SUPPLEMENTARY MATERIAL TO:

Differential abnormalities of cerebrospinal fluid dopaminergic vs. noradrenergic indices in synucleinopathies

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Short title: CSF Biomarkers of Catecholamine Deficiency

Keywords: norepinephrine; Parkinson; multiple system atrophy; pure autonomic failure; MHPG; HVA

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Supplementary Table 1:

Cerebrospinal fluid (CSF) catechols, 3-methoxy-4-hydroxyphenylglycol (MHPG), and homovanillic acid (HVA) data were analyzed from 130 subjects, including 92 synucleinopathy patients (36 Parkinson disease (PD), 37 multiple system atrophy (MSA), 19 pure autonomic failure (PAF)). Mean (±SEM) ages and sex makeups were: PD 65±2 years, 22 men, 14 women; MSA 57±1 years, 25 men, 12 women; and PAF 65±2 years, 14 men, 5 women. Detailed clinical information is provided about the three synucleinopathy groups, including treatment status for a variety of potentially interfering medications (e.g., a monoamine oxidase inhibitors (MAOI), catechol-O-methyltransferase inhibitor (COMTI), or selective serotonin reuptake inhibitor (SSRI)).

N	PATID	Protocol	Group	Age	Race	Sex	Ashk.?	Accrual Date	Age at Death	Motor Dysf Age at Onset	OH Sx Age at Onset	Time Onset to Study	L-Dopa responsive	Orth Hypotension	Orth Intolerance	Urinary symptoms	Impotence	Constipation	Decreased sweat	Slurred Speech	Depression	Dementia	Fatigue
					White=1	M=1	Y=1			years	PAF	years	Movement	Yes=1	Yes=1	Yes=1	Yes=1	Yes=1	Yes=1	Yes=1	Yes=1	Vis. halluc., dec. mem., MoCA	Yes=1
1	00180	94N0186	PD+OH	62.4	1	1	0	2003/01/30		58		8	0	1	1	1	1	0	1	1	1	0	
2	00119	03N0004	PD+OH	62.1	1	1	0	2004/07/22		57		9	0	1	1	1	1	0	0	0	0	0	
3	00354	03N0004	PD+OH	78.5	1	0	0	2005/01/11		73		9	1	1	1	1			0	0	0	0	
4	00396	03N0004	PD+OH	77.8	B	0	0	2005/02/15		81		0		1	1	1				0		0	
5	01606	03N0004	PD+OH	72.1	1	0	1	2006/05/10	83.4	61		11	1	1	1	1		0	0	0	1	0	
6	01686	03N0004	PD+OH	59.9	1	1	0	2006/11/29		57		2	1	1	1	1	1	1	1	0	0	0	1
7	02013	03N0004	PD+OH	68.1	1	1	0	2008/07/23		63		5	1	1	1			1	0	0	1		1
8	02140	03N0004	PD+OH	62.6	1	1	0	2010/01/27		61		1		1	1	1	0	0	0	0	0	0	1
9	02483	03N0004	PD+OH	65.5	1	1	0	2010/08/25		64		1		1	1	1	1	1	0	0	0	1	1
10	02458	03N0004	PD+OH	74.2	1	1	0	2010/06/01															
