

Supplemental Table 5. Prediction accuracy of ANN class SPL-sham depending on the exclusion of variables and their combinations. The ANN was trained using a dataset containing all days after the stroke, except the 2nd day. Values in the table are sorted based on the mean accuracy prediction of class SPL-sham.

“Out” variable	“In” variable	The mean accuracy value of ANN predictions for the SPL-sham class.	SD of accuracy in predictions for the ANN SPL-sham class.
MRI_CONTRA-WEIGHT-NS	Day_nr-MRI_IPSI-BLI_max_flux-BLI_max_radiance	0.9284	0.0366
MRI_IPSI-MRI_CONTRA-WEIGHT-NS	Day_nr-BLI_max_flux-BLI_max_radiance	0.9281	0.0286
MRI_IPSI-MRI_CONTRA-WEIGHT	Day_nr-NS-BLI_max_flux-BLI_max_radiance	0.9267	0.0213
MRI_CONTRA-WEIGHT	Day_nr-MRI_IPSI-NS-BLI_max_flux-BLI_max_radiance	0.9180	0.0385
MRI_CONTRA-WEIGHT-NS-BLI_max_flux	Day_nr-MRI_IPSI-BLI_max_radiance	0.9092	0.0321
MRI_IPSI-WEIGHT	Day_nr-MRI_CONTRA-NS-BLI_max_flux-BLI_max_radiance	0.9032	0.0347
MRI_IPSI-MRI_CONTRA-WEIGHT-NS-BLI_max_flux	Day_nr-BLI_max_radiance	0.8999	0.0303
WEIGHT	Day_nr-MRI_IPSI-MRI_CONTRA-NS-BLI_max_flux-BLI_max_radiance	0.8955	0.0340
MRI_IPSI-MRI_CONTRA-WEIGHT-BLI_max_flux	Day_nr-NS-BLI_max_radiance	0.8902	0.0337
MRI_CONTRA-WEIGHT-BLI_max_flux	Day_nr-MRI_IPSI-NS-BLI_max_radiance	0.8899	0.0343

MRI_IPSI-WEIGHT-NS	Day_nr-MRI_CONTRA- BLI_max_flux- BLI_max_radiance	0.8833	0.0442
WEIGHT-NS	Day_nr-MRI_IPSI- MRI_CONTRA- BLI_max_flux- BLI_max_radiance	0.8812	0.0492
MRI_IPSI-MRI_CONTRA- NS	Day_nr-WEIGHT- BLI_max_flux- BLI_max_radiance	0.8807	0.0336
MRI_CONTRA	Day_nr-MRI_IPSI-WEIGHT- NS-BLI_max_flux- BLI_max_radiance	0.8737	0.0300
MRI_IPSI-NS	Day_nr-MRI_CONTRA- WEIGHT-BLI_max_flux- BLI_max_radiance	0.8712	0.0340
MRI_IPSI-MRI_CONTRA	Day_nr-WEIGHT-NS- BLI_max_flux- BLI_max_radiance	0.8705	0.0355
Day_nr-MRI_IPSI- MRI_CONTRA-WEIGHT- BLI_max_radiance	NS-BLI_max_flux	0.8698	0.0300
MRI_IPSI	Day_nr-MRI_CONTRA- WEIGHT-NS-BLI_max_flux- BLI_max_radiance	0.8678	0.0242
Day_nr-MRI_IPSI-WEIGHT- BLI_max_radiance	MRI_CONTRA-NS- BLI_max_flux	0.8669	0.0338
NS	Day_nr-MRI_IPSI- MRI_CONTRA-WEIGHT- BLI_max_flux- BLI_max_radiance	0.8645	0.0387
MRI_CONTRA-NS	Day_nr-MRI_IPSI-WEIGHT- BLI_max_flux- BLI_max_radiance	0.8638	0.0304
None	Day_nr-MRI_IPSI- MRI_CONTRA-WEIGHT-	0.8576	0.0339

