

Supplemental Table 6. Differences in prediction accuracies of ANN classes SPLX and SPL-sham depending on the exclusion of variables and their combinations, along with t-test results. The ANN was trained using a dataset containing all days after a stroke, except the 2nd day. Values in the table are sorted based on the differences in mean accuracy predictions of classes SPLX and SPL-sham.

“Out” variable	“In” variable	Mean accuracy of SPLX – Mean accuracy of SPL-sham	t-test P-value	Statistically significant difference in the prediction of SPLX and SPL-sham
Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-BLI_max_flux-BLI_max_radiance	NS	0.2269	0.0000	YES
Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-BLI_max_radiance	NS-BLI_max_flux	0.2106	0.0000	YES
Day_nr-MRI_IPSI-WEIGHT-BLI_max_radiance	MRI_CONTRA-NS-BLI_max_flux	0.2034	0.0000	YES
Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-NS-BLI_max_radiance	BLI_max_flux	0.1889	0.0000	YES
Day_nr-MRI_IPSI-MRI_CONTRA-BLI_max_radiance	WEIGHT-NS-BLI_max_flux	0.1822	0.0000	YES
MRI_IPSI-MRI_CONTRA-WEIGHT-NS-BLI_max_flux	Day_nr-BLI_max_radiance	0.1669	0.0000	YES
Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT	NS-BLI_max_flux-BLI_max_radiance	0.1608	0.0000	YES
Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-BLI_max_flux	NS-BLI_max_radiance	0.1573	0.0000	YES
Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-	BLI_max_radiance	0.1572	0.0000	YES

NS-BLI_max_flux				
Day_nr-MRI_IPSI-WEIGHT	MRI_CONTRA-NS-BLI_max_flux-BLI_max_radiance	0.1437	0.0000	YES
MRI_IPSI-MRI_CONTRA-WEIGHT-NS	Day_nr-BLI_max_flux-BLI_max_radiance	0.1433	0.0000	YES
MRI_CONTRA-WEIGHT-NS-BLI_max_flux	Day_nr-MRI_IPSI-BLI_max_radiance	0.1416	0.0000	YES
Day_nr-MRI_CONTRA-WEIGHT-BLI_max_flux-BLI_max_radiance	MRI_IPSI-NS	0.1409	0.0000	YES
MRI_CONTRA-WEIGHT-NS	Day_nr-MRI_IPSI-BLI_max_flux-BLI_max_radiance	0.1394	0.0000	YES
Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-NS	BLI_max_flux-BLI_max_radiance	0.1347	0.0000	YES
MRI_IPSI-MRI_CONTRA-WEIGHT-NS-BLI_max_radiance	Day_nr-BLI_max_flux	0.1339	0.0000	YES
MRI_IPSI-MRI_CONTRA-WEIGHT-BLI_max_flux	Day_nr-NS-BLI_max_radiance	0.1320	0.0000	YES
Day_nr-MRI_IPSI-MRI_CONTRA	WEIGHT-NS-BLI_max_flux-BLI_max_radiance	0.1220	0.0000	YES
MRI_IPSI-MRI_CONTRA-WEIGHT-NS-BLI_max_flux-BLI_max_radiance	Day_nr	0.1218	0.0567	NO
MRI_CONTRA-WEIGHT-BLI_max_flux	Day_nr-MRI_IPSI-NS-BLI_max_radiance	0.1210	0.0000	YES
MRI_IPSI-MRI_CONTRA-WEIGHT	Day_nr-NS-BLI_max_flux-BLI_max_radiance	0.1143	0.0000	YES
MRI_IPSI-MRI_CONTRA-	Day_nr-NS	0.1141	0.0000	YES

