Supplementary Table 1: Baseline demographic information for PD subjects who remained in vs. left the study

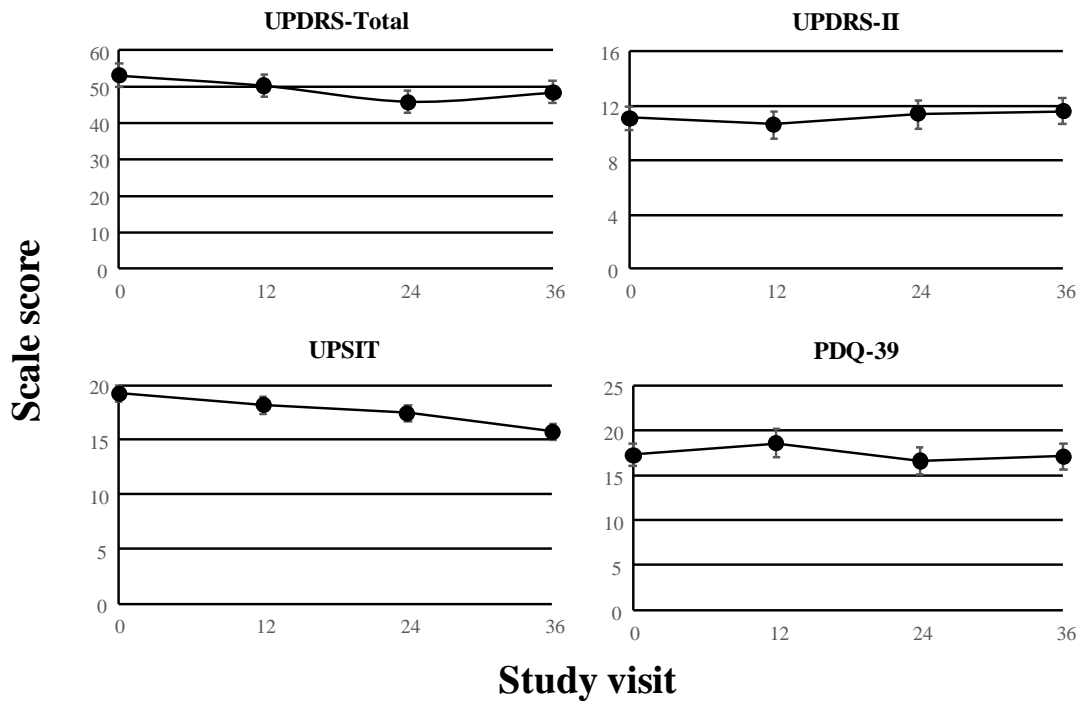|	Completer (n=80)	Non-Completer (n=45)	P value
Gender, n (M/F)	45/35	24/21	0.75
Age (y)	66.0 ± 8.4	70.6 ± 10.1	0.007
Education (y)	14.8 ± 2.9	14.4 ± 2.6	0.40
Clinical measures			
Disease duration (y), median (25th, 75th percentile)	3.8 (1.3, 8.6)	4.6 (0.6, 12.5)	0.99
LEDD (mg)	679 ± 407	577 ± 571	0.26
UPDRS-I	8.6 ± 5.8	13.3 ± 8.7	0.002
UPDRS-II	8.9 ± 7.9	15.0 ± 11.7	0.004
UPDRS-III	24.1 ± 14.4	39.6 ± 23.4	<0.001
UPDRS-IV	1.9 ± 2.8	2.9 ± 4.1	0.16
UPDRS-Total	43.4 ± 24.7	70.9 ± 40.8	<0.001
MoCA	24.6 ± 3.2	21.4 ± 5.4	<0.001
UPSIT	18.6 ± 7.3	20.1 ± 8.3	0.11
HDRS	5.6 ± 4.5	8.0 ± 6.0	0.02
PDQ-39	15.2 ± 13.0	21.9 ± 13.6	0.02

Values are mean ± SD unless otherwise indicated. Abbreviations: F = female; HRDS = Hamilton Depression Rating Scale; LEDD = levodopa equivalent daily dosage; M = male; MoCA = Montreal Cognitive Assessment; PDQ-39 = Parkinson's Disease Questionnaire; UPDRS = Unified Parkinson's Disease Rating Scale, I = non-motor experiences of daily living, II = motor experiences of daily living, III = motor examination; UPSIT = University of Pennsylvania Smell Identification Test