	NS-BLI_max_flux- BLI_max_radiance		
Day_nr-MRI_IPSI- MRI_CONTRA- BLI_max_radiance	WEIGHT-NS-BLI_max_flux	0.8461	0.0317
MRI_IPSI-MRI_CONTRA- WEIGHT-BLI_max_radiance	Day_nr-NS-BLI_max_flux	0.8458	0.0305
WEIGHT-NS-BLI_max_flux	Day_nr-MRI_IPSI- MRI_CONTRA- BLI_max_radiance	0.8453	0.0764
MRI_IPSI-WEIGHT- BLI_max_flux	Day_nr-MRI_CONTRA-NS- BLI_max_radiance	0.8415	0.0495
MRI_CONTRA-WEIGHT- BLI_max_radiance	Day_nr-MRI_IPSI-NS- BLI_max_flux	0.8399	0.0404
MRI_IPSI-MRI_CONTRA- WEIGHT-NS- BLI_max_radiance	Day_nr-BLI_max_flux	0.8386	0.0349
MRI_CONTRA- BLI_max_flux	Day_nr-MRI_IPSI-WEIGHT- NS-BLI_max_radiance	0.8361	0.0261
Day_nr-MRI_CONTRA- BLI_max_radiance	MRI_IPSI-WEIGHT-NS- BLI_max_flux	0.8356	0.0319
MRI_IPSI-BLI_max_radiance	Day_nr-MRI_CONTRA- WEIGHT-NS-BLI_max_flux	0.8325	0.0316
Day_nr-BLI_max_radiance	MRI_IPSI-MRI_CONTRA- WEIGHT-NS-BLI_max_flux	0.8323	0.0269
WEIGHT-BLI_max_flux	Day_nr-MRI_IPSI- MRI_CONTRA-NS- BLI_max_radiance	0.8300	0.0452
MRI_IPSI-WEIGHT- BLI_max_radiance	Day_nr-MRI_CONTRA-NS- BLI_max_flux	0.8299	0.0374
BLI_max_radiance	Day_nr-MRI_IPSI- MRI_CONTRA-WEIGHT- NS-BLI_max_flux	0.8279	0.0258
Day_nr-MRI_CONTRA-	MRI_IPSI-NS-BLI_max_flux	0.8269	0.0517

WEIGHT-BLI_max_radiance			
MRI_IPSI-MRI_CONTRA-BLI_max_radiance	Day_nr-WEIGHT-NS-BLI_max_flux	0.8247	0.0246
BLI_max_flux	Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-NS-BLI_max_radiance	0.8240	0.0273
WEIGHT-BLI_max_radiance	Day_nr-MRI_IPSI-MRI_CONTRA-NS-BLI_max_flux	0.8233	0.0389
MRI_CONTRA-BLI_max_radiance	Day_nr-MRI_IPSI-WEIGHT-NS-BLI_max_flux	0.8225	0.0307
Day_nr-MRI_CONTRA	MRI_IPSI-WEIGHT-NS-BLI_max_flux-BLI_max_radiance	0.8218	0.0243
Day_nr-WEIGHT	MRI_IPSI-MRI_CONTRA-NS-BLI_max_flux-BLI_max_radiance	0.8217	0.0292
Day_nr-WEIGHT-BLI_max_radiance	MRI_IPSI-MRI_CONTRA-NS-BLI_max_flux	0.8215	0.0351
Day_nr-MRI_CONTRA-WEIGHT	MRI_IPSI-NS-BLI_max_flux-BLI_max_radiance	0.8203	0.0461
NS-BLI_max_radiance	Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-BLI_max_flux	0.8198	0.0302
MRI_IPSI-BLI_max_flux	Day_nr-MRI_CONTRA-WEIGHT-NS-BLI_max_radiance	0.8193	0.0286
MRI_IPSI-MRI_CONTRA-BLI_max_flux	Day_nr-WEIGHT-NS-BLI_max_radiance	0.8190	0.0264
Day_nr	MRI_IPSI-MRI_CONTRA-WEIGHT-NS-BLI_max_flux-BLI_max_radiance	0.8188	0.0196
Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT	NS-BLI_max_flux-BLI_max_radiance	0.8175	0.0276