11	02702	03N0004	PD+OH	78.0	1	0	0	2011/03/31					1										
12	02964	03N0004	PD+OH	69.6	1	1	1	2012/03/07		68		1											
13	03194	03N0004	PD+OH	69.1	1	0	1	2013/07/02															
14	03184	03N0004	PD+OH	67.8	1	1	0	2014/04/07		61		6	0	1	1	1	0	1	0	1	0	1	1
15	03502	03N0004	PD+OH	75.2	1	1	0	2015/03/19		61			1	0	0	1	1	1	1	0	0	0	1
16	03334	03N0004	PD+OH	65.7	1	0	0	2014/07/22		57		8	1	1	1	1		1	1	0	0	1	1
17	03506	03N0004	PD+OH	67.8	1	1	1	2015/05/29		65		3	1	1	0	1	1	1	1	0	1	1	1
18	03681	03N0004	PD+OH	75.2	1	0	1	2017/11/12		73			0	1	1	1		1	0	0	0	0	1
19	03762	03N0004	PD+OH	70.8	1	1	1	2018/09/20		68		3	1	1	1	1	1	1	0	0	1	0	1
20	03821	18N0140	PD+OH	76.5	1	1	0	2019/08/13					0	1	1	1	1	1	1	0	1	1	1
21	01467	03N0004	PD No OH	45.2	1	1	0	2005/12/14		39		6	1	0	0	1	0	0	0			0	1
22	01707	03N0004	PD No OH	55.9	1	1	0	2007/06/13		53		2		0	0	0	1	0	0	0	0	0	0
23	01908	03N0004	PD No OH	52.8	1	0	0	2008/02/26		51		2		0	0	1		0	0	0	1	0	1
24	02196	03N0004	PD No OH	63.9	1	1	0	2010/12/15		59		3	1	0	0	1	1	1	0	1	0	1	1
25	02022	03N0004	PD No OH	54.8	1	1	0	2008/09/17		51		4	1	0	0	1	1	1	0	1	1	0	1
26	02664	03N0004	PD No OH	42.3	B	0	0	2011/02/23		42		0	0	0	0	1		1	0	0	1	0	1
27	02963	09N0010	PD No OH	49.8	1	1	0	2012/05/14						0	0	1	0	1	1	1	1	1	1
28	03123	09N0010	PD No OH	75.7	1	1	1	2013/03/22					1		0	1	1	1	1	0	0	1	1
29	03205	03N0004	PD No OH	60.0	1	0	0	2014/02/21		56		4	1	0	0	1		1	1	0	1	0	0
30	03309	03N0004	PD No OH	74.2	B	1	0	2014/04/02		70		7	1	0	1	0	0	1	0	0	0	1	0
31	03175	03N0004	PD No OH	46.2	1	0	0	2014/09/28		40		6		1	1	1		1	0	0	1	0	1
32	03511	03N0004	PD No OH	42.3	1	0	0	2015/05/18		30		42	1	0	0	0		1	0	0	0	0	0
33	03569	03N0004	PD No OH	77.1	1	0	0	2016/02/04		74		3	1	1	1	1		1	1	1	0	1	1
34	03213	03N0004	PD No OH	74.5	1	0	1	2017/09/12		69													
35	03802	18N0140	PD No OH	68.6	1	0	0	2019/04/17					0	0	0	1		1	0	0	1	0	1
36	03819	18N0140	PD No OH	62.3	HISP.	1	1	2019/09/29					0	0	1	1	1	1	1	0	0	0	1
	MEAN			**65.1**	**31**	**21**	**9**																
	SEM			**1.8**	**5**	**15**	**27**																
	N			**36**	**36**	**36**	**36**																

N	PATID	Protocol	Group	Age	Race	Sex	Ashk.?	Accrual Date	Age at Death	Motor Dysf Age at Onset	OH Sx Age at Onset	Time Onset to Study	L-Dopa responsive	Orth Hypotension	Orth Intolerance	Urinary symptoms	Impotence	Constipation	Decreased sweat	Slurred Speech	Depression	Dementia	Fatigue
