

Supplementary material to “Neonatal morphometric similarity mapping for predicting brain age and characterizing neuroanatomic variation associated with preterm birth”

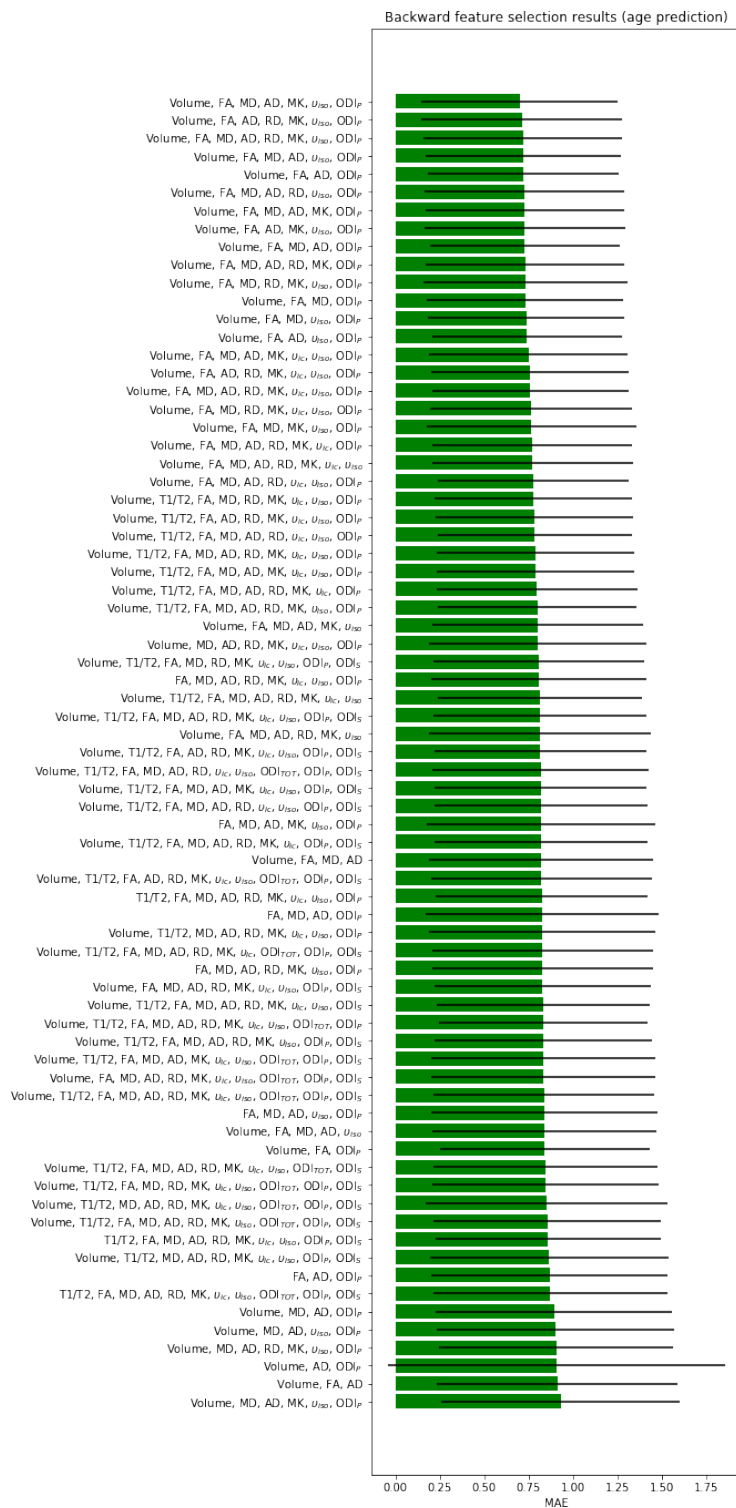


Figure 4-1 Feature selection results for the age prediction task. The best set of features was selected with a backward feature selection scheme: starting from the full set of features, at each iteration the feature whose subtraction caused the least increase in prediction error was removed. The mean absolute error (MAE) computed with leave-one-out cross-validation is reported for each subset of features. The black lines depict standard deviation.

