

PET A (before treatment) vs. healthy controls						
Area	R/L	X	Y	Z	T-value	Cluster
Occipital Pole, Visual cortex V2, BA 18	R	30	-92	16	6,13	539
Visual cortex V1 BA 17		14	-88	18	5,53	
Visual cortex V3/V4/V2, BA 18		38	-88	14	5,28	
Visual cortex V1	R	22	-98	-18	4,31	61
Lateral occipital cortex, inferior division, Visual cortex V5	R	52	-70	-4	4,91	229
Visual cortex V4, V3		40	-80	-16	4,50	
Occipital pole, Visual cortex V2/V1	L	-12	-94	12	3,78	22
Lateral occipital cortex, Visual Cortex V2	L	-30	-90	14	4,56	89
Lateral occipital cortex, inferior division, Visual cortex V5	L	-40	-72	-4	5,26	414
Visual cortex V4, V3, V2		-36	-88	-14	4,32	
Visual cortex V4, V3, V2		-36	-88	-8	4,07	
Inferior parietal lobule, supramarginal gyrus	L	-58	-30	38	4,91	122
Postcentral gyrus, primary sensory cortex		-54	-22	46	4,19	
Premotor cortex, precentral gyrus BA 6	L	-54	4	34	4,52	221
Precentral cortex, corticospinal tract		-44	-2	32	4,01	
Pre-/postcentral cortex, primary motor, primary somatosensory cortex		-52	-8	40	3,99	
Postcentral gyrus, secondary somatosensory, OP4	L	-62	-18	22	3,72	16
Middle /superior temporal gyrus, posterior division, BA 20/22	R	64	-24	-6	6,06	476
Middle temporal gyrus, posterior division		60	-16	-24	4,53	
Middle temporal gyrus, posterior division		60	-12	-16	3,89	
Middle temporal gyrus, anterior division	R	54	6	-38	5,62	89
Inferior temporal gyrus, temporooccipital part	R	56	-52	-14	3,95	36
Middle / superior temporal gyrus, posterior division, BA 20/22	L	-64	-24	-10	3,99	187
Superior temporal gyrus		-50	-12	-12	3,91	
Middle temporal gyrus, posterior division	L	-60	-40	-6	3,75	15
Inferior temporal gyrus, posterior division	L	-54	-42	-22	3,50	72
Supramarginal/superior temporal gyrus	L	-58	-42	12	4,04	64
Inferior temporal gyrus, posterior division		-54	-42	-24	3,26	
Anterior insula cortex	L	-26	16	-12	3,51	59
Frontal Pole	L	-40	38	-10	4,63	111
Frontal Pole	R	30	44	-8	3,90	50
Healthy controls v. PET A (before treatment)						
Area	R/L	X	Y	Z	T-value	Cluster
Temporal Pole / inferior frontal gyrus	R	56	8	-4	3,78	57
Optic radiation / lateral occipital cortex	R	36	-60	18	4,28	60
Optic radiation / lateral occipital cortex	L	-34	-56	14	3,58	57
Parahippocampal gyrus	R	14	-8	-32	3,61	51
Parahippocampal gyrus	L	-8	-12	-38	4,68	59
Cerebellum (I-IV, V)	R	14	-44	-18	3,88	38