					White=1	M=1	Y=1			years	PAF	years	Movement	Yes=1	Yes=1	Yes=1	Yes=1	Yes=1	Yes=1	Yes=1	Yes=1	Vis. halluc., dec. mem., MoCA	Yes=1
1	01433	03N0004	MSA-C	57.0	B	0	0	2005/11/02		48		9		1	1	1		1	0	1	0	0	1
2	01464	03N0004	MSA-C	67.7	1	1	0	2005/12/07		65		2	0	1	1	1	1	1	0	0	1	0	
3	01478	03N0004	MSA-C	64.8	1	1	0	2006/02/15		59		6	0	1	1	1	1			1	0	0	1
4	01557	03N0004	MSA-C	58.6	1	1	0	2006/04/06		56		3		1	1	1	1	1	1	1	1	0	
5	01800	03N0004	MSA-C	50.4	1	1	0	2007/07/17		48		2		1	1	1	1	1	1	1	0	0	1
6	01810	03N0004	MSA-C	51.1	1	1	0	2007/10/23					0	1	1	1	1	1	0	1	1	0	1
7	02896	03N0004	MSA-C	59.7	1	1	0	2011/11/14															
8	03021	03N0004	MSA-C	53.1	1	1	0	2012/08/07	56.7														
9	03231	03N0004	MSA-C	58.7	1	0	0	2014/08/04		57		2		1	1	1		1	0	1	0	0	1
10	03472	03N0004	MSA-C	67.4	1	0	0	2015/05/27								1		1	1	1	1	0	1
11	03032	03N0004	MSA-C	59.5	1	1	0	2015/05/08	64.8					1	1	1	1	1	1	1	1	1	1
12	03629	03N0004	MSA-C	48.3	1	1	0	2007/04/20						1	1	1	1	1	1	1	0	0	1
13	00013	03N0004	MSA-P	53.5	1	1	0	2004/07/08		43		10		1	1	1	1	0	0	1			
14	00368	03N0004	MSA-P	48.8	O	1	0	2005/02/09		44		4	1	0	0	1	1			0		0	
15	00547	03N0004	MSA-P	44.6	1	1	0	2005/07/20		39		5	1	1	1	1	1	1		1	0	0	1
16	01594	03N0004	MSA-P	59.0	1	0	0	2006/03/29		53		5		1	0	1		0	0	1	0	0	1
17	01591	03N0004	MSA-P	46.2	1	1	0	2006/06/07		40		6	1	1	1	1	1	1		1	0	0	1
18	01625	03N0004	MSA-P	63.4	1	1	0	2006/07/12		60		3	0	0	0	1	1	1	1	1			
19	01615	03N0004	MSA-P	54.7	O	1	0	2006/07/19		54		1		1	1	1	1		1	1	1		
20	01716	03N0004	MSA-P	74.3	1	1	0	2007/03/28		70		4	1	1	1	1	1	1	0	0	1	0	1
21	01988	03N0004	MSA-P	63.9	1	1	0	2008/03/25	66.2	60		4		1	1	1	0	0	1	0	0	1	1
22	02011	03N0004	MSA-P	57.9	H	1	0	2008/11/21		53		4	0	1	1	1	1	1	0	0	1	0	1
23	02077	03N0004	MSA-P	49.9	1	0	0	2009/05/11															
24	02107	03N0004	MSA-P	63.8	1	0	0	2009/03/23		62		2	1	1	1	1		1	1	1	1	0	1
25	02705	03N0004	MSA-P	71.3	G	1	0	2011/05/10	72.6				0	1	1	1	1	1	1	0	0	1	1
26	02736	03N0004	MSA-P	56.4	1	1	0	2011/07/15		49		7	1	1	1	1	1	1	0	1	1	0	0
27	02852	03N0004	MSA-P	47.2	1	1	0	2011/10/04		46		4	1	0	0	1	1	1	0	0	0	0	
28	03007	03N0004	MSA-P	48.8	1	1	0	2012/07/30					1	1	1	1	1		0	1	0	0	1
29	03183	03N0004	MSA-P	45.3	1	1	0	2013/10/11		43		2	0	1	1	1	1		0	0		0	
30	03239	03N0004	MSA-P	48.6	1	0	0	2013/11/08															
