## PPMI ADVERSE EVENT LOG

**Instructions:** Assess for adverse events (observed, elicited from, or volunteered by the participant) at visits when SPECT imaging, lumbar puncture, or skin biopsy are conducted, as well as by telephone 2-3 days later and followed to resolution or appropriate outcome (not more than 30 days post-procedure). Enter each change in "severity" on a new row. Please specify start and stop dates as actual or estimated (representing your best reasonable estimate). If recording a <u>serious</u> adverse event, please refer to the Operations Manual for reporting guidance.

AE #	Adverse	Start Date	Stop Date	Severity	Serious	Relationship	How is it related	Resulted in	Complete when resolved
	Event	(mm/dd/yyyy)	(mm/dd/yyyy)	1=mild	0=no	to	1 =DaTscan	withdrawal	(or up to 30 days post-
				2=moderate	1=yes	Study	2 = LP	from study	procedure)
				3=severe		1 =unrelated	3=skin biopsy	0=no	Primary Outcome
						2=unlikely	4 = AV-133	1=yes	1=recovered
						3=possible	5 = MK-6240 PET		2=under
						4=probably	Scan		treatment/observation
						5=definite			3=change in AE
									characteristic
									4=sequela
									5=fatal
									6=unknown

### ADVERSE EVENT TELEPHONE ASSESSMENT

Complete this form for the telephone follow up 2-3 business days following a lumbar puncture, skin biopsy, or SPECT imaging procedure to assess for adverse events.

1. Was an LP, skin biopsy or DaTscan imaging scan conducted at this visit?	YES	NO
If no, question 2 does not require completion.		
<ul> <li>2. Was contact made during this telephone call?</li> <li>a. If no, indicate the reason: <ol> <li>= phone disconnected/number no longer in service</li> <li>= messages for participant were not returned</li> <li>= participant moved/unable to locate</li> <li>= other, please specify:</li> </ol> </li> </ul>	YES	NO

*If no, question 3 does not require completion.* 

3.	Where any adverse events reported by the participant?	YES	NO
----	---	-----	----

If yes, new adverse event(s) should be documented on the Adverse Event Log.

1.\_\_\_\_

## PPMI CLINICAL LABS

1. Blood for clinical labs: (0 = Not collected, 1 = Collected) If Not Collected (0), provide reason in Comments.

Comments:

## PPMI Conclusion of Study Participation

- 1. Date of conclusion of participation \_\_\_\_\_
- 2. Please select a reason for conclusion of study participation:
  - 01 = Completed study per protocol
  - 02 = Transportation/Travel issues (ex: logistics or travel, moved away from study site)
  - 03 = Burden of study procedures (other than travel)
  - 04 = Family, care-partner, or social issues
  - 05 = Non-compliance with study procedures
  - 06 = Adverse event
  - 07 = Death
  - 08 = Other, please specify:

3. Did increasing PD disability contribute to the decision to withdraw from PPMI 2.0?

YES NO

## PPMI Concomitant Medication Log

Row	Medication Name (generic preferred)	Start Date	Stop Date	Indication (See options below)

Indication Selections\*: Anxiety Atrial Fibrilation/Arrhythmias Benign Prostatic hypertrophy/overactive bladder Cognitive dysfunction Congestive heart failure Constipation Coronary artery disease, peripheral artery disease, stroke Daytime sleepiness Delusions, hallucinations, psychosis Depression Diabetes GERD Hyperlipidemia Hypertension Insomnia Nausea Pain **REM-behavior disorder** Restless Leg syndrome Sexual dysfunction Sialorrhea/drooling Supplements/homeopathic medication Thyroid disorder Vitamins/coenzymes Other, please specify: \_\_\_\_

\*Only above options will be available in EDC

## PPMI CONTINUING CONSENT

Discussion of continued consent in PPMI ensures that the participant and/or their research proxy still understands the voluntary nature of participation, has the opportunity to ask questions or express concerns, or may withdraw consent given previously.

1. Participant or research proxy confirmed willingness to continued participation in PPMI Clinical?

YES NO

If no, include comment and complete Conclusion of Participation form.

If no to Q1, skip Q2.

2. Participant or research proxy confirmed willingness for continued participation in PPMI Clinical optional activities (e.g., sharing of contact info, future contact by study team)?

YES NO

If no, update the Informed Consent Tracking Log.

Comment:

### DaTscan IMAGING

*Note: Women of childbearing potential must have a negative pregnancy test result <u>prior to</u> injection.* 

- 1. DaTscan imaging scan:
  - 0 = Not Completed
  - 1 = Completed at this visit

**2** = **Completed using a previously acquired DaTscan** (*i.e., acquired prior to participant's consent to PPMI*)

1a. If using a previously acquired DaTscan, provide date of scan: \_\_\_\_ / \_\_\_\_ / \_\_\_\_\_

If using a previously acquired DaTscan, record the Assessment Date as the date of this visit.

*If not completed, provide reason:* 

## PPMI DEMOGRAPHICS

- 1. Handedness:
  - 1 = Right
  - 2 = Left
  - 3 = Mixed
- Does participant identify their ethnicity as being Hispanic or Latino (Spanish origin)? (0 = No, 1 = Yes, 2 = Unknown or not reported)
- Does participant identify as being of Ashkenazi Jewish descent? (0 = No, 1 = Yes, 2 = Unknown or not reported)
- Does participant identify as being of Basque descent? (0 = No, 1 = Yes, 2 = Unknown or not reported)
- Does the participant identify as being of African Berber descent? (0 = No, 1 = Yes, 2 = Unknown or not reported)
- 6. Do you identify yourself as being American Indian or Alaska Native? (0 = No, 1 = Yes, 2 = Unknown or not reported)
- 7. Do you identify yourself as being Asian? (0 = No, 1 = Yes, 2 = Unknown or not reported)
- Do you identify yourself as being Black or African American? (0 = No, 1 = Yes, 2 = Unknown or not reported)
- 9. Do you identify yourself as being Native Hawaiian or Other Pacific Islander? (**0** = **No**, **1** = **Yes**, **2** = **Unknown or not reported**)
- 10. Do you identify yourself as being White? (0 = No, 1 = Yes, 2 = Unknown or not reported)
- 11. Do you identify yourself with a race category not specified on this form? (0 = No, 1 = Yes, 2 = Unknown or not reported) If "Yes", please specify:

## DOCUMENTATION OF INFORMED CONSENT

## Instruction: Document date participant signed consent as the "Assessment Date" above.

## **#1-8 MUST = Yes in order to consent to participation in PPMI Clinical.**

- 1. Informed consent was discussed with participant and/or legally authorized representative for the PPMI Clinical study. **YES NO**
- 2. Consent form was provided to the participant and/or legally authorized representative for review. **YES NO**
- 3. Participant and/or legally authorized representative were given adequate time to read the consent form and discuss the study with study staff and/or person of participant's choice. **YES NO**
- 4. Participant and/or legally authorized representative signed and dated the informed consent. **YES NO**
- 5. Copy of the consent form was provided to the participant and/or legally authorized representative upon conclusion of the consent process. **YES NO**
- 6. Consent has been signed prior to any study procedures being performed. **YES NO**
- 7. Informed consent obtained by person authorized on site delegation log. **YES NO**
- During the informed consent process, the participant and/or authorized representative had the opportunity to ask questions and receive answers by study personnel.
   YES NO
- Comments (if any of the above steps were not completed, note below, including corrective action if applicable) this must be completed if any questions 1-8 not selected "yes".

Participant ID

Visit Number

## **EPWORTH SLEEPINESS SCALE**

- A. <u>Source of Information</u>: 1 = Participant, 2 = Caregiver/Informant,
  - 3 = Participant and Caregiver/Informant

How likely are you to doze off or fall asleep in situations described below, in contrast to feeling just tired? This refers to your usual way of life in recent times. Even if you haven't done some of these things recently try to work out how they would have affected you. Use the following scale to choose the **most appropriate number** for each situation:

0 = would never doze
1 = slight chance of dozing
2 = moderate chance of dozing 3 =
high chance of dozing

## It is important that you answer each question as best you can.

1.	Sitting and reading	1.
2.	Watching TV	2.
3.	Sitting, inactive in a public place (e.g., a theatre or a meeting)	3.
4.	As a passenger in a car for an hour without a break	4.
5.	Lying down to rest in the afternoon when circumstances permit	5.
6.	Sitting and talking to someone	6.
7.	Sitting quietly after a lunch without alcohol	7.
8.	In a car, while stopped for a few minutes in the traffic	8.

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## **FAMILY HISTORY**

1. Do you have any known family history of Parkinson's Disease or Parkinsonism?

## Yes No

### Instructions:

Completion of the following questions will capture people in your family with and without Parkinson's disease or Parkinsonism. Please indicate the number of relatives (living or deceased) for each family type listed below and the number of these relatives who have or had PD or Parkinsonism.

For example, if you have two maternal aunts and one has PD, enter "2" in the Number of Family Members box and enter "1" in the Number with PD or Parkinsonism box. If you have 2 full brothers and 2 full sisters and none have PD or Parkinsonism, enter "2" in the Number of Family Members box for each family type and "0" in the Number with PD or Parkinsonism box. If you are unsure if the listed relative had PD or Parkinsonism, please add a "0" to the Number with PD box.

