

# The Neuropathology Data Form

ADC subject ID: \_\_\_\_\_ Completed by: \_\_\_\_\_

1. MDS/UDS patient ID <b>PTID</b>	_____							
2. Date form completed (MM/DD/YYYY)	<b>NPFORMMO / NPFORMDY / NPFORMYR</b>							
3. Neuropath ID <b>NPID</b>	_____							
4. Sex <b>NPSEX</b> (CHECK ONE)	<input type="checkbox"/> 1 Male <input type="checkbox"/> 2 Female							
5. Age at death <b>NPDAGE</b>	_____ years							
6. Date of death (MM/DD/YYYY)	<b>NPDODMO / NPDODDY / NPDODYR</b>							
7. Postmortem interval (PMI): time between death and brain removal <b>NPPMIH</b>	_____ . _____ hours (99.9 = unknown)							
8. Fixative <b>NPFIX</b>	<input type="checkbox"/> 1 Formalin <input type="checkbox"/> 2 Paraformaldehyde <input type="checkbox"/> 7 Other (SPECIFY): <b>NPFIXX</b> _____							
<b>9. GROSS FINDINGS</b>								
a. Whole brain weight (if half brain, multiply weight by two) <b>NPWBRWT</b>	_____ grams (9999 = unknown)							
b. Does the value in Question 9a represent fresh or fixed weight? (CHECK ONE) <b>NPWBRF</b>	<input type="checkbox"/> 1 Fresh <input type="checkbox"/> 2 Fixed <input type="checkbox"/> 8 Not applicable							
c. Severity of gross findings								
(CHECK ONE BOX PER ROW)								
	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 10%;">None</th> <th style="width: 10%;">Mild</th> <th style="width: 10%;">Moderate</th> <th style="width: 10%;">Severe</th> <th style="width: 10%;">Not assessed</th> <th style="width: 10%;">Missing/unknown</th> </tr> </thead> </table>		None	Mild	Moderate	Severe	Not assessed	Missing/unknown
	None	Mild	Moderate	Severe	Not assessed	Missing/unknown		
1. Cerebral cortex atrophy <b>NPGRCCA</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;"><input type="checkbox"/> 0</td> <td style="width: 10%;"><input type="checkbox"/> 1</td> <td style="width: 10%;"><input type="checkbox"/> 2</td> <td style="width: 10%;"><input type="checkbox"/> 3</td> <td style="width: 10%;"><input type="checkbox"/> 8</td> <td style="width: 10%;"><input type="checkbox"/> 9</td> </tr> </table>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 8	<input type="checkbox"/> 9	
<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 8	<input type="checkbox"/> 9			
2. Lobar atrophy (significant frontal and/or temporal atrophy) <b>NPGRLA</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;"><input type="checkbox"/> 0</td> <td colspan="3" style="width: 30%;"><input type="checkbox"/> 1 Yes</td> <td style="width: 10%;"><input type="checkbox"/> 8</td> <td style="width: 10%;"><input type="checkbox"/> 9</td> </tr> </table>	<input type="checkbox"/> 0	<input type="checkbox"/> 1 Yes			<input type="checkbox"/> 8	<input type="checkbox"/> 9	
<input type="checkbox"/> 0	<input type="checkbox"/> 1 Yes			<input type="checkbox"/> 8	<input type="checkbox"/> 9			
3. Hippocampus atrophy <b>NPGRHA</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;"><input type="checkbox"/> 0</td> <td style="width: 10%;"><input type="checkbox"/> 1</td> <td style="width: 10%;"><input type="checkbox"/> 2</td> <td style="width: 10%;"><input type="checkbox"/> 3</td> <td style="width: 10%;"><input type="checkbox"/> 8</td> <td style="width: 10%;"><input type="checkbox"/> 9</td> </tr> </table>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 8	<input type="checkbox"/> 9	
<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 8	<input type="checkbox"/> 9			
4. Substantia nigra hypopigmentation <b>NPGRSNH</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;"></td> <td style="width: 10%;"><input type="checkbox"/> 1</td> <td style="width: 10%;"><input type="checkbox"/> 2</td> <td style="width: 10%;"><input type="checkbox"/> 3</td> <td style="width: 10%;"><input type="checkbox"/> 8</td> <td style="width: 10%;"><input type="checkbox"/> 9</td> </tr> </table>		<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 8	<input type="checkbox"/> 9	
	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 8	<input type="checkbox"/> 9			
5. L. ceruleus hypopigmentation <b>NPGRLLCH</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;"><input type="checkbox"/> 0</td> <td style="width: 10%;"><input type="checkbox"/> 1</td> <td style="width: 10%;"><input type="checkbox"/> 2</td> <td style="width: 10%;"><input type="checkbox"/> 3</td> <td style="width: 10%;"><input type="checkbox"/> 8</td> <td style="width: 10%;"><input type="checkbox"/> 9</td> </tr> </table>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 8	<input type="checkbox"/> 9	
<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 8	<input type="checkbox"/> 9			
6. Atherosclerosis (of the circle of Willis) <b>NPAVAS</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;"></td> <td style="width: 10%;"><input type="checkbox"/> 1</td> <td style="width: 10%;"><input type="checkbox"/> 2</td> <td style="width: 10%;"><input type="checkbox"/> 3</td> <td style="width: 10%;"><input type="checkbox"/> 8</td> <td style="width: 10%;"><input type="checkbox"/> 9</td> </tr> </table>		<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 8	<input type="checkbox"/> 9	
	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 8	<input type="checkbox"/> 9			