Supplementary Table 1

PET B (on treatment) vs. healthy controls						
Area	R/L	X	Y	Z	T-value	Cluster
Occipital pole, Visual cortex V1/V2, BA 17/18	R	20	-98	-16	4,27	33
Occipital pole, Visual cortex V2, BA 18	R	18	-92	18	6,3	719
Lateral occipital cortex, superior division		38	-88	16	5,72	
Lateral occipital cortex, superior division		16	-86	30	4,70	
Lateral occipital cortex, Visual cortex V4/V3	R	40	-80	-16	4,87	251
Lateral occipital cortex, Visual cortex V5		50	-70	-8	4,70	
Occipital pole, Visual cortex V2, BA18	L	-28	-90	16	5,33	225
Occipital pole, Visual cortex V2/V1, BA17/18		-12	-94	12	4,04	
Lateral occipital cortex, Visual cortex V5	L	-40	-72	-4	5,24	520
Lateral occipital cortex, Visual cortex V3/V4		-40	-86	-14	4,91	
Inferior temporal gyrus, temporooccipital part		-50	-62	-10	3,88	
Middle temporal gyrus, posterior division	R	64	-20	-10	5,84	408
Superior/middle temporal gyrus, superior division		62	-30	2	4,92	
Secondary somatosensory cortex, parietal operculum OP1		62	-22	22	4,23	
Inferior/middle temporal gyrus,	R	54	-54	-8	4,11	73
Angular gyrus/inferior parietal lobule		56	-52	16	4,09	
Middle temporal gyrus, posterior division	L	-64	-24	-10	5,52	580
Superior temporal gyrus, posterior division		-62	-16	-6	5,38	
Superior/middle temporal gyrus, posterior division, acoustic cortex/radiation		-52	-16	-10	4,79	
Inferior parietal lobule, supramarginal gyrus	L	-56	-44	22	4,63	102
Planum temporale, auditory cortex		-48	-34	8	4,02	
Inferior temporal gyrus, posterior division	L	-50	-38	-24	6,25	186
Middle temporal gyrus, posterior division/ temporooccipital part	L	-60	-42	-6	4,72	47
Postcentral gyrus	R	64	-8	40	4,27	33
Postcentral gyrus, somatosensory cortex, BA 1/2		58	-16	50	3,73	
Postcentral gyrus, primary somatosensory cortex BA 1/2	L	-54	-18	46	4,10	59
Postcentral gyrus, somatosensory cortex BA 1/2		-58	-16	36	3,62	
Postcentral gyrus, somatosensory cortex, parietal operculum OP4/1	L	-64	-16	22	4,61	80
Pre-/postcentral gyrus, motor cortex, BA 4	L	-48	-8	34	3,93	43
Putamen	L	-22	20	-6	3,87	14
Frontal Pole	L	-40	38	-10	4,78	77
Healthy controls vs. PET B (on treatment)						
Area	R/L	X	Y	Z	T-value	Cluster
Cerebellum (Vermis, VI)	R	4	-66	-22	5,16	887
Cerebellum (I-IV, V)		12	-44	-16	5,16	
Cerebellum (I-IV, V)		8	-52	-12	4,58	
Cerebellum (VIIb/a)	R	42	-52	-58	3,86	12
Cerebellum (VI/V)	L	-24	-50	-30	3,79	14
Cerebellum (Pontine brainstem)	R	16	-50	-38	3,76	16
Parahippocampal gyrus	L	-10	-12	-34	4,73	98
Thalamus	R	14	-8	-32	4,27	52
Thalamus	R	8	-4	4	3,93	12
Optic radiation/callosal body/middle temp. gyr.	L	-30	-48	26	3,92	66
Middle temporal gyrus/ inferior parietal lobule	R	42	-56	10	4,93	103

Supplementary Table 2

PET B vs. PET A (on vs. off treatment), 0.001						
Area	R/L	X	Y	Z	T-value	Cluster
Supramarginal gyrus	L	-60	-46	48	4,92	10

PET B vs. PET A (on vs. off treatment), 0.005						
Area	R/L	X	Y	Z	T-value	Cluster
Supramarginal gyrus	L	-60	-46	48	4,92	29
Superior temporal gyrus / Secondary somatosensory cortex (OP4)	L	-66	-16	2	3,27	112
Middle temporal gyrus / Supramarginal gyrus	R	48	-46	6	3,32	18
Anterior intraparietal sulcus	L	-30	-36	38	4,05	14
Superior parietal lobule 7	L	-36	-60	56	3,96	11
Superior parietal lobule 7	R	10	-62	62	3,96	21
Superior parietal lobule 7	R	8	-48	76	3,39	14
Frontal pole /superior frontal gyrus	L	-22	44	46	3,84	62
Superior frontal gyrus / Premotor area, BA 6	R	24	0	46	3,71	32
Premotor cortex, BA 6	L	-6	-18	44	3,66	111
Juxtapositional Lobule /Premotor cortex, BA 6	L	-4	-4	58	3,57	
Premotor cortex, BA 6	R	12	-2	78	4,3	36
Middle frontal gyrus	R	36	34	16	3,66	12
Optic radiation /lateral geniculate body	R	26	-24	-4	3,58	23
Precuneus Cortex	R	0	-60	18	3,53	36
Visual Cortex (V1, BA17)	R	8	-62	10	3,34	34
Visual cortex (V1, BA17)/optic radiation	R	30	-62	6	4,09	51
Cerebellum VI / Nodule	R	16	-62	-30	3,48	19
Callosal body	L	-6	-36	14	3,58	13

PET A vs. PET B (off vs. on treatment), 0.001						
Area	R/L	X	Y	Z	T-value	Cluster
Cerebellum /Crus I	L	-40	-70	-24	6,19	80
Temporal fusiform/parahippocampal gyrus	R	34	-14	-32	5,52	49
Superior parietal lobule/post/precentral gyrus	R	6	-36	56	5,39	14