	Number of Family Members	Number with PD or Parkinsonism
Biological Mother	1	
Biological Father	1	
Full Brothers		
Full Sisters		
Maternal Half Siblings		
Paternal Half Siblings		
Maternal Grandmother	1	
Maternal Grandfather	1	
Paternal Grandmother	1	
Paternal Grandfather	1	
Maternal Aunts and Uncles		
Paternal Aunts and Uncles		
Maternal Cousins		
Paternal Cousins		
Children		

<sup>2.</sup> Do you have a more distant relative not listed above who has/had Parkinson's disease or Parkinsonism? **Yes No** 

## PPMI Features of Parkinsonism

1.	Bradykinesia:	Defined as slowness of movement AND decrement in amplitude or speed or progressive hesitations / halts as movements are continued				
	Bradykinesi	a is present and typical for parkin	sonism <b>Yes</b>	No	uncertain	
2.	Rigidity:	Judged on slow passive movem relaxed position. Rigidity refers independent resistance to pass relax. Isolated cogwheeling with minimum requirements for rigid	to "lead-pipe" ive movement hout lead-pipe	resistance that not solely refle	t is velocity- ecting failure to	
	Rigidity is p	resent and typical for parkinsonis	m <b>Yes</b>	No	uncertain	
3.	Rest tremor:	Rest tremor refers to 4-6 Hz tre suppressed during movement in qualify for parkinsonism criteria	nitiation. Kinet	, 0		
	Rest tremor	is present and typical for parkins				
			Yes	Νο	uncertain	
4.	Postural or gait disturbance:	Postural instability not caused b cerebellar or proprioceptive dy	• • •	al, vestibular,		
	Postural dis	turbance is present and typical fo	•			
			Yes	Νο	uncertain	

- 5. To what degree are you confident that this participant has abnormalities consistent with a neurodegenerative parkinsonian syndrome (PS)?
  - 1 = Abnormalities that are signs of PS (90 100%)
  - 2 = Abnormalities that are likely signs of PS (70 89%)
  - 3 = Abnormalities that may be signs of PS (50 69%)
  - 4 = Non-specific abnormalities (25 49%)
  - 5 = No evidence of parkinsonian signs (0 24%)

### FREEZING AND FALLS

- A. Indicate the source of information:
  - 1 = Participant 2 = Caregiver/Informant 3 = Participant and Caregiver/Informant
- 1. Does the participant currently experience freezing of gait?
  - 0 = None
  - 1 = Rare freezing when walking; may have start hesitation
  - 2 = Occasional freezing when walking
  - 3 = Frequent freezing; occasional falls from freezing
  - 4 = Frequent falls from freezing
- 2. Does the participant currently experience falls not related to freezing of gait?
  - 0 = None
  - 1 = Rare falling
  - 2 = Occasionally falls, less than once per day
  - 3 = Falls on average of once daily
  - 4 = Falls more than once daily
- 3. In the past 12 months, has the participant experienced freezing of gait?
  - 0 = None
  - 1 = Rare freezing when walking; may have start hesitation
  - 2 = Occasional freezing when walking
  - 3 = Frequent freezing; occasional falls from freezing
  - 4 = Frequent falls from freezing
- In the past 12 months, has the participant experienced falls that were not related to freezing of gait?
  - 0 = None
  - 1 = Rare falling

- 2 = Occasionally falls, less than once per day
- 3 = Falls on average of once daily
- 4 = Falls more than once daily

## Instructions to Match EDC dynamic functionality:

If the participant responded options 3-4 to question #1, complete questions #5-6. If the participant responded options 1-4 to question #2, complete questions #5-6. If the participant responded options 3-4 to question #3, complete questions #5-6. If the participant responded options 1-4 to question #4, complete questions #5-6.

5. Did any of these falls result in the following injuries?

5a. Fracture of the hip or lower limb	YES	NO
5b. Fracture of upper extremity	YES	NO
5c. Skull fracture	YES	NO
5d. Other fracture	YES	NO
If yes, please specify:		
5e. Head injury without loss of consciousness	YES	NO
5f. Head injury with loss of consciousness	YES	NO
5g. Laceration requiring sutures (stitches)	YES	NO
	YES	NO
5e. Other		

## 6. Did any of these falls result in:

6a. Outpatient visit to a healthcare provider (Including urgent care facility) YES				
6b. Visit to the ER	YES	NO		
6c. Hospitalization	YES	NO		
6d. Surgery	YES	NO		
6e. Institutionalization	YES	NO		

## **GENERAL PHYSICAL EXAM**

Organ	n system abnormalities by e	xamination:	
1.	Skin:		
	Normal	Abnormal	Cannot Assess
	If abnormal, describe briefly:		
2.	Head/Neck/Lymphatic:		
	Normal	Abnormal	Cannot Assess
	If abnormal, describe briefly:		
3.	Eyes:		
	Normal	Abnormal	Cannot Assess
	If abnormal, describe briefly:		
4.	Ears/Nose/Throat:		
	Normal	Abnormal	Cannot Assess
	If abnormal, describe briefly:		

5. Lungs:

	Normal	Abnormal	Cannot Assess
	If abnormal, describe briefly:		
6.	Cardiovascular (including per	ripheral vascular):	
	Normal	Abnormal	Cannot Assess
	If abnormal, describe briefly:		
7.	Abdomen:		
	Normal If abnormal, describe briefly:	Abnormal	Cannot Assess
8.	Musculoskeletal: Normal	Abnormal	Cannot Assess
	If abnormal, describe briefly:		
9.	Neurological (not including P	D, if applicable):	
	Normal	Abnormal	Cannot Assess
	If abnormal, describe briefly:		

Participa	ant ID			Visit Date
Visit Nur	nber			Site #
10.	Psychiatric:			
	Normal	Abnormal	Cannot Assess	
	If abnormal, describe brid	efly:		
11.	Other:			
	Specify and describe brie	əfly:		

Visit Number

## PPMI

## **GERIATIRIC DEPRESSION SCALE-15**

Choose the best answer for how you have felt over the **past week**. (0 = No, 1 = Yes)

1.	Are you basically satisfied with your life?	1.
2.	Have you dropped many of your activities and interests?	2.
3.	Do you feel that your life is empty?	3.
4.	Do you often get bored?	4.
5.	Are you in good spirits most of the time?	5.
6.	Are you afraid that something bad is going to happen to you?	6.
7.	Do you feel happy most of the time?	7.
8.	Do you often feel helpless?	8.
9.	Do you prefer to stay at home, rather than going out and doing new things?	9.
10.	Do you feel you have more problems with memory than most?	10.
11.	Do you think it is wonderful to be alive now?	11.
12.	Do you feel pretty worthless the way you are now?	12.
13.	Do you feel full of energy?	13.
14.	Do you feel that your situation is hopeless?	14.
15.	Do you think that most people are better off than you are?	15.

Sheikh JI, Yesavage JA: Geriatric Depression Scale (GDS): Recent evidence and development of a shorter version. Clinical Gerontology: A Guide to Assessment and Intervention. 165-173, NY: The Haworth Press, 1986.

## Healthy Control Inclusion/Exclusion Criteria

# All inclusion criteria must be marked "yes" and all exclusion criteria must be marked "no" before proceeding to enrollment. Otherwise, complete "Screen Fail" CRF.

Inclusion Criteria:

1. Male or Female age 30 years or older at Screening visit.

## YES NO

2. Individuals taking any of the following drugs: alpha methyldopa, methylphenidate,

amphetamine derivatives or modafinil, must be willing and medically able to hold the

medication for at least 5 half-lives before DaTscan imaging.

## YES NO

3. Confirmation that participant is eligible based on Screening DaTscan imaging.

## YES NO

4. Able to provide informed consent.

## YES NO

- 5. Either is male, or is female and meets additional criteria below, as applicable:
  - Female of childbearing potential who is not pregnant, lactating, or planning pregnancy during the study and has a negative pregnancy test on day of Screening DaTscan imaging test prior to injection of DaTscan

### YES NO

## Exclusion Criteria:

1. First degree relative with PD (i.e. biologic parent, sibling, child).

YES NO

2. Current or active clinically significant neurological disorder (in the opinion of the Investigator).

## YES NO

3. Previously obtained MRI scan with evidence of clinically significant neurological disorder (in the opinion of the Investigator).

## YES NO

4. Received any of the following drugs: dopamine receptor blockers (neuroleptics),

metoclopramide and reserpine within 6 months of Screening visit.

YES NO

5. Current treatment with anticoagulants (e.g., coumadin, heparin, oral thrombin inhibitors) that might preclude safe completion of the lumbar puncture.

## YES NO

 Condition that precludes the safe performance of routine lumbar puncture, such as prohibitive lumbar spinal disease, bleeding diathesis, or clinically significant coagulopathy or thrombocytopenia.

## YES NO

7. Any other medical or psychiatric condition or lab abnormality, which in the opinion of the investigator might preclude participation.

YES NO

## Informed Consent Tracking Log

Study	Site	Site IRB	Date ICF	Reason for Consent	Consent to	Consent to	Consent to	Consent to	Comment
Template	Version	Approval	Signed		share	share	re-contact	re-contact	
Version	Date	Date			contact info	contact info	for use of	for other	
Date					with FOUND	with	information	research	
					Y/N	Pathology	Y/N	Y/N	
						Core			
						Y/N/NA			
			• · · · · · · · · · · · · · · · · · · ·						

PPMI LEDD Concomitant Medication Log

Row	Medication Name (generic preferred)	Dose Strength	Units	Dose taken (1 tab, 2 tab etc)	Dose frequency per day (numeric	Start Date	Stop Date
					only- do not use TID, etc)		

## PPMI Lumbar Puncture

Note: Indicate date of CSF collection as the "Assessment Date".

Was the lumbar puncture for collection of CSF completed?
 0 = Not Done, 1 = Collected, 2 = Partial Collection, 3 = Attempted, no collection

## *If* Q1 = 0, 2 or 3, answer Q2.

Indicate primary reason for issues with CSF collection:

 Participant refused
 Participant not feeling well enough to attempt
 Site issues (e.g., scheduling difficulties on site end)
 History of difficulty obtaining LP (e.g., participant unable to tolerate procedure in the past; adverse events associated with prior lumbar punctures)
 S=Spinal issues (e.g., recent back surgery, spinal stenosis, etc.)
 Medical contraindications to lumbar puncture (e.g., started anticoagulants, lab results, altered mentation, focal neurologic signs, papilledema, seizures, tumor)
 Other, specify in comments

If Q1 = 0 no more responses required.

