Specimen Collection and Processing Form

PPMI Syn One: Case Report Form

Site No:

- ◯ 018 - University of Pennsylvania
- ◯ 034 - Institute for Neurodegenerative Disorders
- ◯ 088 - Northwestern University

Email address of staff member completing this form: _____

Note: A copy of the completed CRF will be sent to this address.

PPMI Participant ID: _____

Sex

- ◯ Female
- ◯ Male

Year of Birth _____

PPMI Visit ID:

- ◯ BL
- ◯ V02
- ◯ V04
- ◯ V05
- ◯ V06
- ◯ V08
- ◯ V10
- ◯ V12
- ◯ V13
- ◯ V14
- ◯ V15
- ◯ V16
- ◯ V17
- ◯ V18
- ◯ V19
- ◯ V20
- ◯ V21
- ◯ V22

PPMI Visit Date: _____

Consent and Eligibility

PPMI SynOne ICF Site Version Date: _____

PPMI SynOne ICF Study Version Date: _____

PPMI SynOne Date of Consent: _____

Did the participant consent to receive the results of their SynOne test:

◯ Yes
◯ No

Did participant meet the below PPMI SynOne eligibility criteria?

◯ Yes
◯ No

Inclusion Criteria:

- Willing and able to provide written informed consent.
- Enrolled in PPMI clinical study.
- PPMI clinical participants with already-available SAA results. Exclusion Criteria:

- History of allergic reaction to local anesthesia for skin biopsies.

- Use of anticoagulants, including but not limited to the following medications, are excluded from this study: Dabigatran (PRADAXA, PRADAX, PRAZAXA), HEPARIN, Warfarin (COUMADIN, JANTOVEN), Lepirudan (REFLUDAN), Bivalirudin (ANGIOMAX), and Desirudin (LPRIVASK).
- Significantly impaired wound health or history of scarring or keloid formation.

Reason Ineligible:

◯ Not enrolled in PPMI Clinical
◯ Unable to provide informed consent
◯ Unwilling to provide informed consent
◯ History of allergic reaction to local anesthesia.
◯ Use of anticoagulants, including but not limited to the following medications, are excluded from this study: Dabigatran (PRADAXA, PRADAX, PRAZAXA), HEPARIN, Warfarin (COUMADIN, JANTOVEN), Lepirudan (REFLUDAN), Bivalirudin (ANGIOMAX), and Desirudin (LPRIVASK).
◯ Significantly impaired wound health or history of scarring or keloid formation
◯ Other

(Please click "submit" below after entering the Reason Ineligible)

Please Specify:

_____

Biopsy Collection Detail

Date of biopsy collection:

_____

Time of biopsy collection:

_____
(Use 24 Hour clock.)

Side of body:

◯ RIGHT
◯ LEFT

Biopsies Collected	◯ No ◯ Collected ◯ Partial Collection ◯ Attempted, No Collection (If response is "No", "Partial Collection", or "Attempted, No Collection", please specify in comments)
Biopsies Collected: Note: Expected number of biopsies is 3.	☐ Distal Leg (10 cm above the lateral malleolus) ☐ Distal Thigh (10 cm above the lateral knee) ☐ Posterior Cervical Region (3 cm lateral to the C-7 spinous process)
Reason fewer biopsies were collected than expected:	_____
Notes:	_____

[patno] SynOne Pathology Report AE Form

PPMI Syn One: Adverse Events Log

Site No: [cno]
Participant ID: [patno]
Collection Date: [skndrdt]

AE #1

AE #1 Start Date	_____
AE #1 Stop Date	_____
AE #1 Detail	_____
AE #1 Severity	◯ 1 - mild ◯ 2 - moderate ◯ 3 - severe
AE #1 Serious	◯ Yes ◯ No
AE #1 Relationship to Study	◯ 1 - unrelated ◯ 2 - unlikely ◯ 3 - possible ◯ 4 - probable ◯ 5 - definite
AE #1 Resulted in Study Withdrawal	◯ Yes ◯ No
AE #1 Primary Outcome	◯ 1 - recovered ◯ 2 - under treatment/observation ◯ 3 - change in AE characteristic ◯ 4 - sequela ◯ 5 - fatal ◯ 6 - unknown
AE #1 Notes	_____
Additional AE incident?	◯ Yes ◯ No