WEIGHT-BLI_max_flux- BLI_max_radiance				
MRI_CONTRA-WEIGHT- NS-BLI_max_radiance	Day_nr-MRI_IPSI- BLI_max_flux	0.1131	0.0000	YES
MRI_CONTRA-WEIGHT- BLI_max_flux- BLI_max_radiance	Day_nr-MRI_IPSI-NS	0.1113	0.0000	YES
Day_nr-MRI_IPSI- WEIGHT-BLI_max_flux	MRI_CONTRA-NS- BLI_max_radiance	0.1096	0.0000	YES
Day_nr-MRI_CONTRA- WEIGHT-BLI_max_flux	MRI_IPSI-NS- BLI_max_radiance	0.1086	0.0000	YES
Day_nr-MRI_CONTRA- WEIGHT-BLI_max_radiance	MRI_IPSI-NS- BLI_max_flux	0.1051	0.0000	YES
Day_nr-MRI_IPSI- WEIGHT-NS- BLI_max_radiance	MRI_CONTRA- BLI_max_flux	0.1024	0.0000	YES
MRI_CONTRA-WEIGHT	Day_nr-MRI_IPSI-NS- BLI_max_flux- BLI_max_radiance	0.1020	0.0000	YES
Day_nr-MRI_IPSI- WEIGHT-NS	MRI_CONTRA- BLI_max_flux- BLI_max_radiance	0.1011	0.0000	YES
Day_nr-MRI_IPSI- MRI_CONTRA-NS	WEIGHT-BLI_max_flux- BLI_max_radiance	0.1000	0.0000	YES
Day_nr-MRI_CONTRA- WEIGHT-NS-BLI_max_flux	MRI_IPSI- BLI_max_radiance	0.0999	0.0000	YES
Day_nr-MRI_CONTRA- WEIGHT-NS- BLI_max_radiance	MRI_IPSI-BLI_max_flux	0.0999	0.0000	YES
MRI_IPSI-MRI_CONTRA- WEIGHT-BLI_max_radiance	Day_nr-NS-BLI_max_flux	0.0991	0.0000	YES
Day_nr-MRI_IPSI- MRI_CONTRA- BLI_max_flux	WEIGHT-NS- BLI_max_radiance	0.0956	0.0000	YES

MRI_CONTRA-WEIGHT-BLI_max_radiance	Day_nr-MRI_IPSI-NS-BLI_max_flux	0.0951	0.0000	YES
MRI_IPSI-WEIGHT-NS	Day_nr-MRI_CONTRA-BLI_max_flux-BLI_max_radiance	0.0897	0.0000	YES
WEIGHT-NS-BLI_max_flux	Day_nr-MRI_IPSI-MRI_CONTRA-BLI_max_radiance	0.0897	0.0002	YES
Day_nr-MRI_CONTRA-WEIGHT	MRI_IPSI-NS-BLI_max_flux-BLI_max_radiance	0.0865	0.0000	YES
MRI_CONTRA-WEIGHT-NS-BLI_max_flux-BLI_max_radiance	Day_nr-MRI_IPSI	0.0834	0.0000	YES
WEIGHT-NS	Day_nr-MRI_IPSI-MRI_CONTRA-BLI_max_flux-BLI_max_radiance	0.0827	0.0000	YES
Day_nr-MRI_IPSI-MRI_CONTRA-NS-BLI_max_radiance	WEIGHT-BLI_max_flux	0.0774	0.0002	YES
Day_nr-MRI_CONTRA-BLI_max_radiance	MRI_IPSI-WEIGHT-NS-BLI_max_flux	0.0772	0.0000	YES
Day_nr-WEIGHT-BLI_max_flux-BLI_max_radiance	MRI_IPSI-MRI_CONTRA-NS	0.0761	0.0000	YES
Day_nr-MRI_CONTRA-WEIGHT-NS-BLI_max_flux-BLI_max_radiance	MRI_IPSI	0.0753	0.0001	YES
Day_nr-WEIGHT-BLI_max_radiance	MRI_IPSI-MRI_CONTRA-NS-BLI_max_flux	0.0742	0.0000	YES
Day_nr-MRI_CONTRA-WEIGHT-NS	MRI_IPSI-BLI_max_flux-BLI_max_radiance	0.0739	0.0000	YES
MRI_IPSI-WEIGHT	Day_nr-MRI_CONTRA-NS-	0.0732	0.0000	YES

