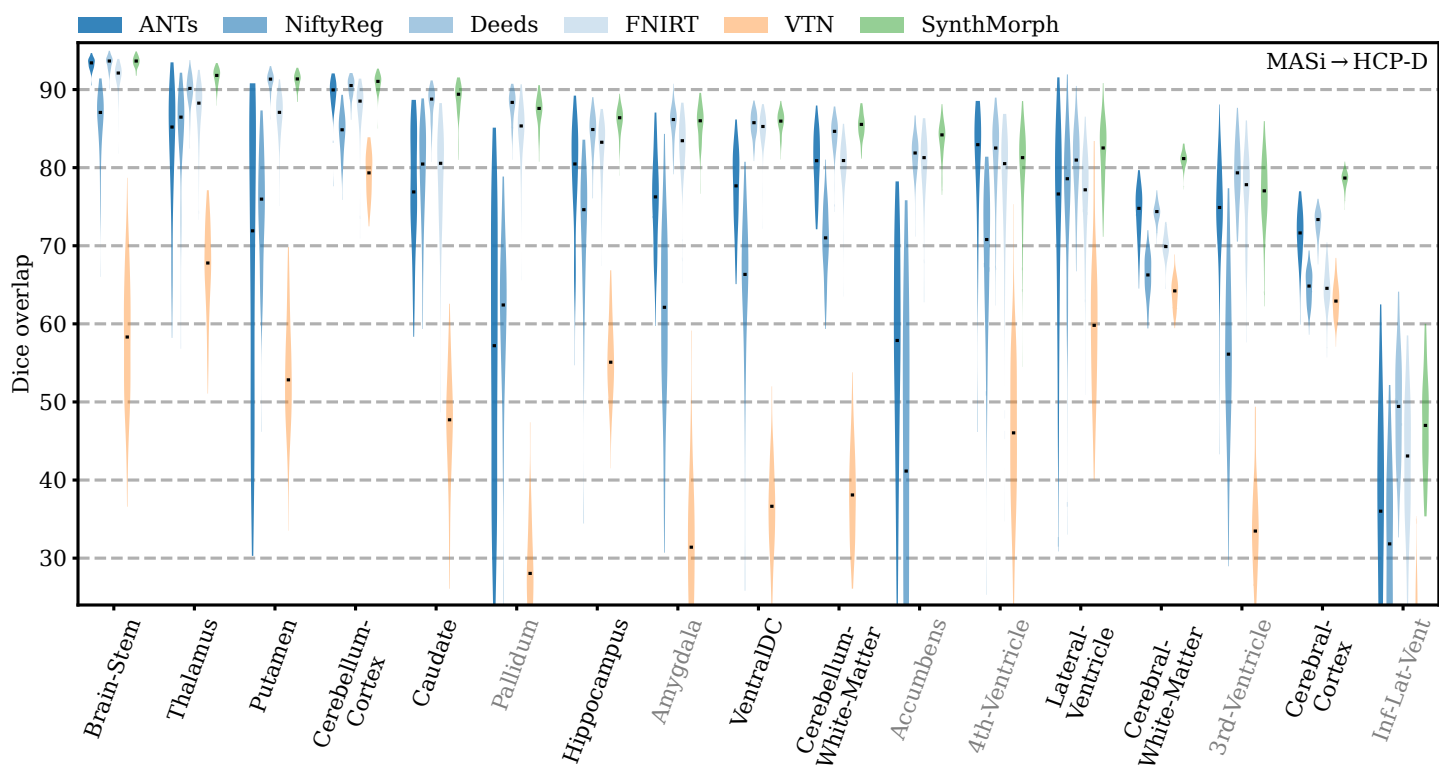


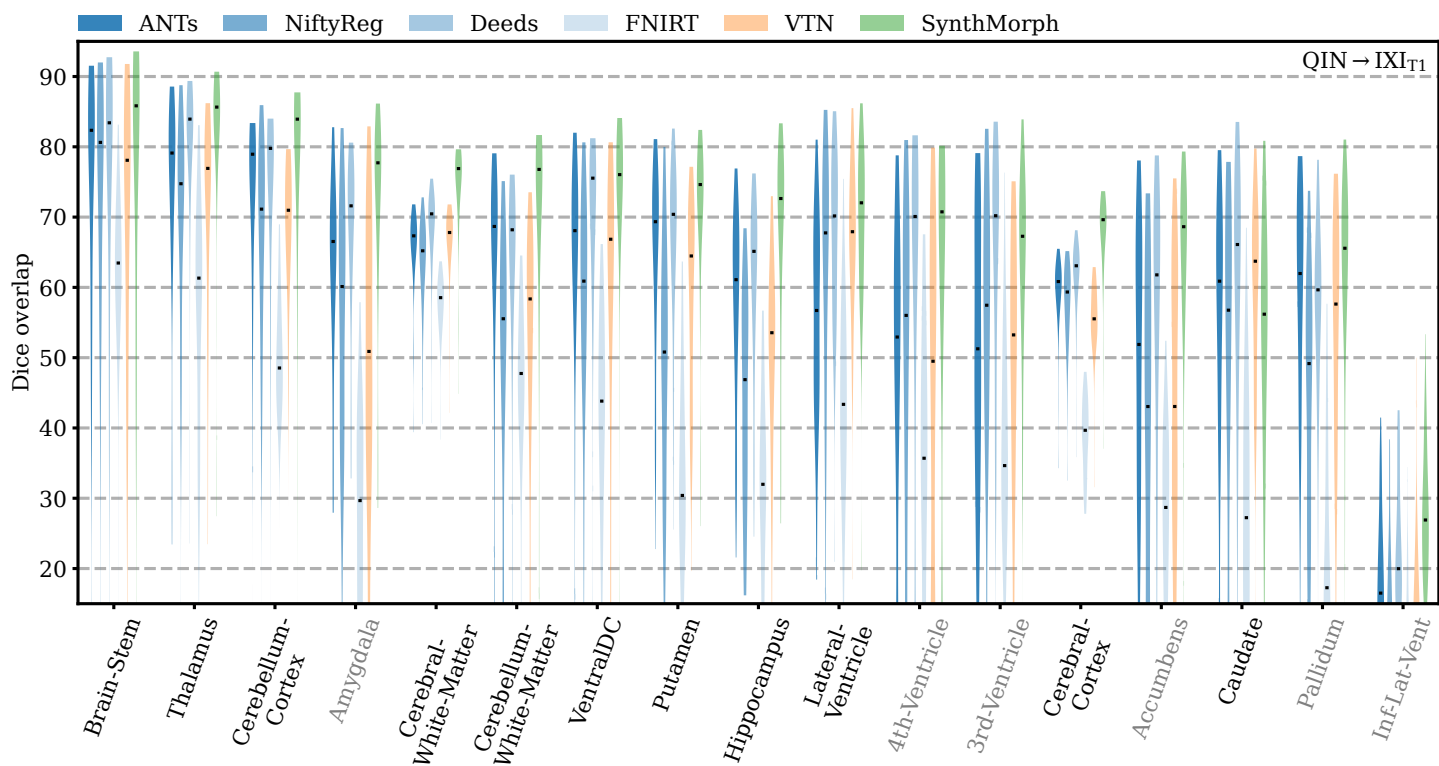
Figure S2. Deformable 3D registration accuracy per structure across testset GSP→IXI<sub>T2</sub> after affine initialization with NiftyReg. We left-right average bilateral brain regions. SynthMorph training did not optimize the overlap of structures shown in gray.



**Figure S3.** Deformable 3D registration accuracy per structure across testset GSP to IXI<sub>PD</sub> after affine initialization with NiftyReg. We left-right average bilateral brain regions. SynthMorph training did not optimize the overlap of structures shown in gray.



**Figure S4.** Deformable 3D registration accuracy per structure across testset MASI to HCP-D after affine initialization with NiftyReg. We left-right average bilateral brain regions. SynthMorph training did not optimize the overlap of structures shown in gray.



**Figure S5.** Deformable 3D registration accuracy per structure across testset QIN→IXI<sub>T1</sub> after affine initialization with NiftyReg. We left-right average bilateral brain regions. SynthMorph training did not optimize the overlap of structures shown in gray.