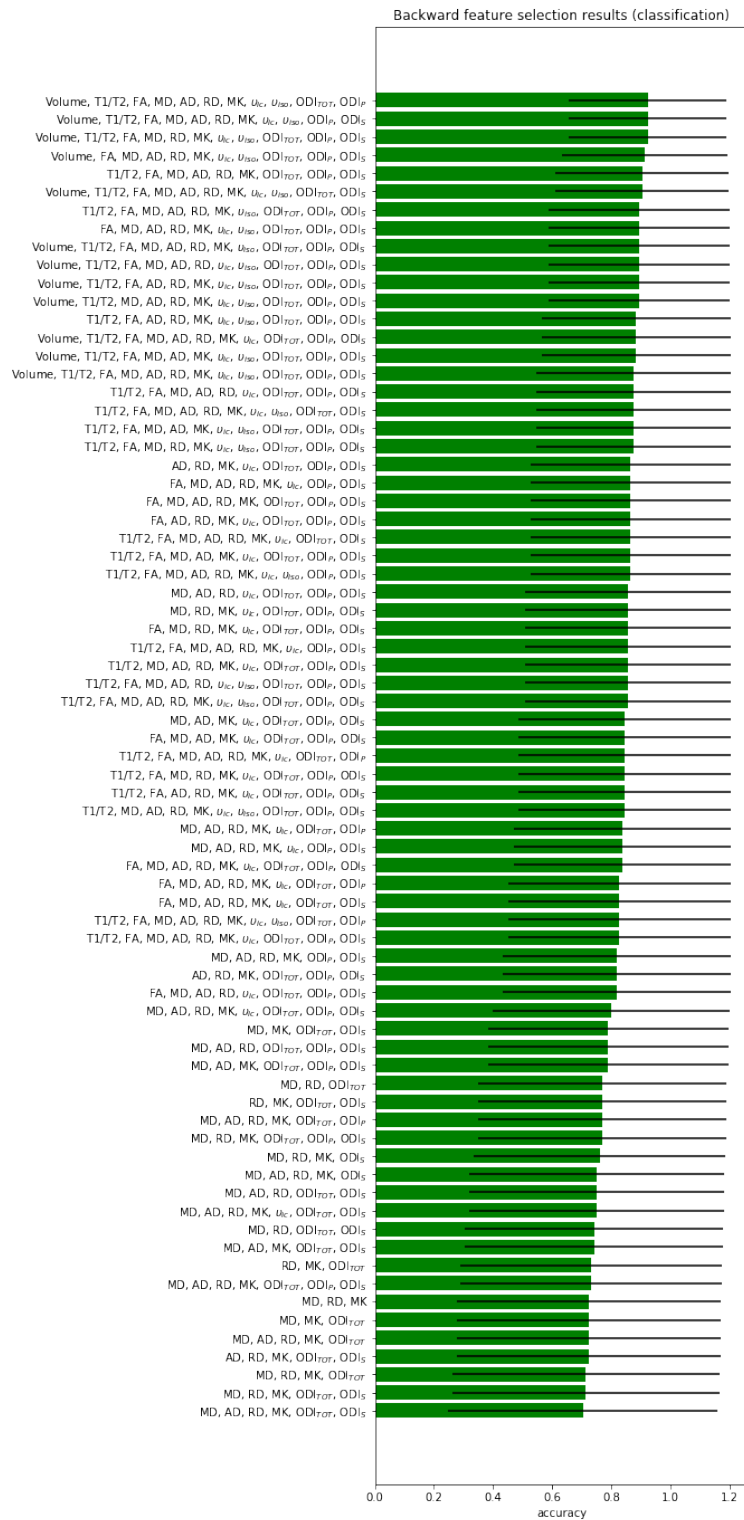


Figure 4-2 Feature selection results for the classification task. The best set of features was selected with a backward feature selection scheme: starting from the full set of features, at each iteration the feature whose subtraction caused the least decrease in prediction accuracy was removed. The accuracy computed with leave-one-out cross-validation is reported for each subset of features. The black lines depict standard deviation.

Table 5-1 Abbreviations of ROI names and division of ROIs into groups.