31	03773	03N0004	MSA-P	69.9	H	0	0	2014/09/19				2	0	1	1	1		1		0		0	
32	03356	03N0004	MSA-P	73.6	1	1	0	2014/09/21	77.7					1	1		1			1		0	
33	02910	03N0004	MSA-P	62.2	B	0	0	2012/01/12															
34	03690	03N0004	MSA-P	63.8	1	1	1	2017/07/24						1	1	1	1	1	1	0	1	0	1
35	03749	03N0004	MSA-P	51.7	1	1	0	2018/09/10			47	5	0	1	1	1	1	1	0	0	0	0	0
36	03814	18N0140	MSA-P	52.3	1	1	0	2019/06/20						0		1	1	0	0	1	0	0	1
37	03434	03N0004	MSA-P	51.3	1	1	0	2014/10/26						0	0	1	1	1	0	0	0	0	0
	MEAN			**57.3**	**29**	**28**	**1**																
	SEM			**1.4**	**7**	**8**	**35**																
	N			**37**	**36**	**36**	**36**																

N	PATID	Protocol	Group	Age	Race	Sex	Ashk.?	Accrual Date	Age at Death	Motor Dysf Age at Onset	OH Sx Age at Onset	Time Onset to Study	L-Dopa responsive	Orth Hypotension	Orth Intolerance	Urinary symptoms	Impotence	Constipation	Decreased sweat	Slurred Speech	Depression	Dementia	Fatigue
					White=1	M=1	Y=1			years	PAF	years	Movement	Yes=1	Yes=1	Yes=1	Yes=1	Yes=1	Yes=1	Yes=1	Yes=1	Vis. halluc., dec. mem., MoCA	Yes=1
1	00241	03N0004	PAF	52.9	1	1	0	2003/12/09			43	10											
2	01096	03N0004	PAF	57.2	1	0	0	2005/06/15			57	0		1	1	1	0	1	0	0	0	0	1
3	01411	03N0004	PAF	63.5	1	1	0	2005/08/03															
4	01702	03N0004	PAF	69.6	1	1	0	2007/01/16	79.1		67	3		1	1	0	1	1	1	0	0	0	1
5	02006	03N0004	PAF	83.1	1	1	0	2008/08/06			79	4											
6	01500	03N0004	PAF	65.0	1	1	0	2008/08/20	69.2		53	12		1	1	1	1	1	1	0	1	0	1
7	02353	03N0004	PAF	67.2	1	0	0	2010/02/24			64	3		1	1	1		1	1	0	0	0	0
8	02790	03N0004	PAF	76.3	1	0	0	2011/07/06															
9	03101	03N0004	PAF	75.0	B	1	0	2012/05/30						1	1	1	1	1	0	0	0	1	1
10	03063	03N0004	PAF	44.7	1	1	0	2012/10/19															
11	02966	03N0004	PAF	79.5	1	1	0	2012/12/03			75	5		1	1	1	1	0	0	0	1	0	0
12	03212	03N0004	PAF	56.6	1	0	0	2013/10/08			37	20		1	1	1		1	0	1	0	0	1
13	03533	03N0004	PAF	62.9	1	1	0	2015/07/28			56	7		1	1		1	1	1	0	0	1	1
14	03682	03N0004	PAF	55.4	1	1	0	2017/08/16			50	5		1	0	1	1	1	0	0	0	0	1
15	03750	03N0004	PAF	69.1	1	1	0	2018/08/13						1	1	0	1	1	1	0	1	1	1
16	03751	03N0004	PAF	60.4	1	1	1	2018/10/01			55	5		1	1	1	1	1	1	0	1	0	1
17	03789	18N0140	PAF	60.8	1	0	1	2019/02/04						1	1	0		1	1	0	0	1	1
18	03816	18N0140	PAF	67.7	1	1	0	2019/07/22						0	0	1	1	0	0	0	0	0	0