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**10. METHODS USED FOR SCORING CASE**

<p>a. Tau antibody (CHECK ONE)</p> <p><b>NPTAN</b></p>	<p><input type="checkbox"/> 1 Non-phospho specific</p> <p><input type="checkbox"/> 2 PHF1</p> <p><input type="checkbox"/> 3 CP13</p> <p><input type="checkbox"/> 4 AT8</p> <p><input type="checkbox"/> 7 Other (SPECIFY): <b>NPTANX</b> _____</p> <p><input type="checkbox"/> 8 Not assessed</p>
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<p>b. Amyloid beta antibody (CHECK ONE)</p> <p><b>NPABAN</b></p>	<p><input type="checkbox"/> 1 4G8</p> <p><input type="checkbox"/> 2 10D5</p> <p><input type="checkbox"/> 7 Other (SPECIFY): <b>NPABANX</b> _____</p> <p><input type="checkbox"/> 8 Not assessed</p>
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<p>c. Alpha synuclein antibody (CHECK ONE)</p> <p><b>NPASAN</b></p>	<p><input type="checkbox"/> 1 Non-phospho specific (e.g., LB509)</p> <p><input type="checkbox"/> 2 Phospho-specific (e.g., pSYN#64)</p> <p><input type="checkbox"/> 7 Other (SPECIFY): <b>NPASANX</b> _____</p> <p><input type="checkbox"/> 8 Not assessed</p>
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<p>d. TDP-43 antibody (CHECK ONE)</p> <p><b>NPTDPAN</b></p>	<p><input type="checkbox"/> 1 Non-phospho specific</p> <p><input type="checkbox"/> 2 Phospho-specific</p> <p><input type="checkbox"/> 7 Other (SPECIFY): <b>NPTDPANX</b> _____</p> <p><input type="checkbox"/> 8 Not assessed</p>
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e. Histochemical stains (CHECK ONE BOX PER ROW)			
1.	Modified Bielschowsky <b>NPHISMB</b>	<input type="checkbox"/> 0 No	<input type="checkbox"/> 1 Yes
2.	Gallyas <b>NPHISG</b>	<input type="checkbox"/> 0 No	<input type="checkbox"/> 1 Yes
3.	Other silver stain <b>NPHISSS</b>	<input type="checkbox"/> 0 No	<input type="checkbox"/> 1 Yes
4.	Thioflavin <b>NPHIST</b>	<input type="checkbox"/> 0 No	<input type="checkbox"/> 1 Yes
5.	Other (SPECIFY): <b>NPHISO, NPHISOX</b> _____	<input type="checkbox"/> 0 No	<input type="checkbox"/> 1 Yes