AE #2

AE #2 Start Date	_____
AE #2 Stop Date	_____
AE #2 Detail	_____
AE #2 Severity	◯ 1 - mild ◯ 2 - moderate ◯ 3 - severe
AE #2 Serious	◯ Yes ◯ No
AE #2 Relationship to Study	◯ 1 - unrelated ◯ 2 - unlikely ◯ 3 - possible ◯ 4 - probable ◯ 5 - definite
AE #2 Resulted in Study Withdrawal	◯ Yes ◯ No
AE #2 Primary Outcome	◯ 1 - recovered ◯ 2 - under treatment/observation ◯ 3 - change in AE characteristic ◯ 4 - sequela ◯ 5 - fatal ◯ 6 - unknown
AE #2 Notes	_____

[patno] SynOne Pathology Report Results Form

PPMI Syn One: Pathology Results

Site No: [cno]
Participant ID: [patno]
Collection Date: [skndrdt]

Please upload a copy of the SynOne Pathology Report

Conclusions

Pathology Report Conclusions: Synucleinopathy

- ◯ No evidence of phosphorylated alpha-synuclein deposition
- ◯ Pathologic evidence of phosphorylated alpha-synuclein deposition within cutaneous nerves
- ◯ Other

Please Specify:

_____

Pathology Report Conclusions: Small Fiber Neuropathy

- ◯ Normal intraepidermal nerve fiber density.
- ◯ Reduced intraepidermal nerve fiber density consistent with a length dependent small fiber neuropathy.
- ◯ Other

Please Specify:

_____

Macroscopic Description and Processing

All biopsies were reported in adequate condition

- ◯ Yes
- ◯ No

Example:

> **Macroscopic Description and Processing**
>
> Three (3) skin biopsies in Zamboni fixative were received. The vials were labeled as left posterior cervical, left distal thigh and left distal leg and biopsies were measured to be 3 mm. The biopsies were in adequate condition. They were washed and cryoprotected. The biopsies were sectioned into 50 µm samples. The following stains were performed:
>
> 1. Standard dual immunostaining with protein gene product 9.5 and phosphorylated alpha-synuclein
> 2. Standard Congo Red staining
> 3. Standard hematoxylin and eosin staining

Please indicate which biopsies were reported as not adequate:

- ☐ Post Cervical
- ☐ Distal Thigh
- ☐ Distal Leg

(check all that apply)

Microscopic Description

Enter Normal/Abnormal as indicated on the Results Report

		Normal	Abnormal	Benign Findings
1	Phosphorylated Alpha-Synuclein	◯	◯	◯
2	Intraepidermal Nerve Fibers	◯	◯	◯
4	Skin Histology (Hematoxylin and Eosin)	◯	◯	◯

Pathology Results - Phosphorylated Alpha-Synuclein (P-Syn)

P-syn Deposition - Post Cervical:

- ◯ No phosphorylated alpha-synuclein deposition observed in stained sections.
- ◯ One colocalized fiber seen across all stained sections.
- ◯ Two or more colocalized fibers seen across all stained sections.
- ◯ At least one (1) colocalized P-Syn positive nerve fiber observed in every stained section.
- ◯ Multiple colocalized P-Syn positive nerve fiber observed in every stained section.

P-syn Deposition - Distal Thigh

- ◯ No phosphorylated alpha-synuclein deposition observed in stained sections.
- ◯ One colocalized fiber seen across all stained sections.
- ◯ Two or more colocalized fibers seen across all stained sections.
- ◯ At least one (1) colocalized P-Syn positive nerve fiber observed in every stained section.
- ◯ Multiple colocalized P-Syn positive nerve fiber observed in every stained section.

P-syn Deposition - Distal Leg

- ◯ No phosphorylated alpha-synuclein deposition observed in stained sections.
- ◯ One colocalized fiber seen across all stained sections.
- ◯ Two or more colocalized fibers seen across all stained sections.
- ◯ At least one (1) colocalized P-Syn positive nerve fiber observed in every stained section.
- ◯ Multiple colocalized P-Syn positive nerve fiber observed in every stained section.

Pathology Results - Intraepidermal Nerve Fiber Density

Observed Measurement - Post Cervical:

_____

Normal Range - Post Cervical:

_____
(Enter Numbers Only, Do not enter Greater Than/Equal To sign)

Observed Measurement - Distal Thigh

_____

Normal Range - Distal Thigh

_____
(Enter Numbers Only, Do not enter Greater Than/Equal To sign)

Observed Measurement - Distal Leg

_____

Normal Range - Distal Leg

_____
(Enter Numbers Only, Do not enter Greater Than/Equal To sign)