19	03844	18N0140	PAF	72.8	1	1	0	2020/01/27			60	13		1	1	1	1	0	1	0	0	0	1
	MEAN			**65.3**	**18**	**14**	**2**																
	SEM			**2.2**	**18**	**22**	**34**																
	N			**19**	**36**	**36**	**36**																

N	RBD Sx	On Sinemet?	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Smell Test Date	Smell Test Score	Smell	Anosmia	UPDRS Date	UPDRS (Off)	MRI	Cortical Atrophy/Dil. Ventricles?	White Mtr. Lesions?	Cortisol	K	Glu
	Yes=1	*ON=1*	*Selegline*	*Rasagiline*	*DA Agonist*	*Amantadine*	*COMTI*	*Florinef*	*Midodrine*	*SSRI*	*Aspirin*	*Betablk.*	*PPI*						*of 176*		*1=Yes*	*1=Yes*	*mcg/dL*	*mmol/L*	*mg/dL*
1		0	0	0	0	0	0	0	1	0	0	0	0						47					4.4	93
2		0	0	0	0	0	0	0	0	0	0	0	0										16.3	4.2	99
3		1	0	0	0	1	0	1	1	0	1	0	0												
4		0	0	0	0	0	0	0	1	0	0	0	0										11.9	3.2	102
5		0	0	0	1	0	0	1	1	0	0	0	0	2006/05/08	17	Anosmia	1	2006/05/11	35				5.5	3.6	133
6		0	0	0	1	0	0	0	0	1	1	0	0	2006/11/27	24	Severe	0			2006/11/27	1	0	18.5	3.7	142
7		0	0	0	0	0	0	0	1	0	0	0	0	2008/07/22	11	Anosmia	1	2008/07/23	73	2008/07/21	0	1		5.0	96
8		0	0	0	0	1	0	1	1	0	1	0	0	2010/01/27	20	Severe	0	2010/01/27	19	2010/01/22	1	1	8.4		
9		0	0	0	0	0	0	0	0	0	1	1	0	2010/06/30	15	Anosmia	1	2010/06/30	39	2010/08/23	1	0	6.9	4.7	85
10		1	0	0	1	0	0	1	0	0	0	1	0	2010/06/02	35	Normal	0	2010/09/09	64		1		8.1	4.0	87
11		0	0	0	0	0	1	0	1	0	1	1	0							2011/04/12	1	1	10.1	3.9	97
12		0	0	0	0	0	0	0	0	0	1	0	0							2012/04/02	0	1	13.0	4.5	85
13		0	0	0	0	0	0	0	0	1	1	0	1					2014/01/13	29						
14		0	0	0	0	0	0	0	0	1	0	0	1	2014/04/08	17	Anosmia	1	2014/04/07	45	2014/04/07	1	0	2.5	4.0	108
15		1	0	0	0	0	0	0	0	0	0	0	1	2015/01/27	23	Severe	0	2015/04/13	20	2015/04/13	1	1	6.7	3.8	113
16	1	1	0	1	1	1	0	0	1	0	0	0	0	2014/07/21	29	Moderate	0	2014/07/21	49	2014/07/21	1	1	7.3	3.7	80
17	1	0	0	0	0	0	0	1	0	1	0	0	0	2015/06/03	18	Anosmia	1	2015/06/03	43	2015/06/01	0	1	6.7	4.6	95
18	1	0	0	0	0	0	0	0	0	0	0	0	0	2017/11/16	13	Anosmia	1	2017/11/15	50	2017/11/13	1	1	10.5	4.1	88
19	0	1	0	1	1	0	0	1	1	0	0	1	1	2018/09/26	23	Severe	0	2018/09/24	46	2018/09/24	1	1	10.7	3.5	92
20	1	0	0	0	0	0	0	0	0	1	0	0	0	2019/08/21	11	Anosmia	1	2019/08/18	41	2019/08/21	0	1	10.2	4.7	117
21		0	0	1	1	0	1	0	0	0	0	0	0	2005/12/11	27	Moderate	0	2005/09/09	26	2005/12/13	0	0		4.0	111
22	0	0	0	0	0	0	0	0	0	0	1	0	0	2007/06/11	29	Moderate	0	2007/06/13	26	2007/06/14	0	0	6.3	3.8	91