	BLI_max_flux- BLI_max_radiance			
MRI_IPSI-WEIGHT- BLI_max_flux	Day_nr-MRI_CONTRA-NS- BLI_max_radiance	0.0713	0.0000	YES
Day_nr-WEIGHT-NS- BLI_max_radiance	MRI_IPSI-MRI_CONTRA- BLI_max_flux	0.0663	0.0000	YES
Day_nr-WEIGHT- BLI_max_flux	MRI_IPSI-MRI_CONTRA- NS-BLI_max_radiance	0.0645	0.0000	YES
Day_nr-MRI_CONTRA- BLI_max_flux- BLI_max_radiance	MRI_IPSI-WEIGHT-NS	0.0640	0.0000	YES
WEIGHT	Day_nr-MRI_IPSI- MRI_CONTRA-NS- BLI_max_flux- BLI_max_radiance	0.0636	0.0000	YES
MRI_IPSI-MRI_CONTRA- NS	Day_nr-WEIGHT- BLI_max_flux- BLI_max_radiance	0.0604	0.0000	YES
WEIGHT-BLI_max_flux	Day_nr-MRI_IPSI- MRI_CONTRA-NS- BLI_max_radiance	0.0603	0.0000	YES
Day_nr-MRI_CONTRA-NS- BLI_max_radiance	MRI_IPSI-WEIGHT- BLI_max_flux	0.0596	0.0000	YES
Day_nr-MRI_CONTRA	MRI_IPSI-WEIGHT-NS- BLI_max_flux- BLI_max_radiance	0.0580	0.0000	YES
Day_nr-WEIGHT	MRI_IPSI-MRI_CONTRA- NS-BLI_max_flux- BLI_max_radiance	0.0567	0.0000	YES
Day_nr-WEIGHT-NS	MRI_IPSI-MRI_CONTRA- BLI_max_flux- BLI_max_radiance	0.0550	0.0000	YES
MRI_IPSI-MRI_CONTRA- NS-BLI_max_flux	Day_nr-WEIGHT- BLI_max_radiance	0.0545	0.0001	YES

Day_nr-MRI_CONTRA-BLI_max_flux	MRI_IPSI-WEIGHT-NS-BLI_max_radiance	0.0514	0.0000	YES
MRI_IPSI-WEIGHT-BLI_max_flux-BLI_max_radiance	Day_nr-MRI_CONTRA-NS	0.0508	0.0000	YES
Day_nr-BLI_max_radiance	MRI_IPSI-MRI_CONTRA-WEIGHT-NS-BLI_max_flux	0.0475	0.0000	YES
WEIGHT-BLI_max_flux-BLI_max_radiance	Day_nr-MRI_IPSI-MRI_CONTRA-NS	0.0464	0.0000	YES
MRI_IPSI-WEIGHT-NS-BLI_max_radiance	Day_nr-MRI_CONTRA-BLI_max_flux	0.0461	0.0010	YES
MRI_IPSI-WEIGHT-NS-BLI_max_flux	Day_nr-MRI_CONTRA-BLI_max_radiance	0.0455	0.0075	YES
MRI_CONTRA-BLI_max_flux-BLI_max_radiance	Day_nr-MRI_IPSI-WEIGHT-NS	0.0449	0.0001	YES
Day_nr-WEIGHT-NS-BLI_max_flux	MRI_IPSI-MRI_CONTRA-BLI_max_radiance	0.0445	0.0003	YES
MRI_IPSI-WEIGHT-BLI_max_radiance	Day_nr-MRI_CONTRA-NS-BLI_max_flux	0.0427	0.0001	YES
MRI_IPSI-NS	Day_nr-MRI_CONTRA-WEIGHT-BLI_max_flux-BLI_max_radiance	0.0423	0.0001	YES
Day_nr-MRI_CONTRA-NS	MRI_IPSI-WEIGHT-BLI_max_flux-BLI_max_radiance	0.0397	0.0000	YES
MRI_CONTRA-NS-BLI_max_flux	Day_nr-MRI_IPSI-WEIGHT-BLI_max_radiance	0.0384	0.0048	YES
Day_nr-MRI_CONTRA-NS-BLI_max_flux	MRI_IPSI-WEIGHT-BLI_max_radiance	0.0384	0.0001	YES
MRI_IPSI-MRI_CONTRA-BLI_max_flux-BLI_max_radiance	Day_nr-WEIGHT-NS	0.0383	0.0002	YES