Supplementary Table 2: Estimated annual changes of common data elements for PD and PD subgroups with complete data
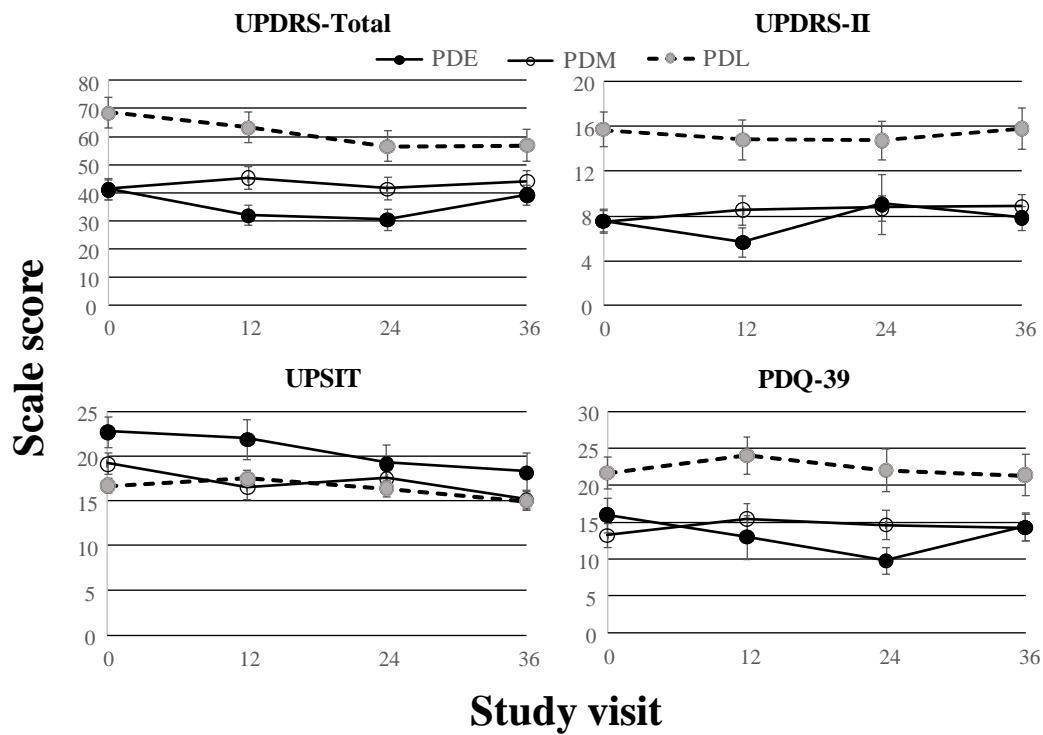
	PD		PDE		PDM		PDL	
	Estimate (95% CI)	P value	Estimate (95% CI)	P value	Estimate (95% CI)	P value	Estimate (95% CI)	P value
MDS-UPDRS I	0.43 (0.02, 0.85)	**0.041**	0.75 (-0.12, 1.62)	0.092	0.24 (-0.47, 0.96)	0.501	0.42 (-0.23, 1.06)	0.203
II	0.96 (0.49, 1.44)	**0.0001**	1.01 (0.01, 2.00)	**0.048**	0.48 (-0.34, 1.30)	0.247	1.32 (0.60, 2.05)	**0.001**
III	0.02 (-1.00, 1.03)	0.977	0.62 (-1.50, 2.75)	0.561	-0.55 (-2.31, 1.20)	0.532	0.14 (-1.44, 1.71)	0.861
Total	1.57 (0.07, 3.07)	**0.040**	2.30 (-0.83, 5.43)	0.148	0.51 (-2.07, 3.10)	0.694	2.03 (-0.29, 4.35)	0.085
MoCA	-0.25 (-0.47, -0.03)	**0.027**	0.05 (-0.40, 0.50)	0.817	-0.45 (-0.82, -0.08)	**0.018**	-0.26 (-0.61, 0.09)	0.144
UPSIT	-0.81 (-1.15, -0.47)	**<0.0001**	-1.43 (-2.13, -0.72)	**0.0002**	-0.91 (-1.47, -0.35)	**0.002**	-0.41 (-0.92, 0.10)	0.115
HDRS	0.12 (-0.23, 0.47)	0.489	0.34 (-0.37, 1.06)	0.345	0.30 (-0.29, 0.89)	0.314	-0.17 (-0.73, 0.39)	0.550
PDQ-39	0.98 (0.37, 1.59)	**0.002**	0.91 (-0.35, 2.18)	0.154	0.78 (-0.26, 1.82)	0.140	1.20 (0.23, 2.17)	**0.016**

Data represent the estimates for the annual rate of change for PD and PD subgroups using linear mixed effects repeated measures ANOVA models. 95% confidence intervals are in parentheses and the P value for each estimate is given. Significant changes are indicated by bold text.

Abbreviations: CI = confidence interval; HDRS = Hamilton Depression Rating Scale; LEDD = levodopa equivalent daily dosage; MoCA = Montreal Cognitive Assessment; PD = Parkinson's disease; PDQ-39 = Parkinson's Disease Questionnaire; UPDRS = Unified Parkinson's Disease Rating Scale, I = non-motor experiences of daily living, II = motor experiences of daily living, III = motor examination; UPSIT = University of Pennsylvania Smell Identification Test.

Supplementary Figure 1: Depiction of the metrics that changed significantly in PD subjects over the 36 months of the study. The data represent the raw mean and standard errors for each metric.

Supplementary Figure 2: Depiction of the significant metrics in the PD subgroups over the 36 months of the study. The data represent the raw mean and standard errors for each metric.