- 3. Date of last intake of food:
- 4. Time of last intake of food (24-hour clock):
- 5. Fasting status:
  - a. 1 = Fasted (minimum of 8 hours), 2 = Low-Fat Diet, 3 = Not Fasted, No Low-Fat Diet
- Is the participant on medication for treating the symptoms of Parkinson's disease?
   1= Yes
  - 2 = No

6a. Date of most recent PD medication dosing: *date field free text in MM/DD/YYY format* 6b. Time of most recent/in clinic PD medication dosing: *free test field to enter numbers HH:MM format:* 

- 7. Indicate needle used to collect CSF:
  - 1 = 20g Quincke (sharp bevelled) needle
  - 2 = 22g Quincke (sharp bevelled) needle
  - 3 = 25g Quincke (sharp bevelled) needle
  - 4 = 22g Sprotte (atraumatic) needle
  - 5 = 24g Sprotte (atraumatic) needle (preferred)

Participant ID

#### Visit Number

6 = 18g

- 7 = Other, specify in comments
- 8. Indicate method used to collect CSF:
  - 1 = Gravity
  - 2 = Syringe suction
- 9. Indicate location where LP performed:
  - 0 = L2-L3 Interspace
  - 1 = L3-L4 Interspace
  - 2 = L4-L5 Interspace
  - 3 = L5-S1 Interspace
  - 4 = Unknown
- 10. Position of participant when lumbar puncture performed:
  - 1 = Sitting, leaned over (preferred)
  - 2 = Lying, curled up on side
  - 3 = Prone
  - 4 = Unknown
  - 5 = Other, specify in comments
- 11. Time CSF collection completed: (24-hour clock)
- 12. Volume of CSF collected prior spinning: (milliliters)
- Time CSF was centrifuged: (24-hour clock) (Within 15 minutes from sample collection)
- 14. Rate of centrifugation for the CSF sample: (xg)a. Duration of centrifugation: (minutes)
- 15. Temperature at which CSF tube was spun: (Celsius)
- 16. Time CSF sample aliquotted: (24-hour clock)
- 17. Total volume of CSF aliquotted after spinning: (milliliters)
- 18. Total number of aliquot tubes:
- 19. Was part of sample discarded due to a bloody tap? (0 = No, 1 = Yes)
- 20. Indicate how samples stored: (1 = freezer, 2 = placed on dry ice)

## *If response = 1, complete Qa.*

- a. Storage temperature if placed in freezer: (Celsius)
- 21. Time samples were either placed in freezer or placed on dryice: (24-hour clock)
- 22. Was part of the sample sent to local lab for analyses? (0 = No, 1 = Yes, 2 = Site exemption) If No, specify in Comments.
  If response = Yes, Questions 23-26 required.
- 23. What is the white blood cell count (Units should be per cubic microliter)?
- 24. What is the red blood cell count (Units should be per cubic microliter)?
- 25. What is the total protein (Units should be mg/dL)?
- 26. What is the total glucose (Units should be mg/dL)?
- 27. Was a fluoroscopy performed? (0 = No, 1 = Yes) *If response = Yes, Question a required.*a. Date of fluoroscopy:
- 28. Was a lumbar spine film performed? (0 = No, 1 = Yes) *If response = Yes, Question a required.*a. Date of spine film:

If Q27 or Q28 = Yes, Question 29 is required.

29. Indicate reason for use of additional guidance:
1=Previously failed attempt
2=Uncertain about location
3=Part of standard procedure
4=Other

Visit Number

## PPMI MEDICAL CONDITIONS LOG

	CATEGORY:						
1d = De 1e Opht 1f = EN 1g = Pu 1h Card	rmatological halmological		1j =Hepatobiliary 1k = Renal 1I =Gynecological/Urologic 1m = Musculoskeletal 1n =Metabolic/Endocrine 1o = Hemato/Lymphatic	1q = Psych 1r = Allergy 1s = Other	niatric y/Immunologi	han disease under study c – Please note drug all CoV-2)	
Row #	Category (See KEY above)	Date of Diagnosis (MM/DD/YY YY)	Enter diagnosed medical conditions. Specify the disorder/diagnosis and use only one line per des <b>DO NOT ABBREVIATE.</b>		Resolved 0 = No 1 = Yes	Date of Resolution (MM/DD/YYYY)	

### MAGNETIC RESONANCE IMAGING

1. MRI scan:

1 = Completed

## 0 = Not Completed

- 2. Is participant on dopaminergic medication (Levodopa formulations or dopamine agonists) for treating the symptoms of Parkinson disease?
  - 0 = No
  - 1 = Yes

2a. Date of last dose prior to scan: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

2b. Time of last dose prior to scan: \_\_\_\_\_: \_\_\_\_(24-hour clock)

*If MRI not completed, provide reason:* 

#### **MODIFIED SCHWAB & ENGLAND ACTIVITIES OF DAILY LIVING**

#### Please provide assessment using 5-point increments between 0 and 100%

- 100% Completely independent. Able to do all chores without slowness, difficulty or impairment. Essentially normal. Unaware of any difficulty.
- 90% Completely independent. Able to do all chores with some degree of slowness, difficulty and impairment. Might take twice as long. Beginning to be aware of difficulty.
- 80% Completely independent in most chores. Takes twice as long. Conscious of difficulty and slowness.
- 70% Not completely independent. More difficulty with some chores. Three to four times as long in some. Must spend a large part of the day with chores.
- 60% Some dependency. Can do most chores, but exceedingly slowly and with much effort. Errors; some impossible.
- 50% More dependent. Help with half, slower, etc. Difficulty with everything.
- 40% Very dependent. Can assist with all chores but few alone.
- 30% With effort, now and then does a few chores alone or begins alone. Much help needed.
- 20% Nothing alone. Can be a slight help with some chores. Severe invalid.
- 10% Totally dependent, helpless. Complete invalid.
- 0% Vegetative functions such as swallowing, bladder, and bowel functions are not functioning. Bedridden.

Consensus Rating Percent: \_\_\_\_\_% (Investigator, participant, caregiver/informant)

### **Neurological Exam**

## Answers should be selected by checking the appropriate box. Only one response choice allowed per item.

## **Mental Status**

Normal	
Abnormal (specify:	)
Not tested	
Unable to test	

## Cranial Nerves (II –XII)

Normal	
Abnormal (specify:	)
Not tested	

Unable to test

## Motor exam (other than PD)

Normal	
Abnormal (specify:	)
Not tested	
Unable to test	

### Sensory exam

Normal	
Abnormal (specify:	)
Not tested	

Unable to test

## Coordination (other than PD)

Normal	
Abnormal (specify:	)
Not tested	

Participa	ant ID	
Visit Nu	mber	
	Jnable to test	
Reflexes		
	Normal	
	Abnormal (specify:)	
	Not tested	
	Jnable to test	
Gait (other tha	in PD)	
	Normal	
	Abnormal (specify:)	
	Not tested	

Unable to test

Visit Date

SIte #

#### **NEURO-QoL COGNITIVE FUNCTION SHORT FORM**

## Cognition Function-Short Form

Please respond to each question or statement by marking one box per row.

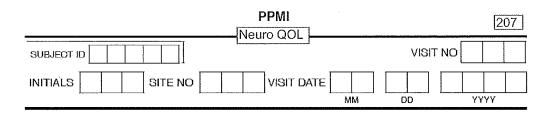
## How much DIFFICULTY do you currently have...

		None	· A little	Somewhat	A lot	Cannot do
NQCOG22r1	reading and following complex instructions (e.g., directions for a new medication)?	<b></b> 5	4	3	2	т 1
N0000241	planning for and keeping appointments that are not part of your weekly routine, (e.g., a therapy or doctor appointment, or a social gathering with friends and family)?	<b>.</b> 5		<b>_</b>	2	
NQCOG2511	managing your time to do most of your daily activities?	5			2	
NGCOG40r1	learning new tasks or instructions?	5		3	2	

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English March 6, 2014

#### **NEURO-QoL COMMUNICATION SHORT FORM**



Neuro-QOL Scale v1.0 - Communication - Short Form

#### **Communication – Short Form**

Please respond to each question or statement by marking one box per row.

## How much DIFFICULTY do you currently have...

		None	A little	Somewhat	A lot	Cannot do
NQCOG01	writing notes to yourself, such as appointments or 'to do' lists?	5	4	<b></b> 3	□ 2	
NQCOG04	understanding family and friends on the phone?	5	4	3	□ 2	
NQCOG08	carrying on a conversation with a small group of familiar people (e.g., family or a few friends)?	<b></b> 5	<b>—</b> 4	3	2 2	
NQCOG10	organizing what you want to say?	5	4	<b></b> 3	2	1
NQCOG11	speaking clearly enough to use the telephone?	5	4	3	2	

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English March 6, 2014

### NEURO-QoL LEF MOBILITY SHORT FORM

## Lower Extremity Function (Mobility) – Short Form

### Please respond to each question or statement by marking one box per row.

<b>,</b> , ,		Without any difficulty	With a little difficulty	With some difficulty	With much difficulty	Unable to do
NQMOB37	Are you able to get on and off the toilet?	5	□ 4		2 2	1
NQMOB30	Are you able to step up and down curbs?	5	□ 4	3	2	1
NQMOB26	Are you able to get in and out of a car?	5	□ 4	3	2	
NQMOB32	Are you able to get out of bed into a chair?	□ 5	4	3	2	
NQMOB25	Are you able to push open a heavy door?	5	□ 4	3	2	
NQMOB33	Are you able to run errands and shop?	5	4	3	2	
NQMOB31	Are you able to get up off the floor from lying on your back without help?	5	□ 4	3	2	
NQMOB28	Are you able to go for a walk of at least 15 minutes?	5	<b>—</b> 4	3	2	

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English March 6, 2014

1 2 9 7

#### PPMI

### **NEURO-QOL UEF FINE MOTOR ADLT SHORT FORM**

## Upper Extremity Function (Fine Motor, ADL) – Short Form

## Please respond to each question or statement by marking one box per row.

• manual property (	(	Without any difficulty	With a little difficulty	With some difficulty	With much difficulty	Unable to do
NQUEX29	Are you able to turn a key in a lock?	5	<b>—</b> 4	<b></b> 3	□ 2	
NQUEX20	Are you able to brush your teeth?	5		3	□ 2	1
NQJEX44	Are you able to make a phone call using a touch tone key-pad?	<b>–</b> 5	□ 4	3	2	1
NQUEX36	Are you able to pick up coins from a table top?	<b>D</b> 5	<b>—</b> 4	3	2	<b>.</b> 1
NQUEX30	Are you able to write with a pen or pencil?	<b>_</b> 5	<b>1</b>	3	2	
NQUEX28	Are you able to open and close a zipper?	<b>5</b>	4	<b>_</b> 3	2	
NQUEX33	Are you able to wash and dry your body?	5	<b>1</b> 4	3	2	
NQUEX37	Are you able to shampoo your hair?	<b>5</b>	4	3	□ 2	1