23	1	0	0	0	0	0	0	0	0	1	0	0	0	2008/02/27	38	Normal	0	2008/02/29	20	2008/02/26	1	0	9.5	4.2	84
24	1	0	0	0	1	0	0	0	0	0	0	0	1	2010/12/16	13	Anosmia	1	2010/12/16	49	2010/12/14	0	1	13.5	4.3	88
25	0	0	0	0	1	0	0	0	0	1	0	0	1	2010/03/22	10	Anosmia	1	2010/03/24	44	2010/03/29	0	0	8.1	4.3	112
26	1	0	0	0	0	0	0	0	0	0	0	0	0	2011/02/25	37	Normal	0			2011/02/23	0	0	5.4	4.3	89
27	1	0	0	0	0	0	0	0	0	1	0	1	1	2012/10/01	15	Anosmia	1	2012/10/01	59	2012/10/04	0	1	3.5	4.2	116
28		0	0	0	0	0	0	0	0	0	0	0	0							2013/07/22					
29	1	1	0	0	1	0	0	0	0	1	0	0	0	2014/02/25	26	Moderate	0	2014/02/21	39	2014/02/24	1	1	10.2	4.2	93
30	0	1	0	0	0	0	0	0	0	0	0	0	0							2014/08/11	1	1	7.0	5.1	83
31	1	0	0	1	0	0	0	1	0	1	0	0	0	2014/09/30	24	Severe	0	2014/09/30	25	2014/09/29	0	0		3.6	87
32	0	0	0	0	1	0	0	0	0	0	0	0	0	2015/12/10	8	Anosmia	1	2015/12/04	57	2015/12/08	0	1	18.6	4.4	89
33	1	1	0	0	0	0	0	0	0	0	1	0	0	2016/02/06	13	Anosmia	1	2016/02/22	49	2016/02/23	0	1	6.1	3.6	200
34		0	0	1	0	0	0	0	0	0	0	0	0												
35	1	0	0	0	0	0	0	1	0	0	0	1	0	2019/05/21	28	Moderate	0	2019/05/20	17	2019/05/20	1	1	20.5	3.8	86
36	0	1	0	0	0	0	0	0	0	0	0	1	1	2019/08/06	30	Mild	0	2019/08/07	27	2019/08/05	0	0	10.6	4.6	106
		9	**0**	**5**	**10**	**3**	**2**	**7**	**9**	**9**	**10**	**7**	**8**		**21**		**12**		**40**		**14**	**17**	**9.7**	**4.1**	**101.5**
		27	**36**	**31**	**26**	**33**	**34**	**29**	**27**	**27**	**26**	**29**	**28**		**2**		**24**		**3**		**22**	**19**	**0.9**	**0.1**	**4.2**
		36	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**		**26**		**36**		**26**		**36**	**36**	**28**	**31**	**31**

N	RBD Sx	On Sinemet?	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Smell Test Date	Smell Test Score	Smell	Anosmia	UPDRS Date	UPDRS (Off)	MRI	Cortical Atrophy/Dil. Ventricles?	White Mtr. Lesions?	Cortisol	K	Glu
	Yes=1	*ON=1*	*Selegline*	*Rasagiline*	*DA Agonist*	*Amantadine*	*COMTI*	*Florinef*	*Midodrine*	*SSRI*	*Aspirin*	*Betablk.*	*PPI*						*of 176*		*1=Yes*	*1=Yes*	*mcg/dL*	*mmol/L*	*mg/dL*
1		0	0	0	0	0	0	1	1	0	0	0	0	2005/11/04	30	Moderate	0			2005/12/06					
2		0	0	0	1	0	1	0	0	0	0	0	0	2005/12/06	24	Severe	0	2005/12/06	40	2005/12/09	1	0			
3		0	0	0	0	0	0	0	1	0	0	0	0	2006/02/16	37	Normal	0			2006/02/14	0	1			
4		0	0	0	0	0	0	1	1	0	0	0	0	2006/04/04	28	Moderate	0			No CRIS record.					