PET A vs. PET B (off vs. on treatment), 0.005						
Area	R/L	X	Y	Z	T-value	Cluster
Cerebellum /Crus I	L	-40	-70	-24	6,19	178
Cerebellum	L	-10	-62	-32	3,43	12
Cerebellum/Lingual gyrus (VI, Vermis)	R	6	68	-12	3,50	17
Cerebellum (VI, Crus I)	R	34	-62	-26	3,44	15
Posterior insular cortex	L	-36	-16	8	3,68	12
Posterior insular cortex	R	40	-16	12	3,62	10
Temporal fusiform/parahippocampal gyrus	R	34	-14	-32	5,52	97
Temporal fusiform/ parahippocampal gyrus	R	26	-36	-24	3,53	14
Temporal fusiform cortex/parahippocampal gyrus/optic radiation	R	30	-40	-10	3,47	17
Middle temporal gyrus	R	74	-36	-14	4,99	23
Middle/superior temporal gyrus	R	56	-32	0	3,42	18
Middle/superior temporal gyrus	R	58	-36	10	3,15	11
Superior parietal lobule/post/precentral gyrus	R	6	-36	56	5,39	43
Juxtapositional lobule/premotor cortex, BA 6	R	6	0	62	4,20	39
Lateral occipital cortex	L	-46	-72	20	3,39	23
Visual cortex /occipital pole V2/3	R	38	-94	-6	3,61	15

Supplementary Table 3

PET A Responders (before treatment) vs. healthy controls						
Area	R/L	X	Y	Z	T-value	Cluster
Visual cortex V2, V1, BA 18/17	R	32	-94	16	7,69	136
Visual cortex V2, V1, BA 17/18		14	-88	18	4,28	
Visual cortex V2, V3, BA 18	L	-30	-990	12	4,2	16
Lateral occipital cortex, Visual cortex V5	R	54	-70	-4	5,37	27
Lateral occipital cortex, Visual cortex V5	L	-38	-72	-2	5,24	76
Lateral occipital cortex / inferior parietal lobule	L	-42	-82	30	4,66	13
Middle temporal gyrus, posterior division, BA 21	L	-60	-38	-6	6,52	74
Middle temporal gyrus, posterior division	L	-60	-22	-18	4,23	27
Planum temporale/superior temporal gyrus	R	62	-26	12	4,77	127
Middle temporal gyrus, posterior division		54	-24	-6	4,34	
Planum temporale/superior temporal gyrus		54	-18	-2	4,22	
Superior temporal gyrus	L	-58	-38	10	6,01	75
Temporal pole, middle temporal gyrus	R	54	6	-38	4,91	15
Precentral gyrus, primary motor, BA 4	L	-44	-4	32	4,99	196
Precentral gyrus, premotor cortex, BA 6		-52	0	34	4,90	
Postcentral gyrus / supramarginal gyrus	L	-54	-26	40	4,38	23
Putamen/Pallidum	L	-28	10	4	6,19	356
Putamen	R	28	10	-4	4,9	39
Parahippocampal gyrus, posterior division	L	-22	-40	-10	4,75	24
Frontal pole	R	30	56	34	4,88	28
Frontal pole	L	-40	40	-8	4,63	62
Middle frontal gyrus	L	-38	20	38	4,58	20
Healthy controls v. PET A Responders (before treatment)						
Area	R/L	X	Y	Z	T-value	Cluster
Cerebellum, anterior lobe/culmen, I-IV	R	4	-54	-10	8,46	1145
Cerebellum, anterior lobe/culmen, I-IV		2	-52	-16	6,97	
Cerebellum, anterior lobe/culmen, V, I-IV		16	-44	-16	5,18	
Cerebellum Crus II, VIIb	R	14	-78	-46	4,97	130
Cerebellum VIIb, a, Crus II	L	-8	-72	-50	4,56	50
Cerebellar Crus II,I	R	22	-90	-30	4,54	21
Cerebellar Crus I,II	L	-30	-80	-32	4,42	44
Cerebellum Crus VI	R	26	-68	-28	4,39	76
Cerebellum Crus I		42	-56	-32	3,98	
Callosal body, cingulate posterior division	L	-6	-44	18	6,00	99
Optic radiation, callosal body	L	-38	-52	-8	4,85	10
Hippocampus	L	-34	-34	-10	4,52	11
Inferior parietal lobule	R	42	-58	18	4,61	51