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English March 6, 2014

## PPMI OTHER CLINICAL FEATURES

## Other features supportive of Parkinson's disease

Other feat	ures supportive of Parkinson's disease						
1.	Stooped posture	Yes	No	uncertain			
2.	Decreased arm swing	Yes	No	uncertain			
3.	Shuffling gait	Yes	No	uncertain			
4.	Micrographia	Yes	No	uncertain			
5.	Diminished olfaction	Yes	No	uncertain			
6.	Seborrheic dermatitis	Yes	No	uncertain			
7.	Dream enactment suggestive of REM sleep behavior	Yes	No	uncertain			
	disorder						
<u>Atypical m</u>	otor features						
1.	Postural instability or gait freezing in the first 3 years	Yes	No	uncertain			
2.	Supranuclear gaze palsy	Yes	No	uncertain			
3.	Dysphagia	Yes	No	uncertain			
4.	Dysarthria	Yes	No	uncertain			
5.	Inspiratory stridor	Yes	No	uncertain			
6.	Disproportionate anterocollis	Yes	No	uncertain			
7.	Wide based gait / cerebellar features	Yes	No	uncertain			
8.	Myoclonous	Yes	No	uncertain			
9.	Dystonia	Yes	No	uncertain			
10.	Prominent action tremor	Yes	No	uncertain			
<u>Neurobeha</u>	avioral features						
1.	Cognitive fluctuations	Yes	No	uncertain			
2.	Systematized delusions or visual hallucinations unrelated to	Yes	No	uncertain			
	medications						
3.	Depression	Yes	No	uncertain			
4.	Anxiety	Yes	No	uncertain			
5.	Apathy	Yes	No	uncertain			
Other non-	-motor features associated with atypical parkinsonism						
1.	Symptomatic dysautonomia unrelated to medications, includ	ling:					
	1a. postural hypotension	Yes	No	uncertain			
	1b. sexual dysfunction	Yes	No	uncertain			
	1c. urinary dysfunction	Yes	No	uncertain			
	1d. bowel dysfunction	Yes	No	uncertain			
2.	Unequivocal cortical sensory loss (i.e., graphesthesia,	Yes	No	uncertain			
	stereognosis with intact primary sensory modalities)						
3.	Limb ideomotor apraxia	Yes	No	uncertain			
4.	Otherwise unexplained pyramidal tract signs	Yes	No	uncertain			
5.	Alien limb phenomenon	Yes	No	uncertain			
6.	Definite response to alcohol	Yes	No	uncertain			
Response to therapy							
1.	Clear and dramatic response to levodopa	Yes	No	N/A			
2.	Little or no response to levodopa	Yes	No	N/A			
3.	Neuroleptic super-sensitivity	Yes	No	N/A			
4.	Motor fluctuations	Yes	No	N/A			
5.	Dyskinesia	Yes	No	N/A			

## PARTICIPANT MOTOR FUNCTION QUESTIONNAIRE

Α.	A. Who completed this questionnaire?							
	1 = participant	2 = caregiver	3 = Participant a	nd Caregiver				
When answering these questions, please think about your current abilities.								
1.	Do you have trouble ris	ing from a chair?	0=No	1=Yes	2=Uncertain			
2.	Is your handwriting sma	aller than it once was?	0=No	1=Yes	2=Uncertain			
3.	Do people tell you that than it once was?	your voice is softer	0=No	1=Yes	2=Uncertain			
4.	Is your balance poor?		0=No	1=Yes	2=Uncertain			
5.	Do your feet ever seem	to get stuck to the floor?	0=No	1=Yes	2=Uncertain			
6.	Do people tell you that less expressive than it		0=No	1=Yes	2=Uncertain			
7.	Do your arms or legs sl	nake?	0=No	1=Yes	2=Uncertain			
8.	Do you have trouble bu	ttoning buttons?	0=No	1=Yes	2=Uncertain			
9.	Do you shuffle your fee steps when you walk?	t and/or take tiny	0=No	1=Yes	2=Uncertain			
10.	Do you move more slov people your age?	vly than other	0=No	1=Yes	2=Uncertain			
11.	Has anyone ever told y have Parkinson's disea	-	0=No	1=Yes	2=Uncertain			

# PPMI

#### PD DIAGNOSIS HISTORY

1.	Date of	f first symptom onset (per the participant):		_/	/
2.	Date of	f Parkinson's disease diagnosis:		_/	/
3.	. Were the following symptoms present at the time of diagnosis:				
	a.	Rigidity	YES	NO	UNKNOWN
	b.	Bradykinesia	YES	NO	UNKNOWN
	C.	Postural instability	YES	NO	UNKNOWN
	d.	Other	YES	NO	UNKNOWN
		i. If yes, please specify:			

4. Side predominantly affected at onset:

LEFT	RIGHT	SYMMETRIC	UNKNOWN

#### Parkinson's Disease Inclusion/Exclusion Criteria

# All inclusion criteria must be marked "yes" and all exclusion criteria must be marked "no" before proceeding to enrollment. Otherwise, complete "Screen Fail" CRF.

Inclusion Criteria:

1. Male or female age 30 years or older at Screening Visit.

# YES NO

2. A diagnosis of Parkinson disease for 2 years or less at Screening Visit.

#### YES NO

3. Not expected to require PD medication within at least 6 months from Baseline.

YES NO

 Patients must have at least two of the following: resting tremor, bradykinesia, rigidity (must have either resting tremor or bradykinesia); OR either asymmetric resting tremor or asymmetric bradykinesia.

#### YES NO

5. Hoehn and Yahr stage I or II at Baseline.

YES NO

6. Individuals taking any of the following drugs: alpha methyldopa, methylphenidate,

amphetamine derivatives or modafinil, must be willing and medically able to hold the medication for at least 5 half-lives before DaTscan imaging.

YES NO

7. Confirmation that participant is eligible based on Screening DaTscan imaging.

YES NO

- 8. Able to provide informed consent. **YES NO**
- 9. Either is male, or is female and meets additional criteria below, as applicable:
  - Female of childbearing potential who is not pregnant, lactating, or planning pregnancy during the study and has a negative pregnancy test on day of Screening DaTscan imaging test prior to injection of DaTscan

YES NO

Exclusion Criteria:

1. Currently taking levodopa, dopamine agonists, MAO-B inhibitors (e.g., selegiline, rasagiline), amantadine or another PD medication.

#### YES NO

 Has taken levodopa, dopamine agonists, MAO-B inhibitors or amantadine within 60 days of Baseline visit.

#### YES NO

3. Has taken levodopa or dopamine agonists prior to Baseline visit for more than a total of 90 days.

# YES NO

 Atypical PD syndromes due to either drugs (e.g., metoclopramide, flunarizine, neuroleptics) or metabolic disorders (e.g., Wilson's disease), encephalitis, or degenerative diseases (e.g., progressive supranuclear palsy).

#### YES NO

5. A clinical diagnosis of dementia as determined by the investigator.

#### YES NO

6. Previously obtained MRI scan with evidence of clinically significant neurological disorder (in the opinion of the Investigator).

#### YES NO

 Received any of the following drugs: dopamine receptor blockers (neuroleptics), metoclopramide and reserpine within 6 months of Screening visit.

# YES NO

8. Current treatment with anticoagulants (e.g., coumadin, heparin, oral thrombin inhibitors) that might preclude safe completion of the lumbar puncture.

# YES NO

 Condition that precludes the safe performance of routine lumbar puncture, such as prohibitive lumbar spinal disease, bleeding diathesis, or clinically significant coagulopathy or thrombocytopenia.

# YES NO

10. Any other medical or psychiatric condition or lab abnormality, which in the opinion of the investigator might preclude participation.

#### Parkinson's Disease-LRRK2 or GBA Inclusion/Exclusion Criteria

# All inclusion criteria must be marked "yes" and all exclusion criteria must be marked "no" before proceeding to enrollment. Otherwise, complete "Screen Fail" CRF.

Inclusion Criteria:

1. Male or female age 30 years or older at Screening Visit.

# YES NO

2. A diagnosis of Parkinson disease for 2 years or less at Screening Visit.

#### YES NO

3. Patients must have at least two of the following: resting tremor, bradykinesia, rigidity (must have either resting tremor or bradykinesia); OR either asymmetric resting tremor or asymmetric bradykinesia.

YES NO

4. Hoehn and Yahr stage I or II at Baseline.

# YES NO

 Confirmation of causative LRRK2 or GBA (willingness to undergo genetic testing as part of genetic screening and be informed of genetic testing results, or documentation of prior genetic testing results).

YES NO

 Individuals taking any of the following drugs: alpha methyldopa, methylphenidate, amphetamine derivatives or modafinil, must be willing and medically able to hold the medication for at least 5 half-lives before DaTscan imaging.

YES NO

7. Confirmation that participant is eligible based on Screening DaTscan imaging.

- 8. Able to provide informed consent. **YES NO**
- 9. Either is male, or is female and meets additional criteria below, as applicable:
  - Female of childbearing potential who is not pregnant, lactating, or planning pregnancy during the study and has a negative pregnancy test on day of Screening DaTscan imaging test prior to injection of DaTscan
  - YES NO

#### Visit Number

#### Exclusion Criteria:

1. Received any of the following drugs: dopamine receptor blockers (neuroleptics), metoclopramide and reserpine within 6 months of Screening visit.

#### YES NO

2. Current treatment with anticoagulants (e.g., coumadin, heparin) that might preclude safe completion of the lumbar puncture.

#### YES NO

 Condition that precludes the safe performance of routine lumbar puncture, such as prohibitive lumbar spinal disease, bleeding diathesis, or clinically significant coagulopathy or thrombocytopenia.

#### YES NO

4. Any other medical or psychiatric condition or lab abnormality, which in the opinion of the investigator might preclude participation.