MRI_CONTRA-WEIGHT-NS-BLI_max_radiance	Day_nr-MRI_IPSI-BLI_max_flux	0.8173	0.0523
Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-BLI_max_flux-BLI_max_radiance	NS	0.8166	0.0681
MRI_CONTRA-NS-BLI_max_radiance	Day_nr-MRI_IPSI-WEIGHT-BLI_max_flux	0.8124	0.0253
Day_nr-MRI_IPSI-WEIGHT	MRI_CONTRA-NS-BLI_max_flux-BLI_max_radiance	0.8116	0.0312
MRI_CONTRA-NS-BLI_max_flux	Day_nr-MRI_IPSI-WEIGHT-BLI_max_radiance	0.8095	0.0425
MRI_IPSI-NS-BLI_max_radiance	Day_nr-MRI_CONTRA-WEIGHT-BLI_max_flux	0.8089	0.0351
Day_nr-MRI_CONTRA-WEIGHT-BLI_max_flux	MRI_IPSI-NS-BLI_max_radiance	0.8061	0.0375
NS-BLI_max_flux	Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-BLI_max_radiance	0.8016	0.0387
Day_nr-NS	MRI_IPSI-MRI_CONTRA-WEIGHT-BLI_max_flux-BLI_max_radiance	0.8004	0.0336
MRI_IPSI-MRI_CONTRA-NS-BLI_max_radiance	Day_nr-WEIGHT-BLI_max_flux	0.7989	0.0286
Day_nr-MRI_CONTRA-NS-BLI_max_radiance	MRI_IPSI-WEIGHT-BLI_max_flux	0.7984	0.0277
Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-NS-BLI_max_radiance	BLI_max_flux	0.7971	0.0400
Day_nr-MRI_CONTRA-NS	MRI_IPSI-WEIGHT-BLI_max_flux-BLI_max_radiance	0.7949	0.0254
MRI_IPSI-WEIGHT-NS-	Day_nr-MRI_CONTRA-	0.7935	0.0612

BLI_max_flux	BLI_max_radiance		
Day_nr-MRI_IPSI-MRI_CONTRA	WEIGHT-NS-BLI_max_flux-BLI_max_radiance	0.7924	0.0303
Day_nr-MRI_CONTRA-BLI_max_flux	MRI_IPSI-WEIGHT-NS-BLI_max_radiance	0.7915	0.0321
Day_nr-NS-BLI_max_radiance	MRI_IPSI-MRI_CONTRA-WEIGHT-BLI_max_flux	0.7906	0.0440
MRI_IPSI-MRI_CONTRA-NS-BLI_max_flux	Day_nr-WEIGHT-BLI_max_radiance	0.7886	0.0412
Day_nr-WEIGHT-BLI_max_flux	MRI_IPSI-MRI_CONTRA-NS-BLI_max_radiance	0.7872	0.0345
WEIGHT-NS-BLI_max_radiance	Day_nr-MRI_IPSI-MRI_CONTRA-BLI_max_flux	0.7867	0.0363
Day_nr-WEIGHT-NS	MRI_IPSI-MRI_CONTRA-BLI_max_flux-BLI_max_radiance	0.7866	0.0275
Day_nr-WEIGHT-NS-BLI_max_radiance	MRI_IPSI-MRI_CONTRA-BLI_max_flux	0.7862	0.0314
MRI_IPSI-WEIGHT-NS-BLI_max_radiance	Day_nr-MRI_CONTRA-BLI_max_flux	0.7861	0.0388
Day_nr-MRI_CONTRA-WEIGHT-NS	MRI_IPSI-BLI_max_flux-BLI_max_radiance	0.7858	0.0481
Day_nr-MRI_CONTRA-WEIGHT-BLI_max_flux-BLI_max_radiance	MRI_IPSI-NS	0.7847	0.0400
Day_nr-BLI_max_flux	MRI_IPSI-MRI_CONTRA-WEIGHT-NS-BLI_max_radiance	0.7816	0.0438
Day_nr-MRI_CONTRA-WEIGHT-NS-BLI_max_radiance	MRI_IPSI-BLI_max_flux	0.7811	0.0471
Day_nr-MRI_IPSI-MRI_CONTRA-NS	WEIGHT-BLI_max_flux-BLI_max_radiance	0.7787	0.0251