5		0	0	0	0	0	0	0	0	0	0	0	0	2007/07/17	34	Normal	0	2007/07/17	43	2007/07/19	0	1	21.0		
6		0	0	0	0	1	0	1	0	0	0	0	0	2007/10/22	22	Severe	0	2007/10/26	44	2007/10/22	0	0	6.2		
7		0	0	0	0	0	0	0	1	0	0	0	0												
8		0	0	0	0	0	0	0	0	0	0	0	0												
9	1	0	0	0	0	0	0	0	0	0	0	0	1	2014/08/06	37	Normal	0	2014/08/08	33	2014/08/04	0	0	2.3	4.0	95
10	1	0	0	0	0	0	0	0	0	0	0	0	0	2015/05/28	34	Mild	0	2015/05/28	53	2014/05/27	1	0	12.4	4.3	95
11	1	0	0	0	0	0	0	0	0	1	0	0	1	2015/05/08	31	Mild	0	2015/09/21	53	2015/09/22	1	1	7.6	4.6	124
12	1	0	0	0	0	0	0	0	0	0	0	0	1	2017/08/03	35	Normal	0	2017/08/01	57	2017/07/31	0	0	4.7	4.2	130
13		0	0	0	0	0	0	0	0	0	0	0	0												
14		0	0	0	1	1	1	0	0	0	0	0	0												
15		0	0	0	0	0	0	1	0	0	0	0	0							2004/12/14	0	0			
16		0	0	0	0	1	0	0	0	0	0	0	0	2006/03/27	37	Normal	0			2006/03/27	0	1			
17		0	0	0	0	0	1	1	1	0	0	0	0	2006/06/05	39	Normal	0			2006/06/08	0	0			
18		0	0	0	0	0	0	0	0	0	1	0	0	2006/07/10	34	Normal	0			2008/12/02	1	0			
19		0	0	0	0	0	0	0	0	0	1	0	1	2006/07/17	39	Normal	0								
20		0	0	0	1	0	0	0	0	1	0	0	1	2007/03/26	30	Mild	0	2007/03/30	38	2007/04/02	1	1	9.9		
21		0	0	0	0	0	0	1	1	0	0	0	0	2008/03/25	16	Anosmia	1	2008/03/28	13	No CRIS record.			12.8		
22			1	0	0	0	0	0	0	0	0	0	0	2008/11/21	23	Mild	0	2008/11/18	68	2008/11/18	0	0			
23			0	0	0	0	0	0	1	1	0	0	1	2009/05/12	29	Moderate	0	2009/05/14	34	2009/05/13	0	0			
24		1 held for testing	0	0	0	0	0	0	0	1	1	0	0												
25	1	1	0	0	0	0	1	1	0	0	1	0	0	2011/05/12	20	Severe	0			2011/05/07	1	0			
26	1	0	0	0	0	0	0	0	0	1	0	0	1	2011/07/18	27	Moderate	0			2011/07/18	0		13.1	4.7	96
27	1	1 held for testing	0	0	0	0	0	0	0	0	0	0	0	2011/10/03	37	Normal	0	2011/12/20	31	2011/10/03	0	1	14.6	4.1	95
28	1	0	0	0	0	0	0	1	1	0	0	0	0	2012/08/01	39	Normal	0	2012/08/06	44	2012/07/30	0	0	13.5	4.1	96
29	0	0	0	0	0	0	0	0	0	0	0	0	0	2013/10/14	35	Normal	0	2013/10/12	38	2013/10/18	0	0	13.5	3.8	94
30			0	0	0	0	0	0	0	0	0	0	0												
31		1 held for testing	0	0	0	0	0	1	1	0	1	1	0	2014/09/24	30	Moderate	0	2014/09/25	69	2014/09/22	0	1	12.5	3.9	134
32		0	0	0	0	0	0	0	0	0	1	0	0	2014/09/24	29	Moderate	0	2014/09/25	60	2014/09/22	1	1			
33		0	0	0	0	0	0	0	0	0	0	0													
34	1	1 held for testing	0	0	1	0	0	0	0	1	0	0	0	2017/07/26	29	Moderate	0	2017/07/27	57	2017/07/26	0	0	12.4	4.5	103
35	1	0	0	0	0	0	0	0	1	0	0	0	1	2018/09/12	36	Normal	0	2018/09/11	6	2018/09/10	0	0	7.6	4.4	89
36	0	1 held for testing	0	0	0	0	0	1	0	0	0	0	0	2019/06/26	33	Mild	0	2019/06/26	77	Not done			8.0	4.1	98
37	0	0	0	0	0	0	0	0	0	0	0	0	0	2014/10/30	35	Normal	0	2014/10/30	12	2014/10/27	0	1	10.8	4.0	92
		1	**1**	**0**	**4**	**3**	**4**	**11**	**9**	**7**	**6**	**0**	**8**		**31**		**1**		**44**		**7**	**9**	**10.8**	**4.2**	**103.2**