#### Parkinson's Disease-SNCA or rare genetic variant Inclusion/Exclusion Criteria

# All inclusion criteria must be marked "yes" and all exclusion criteria must be marked "no" before proceeding to enrollment. Otherwise, complete "Screen Fail" CRF.

Inclusion Criteria:

1. Male or female age 30 years or older at Screening Visit.

# YES NO

2. Parkinson disease diagnosis at Screening Visit.

#### YES NO

 Patients must have at least two of the following: resting tremor, bradykinesia, rigidity (must have either resting tremor or bradykinesia); OR either asymmetric resting tremor or asymmetric bradykinesia.

#### YES NO

4. Hoehn and Yahr stage I, II, or III at Baseline.

# YES NO

 Confirmation of causative SNCA or Parkin mutation (willingness to undergo genetic testing as part of genetic screening and be informed of genetic testing results, or approved documentation of prior genetic testing results).

#### YES NO

6. Individuals taking any of the following drugs: alpha methyldopa, methylphenidate, amphetamine derivatives or modafinil, must be willing and medically able to hold the medication for at least 5 half-lives before DaTscan imaging.

YES NO

7. Confirmation that participant is eligible based on Screening DaTscan imaging.

#### YES NO

8. Able to provide informed consent.

- 9. Either is male, or is female and meets additional criteria below, as applicable:
  - Female of childbearing potential who is not pregnant, lactating, or planning pregnancy during the study and has a negative pregnancy test on day of Screening DaTscan imaging test prior to injection of DaTscan
  - YES NO

# Exclusion Criteria:

 Received any of the following drugs: dopamine receptor blockers (neuroleptics), metoclopramide and reserpine within 6 months of Screening visit.

# YES NO

2. Current treatment with anticoagulants (e.g., coumadin, heparin) that might preclude safe completion of the lumbar puncture.

# YES NO

 Condition that precludes the safe performance of routine lumbar puncture, such as prohibitive lumbar spinal disease, bleeding diathesis, or clinically significant coagulopathy or thrombocytopenia.

# YES NO

4. Any other medical or psychiatric condition or lab abnormality, which in the opinion of the investigator might preclude participation.

#### PREGNANCY TEST

#### A. Is participant of childbearing potential?

YES NO

- 1. If female of childbearing potential, was pregnancy test performed?
  - YES NO If no, specify in comments below
  - 1a. If response to question 1 is "yes", is the participant pregnant?

YES NO

1b. Was the pregnancy test result confirmed prior to DaTscan injection for SPECT scan?

YES NO

NOTE: If pregnant, consult protocol.

Comments:

# PPMI Primary Clinical Diagnosis

#### Please select ONE answer below:

- 1. Most likely primary diagnosis:
  - 01 = Idiopathic PD
  - 02 = Alzheimer's disease
  - 03 = Frontotemporal dementia
  - 04 = Corticobasal syndrome
  - 05 = Dementia with Lewy bodies
  - 06 = Dopa-responsive dystonia
  - 07 = Essential tremor
  - 08 = Hemiparkinson/hemiatrophy syndrome
  - 09 = Juvenile autosomal recessive parkinsonism
  - 10 = Motor neuron disease with parkinsonism
  - 11 = Multiple system atrophy
  - 12 = Neuroleptic-induced parkinsonism
  - 13 = Normal pressure hydrocephalus
  - 14 = Progressive supranuclear palsy
  - 15 = Psychogenic parkinsonism
  - 16 = Vascular parkinsonism
  - 17 = No PD nor other neurological disorder
  - 18 = Spinocerebellar Ataxia (SCA)
  - 97 = Other neurological disorder(s) (specify)\_\_\_\_\_
- 2. What is your percent confidence in your most likely primary diagnosis:
  - 1. 76-100%
  - 2. 51-75%
  - 3. 26-50%
  - 4. 0-25%

# **Prodromal Inclusion/Exclusion Criteria**

All inclusion criteria must be marked "yes" and all exclusion criteria must be marked "no" before proceeding to enrollment. Otherwise, complete "Screen Fail" CRF.

Inclusion Criteria:

1. Enrolled in PPMI 2.0 Remote and based on risk criteria, or olfaction, and/or other PD assessments in the PPMI 2.0 Remote protocol are eligible for PPMI 2.0 Clinical.

YES NO

2. Male or female age 60 years or older (except age 30 years or older for SNCA, or rare genetic mutations (such as Parkin or Pink1) participants).

YES NO

 Individuals taking any of the following drugs: alpha methyldopa, methylphenidate, amphetamine derivatives or modafinil, must be willing and medically able to hold the medication for at least 5 half-lives before DaTscan imaging.

YES NO

4. Confirmation that participant is eligible based on Screening DaTscan imaging.

YES NO

5. Able to provide informed consent.

YES NO

6. Women may not be pregnant, lactating or planning pregnancy during the study.

(Includes a negative pregnancy test on day of Screening DaTscan imaging test prior to injection of DaTscan.)

YES NO

Exclusion Criteria:

1. Clinical diagnosis of PD, other parkinsonism, or dementia.

YES NO

 Received any of the following drugs: dopamine receptor blockers (neuroleptics), metoclopramide and reserpine within 6 months of Screening Visit.

YES NO

3. Current treatment with anticoagulants (e.g. coumadin, heparin) that might preclude safe completion of the lumbar puncture.

#### Visit Number

 Condition that precludes the safe performance of routine lumbar puncture, such as prohibitive lumbar spinal disease, bleeding diathesis, or clinically significant coagulopathy or thrombocytopenia.

# YES NO

5. Any other medical or psychiatric condition or lab abnormality, which in the opinion of the investigator might preclude participation.

Visit Number

PPMI

SIte #

Questionna	ire for Impu	lsive-Compul (QUIP-Cur			nson's Disease
Reported :	Patient	Infor	· · · · · · · · · · · · · · · · · · ·		ent and Informant
Patient name:					
Date:					
*If information reported b	y an informant,	answer question	s based on you	ur understandi	ng of the patient.
Answ		<u>ESTIONS</u> base			AVIORS
	LAS	STING AT L	EAST 4 WI	<u>EEKS</u>	
<b><u>A. GAMBLING</u></b> 1. Do you or others think y gambling, lotteries, scratch			0 0	naviors (such a	s casinos, internet YesNo
2. Do you have difficulty of trouble cutting down or sto		r gambling behav	viors (such as i	ncreasing ther	n over time, or having YesNo
<u>B. SEX</u>					
1. Do you or others think others, promiscuity, prosti activities, or pornography	tution, change i			·	6
2. Do you think too much feeling guilty)?	about sex behav	viors (such as ha	ving trouble ke	eeping thought	ts out of your mind or YesNo
<u>C. BUYING</u>					
1. Do you or others think thing or things that you do				viors (such as t	
2. Do you engage in activi lying, hoarding things, bo					
					YesNo
<b>D. EATING</b> 1. Do you or others think y different types of food tha hungry)?	•		-		
2. Do you have urges or de becoming restless or irrita					se you distress (including YesNo

Yes No

# **E. OTHER BEHAVIORS**

Do you or others think that you spend too much time....

1. On specific tasks, hobbies or other organized activities (such as writing, painting, gardening, repairing or dismantling things, collecting, computer use, working on projects, etc.)? Yes\_\_\_No

2. Repeating certain simple motor activities (such as cleaning, tidying, handling, examining, sorting, ordering, or arranging objects, etc.)?

3. Walking or driving with no intended goal or specific purpose?

# **F. MEDICATION USE**

1. Do you or others (including your physicians) think that you consistently take too much of your Parkinson's medications? \_\_\_\_Yes\_\_\_No\_\_\_Not applicable

2. Do you have difficulty controlling your use of Parkinson's medications (such as experiencing a strong desirefor more medication, or having worse mood or feeling unmotivated at a lower dosage)?

\_\_\_\_Yes\_\_\_No\_\_\_Not applicable

# **REM SLEEP BEHAVIOR DISORDER SCREENING QUESTIONNAIRE (RBDSQ)**

A. Source of information:

Pa	rticipant	Caregiver/Informant	Participant and Caregi	ver/Info	ormant	
1.	l sometime	es have very vivid dreams.		YES	NO	
2.	My dream	s frequently have an aggressive or action	on-packed content.	YES	NO	
3.	The dream	YES	NO			
4.	4. I know that my arms or legs move when I sleep.					
5.	5. It thereby happened that I (almost) hurt by bed partner or myself.					
6.	6. I have or had the following phenomena during my dreams:					
	6.1	speaking, shouting, swearing, laughin	g loudly:	YES	NO	
	6.2	sudden limb movements, "fights":		YES	NO	
	6.3	gestures, complex movements, that a salute, to frighten mosquitoes, fall of		.g., to w <b>YES</b>	ave, to <b>NO</b>	
	6.4	things that fell down around the bed,	e.g., bedside lamp, book,	glasses	:	
				YES	NO	
7.	It happens	s that my movements awake me.		YES	NO	
8.	After awal	kening I mostly remember the content	of my dreams well.	YES	NO	
9. My sleep is frequently disturbed. YES					NO	
10	. I have/had	a disease of the nervous system:				
	10.a	Stroke		YES	NO	
	10.b	Head trauma		YES	NO	

10.c	Parkinsonism	YES	NO
10.d	RLS	YES	NO
10.e	Narcolepsy	YES	NO
10.f	Depression	YES	NO
10.g	Epilepsy	YES	NO
10.h	Inflammatory disease of the brain	YES	NO
10.i	Other, specify:	_	

#### **REPORT OF PREGNANCY**

# Note: If a pregnancy was confirmed as occurring within 30 days following DaTscanTM injection, document this in the database within 24 hours of notification.

- 1. This is a report of pregnancy for which person?
  - 1 = Female participant
  - 2 = Female partner of male participant
- 2. Is the pregnancy confirmed as occurring within 30 days following the DaTscan injection?