MRI_CONTRA-BLI_max_flux-BLI_max_radiance	Day_nr-MRI_IPSI-WEIGHT-NS	0.7759	0.0323
Day_nr-WEIGHT-BLI_max_flux-BLI_max_radiance	MRI_IPSI-MRI_CONTRA-NS	0.7752	0.0542
Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-NS	BLI_max_flux-BLI_max_radiance	0.7750	0.0304
Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-BLI_max_flux	NS-BLI_max_radiance	0.7750	0.0384
Day_nr-MRI_IPSI-WEIGHT-NS-BLI_max_radiance	MRI_CONTRA-BLI_max_flux	0.7738	0.0356
Day_nr-MRI_IPSI-WEIGHT-NS	MRI_CONTRA-BLI_max_flux-BLI_max_radiance	0.7730	0.0398
MRI_IPSI-NS-BLI_max_flux	Day_nr-MRI_CONTRA-WEIGHT-BLI_max_radiance	0.7725	0.0461
MRI_CONTRA-WEIGHT-BLI_max_flux-BLI_max_radiance	Day_nr-MRI_IPSI-NS	0.7719	0.0450
Day_nr-MRI_IPSI-WEIGHT-BLI_max_flux	MRI_CONTRA-NS-BLI_max_radiance	0.7683	0.0371
Day_nr-MRI_CONTRA-BLI_max_flux-BLI_max_radiance	MRI_IPSI-WEIGHT-NS	0.7670	0.0405
BLI_max_flux-BLI_max_radiance	Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT-NS	0.7666	0.0327
Day_nr-MRI_IPSI-MRI_CONTRA-NS-BLI_max_radiance	WEIGHT-BLI_max_flux	0.7663	0.0694
Day_nr-MRI_IPSI	MRI_CONTRA-WEIGHT-NS-BLI_max_flux-BLI_max_radiance	0.7638	0.0406

WEIGHT-BLI_max_flux- BLI_max_radiance	Day_nr-MRI_IPSI- MRI_CONTRA-NS	0.7631	0.0311
Day_nr-MRI_IPSI- MRI_CONTRA- BLI_max_flux	WEIGHT-NS- BLI_max_radiance	0.7597	0.0356
Day_nr-MRI_CONTRA-NS- BLI_max_flux	MRI_IPSI-WEIGHT- BLI_max_radiance	0.7581	0.0282
Day_nr-BLI_max_flux- BLI_max_radiance	MRI_IPSI-MRI_CONTRA- WEIGHT-NS	0.7572	0.0333
Day_nr-MRI_IPSI-NS	MRI_CONTRA-WEIGHT- BLI_max_flux- BLI_max_radiance	0.7517	0.0389
MRI_IPSI-MRI_CONTRA- WEIGHT-BLI_max_flux- BLI_max_radiance	Day_nr-NS	0.7513	0.0402
MRI_IPSI-MRI_CONTRA- BLI_max_flux- BLI_max_radiance	Day_nr-WEIGHT-NS	0.7486	0.0353
Day_nr-MRI_IPSI- BLI_max_radiance	MRI_CONTRA-WEIGHT- NS-BLI_max_flux	0.7450	0.0449
Day_nr-NS-BLI_max_flux	MRI_IPSI-MRI_CONTRA- WEIGHT-BLI_max_radiance	0.7443	0.0388
Day_nr-MRI_CONTRA- WEIGHT-NS-BLI_max_flux	MRI_IPSI-BLI_max_radiance	0.7394	0.0518
MRI_IPSI-BLI_max_flux- BLI_max_radiance	Day_nr-MRI_CONTRA- WEIGHT-NS	0.7382	0.0232
MRI_IPSI-WEIGHT- BLI_max_flux- BLI_max_radiance	Day_nr-MRI_CONTRA-NS	0.7381	0.0321
Day_nr-WEIGHT-NS- BLI_max_flux	MRI_IPSI-MRI_CONTRA- BLI_max_radiance	0.7358	0.0386
Day_nr-MRI_IPSI- MRI_CONTRA-WEIGHT- NS-BLI_max_flux	BLI_max_radiance	0.7282	0.0353

