

Supplementary table 2. Classification results using the diagnostic tool with all possible combinations of the MRI methods.

METHODS USED	FTLD	AD	LBD	SMC
VOL+TBM	12 (24%)	16 (32%)	17 (34%)	5 (10%)
VOL+VBM	30 (60%)	2 (4%)	16 (32%)	2 (4%)
VOL+WMH	18 (36%)	12 (24%)	16 (32%)	4 (8%)
VOL+GRADING	18 (36%)	6 (12%)	20 (40%)	6 (12%)
VOL+MANIFOLD	4 (8%)	18 (36%)	23 (46%)	5 (10%)
TBM+VBM	23 (46%)	7 (14%)	19 (38%)	1 (2%)
TBM+WMH	9 (18%)	18 (36%)	18 (36%)	5 (10%)
TBM+GRADING	13 (26%)	9 (18%)	18 (36%)	10 (20%)
TBM+MANIFOLD	4 (8%)	18 (36%)	24 (48%)	4 (8%)
VBM+WMH	27 (54%)	5 (10%)	18 (36%)	0 %
VBM+GRADING	28 (56%)	5 (10%)	15 (30%)	2 (4%)
VBM+MANIFOLD	15 (30%)	11 (22%)	23 (46%)	1 (2%)
WMH+GRADING	16 (32%)	5 (10%)	15 (30%)	14 (28%)
WMH+MANIFOLD	5 (10%)	15 (30%)	25 (50%)	5 (10%)
GRADING+MANIFOLD	5 (10%)	10 (20%)	24 (48%)	11 (22%)
VOL+TBM+VBM	25 (50%)	2 (4%)	21 (42%)	2 (4%)
VOL+TBM+WMH	13 (26%)	15 (30%)	19 (38%)	3 (6%)
VOL+TBM+GRADING	17 (34%)	9 (18%)	17 (34%)	7 (14%)
VOL+TBM+MANIFOLD	7 (14%)	17 (34%)	23 (46%)	3 (6%)
VOL+VBM+WMH	29 (58%)	2 (4%)	18 (36%)	1 (2%)
VOL+VBM+GRADING	29 (58%)	2 (4%)	17 (34%)	2 (4%)
VOL+VBM+MANIFOLD	21 (42%)	6 (12%)	23 (46%)	0 %
VOL+WMH+GRADING	19 (38%)	6 (12%)	18 (36%)	7 (14%)
VOL+WMH+MANIFOLD	7 (14%)	16 (32%)	20 (40%)	7 (14%)
VOL+GRADING+MANIFOLD	12 (24%)	7 (14%)	23 (46%)	8 (16%)
TBM+VBM+WMH	22 (44%)	6 (12%)	22 (44%)	0 %
TBM+VBM+GRADING	23 (46%)	6 (12%)	18 (36%)	3 (6%)
TBM+VBM+MANIFOLD	13 (26%)	11 (22%)	25 (50%)	1 (2%)
TBM+WMH+GRADING	13 (26%)	8 (16%)	22 (44%)	7 (14%)
TBM+WMH+MANIFOLD	5 (10%)	16 (32%)	22 (44%)	7 (14%)
TBM+GRADING+MANIFOLD	8 (16%)	11 (22%)	24 (48%)	7 (14%)
VBM+WMH+GRADING	25 (50%)	7 (14%)	15 (30%)	3 (6%)
VBM+WMH+MANIFOLD	13 (26%)	12 (24%)	24 (48%)	1 (2%)
VBM+GRADING+MANIFOLD	16 (32%)	8 (16%)	22 (44%)	4 (8%)
WMH+GRADING+MANIFOLD	6 (12%)	9 (18%)	26 (52%)	9 (18%)
VOL+TBM+VBM+WMH	27 (54%)	3 (6%)	19 (38%)	1 (2%)
VOL+TBM+VBM+GRADING	23 (46%)	4 (8%)	20 (40%)	3 (6%)
VOL+TBM+VBM+MANIFOLD	17 (34%)	9 (18%)	24 (48%)	0 %
VOL+TBM+WMH+GRADING	17 (34%)	9 (18%)	19 (38%)	5 (10%)
VOL+TBM+WMH+MANIFOLD	7 (14%)	18 (36%)	21 (42%)	4 (8%)
VOL+TBM+GRADING+MANIFOLD	11 (22%)	10 (20%)	25 (50%)	4 (8%)
VOL+VBM+WMH+GRADING	28 (56%)	2 (4%)	19 (38%)	1 (2%)
VOL+VBM+WMH+MANIFOLD	20 (40%)	8 (16%)	21 (42%)	1 (2%)
VOL+VBM+GRADING+MANIFOLD	18 (36%)	8 (16%)	22 (44%)	2 (4%)
VOL+WMH+GRADING+MANIFOLD	12 (24%)	7 (14%)	23 (46%)	8 (16%)
TBM+VBM+WMH+GRADING	21 (42%)	8 (16%)	18 (36%)	3 (6%)
TBM+VBM+WMH+MANIFOLD	12 (24%)	12 (24%)	24 (48%)	2 (4%)

TBM+VBM+GRADING+MANIFOLD	13 (26%)	9 (18%)	26 (52%)	2 (4%)
TBM+WMH+GRADING+MANIFOLD	9 (18%)	10 (20%)	24 (48%)	7 (14%)
VBM+WMH+GRADING+MANIFOLD	15 (30%)	7 (14%)	20 (40%)	8 (16%)
VOL+TBM+VBM+WMH+GRADING	24 (48%)	4 (8%)	21 (42%)	1 (2%)
VOL+TBM+VBM+WMH+MANIFOLD	16 (32%)	10 (20%)	23 (46%)	1 (2%)
VOL+TBM+VBM+GRADING+MANIFOLD	17 (34%)	8 (16%)	23 (46%)	2 (4%)
VOL+TBM+WMH+GRADING+MANIFOLD	12 (24%)	9 (18%)	22 (44%)	7 (14%)
VOL+VBM+WMH+GRADING+MANIFOLD	21 (42%)	5 (10%)	21 (42%)	3 (6%)
TBM+VBM+WMH+GRADING+MANIFOLD	12 (24%)	9 (18%)	24 (48%)	5 (10%)
VOL+TBM+VBM+WMH+GRADING+MANIFOLD	16 (32%)	9 (18%)	22 (44%)	3 (6%)

Supplementary table 2. Classification results using the diagnostic tool with all possible combinations of the MRI methods. (VOL=volumetry, TBM=Tensor-based morphometry, VBM= Voxel-based morphometry, WMH=white matter hyperintensities, Manifold=manifold-based learning).