WEIGHT-NS- BLI_max_radiance	Day_nr-MRI_IPSI- MRI_CONTRA- BLI_max_flux	0.0374	0.0012	YES
MRI_CONTRA-NS	Day_nr-MRI_IPSI- WEIGHT-BLI_max_flux- BLI_max_radiance	0.0364	0.0003	YES
MRI_IPSI-MRI_CONTRA	Day_nr-WEIGHT-NS- BLI_max_flux- BLI_max_radiance	0.0345	0.0012	YES
Day_nr	MRI_IPSI-MRI_CONTRA- WEIGHT-NS- BLI_max_flux- BLI_max_radiance	0.0345	0.0000	YES
WEIGHT-BLI_max_radiance	Day_nr-MRI_IPSI- MRI_CONTRA-NS- BLI_max_flux	0.0323	0.0044	YES
Day_nr-MRI_CONTRA-NS- BLI_max_flux- BLI_max_radiance	MRI_IPSI-WEIGHT	0.0320	0.0012	YES
NS	Day_nr-MRI_IPSI- MRI_CONTRA-WEIGHT- BLI_max_flux- BLI_max_radiance	0.0311	0.0087	YES
Day_nr-NS- BLI_max_radiance	MRI_IPSI-MRI_CONTRA- WEIGHT-BLI_max_flux	0.0302	0.0171	YES
MRI_CONTRA	Day_nr-MRI_IPSI- WEIGHT-NS- BLI_max_flux- BLI_max_radiance	0.0278	0.0033	YES
MRI_IPSI-MRI_CONTRA- BLI_max_flux	Day_nr-WEIGHT-NS- BLI_max_radiance	0.0266	0.0083	YES
MRI_CONTRA- BLI_max_flux	Day_nr-MRI_IPSI- WEIGHT-NS- BLI_max_radiance	0.0265	0.0052	YES
Day_nr-NS	MRI_IPSI-MRI_CONTRA- WEIGHT-BLI_max_flux-	0.0258	0.0101	YES

	BLI_max_radiance			
MRI_CONTRA-NS-BLI_max_flux-BLI_max_radiance	Day_nr-MRI_IPSI-WEIGHT	0.0248	0.0089	YES
MRI_CONTRA-BLI_max_radiance	Day_nr-MRI_IPSI-WEIGHT-NS-BLI_max_flux	0.0235	0.0144	YES
Day_nr-MRI_IPSI	MRI_CONTRA-WEIGHT-NS-BLI_max_flux-BLI_max_radiance	0.0230	0.0849	NO
MRI_IPSI	Day_nr-MRI_CONTRA-WEIGHT-NS-BLI_max_flux-BLI_max_radiance	0.0204	0.0075	YES
MRI_CONTRA-NS-BLI_max_radiance	Day_nr-MRI_IPSI-WEIGHT-BLI_max_flux	0.0194	0.0425	YES
MRI_IPSI-MRI_CONTRA-NS-BLI_max_radiance	Day_nr-WEIGHT-BLI_max_flux	0.0187	0.0431	YES
MRI_IPSI-BLI_max_flux	Day_nr-MRI_CONTRA-WEIGHT-NS-BLI_max_radiance	0.0170	0.0788	NO
NS-BLI_max_flux	Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-BLI_max_radiance	0.0169	0.1611	NO
MRI_IPSI-BLI_max_radiance	Day_nr-MRI_CONTRA-WEIGHT-NS-BLI_max_flux	0.0166	0.0849	NO
MRI_IPSI-MRI_CONTRA-BLI_max_radiance	Day_nr-WEIGHT-NS-BLI_max_flux	0.0163	0.0478	YES
NS-BLI_max_radiance	Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-BLI_max_flux	0.0141	0.1242	NO
BLI_max_radiance	Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-NS-BLI_max_flux	0.0121	0.1233	NO
BLI_max_flux	Day_nr-MRI_IPSI-	0.0115	0.2494	NO

