

# Supplementary Material

## 1 SUPPLEMENTARY TABLES

**Table S1.** Summary of the performance on automated ground truth of models trained on the OASIS data. *Se*: Sensitivity, *Pr*: Precision. Highlighted results indicate that median values are larger ( $P50$ : Wilcoxon,  $p < 0.05$ ).

Tissues	OASIS - test set				MS Dataset - test set			
	CNN <sub>OASIS</sub>		CNN <sub>OASIS-DA</sub>		CNN <sub>OASIS</sub>		CNN <sub>OASIS-DA</sub>	
	<i>Se</i>	<i>Pr</i>	<i>Se</i>	<i>Pr</i>	<i>Se</i>	<i>Pr</i>	<i>Se</i>	<i>Pr</i>
WM	0.931	<b>0.958</b>	0.933	0.948	<b>0.932</b>	0.863	0.900	<b>0.922</b>
GM	<b>0.879</b>	0.933	0.868	0.934	0.860	0.863	<b>0.881</b>	<b>0.875</b>
LV	0.968	0.967	0.965	0.957	0.893	<b>0.984</b>	<b>0.965</b>	0.944
Tha	0.963	<b>0.943</b>	<b>0.972</b>	0.933	0.935	0.924	<b>0.952</b>	0.929
HC	0.945	<b>0.878</b>	<b>0.955</b>	0.867	0.872	<b>0.903</b>	<b>0.943</b>	0.851
CdN	0.944	<b>0.923</b>	<b>0.954</b>	0.907	0.871	<b>0.955</b>	<b>0.920</b>	0.925
Pu	0.950	0.920	0.948	0.917	0.896	<b>0.917</b>	<b>0.940</b>	0.903
GP	0.944	<b>0.887</b>	<b>0.957</b>	0.865	0.813	<b>0.936</b>	<b>0.912</b>	0.894
ALL	0.941	<b>0.926</b>	<b>0.944</b>	0.916	0.884	<b>0.91</b>	<b>0.927</b>	0.906

**Table S2.** Summary of the performance on automated ground truth of models trained on the MS dataset. *Se*: Sensitivity, *Pr*: Precision. Highlighted results indicate that median values are larger ( $P50$ : Wilcoxon,  $p < 0.05$ ).

Tissues	OASIS - test set				MS Dataset - test set			
	CNN <sub>MS</sub>		CNN <sub>MS-DA</sub>		CNN <sub>MS</sub>		CNN <sub>MS-DA</sub>	
	<i>Se</i>	<i>Pr</i>	<i>Se</i>	<i>Pr</i>	<i>Se</i>	<i>Pr</i>	<i>Se</i>	<i>Pr</i>
WM	0.905	<b>0.980</b>	<b>0.945</b>	0.959	0.923	0.947	<b>0.934</b>	<b>0.953</b>
GM	0.801	0.913	<b>0.828</b>	<b>0.935</b>	0.839	0.921	<b>0.872</b>	0.927
LV	<b>0.984</b>	0.916	0.967	<b>0.944</b>	0.956	<b>0.964</b>	<b>0.965</b>	0.959
Tha	0.962	0.940	0.958	0.941	<b>0.972</b>	0.921	0.959	<b>0.945</b>
HC	0.943	0.869	0.942	<b>0.882</b>	0.929	0.874	<b>0.950</b>	0.868
CdN	0.946	0.898	0.950	0.901	<b>0.958</b>	0.887	0.946	<b>0.925</b>
Pu	0.913	<b>0.925</b>	<b>0.930</b>	0.918	0.944	0.910	<b>0.955</b>	0.912
GP	0.956	0.840	0.952	0.849	<b>0.968</b>	0.824	0.959	<b>0.865</b>
ALL	0.926	0.910	<b>0.934</b>	<b>0.916</b>	0.936	0.906	<b>0.943</b>	<b>0.919</b>