Supplementary Table 4

PET B Responders (on treatment) vs. healthy controls, 0.001						
Area	R/L	X	Y	Z	T-value	Cluster
Occipital pole, Visual cortex V2/V1, BA 18/17	R	16	-92	18	6,46	576
Lateral occipital cortex, superior division		38	-88	16	5,51	
Occipital pole, Visual cortex V2/V1, BA 18/17		30	-94	14	5,51	
Occipital pole	R	20	-98	-20	4,51	30
Occipital pole		20	-104	-10	3,89	
Lateral occipital cortex, inferior division	R	40	-82	-16	4,66	58
Lateral occipital cortex, Visual cortex V4/3	R	52	-74	-4	4,62	52
Occipital pole, Visual cortex V2, BA 18	L	-28	-90	16	5,44	703
Lateral occipital cortex, Visual cortex V4/3		-40	-86	-10	5,42	
Occipital pole, Visual cortex V1/2, BA 17/18		-10	-92	12	4,52	
Precuneus /superior parietal lobule	L	-12	-48	42	5,15	20
Middle temporal gyrus, posterior division	R	64	-20	-10	5,21	314
Inferior temporal gyrus, posterior division		58	-18	-26	4,77	
Middle/inferior temporal gyrus, posterior division		60	-28	-16	4,57	
Inferior temporal gyrus, temporooccipital part	R	58	-52	-14	3,95	22
Middle temporal gyrus, temporooccipital part	L	-58	-46	-6	6,11	85
Inferior temporal gyrus, posterior division	L	-50	-38	-24	5,05	84
Middle/superior temporal gyrus, posterior d.	L	-64	-22	-10	7,11	679
Superior temp. gyrus, somatosensory cortex, OP 1		-60	-26	6	4,98	
Supramarginal gyrus/Inferior parietal lobule		-58	-44	22	4,7	
Post-/precentral gyrus	R	64	-8	40	4,28	14
Postcentral gyrus, primary somatosensory, BA 1/2	R	58	-18	50	4,06	19
Postcentral gyrus, primary somatosensory, BA 1	L	-54	-14	54	4,2	34
Postcentral gyrus, primary somatosensory, BA 1/2)		-54	-18	44	3,91	
Pre-/postcentral gyrus, primary motor, BA 4; somatosensory, BA 3)	L	-46	-8	34	4,24	43
Precentral gyrus, premotor /primary motor, BA 6/4		-52	-2	36	3,7	
Healthy controls vs. PET B Responders (on treatment)						
Area	R/L	X	Y	Z	T-value	Cluster
Cerebellar vermis (VIIIa/b, VI; hemisphere VI)	L	-2	-62	-20	9,29	1835
Cerebellum I-V	R	14	-46	-12	8,3	
Cerebellum I-V, V	R	6	-54	-12	8,22	
Cerebellum, Crus I, VI	R	42	-46	-36	4,37	30
Middle cerebellar peduncle, VI/V	L	-22	-48	-30	4,74	70
Juxtapositional Lobule, supplementary motor cortex/premotor cortex, BA 6	R	6	8	60	5,18	137
Middle temporal gyrus/inferior parietal lobule	R	42	-56	10	4,79	70
Intraparietal sulcus/callosal body	L	-30	-50	28	5,08	116
Healthy controls vs. PET B Responders (on treatment), 0.05 corrected						
Area	R/L	X	Y	Z	T-value	Cluster
Cerebellar vermis (VIIIa/b, VI; hemisphere VI)	L	-2	-62	-20	9,29	91
Cerebellum I-V, V	R	6	-54	-12	8,22	

Supplementary Table 5

Responders PET B vs. PET A (on vs. off treatment), 0.001						
Area	R/L	X	Y	Z	T-value	Cluster
Post-/Precentral gyrus, somatosensory, BA 1/premotor BA 6)	R	66	-6	30	8,71	17
Lateral occipital cortex /optic radiation	R	32	-62	18	6,24	20
Juxtapositional lobule cortex, supplementary motor/premotor cortex, BA 6	L	-6	-8	52	6,03	27
Juxtapositional lobule cortex, supplementary motor/premotor cortex, BA 6		-8	-14	46	4,82	
Inferior temporal gyrus, posterior division	L	-52	-28	-26	5,77	12
Juxtapositional lobule cortex, supplementary motor	L	-6	6	56	5,16	16

