

Table 1 – Univariate and multivariate analysis of the association between baseline clinical features with change in MDS-UPDRS Part 3 at 48 weeks in patients treated with exenatide

DEMOGRAPHICS AND CHARACTERISTICS	SUBGROUP	CHANGE IN MDS-UPDRS PART 3 AT 48 WEEKS			
		Univariate analysis		Multivariate analysis	
		Beta Coefficient (SE)	P value	Beta Coefficient (SE)	P value
AGE		0.167 (0.1)	0.065*	NS	NS
		(-0.001, 0.359)			
GENDER	Men	Reference		Reference	
	Female	-1.716 (2.0)	0.425		
		(-5.364, 2.439)			
BMI		0.078 (0.1)	0.625		
		(-0.261, 0.370)			
DISEASE DURATION		-0.12 (0.2)	0.601		
		(-0.730, 0.267)			
HBA1C		-1.262 (2.2)	0.555		
		(-5.516, 3.435)			
LED AT BASELINE		0.002 (0.004)	0.652		
		(-0.006, 0.10)			
TREMOR DOMINANT MOTOR SUBTYPE		-4.840 (1.8)	0.01*	-4.414	0.007
		(-8.30, -1.0)		(-7.3, -1.2)	
MDS-UPDRS PART 1		-0.015 (0.190)	0.938		
		(-0.343, 0.424)			
MDS-UPDRS PART 2		0.328 (0.1)	0.008*	0.448	0.003
		(0.154, 0.572)		(0.2, 0.7)	
MDS-UPDRS PART 3		0.042 (0.1)	0.541		
		(-0.113, 0.181)			
MDS-UPDRS PART 4		-0.434 (0.3)	0.165*	NS	NS
		(-1.047, 0.112)			
UNIFIED DYSKINESIA RATING SCORE		-0.097 (0.1)	0.309		
		(-0.284, 0.089)			
NMSS		0.043 (0.3)	0.212		

		(-0.018, 0.120)	
<b>MADRS</b>		0.119 (0.2)	0.638
		(-0.237, 0.747)	
<b>PDQ-39</b>		0.072 (0.1)	0.394
		(-0.026, 0.295)	
<b>MATTIS-DRS2</b>		-0.192 (0.2)	0.207
		(-0.614, 0.071)	
<b>DAT IMAGING (STRIATAL BINDING RATIO)</b>			
	Mean putaminal uptake	-0.545 (2.2) (-4.215, 4.532)	0.795
	Mean Caudate uptake	1.126 (1.7) (-1.743, 5.235)	0.507
<b>BIOCHEMICAL FACTORS</b>			
<b>CSF EXENATIDE CONCENTRATION</b>		0.221 (0.17) (-0.182, 0.488)	0.231
<b>SERUM EXENATIDE CONCENTRATION</b>		0.002 (0.003) (-0.004, 0.009)	0.517
<b>CSF:SERUM EXENATIDE RATIO</b>		0.055 (0.4) (-0.989, 3.775)	0.735
<b>ANTI-EXENATIDE ANTIBODIES</b>		0.788 (2.8) (-1.621, 3.143)	0.497

Table 2 - Baseline demographics and disease characteristics of high responders / low responders in patients treated with exenatide

CHARACTERISTIC	SUBGROUP	HIGH-RESPONDER* (N=14)	LOW-RESPONDER (N=17)	P VALUE
<b>AGE, MEAN (SEM)</b>		60.1 (2.1)	63.9 (1.9)	0.200
	<50 years, n (%)	2 (14%)	1 (5%)	
	50-69 years, n (%)	9 (64%)	11 (65%)	
	>70 years, n (%)	3 (21%)	5 (30%)	
<b>AGE AT DIAGNOSIS</b>		53.8 (2.4)	57.7 (1.6)	0.377
<b>GENDER</b>	Female, n (%)	3 (21%)	6 (35%)	0.456
	Male, n (%)	11 (79%)	11 (65%)	
<b>BMI, MEAN (SEM)</b>		27.0 (1.0)	27.3 (1.0)	0.953
	Overweight BMI >25.0, n (%)	9 (64%)	11 (65%)	0.100
<b>DISEASE DURATION, YEARS, MEAN (SEM)</b>		6.29 (0.6)	6.4 (1.0)	0.597
	<4 years, n (%)	1 (7%)	3 (18%)	
	4-10 years, n (%)	13 (93%)	11 (64%)	
	>10 years, n (%)	0 (0%)	3 (18%)	
<b>HBA1C, MEAN (SEM)</b>		5.7 (0.1)	5.5 (0.1)	0.336
	Peripheral insulin resistance HbA1c >39mmol/mol, n (%)	9 (64%)	8 (47%)	0.473
<b>LED AT BASELINE, MEAN (SEM)</b>		771.8 (57.1)	775.6 (72.9)	0.830
	Dopamine agonist, n (%)	11 (79%)	14 (82%)	
	MAO-B inhibitor, n (%)	10 (71%)	7 (41%)	
	COMT inhibitor, n (%)	4 (29%)	4 (24%)	
<b>MDS-UPDRS PART 1, MEAN (SEM)</b>		9.4 (1.6)	10.1 (0.9)	0.444
<b>MDS-UPDRS PART 2, MEAN (SEM)</b>		10.1 (1.2)	14.4 (1.9)	0.118
<b>MDS-UPDRS PART 3, MEAN (SEM)</b>		31.0 (1.9)	34.3 (2.8)	0.421
	Tremor dominant, n (%)	4 (29%)	1 (6%)	0.148
	<b>Speech Difficulties</b> (MDS-UPDRS Part 3.1 >2), n (%)	0 (%)	6 (35%)	0.021
	<b>Freezing of gait</b> (MDS-UPDRS Part 3.11) >1	1 (7%)	1 (5%)	0.607
	<b>Postural instability</b> (MDS-UPDRS Part 3.12 >2)	0 (0%)	5 (29%)	0.048
<b>MDS-UPDRS PART 4,</b>		5.2 (0.9)	4.2 (0.7)	0.399

<b>MEAN (SEM)</b>			
<b>UNIFIED DYSKINESIA RATING SCORE, MEAN (SEM)</b>	6.9 (2.3)	4.1 (1.7)	0.215
<b>NMSS, MEAN (SEM)</b>	19.29	28.94	0.071
<b>MADRS, MEAN (SEM)</b>	3.7143	4.4706	0.161
	Presence of depression (MADRS >7)	3 (21%)	4 (24%)
<b>PDQ-39, MEAN (SEM)</b>	18.5268	21.1060	0.186
<b>MATTIS-DRS2 TOTAL, MEAN (SEM)</b>	139.6 (0.9)	136.7 (1.4)	0.161
	MCI (Mattis-DRS-2 <137), n (%)	3 (21%)	9 (53%)
<b>ANTI-EXENATIDE ANTIBODIES, N (%)</b>	0 (0%)	3 (18%)	0.232

Table 3. Logistic regression model of prediction of response to exenatide (high responder defined as change in MDS-UPDRS Part 3 > 3.25)

	<b>REGRESSION COEFFICIENT</b>	<b>OR</b>	<b>95%CI FOR OR</b>	<b>P VALUE</b>
<b>AGE</b>	-0.07	0.94	0.83, 1.05	0.274
<b>TREMOR DOMINANT PHENOTYPE</b>	2.50	12.14	0.70, 210.3	0.086
<b>MDS-UPDRS PART 2 SCORE</b>	-0.17	0.85	0.72, 0.99	0.044
<b>MDS-UPDRS PART 4 SCORE</b>	0.17	1.19	0.87, 1.60	0.238