Short name	Long name	Group
Hip	Hippocampus left	hippocampus
Hip	Hippocampus right	hippocampus
Amyg	Amygdala left	amygdala
Amyg	Amygdala right	amygdala
ATempMed.GM	Anterior temporal lobe	cortical GM
ATempMed.GM	Anterior temporal lobe	cortical GM
ATempLat.GM	Anterior temporal lobe	cortical GM
ATempLat.GM	Anterior temporal lobe	cortical GM
ParaAmbAnt.GM	Gyri parahippocampalis et ambiens anterior part left GM	cortical GM
ParaAmbAnt.GM	Gyri parahippocampalis et ambiens anterior part right GM	cortical GM
STempMid.GM	Superior temporal gyrus	cortical GM
STempMid.GM	Superior temporal gyrus	cortical GM
MITempAnt.GM	Medial and inferior temporal gyri anterior part left GM	cortical GM
MITempAnt.GM	Medial and inferior temporal gyri anterior part right GM	cortical GM
OccTempFusiAnt.GM	Lateral occipitotemporal gyrus	cortical GM
OccTempFusiAnt.GM	Lateral occipitotemporal gyrus	cortical GM
Cereb	Cerebellum left	cerebellum
Cereb	Cerebellum right	cerebellum
BStem	Brainstem	brain stem
Insula.GM	Insula right GM	cortical GM
Insula.GM	Insula left GM	cortical GM
Occ.GM	Occipital lobe right GM	cortical GM
Occ.GM	Occipital lobe left GM	cortical GM
ParaAmbPos.GM	Gyri parahippocampalis et ambiens posterior part right GM	cortical GM
ParaAmbPos.GM	Gyri parahippocampalis et ambiens posterior part left GM	cortical GM
OccTempFusiPos.GM	Lateral occipitotemporal gyrus	cortical GM
OccTempFusiPos.GM	Lateral occipitotemporal gyrus	cortical GM
MITempPos.GM	Medial and inferior temporal gyri posterior part right GM	cortical GM
MITempPos.GM	Medial and inferior temporal gyri posterior part left GM	cortical GM
STempPos.GM	Superior temporal gyrus	cortical GM
STempPos.GM	Superior temporal gyrus	cortical GM
CingAnt.GM	Cingulate gyrus	cortical GM
CingAnt.GM	Cingulate gyrus	cortical GM
CingPos.GM	Cingulate gyrus	cortical GM
CingPos.GM	Cingulate gyrus	cortical GM
Front.GM	Frontal lobe right GM	cortical GM
Front.GM	Frontal lobe left GM	cortical GM
Pariet.GM	Parietal lobe right GM	cortical GM
Pariet.GM	Parietal lobe left GM	cortical GM
Caud	Caudate nucleus right	subcortical GM
Caud	Caudate nucleus left	subcortical GM
Thal.High	Thalamus right	subcortical GM
Thal.High	Thalamus left	subcortical GM
Subthal	Subthalamic nucleus right	subcortical GM
Subthal	Subthalamic nucleus left	subcortical GM
Lenti	Lentiform Nucleus right	subcortical GM
Lenti	Lentiform Nucleus left	subcortical GM
ATempMed.WM	Anterior temporal lobe	cortical GM
ATempMed.WM	Anterior temporal lobe	cortical GM
ATempLat.WM	Anterior temporal lobe	cortical GM
ATempLat.WM	Anterior temporal lobe	cortical GM
ParaAmbAnt.WM	Gyri parahippocampalis et ambiens anterior part left WM	WM
ParaAmbAnt.WM	Gyri parahippocampalis et ambiens anterior part right WM	WM
STempMid.WM	Superior temporal gyrus	WM
STempMid.WM	Superior temporal gyrus	WM
MITempAnt.WM	Medial and inferior temporal gyri anterior part left WM	WM
MITempAnt.WM	Medial and inferior temporal gyri anterior part right WM	WM
OccTempFusiAnt.WM	Lateral occipitotemporal gyrus	WM

OccTempFusiAnt.WM	Lateral occipitotemporal gyrus	WM
Insula.WM	Insula right WM	WM
Insula.WM	Insula left WM	WM
Occ.WM	Occipital lobe right WM	WM
Occ.WM	Occipital lobe left WM	WM
ParaAmbPos.WM	Gyri parahippocampalis et ambiens posterior part right WM	WM
ParaAmbPos.WM	Gyri parahippocampalis et ambiens posterior part left WM	WM
OccTempFusiPos.WM	Lateral occipitotemporal gyrus	WM
OccTempFusiPos.WM	Lateral occipitotemporal gyrus	WM
MITempPos.WM	Medial and inferior temporal gyri posterior part right WM	WM
MITempPos.WM	Medial and inferior temporal gyri posterior part left WM	WM
STempPos.WM	Superior temporal gyrus	WM
STempPos.WM	Superior temporal gyrus	WM
CingAnt.WM	Cingulate gyrus	WM
CingAnt.WM	Cingulate gyrus	WM
CingPos.WM	Cingulate gyrus	WM
CingPos.WM	Cingulate gyrus	WM
Front.WM	Frontal lobe right WM	WM
Front.WM	Frontal lobe left WM	WM
Pariet.WM	Parietal lobe right WM	WM
Pariet.WM	Parietal lobe left WM	WM
Thal.Low	Thalamus right	subcortical GM
Thal.Low	Thalamus left	subcortical GM

GM = gray matter, WM = white matter.