Day_nr-MRI_IPSI-BLI_max_flux	MRI_CONTRA-WEIGHT-NS-BLI_max_radiance	0.7267	0.0268
Day_nr-MRI_IPSI-NS-BLI_max_radiance	MRI_CONTRA-WEIGHT-BLI_max_flux	0.7260	0.0335
Day_nr-MRI_IPSI-WEIGHT-NS-BLI_max_flux	MRI_CONTRA-BLI_max_radiance	0.7180	0.0830
MRI_CONTRA-NS-BLI_max_flux-BLI_max_radiance	Day_nr-MRI_IPSI-WEIGHT	0.7161	0.0317
NS-BLI_max_flux-BLI_max_radiance	Day_nr-MRI_IPSI-MRI_CONTRA-WEIGHT	0.7155	0.0277
Day_nr-MRI_CONTRA-NS-BLI_max_flux-BLI_max_radiance	MRI_IPSI-WEIGHT	0.7127	0.0237
Day_nr-MRI_IPSI-NS-BLI_max_flux	MRI_CONTRA-WEIGHT-BLI_max_radiance	0.7046	0.0260
Day_nr-NS-BLI_max_flux-BLI_max_radiance	MRI_IPSI-MRI_CONTRA-WEIGHT	0.6927	0.0272
Day_nr-MRI_IPSI-BLI_max_flux-BLI_max_radiance	MRI_CONTRA-WEIGHT-NS	0.6907	0.0202
Day_nr-MRI_IPSI-MRI_CONTRA-NS-BLI_max_flux	WEIGHT-BLI_max_radiance	0.6893	0.0387
MRI_IPSI-NS-BLI_max_flux-BLI_max_radiance	Day_nr-MRI_CONTRA-WEIGHT	0.6804	0.0258
Day_nr-MRI_IPSI-NS-BLI_max_flux-BLI_max_radiance	MRI_CONTRA-WEIGHT	0.6710	0.0193
MRI_CONTRA-WEIGHT-NS-BLI_max_flux-BLI_max_radiance	Day_nr-MRI_IPSI	0.6699	0.0396
MRI_IPSI-MRI_CONTRA-	Day_nr-WEIGHT	0.6631	0.0291

NS-BLI_max_flux- BLI_max_radiance			
Day_nr-MRI_IPSI- MRI_CONTRA- BLI_max_flux- BLI_max_radiance	WEIGHT-NS	0.6627	0.0386
Day_nr-MRI_IPSI-WEIGHT- BLI_max_flux- BLI_max_radiance	MRI_CONTRA-NS	0.6601	0.0407
Day_nr-MRI_CONTRA- WEIGHT-NS-BLI_max_flux- BLI_max_radiance	MRI_IPSI	0.6529	0.0627
WEIGHT-NS-BLI_max_flux- BLI_max_radiance	Day_nr-MRI_IPSI- MRI_CONTRA	0.6447	0.0431
Day_nr-MRI_IPSI- MRI_CONTRA-NS- BLI_max_flux- BLI_max_radiance	WEIGHT	0.6336	0.0233
Day_nr-WEIGHT-NS- BLI_max_flux- BLI_max_radiance	MRI_IPSI-MRI_CONTRA	0.6334	0.0415
Day_nr-MRI_IPSI-WEIGHT- NS-BLI_max_flux- BLI_max_radiance	MRI_CONTRA	0.5912	0.0228
MRI_IPSI-WEIGHT-NS- BLI_max_flux- BLI_max_radiance	Day_nr-MRI_CONTRA	0.5905	0.0226
MRI_IPSI-MRI_CONTRA- WEIGHT-NS-BLI_max_flux- BLI_max_radiance	Day_nr	0.4299	0.1477

ANN - artificial neural network; 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.