# 0 = No

1 = Yes

2 = Unknown

#### **RESEARCH BIOSPECIMENS**

- 1. Fasting Status:
  - 1 = Fasted (Minimum of 8 hours)
  - 2 = Low Fat Diet
  - 3 = Not Fasted, Not Low-Fat Diet
  - 1a. Date of Last intake of food (MM/DD/YYY)
  - 1b. Time of last intake of food (24-hour clock)
- 2. Is the participant on medication for treating the symptoms of Parkinson's Disease?
  - 1 = Yes
  - 0 = No
  - 2a. Date of most recent PD medication dosing (MM/DD/YYYY)
  - 2b. Time of most recent/in-clinic PD medication dosing (24-hour clock)

#### **Urine Sample Collection**

- 3. Urine for storage and analysis (1 = collected, 0 = not collected)
  - 3a. Date of urine sample collection (MM/DD/YYYY)
  - 3b. Time of urine sample collection (24-hour clock)
  - 3c. Time of centrifugation (24-hour clock)
  - 3d. Rate of centrifugation (xg)
  - 3e. Duration of Centrifugation (minutes)
  - 3f. Temperature at which tube was spun (Celsius)
  - 3g. Time urine sample placed in freezer (24-hour clock)

#### **RNA-Paxgene RED TOP**

- 4. Blood for Paxgene/RNA (1 = collected, 0 = not collected)
  - 5a. Time of PAXgene/RNA sample collections (24-hour clock)
  - 5b. Date PAXgene/RNA samples placed in freezer (MM/DD/YYYY)
  - 5c. Time PAXgene/RNA samples placed in freezer (24-hour clock)
  - 5d. Storage Temperature (Celsius)

#### Plasma- EDTA Purple Top

- 5. Blood for Plasma (1 = collected, 0 = not collected)
  - 6a. Time of plasma sample collection (24-hour clock)
  - 6b. Time of centrifugation (24-hour clock)
  - 6c. Rate of centrifugation (xg)
  - 6d. Duration of Centrifugation (minutes)

- 6e. Temperature at which tube was spun (Celsius)
- 6f. Total volume aliquoted after spinning (millimeters)
- 6g. Total number of aliquot tubes
- 6h. Time plasma sample placed in freezer (24-hour clock)
- 6i. Storage temperature: (Celsius)
- 6j. Buffy coat: (1 = collected, 0 = not collected)

#### Serum- RED TOP

- 6. Blood for Serum (1 = collected, 0 = not collected)
  - 7a. Time of serum sample collection (24-hour clock)
  - 7b. Time of centrifugation (24-hour clock)
  - 7c. Rate of centrifugation (xg)
  - 7d. Duration of Centrifugation (minutes)
  - 7e. Temperature at which tube was spun (Celsius)
  - 7f. Total volume aliquoted after spinning (milliliters)
  - 7g. Total number of aliquot tubes:
  - 7h. Time serum sample placed in freezer (24-hour clock)
  - 7i. Storage temperature (Celsius)

# Whole Blood- EDTA Purple Top

7. Whole blood collected (1 = collected, 0 = not collected 8a. Time of whole blood sample collection (24-hour clock) 8b. Volume of blood collected (milliliters) 8c. Storage temperature (Celsius)

# **Blood Sample Collection**

8. Date blood samples collected (MM/DD/YYYY)

# SOCIO-ECONOMICS

1. Please record the participant's highest number of years of education completed: \_\_\_\_\_\_

Response should be a numeric entry answer; maximum allowable answer is 35 years.

#### SCREEN FAIL

- 1. Participant did not enroll in PPMI Clinical due to:
  - 1 = Eligibility Criteria
  - 2 = Participant declined participation prior to completing baseline visit

#### If option 2 is selected, complete Q1a.

- a. Please select the reason for declining:
  - 1 = Risks of protocol
  - 2 = Confidentiality issues
  - **3** = Protocol too time intensive
  - 4 = Changed mind about lumbar puncture
  - 5 = Travel requirements
  - 6 = Family or caregiver/informant advised declining
  - 7 = Physician (other than Site Investigator) advised declining
  - 8 = Enrolled in other study
  - 9 = No longer interested
  - 99 = Other

#### Visit Number

#### **PPMI Skin Biopsy**

- Was skin biopsy completed? (0 = No, 1 = Yes) 1. 1a. If "no", please specify reason below: 1 = Participant declined biopsy 2 = Procedure attempted unsuccessfully, please specify: \_\_\_\_\_ 3 = Other, specify: \_\_\_\_\_ Was lidocaine anesthesia administered? (0 = No, 1 = Yes, 2 = other anesthetic, please specify \_\_\_\_\_) 2. On which side of the body was the cervical paravertebral biopsy performed? 3. 1 = right2 = left 4. What type of wound closure was used? 1 = dressing only 2 = steri strips 3 = suture 4 = other (specify) \_\_\_\_\_ 5. Time that biopsy was collected: (24-hour clock)
  - 6. Time biopsy specimen placed in formalin fixation: (24-hour clock)
  - 7. Formalin lot number: \_\_\_\_\_

#### SURGERY FOR PD LOG

Date of Surgery	Type of Surgery	Side	Location (Choose all
			that apply)

"Type of Surgery"

01 = Deep Brain Stimulation (DBS)

02 = Levodopa intestinal gel infusion

- 03 = Focused Ultrasound
- 04 = Other, please specify

05 = Unknown

# <u>"Side"</u>

01 = Bilateral

- 02 = Left
- 03 = Right
- 04 = Not Applicable (e.g., for levodopa intestinal gel infusion)
- 05 = Unknown

"Location"

- 01 = GPi (Globus pallidus internal segment)
- 02 = STN (subthalmic nucleaus)
- 03 = Other, please specify
- 04 = Not Applicable (e.g., for levodopa intestinal gel infusion)

05 = Unknown

\*Only above options will be available in EDC

# MDS-UPDRS Part III ON/OFF Determination & Dosing

If the participant is not being treated with either DBS and/or dopaminergic medications (levodopa formulations or dopamine agonists), the MDS-UPDRS part III will be performed once.

IF the participant is on levodopa, dopamine agonists, or has had DBS, the MDS-UPDRS should be performed in the OFF and ON state as defined below. It is preferred that the OFF exam be performed first.

- **OFF:** Off is the typical functional state when patients have a poor response in spite of taking medications. OFF testing should occur as at least 6 hours post last dose of PD medication or one hour after DBS has been turned off.
- **ON:** On is the typical functional state when patients are receiving medication and have a good response. ON testing should occur at least 1 hour after PD medication dosing, and/or with DBS turned on.

1. Is the participant on dopaminergic medication (levodopa formulations or dopamine agonists) for treating the symptoms of Parkinson's disease?

Yes No

2. Has the participant had deep brain stimulation for treating the symptoms of Parkinson's disease?

Yes No

If **NO to Q1 and Q2**  $\rightarrow$  form is complete and complete one, untreated MDS-UPDRS part III CRF in visit.

If **YES to Q1 and/or Q2** → complete question 3 and dosing Information section, and complete "ON MDS-UPDRS Part III" CRF and "OFF MDS-UPDRS Part III":

3. Will the first MDS-UPDRS Part III be an "ON" or "OFF" examination?

On Off

#### **MDS-UPDRS** Dosing Information

#### For the OFF MDS-UPDRS Part III:

4. For participants receiving treatment for PD (medications, DBS or both) was the "OFF" motor exam performed?

Yes No

5. If no, please select the reason:

1 = Disease severity preventing participant from staying off medications/turning off DBS

2 = Participant did not bring medication to clinic to turn ON

3 = Participant forgot to refrain from taking medications and cannot stay long enough to reverse the order of testing

- 4 = Participant does not feel comfortable turning off DBS
- 5 = Participant/Site forgot to turn off DBS
- 6 = Participant forgot to bring DBS remote to visit

7 = Investigator was unable to determine if participant was fully OFF (extended release medication formulations, etc.)

- 8 = Site scheduling issues during completion of visit
- 9 = Other reason (please specify in comment box) -> *free-text comment box to appear*
- 6. Date of most recent PD medication dosing: \_\_\_\_/ \_\_\_\_/ \_\_\_\_/
- 7. Time of most recent PD medication dosing prior to MDS-UPDRS part III being

assessed (24-hour clock): \_\_\_\_\_: \_\_\_\_\_

- 8. Time that DBS was turned off (24-hour clock): \_\_\_\_\_ er N/A
- 9. Time that the MDS-UPDRS part III "OFF" exam was administered prior to dosing in

clinic: (24-hour clock): \_\_\_\_\_:

#### For the ON MDS-UPDRS Part III:

10. For participants receiving treatment for PD (medications, DBS or both) was the "ON" motor exam performed?

Yes No

- 11. If no, please select the reason:
  - 01 = Typical "ON" state was not reached
  - 02 = Scheduling issues
  - 03 = Other reason (specify in the comment section below)

12. Date of most recent PD medication dosing: \_\_\_\_/ \_\_\_/ \_\_\_\_/

13. Time of most recent/in clinic PD medication dosing (24-hour clock): \_\_\_\_\_:

- 14. Time that DBS was turned on (24-hour clock): \_\_\_\_\_ er N/A
- 15. Time that the MDS-UPDRS part III "ON" exam was administered after dosing in clinic:

(24-hour clock): \_\_\_\_\_: \_\_\_\_\_

Comments if applicable:

# PPMI VISIT STATUS

- 1. Indicate the type of visit that was conducted:
  - Standard protocol visit
  - Diagnostic visit
  - Need for PD Therapy visit
  - Premature Withdrawal visit
  - Unscheduled visit

# 1a. Was this visit conducted as an Out of Clinic visit? No / Yes

If "yes" to Q1a, display question 1b:

- 1b) Indicate primary reason Out of Clinic visit was conducted: :
  - PD too advanced
  - Due to other illness
  - Family, Caregiver, or social issues
  - Participant moved
  - Transportation/Travel issues
  - Hospitalized/Institutionalized
  - Subject refused site visit
  - Participant concern due to COVID-19
  - Governmental restrictions due to COVID-19
  - Site restrictions due to COVID-19