Responders PET B vs. PET A (on vs. off treatment), 0.005

Area	R/L	X	Y	Z	T-value	Cluster
Postcentral gyrus, somatosensory, BA 1/3	R	66	-6	30	8,71	39
Postcentral gyrus, somatosensory, BA 1/ inferior parietal lobule, BA 40	R	44	-36	62	4,97	30
Postcentral gyrus, somatosensory, BA 3	L	-18	-34	60	5,39	10
Juxtapositional lobule cortex, supplementary motor / premotor cortex, BA 6	L	-6	-8	52	6,03	166
Juxtapositional lobule cortex, supplementary motor / premotor cortex, BA 6		-6	6	56	5,16	
Juxtapositional lobule cortex, supplementary motor / premotor cortex, BA 6		-8	-14	46	4,82	
Precentral gyrus / Premotor cortex BA 6	L	-44	-12	60	3,76	14
Intracalcarine cortex /Visual cortex V1, BA 17	R	14	-72	12	4,81	136
Intracalcarine cortex / Visual cortex V1/V2		18	-62	4	4,62	
Optic radiation / occipital white matter / callosal body	R	32	-62	18	6,24	72
Cuneal cortex / Visual cortex V2	R	12	-84	32	4,26	18
Angular gyrus / lateral occipital cortex, superior division / inferior parietal lobule	L	-46	-58	32	3,8	32
Lateral occipital cortex, superior division / superior parietal lobule /precuneus, BA 7	L	-20	-64	58	5,92	44
Lateral occipital cortex, superior division / inferior parietal lobule	L	-24	-82	40	4,67	20
Lateral occipital cortex, superior division	R	34	-58	38	4,43	13
Precuneus	R	12	-50	36	4,42	15
Precuneus	R	0	-54	14	4,21	23
Supramarginal/superior temporal gyrus	R	46	-36	10	5,22	28
Inferior temporal gyrus, temporooccipital part	R	52	-56	-22	5,13	10
Inferior temporal gyrus, posterior division	L	-52	-28	-26	5,77	36
Middle/inferior frontal cortex	R	38	34	16	4,57	27

Responders PET A vs. PET B (off vs. on treatment), 0.001

Area	R/L	X	Y	Z	T-value	Cluster
Midline cerebellum / VIIIa	L	-10	-62	-34	6,01	15
Posterior insular cortex	L	-38	-18	6	5,98	11
Juxtapositional lobule cortex, supplementary motor/premotor area, BA 6	R	6	4	62	5,25	13
Frontal white matter /anterior callosal body	L	-22	36	14	5,04	11

Responders PET A vs. PET B (off vs. on treatment), 0.005

Area	R/L	X	Y	Z	T-value	Cluster
Midline cerebellum /VIIIa	L	-10	-62	-34	6,01	93
Vermis, VIIIa, VIIb, Crus II		-4	-70	-38	4,7	
Cerebellum, Crus I/VI	L	-38	-68	-24	4,38	31

<i>Midbrain/Pons</i>	<i>L</i>	<i>-10</i>	<i>-18</i>	<i>-18</i>	<i>5,01</i>	<i>53</i>
<i>(Para)hippocampal gyrus /temporal fusiform gyrus</i>	<i>R</i>	<i>34</i>	<i>-14</i>	<i>-28</i>	<i>4,08</i>	<i>54</i>
<i>Temporal pole /parahippocampal gyrus</i>	<i>R</i>	<i>22</i>	<i>4</i>	<i>-40</i>	<i>3,79</i>	<i>11</i>
<i>(Para-)hippocampal gyrus /amygdala</i>	<i>L</i>	<i>-24</i>	<i>-2</i>	<i>-20</i>	<i>4,48</i>	<i>17</i>
<i>Posterior insular cortex</i>	<i>L</i>	<i>-38</i>	<i>-18</i>	<i>6</i>	<i>5,98</i>	<i>31</i>
<i>Occipital fusiform / lingual gyrus, visual cortex V3/4</i>	<i>L</i>	<i>-26</i>	<i>-66</i>	<i>-6</i>	<i>5,31</i>	<i>27</i>
<i>Lateral occipital cortex /precuneus / superior parietal lobule, BA 7</i>	<i>L</i>	<i>-10</i>	<i>-78</i>	<i>56</i>	<i>5,25</i>	<i>16</i>
<i>Juxtapositional lobule, supplementary motor/premotor area, BA 6</i>	<i>R</i>	<i>6</i>	<i>4</i>	<i>62</i>	<i>5,25</i>	<i>39</i>
<i>Callosal body / frontal white matter</i>	<i>L</i>	<i>-22</i>	<i>36</i>	<i>14</i>	<i>5,04</i>	<i>59</i>
<i>callosal body / frontal white matter</i>	<i>L</i>	<i>-20</i>	<i>16</i>	<i>32</i>	<i>3,63</i>	<i>28</i>
<i>Callosal body</i>	<i>R</i>	<i>22</i>	<i>34</i>	<i>4</i>	<i>4,06</i>	<i>52</i>

Supplementary Table 6