		35	**35**	**36**	**32**	**33**	**32**	**25**	**27**	**29**	**30**	**36**	**28**		**1**		**35**		**4**		**29**	**27**	**1.1**	**0.1**	**4.3**
		36	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**		**29**		**36**		**20**		**36**	**36**	**17**	**13**	**13**

N	RBD Sx	On Sinemet?	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Other Rxs	Smell Test Date	Smell Test Score	Smell	Anosmia	UPDRS Date	UPDRS (Off)	MRI	Cortical Atrophy/Dil. Ventricles?	White Mtr. Lesions?	Cortisol	K	Glu
	Yes=1	*ON=1*	*Selegline*	*Rasagiline*	*DA Agonist*	*Amantadine*	*COMTI*	*Florinef*	*Midodrine*	*SSRI*	*Aspirin*	*Betablk.*	*PPI*						*of 176*		*1=Yes*	*1=Yes*	*mcg/dL*	*mmol/L*	*mg/dL*
1		0	0	0	0	0	0	1	0	1	0	0	0												
2	0	0	0	0	0	0	0	1	0	1	0	0	0								0	0	13.4	4.1	104
3		0	0	0	0	0	0	0	1	1	0	0	0	2006/09/21	22	Severe	0			2006/09/19	0	0	4.0		
4	0	0	0	0	0	0	0	1	0	0	1	0	0	2007/01/17	11	Anosmia	1			2007/01/18	0	0	6.9	4.3	96
5		0	0	0	0	0	0	0	1	0	0	0	1	2008/08/02	19	Severe	0	2008/08/05	13	2008/08/08	1	1	16.6		
6		0	0	0	0	0	0	0	1	1	0	0	1	2008/08/18	29	Moderate	0			2008/08/22	1	0			
7	0	0	0	0	0	0	0	0	0	0	1	0	0	2010/02/22	35	Normal	0	2010/02/25	4	2010/02/22	0	0	9.1	4.0	84
8		0	0	0	0	0	0	0	0	0	1	0	0							2011/08/02	1	1	6.8	5.4	84
9	1	0	0	0	0	0	0	0	0	0	1	0	0							2012/10/25	1	1	11.6	4.3	79
10		0	0	0	0	0	0	1	0	0	0	0	0	2013/03/25	23	Severe	0	2013/03/24	11				10.7	4.2	91
11	1	0	0	0	0	0	0	1	1	0	0	0	0	2012/12/03	22	Severe	0	2012/11/30	5		1	0	15.8	4.6	88
12	1	0	0	0	0	0	0	1	1	1	0	0	1	2013/10/08	15	Anosmia	1	2013/10/08	16						
13	1	0	0	0	0	0	0	0	0	0	0	0	0	2015/10/20	26	Moderate	0	2015/10/19	3	2015/10/19	1	0	13.9	3.9	103
14	1	0	0	0	1	0	0	0	1	0	0	0	0	2017/08/23	33	Mild	0	2017/08/23	25				11.8	4.4	103
15	1	0	0	0	0	0	0	0	0	1	1	0	1	2018/08/15	11	Anosmia	1	2018/08/14	15	2018/08/13	1	1	9.5	4.7	93
16	0	0	0	0	0	0	0	1	1	0	1	0	0	2018/10/03	19	Severe	0	2018/10/04	11	2018/10/01	0	0	11.4	4.3	93
17	0	0	0	0	0	0	0	0	0	0	0	0	1	2019/02/13		Anosmia	1	2019/02/11	21	2019/02/11	1	1	2.5	4.2	86
18	1	0	0	0	0	0	0	0	1	0	0	0	0	2019/07/23	27	Moderate	0	2019/07/24	3	2019/07/22	0	1	19.6	4.6	106
19	0	0	0	0	0	0	0	0	1	0	0	0	0	2020/01/29	23	Severe	0	2020/01/29	2	2020/01/28	0	1	6.1	4.4	90
		0	**0**	**0**	**1**	**0**	**0**	**7**	**9**	**6**	**6**	**0**	**5**		**23**				**11**		**8**	**7**	**10.6**	**4.4**	**92.9**
		36	**36**	**36**	**35**	**36**	**36**	**29**	**27**	**30**	**30**	**36**	**31**		**2**				**2**		**28**	**29**	**1.2**	**0.1**	**2.3**
		36	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**		**14**				**12**		**36**	**36**	**16**	**14**	**14**