If visit is out of the 45 day window of Target Visit date, complete q2

- 2. Indicate the primary reason the visit was not conducted within window:
  - 1 = Scheduling issue with participant/caregiver
  - 2 = Scheduling issue with site
  - 3 = Family/Social issues
  - 4 = Could not contact participant within window
  - 5 = Transportation/Travel issues
  - 6 = Medical problems
  - 7 = Military duty
  - 8 = Financial issues
  - 9 = Hospitalized/Institutionalized
  - 10 = Other, please specify:

# Vital Signs

1.	Weight (in Kilograms) <u>Baseline and annual only</u>		, kg
2.	Height (in centimeters) Baseline and annual only		_cm
3.	Temperature - oral (Celsius)		C
4.	Army used to measure blood pressure	RIGHT	LEFT
5.	Supine blood pressure taken after participant is supine 1-3 minu	<u>utes</u>	
	Systolic/diastolic (mmHg)	/	
6.	Supine heart rate taken after participant is supine 1-3 minutes		
	(Beats per minute)		
7.	Standing blood pressure taken after participant is standing 1-3	<u>minutes</u>	
	Systolic/diastolic (mmHg)	/	
8.	Standing heart rate taken after participant is standing 1-3 minu	<u>tes</u>	
	(Beats per minute)		

# PARTICIPANT MOTOR FUNCTION QUESTIONNAIRE

Α.	Who completed this que	estionnaire?			
	1 = participant	2 = caregiver	3 = Participant a	nd Caregiver	
Wher	n answering these ques	tions, please think abo	ut your current a	abilities.	
1.	Do you have trouble ris	ing from a chair?	0=No	1=Yes	2=Uncertain
2.	Is your handwriting sma	aller than it once was?	0=No	1=Yes	2=Uncertain
3.	Do people tell you that than it once was?	your voice is softer	0=No	1=Yes	2=Uncertain
4.	Is your balance poor?		0=No	1=Yes	2=Uncertain
5.	Do your feet ever seem	to get stuck to the floor?	0=No	1=Yes	2=Uncertain
6.	Do people tell you that less expressive than it		0=No	1=Yes	2=Uncertain
7.	Do your arms or legs sl	nake?	0=No	1=Yes	2=Uncertain
8.	Do you have trouble bu	ttoning buttons?	0=No	1=Yes	2=Uncertain
9.	Do you shuffle your fee steps when you walk?	t and/or take tiny	0=No	1=Yes	2=Uncertain
10.	Do you move more slov people your age?	vly than other	0=No	1=Yes	2=Uncertain
11.	Has anyone ever told y have Parkinson's disea	-	0=No	1=Yes	2=Uncertain

# **UNIVERSITY OF PENNSYLVANIA SMELL IDENTIFICATION TEST – UPSIT**

Only one answer choice should be selected for each question.

Please refer to booklet 1 to enter responses for questions 1-10.

	Α	В	С	D
2.	This odor smells most li	ike:		
	Α	В	C	D
3.	This odor smells most li	ike:		
	A	В	C	D
4.	This odor smells most li	ike:		
	A	В	C	D
5.	This odor smells most li	ike:		
	Α	В	C	D
6.	This odor smells most li	ike:		
	Α	В	С	D
7.	This odor smells most li	ike:		
	Α	В	С	D
8.	This odor smells most li	ke:		
	Α	В	С	D
9.	This odor smells most li	ike:		
	Α	В	С	D
10.	This odor smells most li	ike:		
	Α	В	с	D

#### Visit Number

Please refer to booklet 2 to enter responses for questions 11-20.

	Α	В	с	D
12.	This odor smells most lil	ke:		
	A	В	c	D
13.	This odor smells most lil	ke:		
	A	В	C	D
14.	This odor smells most lil	ke:		
	Α	В	С	D
15.	This odor smells most lil	ke:		
	Α	В	С	D
16.	This odor smells most lil	ke:		
	Α	В	С	D
17.	This odor smells most lil	ke:		
	Α	В	С	D
18.	This odor smells most lil	ke:		
	Α	В	С	D
19.	This odor smells most lil	ke:		
	Α	В	С	D
20.	This odor smells most lil	ke:		
	Α	В	с	D

Visit Number

Please refer to booklet 3 to enter responses for questions 21-30.

	A	В	с	D
22.	This odor smells most li	ke:		
	Α	В	С	D
23.	This odor smells most li	ke:		
	Α	В	С	D
24.	This odor smells most li	ke:		
	Α	В	С	D
25.	This odor smells most li	ke:		
	Α	В	с	D
26.	This odor smells most li	ke:		
	Α	В	с	D
27.	This odor smells most li	ke:		
	Α	В	с	D
28.	This odor smells most li	ke:		
	Α	В	с	D
29.	This odor smells most li	ke:		
	Α	В	с	D
30.	This odor smells most li	ke:		
	Α	В	С	D

Visit Number

Please refer to booklet 4 to enter responses for questions 31-40.

	Α	В	с	D
32.	This odor smells most lil	ke:		
	Α	В	с	D
33.	This odor smells most li	ke:		
	Α	В	C	D
34.	This odor smells most li	ke:		
	Α	В	C	D
35.	This odor smells most li	ke:		
	Α	В	C	D
36.	This odor smells most li	ke:		
	Α	В	C	D
37.	This odor smells most li	ke:		
	Α	В	С	D
38.	This odor smells most li	ke:		
	Α	В	С	D
39.	This odor smells most li	ke:		
	Α	В	С	D
40.	This odor smells most li	ke:		
	Α	В	С	D

#### Healthy Control Inclusion/Exclusion Criteria

# All inclusion criteria must be marked "yes" and all exclusion criteria must be marked "no" before proceeding to enrollment. Otherwise, complete "Screen Fail" CRF.

Inclusion Criteria:

1. Male or Female age 30 years or older at Screening visit.

# YES NO

2. Individuals taking any of the following drugs: alpha methyldopa, methylphenidate,

amphetamine derivatives or modafinil, must be willing and medically able to hold the

medication for at least 5 half-lives before DaTscan imaging.

#### YES NO

3. Confirmation that participant is eligible based on Screening DaTscan imaging.

# YES NO

4. Able to provide informed consent.

# YES NO

- 5. Either is male, or is female and meets additional criteria below, as applicable:
  - Female of childbearing potential who is not pregnant, lactating, or planning pregnancy during the study and has a negative pregnancy test on day of Screening DaTscan imaging test prior to injection of DaTscan

#### YES NO

# Exclusion Criteria:

1. First degree relative with PD (i.e. biologic parent, sibling, child).

YES NO

2. Current or active clinically significant neurological disorder (in the opinion of the Investigator).

# YES NO

3. Previously obtained MRI scan with evidence of clinically significant neurological disorder (in the opinion of the Investigator).

# YES NO

4. Received any of the following drugs: dopamine receptor blockers (neuroleptics),

metoclopramide and reserpine within 6 months of Screening visit.

5. Current treatment with anticoagulants (e.g., coumadin, heparin, oral thrombin inhibitors) that might preclude safe completion of the lumbar puncture.

# YES NO

 Condition that precludes the safe performance of routine lumbar puncture, such as prohibitive lumbar spinal disease, bleeding diathesis, or clinically significant coagulopathy or thrombocytopenia.

# YES NO

7. Any other medical or psychiatric condition or lab abnormality, which in the opinion of the investigator might preclude participation.

#### Parkinson's Disease Inclusion/Exclusion Criteria

# All inclusion criteria must be marked "yes" and all exclusion criteria must be marked "no" before proceeding to enrollment. Otherwise, complete "Screen Fail" CRF.

Inclusion Criteria:

1. Male or female age 30 years or older at Screening Visit.

# YES NO

2. A diagnosis of Parkinson disease for 2 years or less at Screening Visit.

#### YES NO

3. Not expected to require PD medication within at least 6 months from Baseline.

YES NO

 Patients must have at least two of the following: resting tremor, bradykinesia, rigidity (must have either resting tremor or bradykinesia); OR either asymmetric resting tremor or asymmetric bradykinesia.

#### YES NO

5. Hoehn and Yahr stage I or II at Baseline.

YES NO

6. Individuals taking any of the following drugs: alpha methyldopa, methylphenidate,

amphetamine derivatives or modafinil, must be willing and medically able to hold the medication for at least 5 half-lives before DaTscan imaging.

YES NO

7. Confirmation that participant is eligible based on Screening DaTscan imaging.

YES NO

- 8. Able to provide informed consent. **YES NO**
- 9. Either is male, or is female and meets additional criteria below, as applicable:
  - Female of childbearing potential who is not pregnant, lactating, or planning pregnancy during the study and has a negative pregnancy test on day of Screening DaTscan imaging test prior to injection of DaTscan

YES NO

Exclusion Criteria:

1. Currently taking levodopa, dopamine agonists, MAO-B inhibitors (e.g., selegiline, rasagiline), amantadine or another PD medication.

#### YES NO

 Has taken levodopa, dopamine agonists, MAO-B inhibitors or amantadine within 60 days of Baseline visit.

#### YES NO

3. Has taken levodopa or dopamine agonists prior to Baseline visit for more than a total of 90 days.

# YES NO

 Atypical PD syndromes due to either drugs (e.g., metoclopramide, flunarizine, neuroleptics) or metabolic disorders (e.g., Wilson's disease), encephalitis, or degenerative diseases (e.g., progressive supranuclear palsy).

#### YES NO

5. A clinical diagnosis of dementia as determined by the investigator.

#### YES NO

6. Previously obtained MRI scan with evidence of clinically significant neurological disorder (in the opinion of the Investigator).

#### YES NO

 Received any of the following drugs: dopamine receptor blockers (neuroleptics), metoclopramide and reserpine within 6 months of Screening visit.

# YES NO

8. Current treatment with anticoagulants (e.g., coumadin, heparin, oral thrombin inhibitors) that might preclude safe completion of the lumbar puncture.

# YES NO

 Condition that precludes the safe performance of routine lumbar puncture, such as prohibitive lumbar spinal disease, bleeding diathesis, or clinically significant coagulopathy or thrombocytopenia.

# YES NO

10. Any other medical or psychiatric condition or lab abnormality, which in the opinion of the investigator might preclude participation.