	MRI_CONTRA-WEIGHT-NS-BLI_max_radiance			
Day_nr-MRI_IPSI-NS	MRI_CONTRA-WEIGHT-BLI_max_flux-BLI_max_radiance	0.0111	0.3584	NO
MRI_IPSI-NS-BLI_max_radiance	Day_nr-MRI_CONTRA-WEIGHT-BLI_max_flux	0.0107	0.2991	NO
Day_nr-BLI_max_flux	MRI_IPSI-MRI_CONTRA-WEIGHT-NS-BLI_max_radiance	0.0102	0.3790	NO
None	Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-NS-BLI_max_flux-BLI_max_radiance	0.0091	0.3427	NO
BLI_max_flux-BLI_max_radiance	Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-NS	0.0056	0.6031	NO
MRI_IPSI-NS-BLI_max_flux	Day_nr-MRI_CONTRA-WEIGHT-BLI_max_radiance	0.0025	0.8458	NO
Day_nr-MRI_IPSI-BLI_max_radiance	MRI_CONTRA-WEIGHT-NS-BLI_max_flux	-0.0010	0.9468	NO
Day_nr-MRI_IPSI-WEIGHT-BLI_max_flux-BLI_max_radiance	MRI_CONTRA-NS	-0.0011	0.9438	NO
MRI_IPSI-BLI_max_flux-BLI_max_radiance	Day_nr-MRI_CONTRA-WEIGHT-NS	-0.0059	0.5147	NO
Day_nr-BLI_max_flux-BLI_max_radiance	MRI_IPSI-MRI_CONTRA-WEIGHT-NS	-0.0076	0.5359	NO
Day_nr-NS-BLI_max_flux	MRI_IPSI-MRI_CONTRA-WEIGHT-BLI_max_radiance	-0.0078	0.4777	NO
NS-BLI_max_flux-BLI_max_radiance	Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT	-0.0090	0.3105	NO

Day_nr-MRI_IPSI-WEIGHT-NS-BLI_max_flux	MRI_CONTRA-BLI_max_radiance	-0.0096	0.6321	NO
Day_nr-MRI_IPSI-MRI_CONTRA-BLI_max_flux-BLI_max_radiance	WEIGHT-NS	-0.0139	0.3919	NO
MRI_IPSI-MRI_CONTRA-NS-BLI_max_flux-BLI_max_radiance	Day_nr-WEIGHT	-0.0190	0.0445	YES
Day_nr-MRI_IPSI-NS-BLI_max_radiance	MRI_CONTRA-WEIGHT-BLI_max_flux	-0.0200	0.1583	NO
Day_nr-MRI_IPSI-MRI_CONTRA-NS-BLI_max_flux	WEIGHT-BLI_max_radiance	-0.0311	0.0173	YES
WEIGHT-NS-BLI_max_flux-BLI_max_radiance	Day_nr-MRI_IPSI-MRI_CONTRA	-0.0329	0.0215	YES
Day_nr-WEIGHT-NS-BLI_max_flux-BLI_max_radiance	MRI_IPSI-MRI_CONTRA	-0.0373	0.0022	YES
Day_nr-NS-BLI_max_flux-BLI_max_radiance	MRI_IPSI-MRI_CONTRA-WEIGHT	-0.0401	0.0007	YES
MRI_IPSI-NS-BLI_max_flux-BLI_max_radiance	Day_nr-MRI_CONTRA-WEIGHT	-0.0446	0.0000	YES
Day_nr-MRI_IPSI-BLI_max_flux	MRI_CONTRA-WEIGHT-NS-BLI_max_radiance	-0.0478	0.0001	YES
Day_nr-MRI_IPSI-BLI_max_flux-BLI_max_radiance	MRI_CONTRA-WEIGHT-NS	-0.0646	0.0000	YES
Day_nr-MRI_IPSI-NS-BLI_max_flux	MRI_CONTRA-WEIGHT-BLI_max_radiance	-0.0713	0.0000	YES
Day_nr-MRI_IPSI-NS-BLI_max_flux-BLI_max_radiance	MRI_CONTRA-WEIGHT	-0.0714	0.0000	YES

Day_nr-MRI_IPSI- MRI_CONTRA-NS- BLI_max_flux- BLI_max_radiance	WEIGHT	-0.0728	0.0000	YES
MRI_IPSI-WEIGHT-NS- BLI_max_flux- BLI_max_radiance	Day_nr-MRI_CONTRA	-0.1264	0.0000	YES
Day_nr-MRI_IPSI- WEIGHT-NS- BLI_max_flux- BLI_max_radiance	MRI_CONTRA	-0.1541	0.0000	YES

ANN - artificial neural network; SPLX - splenectomized mice group; SPL-sham - sham-operated mice group; SD - standard deviation; MRI_CONTRA - volume of the contralateral hemisphere measured by MRI; MRI_IPSI - volume of the ipsilateral hemisphere measured by MRI; BLI_max_radiance - surface area of peak radiation measured by bioluminescence method; BLI_max_flux - surface area of peak growth measured by bioluminescence method; WEIGHT - animal weight; Day_nr - day from the middle carotid artery occlusion (MCAO) procedure; NS - scoring of phenotypic neurological assessment.