#### Parkinson's Disease-LRRK2 or GBA Inclusion/Exclusion Criteria

# All inclusion criteria must be marked "yes" and all exclusion criteria must be marked "no" before proceeding to enrollment. Otherwise, complete "Screen Fail" CRF.

Inclusion Criteria:

1. Male or female age 30 years or older at Screening Visit.

# YES NO

2. A diagnosis of Parkinson disease for 2 years or less at Screening Visit.

# YES NO

3. Patients must have at least two of the following: resting tremor, bradykinesia, rigidity (must have either resting tremor or bradykinesia); OR either asymmetric resting tremor or asymmetric bradykinesia.

YES NO

4. Hoehn and Yahr stage I or II at Baseline.

# YES NO

 Confirmation of causative LRRK2 or GBA (willingness to undergo genetic testing as part of genetic screening and be informed of genetic testing results, or documentation of prior genetic testing results).

YES NO

 Individuals taking any of the following drugs: alpha methyldopa, methylphenidate, amphetamine derivatives or modafinil, must be willing and medically able to hold the medication for at least 5 half-lives before DaTscan imaging.

YES NO

7. Confirmation that participant is eligible based on Screening DaTscan imaging.

- 8. Able to provide informed consent. **YES NO**
- 9. Either is male, or is female and meets additional criteria below, as applicable:
  - Female of childbearing potential who is not pregnant, lactating, or planning pregnancy during the study and has a negative pregnancy test on day of Screening DaTscan imaging test prior to injection of DaTscan
  - YES NO

#### Visit Number

#### Exclusion Criteria:

1. Received any of the following drugs: dopamine receptor blockers (neuroleptics), metoclopramide and reserpine within 6 months of Screening visit.

#### YES NO

2. Current treatment with anticoagulants (e.g., coumadin, heparin) that might preclude safe completion of the lumbar puncture.

#### YES NO

 Condition that precludes the safe performance of routine lumbar puncture, such as prohibitive lumbar spinal disease, bleeding diathesis, or clinically significant coagulopathy or thrombocytopenia.

#### YES NO

4. Any other medical or psychiatric condition or lab abnormality, which in the opinion of the investigator might preclude participation.

#### Parkinson's Disease-SNCA or rare genetic variant Inclusion/Exclusion Criteria

# All inclusion criteria must be marked "yes" and all exclusion criteria must be marked "no" before proceeding to enrollment. Otherwise, complete "Screen Fail" CRF.

Inclusion Criteria:

1. Male or female age 30 years or older at Screening Visit.

# YES NO

2. Parkinson disease diagnosis at Screening Visit.

#### YES NO

3. Patients must have at least two of the following: resting tremor, bradykinesia, rigidity (must have either resting tremor or bradykinesia); OR either asymmetric resting tremor or asymmetric bradykinesia.

#### YES NO

4. Hoehn and Yahr stage I, II, or III at Baseline.

# YES NO

 Confirmation of causative SNCA or Parkin mutation (willingness to undergo genetic testing as part of genetic screening and be informed of genetic testing results, or approved documentation of prior genetic testing results).

#### YES NO

6. Individuals taking any of the following drugs: alpha methyldopa, methylphenidate, amphetamine derivatives or modafinil, must be willing and medically able to hold the medication for at least 5 half-lives before DaTscan imaging.

YES NO

7. Confirmation that participant is eligible based on Screening DaTscan imaging.

#### YES NO

8. Able to provide informed consent.

- 9. Either is male, or is female and meets additional criteria below, as applicable:
  - Female of childbearing potential who is not pregnant, lactating, or planning pregnancy during the study and has a negative pregnancy test on day of Screening DaTscan imaging test prior to injection of DaTscan
  - YES NO

# Exclusion Criteria:

 Received any of the following drugs: dopamine receptor blockers (neuroleptics), metoclopramide and reserpine within 6 months of Screening visit.

# YES NO

2. Current treatment with anticoagulants (e.g., coumadin, heparin) that might preclude safe completion of the lumbar puncture.

# YES NO

 Condition that precludes the safe performance of routine lumbar puncture, such as prohibitive lumbar spinal disease, bleeding diathesis, or clinically significant coagulopathy or thrombocytopenia.

# YES NO

4. Any other medical or psychiatric condition or lab abnormality, which in the opinion of the investigator might preclude participation.

# PPMI PRODROMAL HISTORY

# [STANDARD EDC HEADER INFO]

- 1. Indicate how the participant was identified for Prodromal Screening:
  - a. Participant was referred by the IU Screening Core
  - b. Participant was identified by the PPMI clinical site
- Is the participant in the REM sleep behavior disorder (RBD) sub-group? Yes / No
   If Q1 = a AND Q2 = Yes, complete Q2a.
   If Q1 = b AND Q2 = Yes, complete Q2b and Q2c.
  - 2a. Indicate the information supporting selection to RBD sub-group as confirmed by the IU Screening Core:
    - a. Participant reported RBD Yes / No
    - b. RBD questionnaires Yes / No
  - 2b. Does the participant have a clinical diagnosis of RBD? Yes / No *If yes, complete questions below. If no, skip to Q2c.* 
    - i. Indicate date of RBD symptom onset: [calendar picker or enter date]
    - ii. Indicate date of clinical diagnosis: [calendar picker or enter date]
  - 2c. Does the participant have a polysomnography (PSG) consistent with diagnosis of RBD? Yes / No *If yes, complete questions below. If no, skip to Q3.* 
    - i. Indicate date of RBD symptom onset: [calendar picker or enter date]
    - ii. Indicate date of PSG: [calendar picker or enter date]
- 3. Is the participant in the genetic variant subgroup? Yes / No

If Q1 = a or b, AND Q3 = Yes, complete Q3a.

- 3a. Indicate how test results were confirmed:
  - 1 = Genetic testing completed through the IU Screening Core
  - 2 = Previous genetic test report reviewed and approved by the IU Screening Core

# If Q2 = No <u>and</u> Q3 = No, complete Q4

4. Is the participant in the hyposmia (general risk) subgroup? Yes / No

If Q1 = a AND Q4 = Yes, complete Q4a and Q4b.

If Q1 = b AND Q4 = Yes, complete Q4a, Q4b, Q4c.

- 4a. Does the participant have a biological first degree family member with PD Yes / No
- 4b. Does the participant have a known synuclein positive biopsy Yes / No

4c. Does the participant have previously known hyposmia (testing completed prior to PPMI participation) Yes / No

# Prodromal Inclusion/Exclusion Criteria

All inclusion criteria must be marked "yes" and all exclusion criteria must be marked "no" before proceeding to enrollment. Otherwise, complete "Screen Fail" CRF.

Inclusion Criteria:

- 1. Confirmation that participant is eligible based on centrally determined predictive criteria including the University of Pennsylvania Smell Identification Test (UPSIT).
  - a. For participants in PPMI Remote, referral to the clinical site confirms predictive eligibility.
  - b. For participants identified by the clinical site, predictive criteria are based on generalized risk such as first degree biologic relative, known risk of PD including RBD, or known genetic variants associated with PD risk.
    - i. Additionally, confirmation of UPSIT eligibility during the Screening visit prior to DaTscan.

# YES NO

2. Male or female age 60 years or older (except age 30 years or older for SNCA, or rare genetic mutations (such as Parkin or Pink1) participants).

# YES NO

 Individuals taking any of the following drugs: alpha methyldopa, methylphenidate, amphetamine derivatives or modafinil, must be willing and medically able to hold the medication for at least 5 half-lives before DaTscan imaging.

# YES NO

4. Confirmation that participant is eligible based on Screening DaTscan imaging.

YES NO

5. Able to provide informed consent.

# YES NO

- 6. Either is male, or is female and meets additional criteria below, as applicable:
  - Female of childbearing potential who is not pregnant, lactating, or planning pregnancy during the study and has a negative pregnancy test on day of Screening DaTscan imaging test prior to injection of DaTscan

# YES NO

# Exclusion Criteria:

1. Clinical diagnosis of PD, other parkinsonism, or dementia.

#### YES NO

 Received any of the following drugs: dopamine receptor blockers (neuroleptics), metoclopramide and reserpine within 6 months of Screening Visit.

YES NO

3. Current treatment with anticoagulants (e.g. coumadin, heparin) that might preclude safe completion of the lumbar puncture.

YES NO

 Condition that precludes the safe performance of routine lumbar puncture, such as prohibitive lumbar spinal disease, bleeding diathesis, or clinically significant coagulopathy or thrombocytopenia.

#### YES NO

5. Any other medical or psychiatric condition or lab abnormality, which in the opinion of the investigator might preclude participation.

Visit Number

# **PPMI Skin Biopsy**

1.	Was skin biopsy completed? (0 = No, 1 = Yes)
	1a. If "no", please specify reason below:
	1 = Participant declined biopsy
	2 = Procedure attempted unsuccessfully, please specify:
	3 = Other, specify:
2.	Was lidocaine anesthesia administered? (0 = No, 1 = Yes, 2 = other anesthetic, please specify)
3.	Was a formalin-fixed specimen collected? (Yes/No) If Q3 = yes, Q3a-Q3e are required. If Q3 = no, do not display
	<ul> <li>3a. On which side of the body was the cervical paravertebral biopsy performed?</li> <li>1 = right</li> <li>2 = left</li> </ul>
	3b. What type of wound closure was used?
	1 = dressing only 2 = steri strips 3 = suture 4 = other (specify)
	3c. Time that biopsy was collected: (24-hour clock)
	3d. Time biopsy specimen placed in formalin fixation: (24-hour clock)
	3e. Formalin lot number:
4.	Was a frozen specimen collected? (Yes/No) If Q4 = yes, Q4a – Q4e are required. If Q4 = no, do not display
	<ul> <li>4a. On which side of the body was the cervical paravertebral biopsy performed?</li> <li>1 = right</li> <li>2 = left</li> </ul>
	4b. What type of wound closure was used?
	1 = dressing only 2 = steri strips

Visit Number

3 = suture

4 = other (specify) \_\_\_\_\_

4c. Time that biopsy was collected: (24-hour clock)

4d. Time biopsy specimen was frozen: (24-hour clock)

4e. Frozen/Freezer Temperature (in Celsius): \_\_\_\_\_

SIte #