<b>11. ALZHEIMER'S DISEASE.</b> Please score AD neuropathologic changes.	
<p>a. Thal phase for amyloid plaques by immunohistochemistry (IHC)</p> <p><b>(A score — CHECK ONE)</b></p> <p><i>Use only standard blocks (as described in Montine et al., Acta Neuropathol (2012) 123:1–11) to assign phase (i.e., midfrontal, superior/middle temporal, inferior parietal, hippocampus, entorhinal, basal ganglia, midbrain, cerebellum).</i></p> <p><b>NPTHAL</b></p>	<input type="checkbox"/> 0 Phase 0 (A0) <input type="checkbox"/> 1 Phase 1 (A1) <input type="checkbox"/> 2 Phase 2 (A1) <input type="checkbox"/> 3 Phase 3 (A2) <input type="checkbox"/> 4 Phase 4 (A3) <input type="checkbox"/> 5 Phase 5 (A3) <input type="checkbox"/> 8 Not assessed <input type="checkbox"/> 9 Missing/unknown
<p>b. Braak stage for neurofibrillary degeneration</p> <p><b>(B score — CHECK ONE)</b></p> <p><i>Use standard blocks (as described in Montine et al., Acta Neuropathol (2012) 123:1–11) to assign phase (i.e., midfrontal, superior/middle temporal, inferior parietal, occipital, hippocampus, entorhinal).</i></p> <p><b>NPBRAAK</b></p>	<input type="checkbox"/> 0 Stage 0: AD-type neurofibrillary degeneration not present (B0) <input type="checkbox"/> 1 Stage I (B1) <input type="checkbox"/> 2 Stage II (B1) <input type="checkbox"/> 3 Stage III (B2) <input type="checkbox"/> 4 Stage IV (B2) <input type="checkbox"/> 5 Stage V (B3) <input type="checkbox"/> 6 Stage VI (B3) <input type="checkbox"/> 7 The presence of a tauopathy (other than aging/AD) precludes Braak staging <input type="checkbox"/> 8 Not assessed <input type="checkbox"/> 9 Missing/unknown
<p>c. CERAD score for density of neocortical neuritic plaque (plaques with argyrophilic dystrophic neurites, with or without dense amyloid cores). Score without respect to age or diagnosis.</p> <p><b>(C score — CHECK ONE) NPNEUR</b></p> <p><i>Use only standard blocks (as described in Montine et al., Acta Neuropathol (2012) 123:1–11) to assign phase (i.e., midfrontal, superior/middle temporal, inferior parietal).</i></p>	<input type="checkbox"/> 0 No neuritic plaques (C0) <input type="checkbox"/> 1 Sparse neuritic plaques (C1) <input type="checkbox"/> 2 Moderate neuritic plaques (C2) <input type="checkbox"/> 3 Frequent neuritic plaques (C3) <input type="checkbox"/> 8 Not assessed <input type="checkbox"/> 9 Missing/unknown
<p>d. NIA-AA Alzheimer's disease neuropathologic change</p> <p><b>(ADNC)</b></p> <p>(CHECK ONE)</p> <p><b>NPADNC</b></p>	<input type="checkbox"/> 0 Not AD <input type="checkbox"/> 1 Low ADNC <input type="checkbox"/> 2 Intermediate ADNC <input type="checkbox"/> 3 High ADNC <input type="checkbox"/> 8 Not assessed <input type="checkbox"/> 9 Missing/unknown

e. Other pathologic changes associated with AD

<p>1. CERAD semi-quantitative score for diffuse plaques (plaques with non-compact amyloid and no apparent dystrophic neurites). Score from the neocortical field with the highest plaque density and without respect to age or diagnosis. (CHECK ONE) <b>NPDIFF</b></p>	<p><input type="checkbox"/> 0 No diffuse plaques  <input type="checkbox"/> 1 Sparse diffuse plaques  <input type="checkbox"/> 2 Moderate diffuse plaques  <input type="checkbox"/> 3 Frequent diffuse plaques  <input type="checkbox"/> 8 Not assessed  <input type="checkbox"/> 9 Missing/unknown</p>
<p>2. Cerebral amyloid angiopathy (CHECK ONE) <b>NPAMY</b></p>	<p><input type="checkbox"/> 0 None  <input type="checkbox"/> 1 Mild  <input type="checkbox"/> 2 Moderate  <input type="checkbox"/> 3 Severe  <input type="checkbox"/> 8 Not assessed  <input type="checkbox"/> 9 Missing/unknown</p>

**12. CEREBROVASCULAR DISEASE (CVD).** Report all CVD, macroscopic vascular brain injury (VBI), and microinfarcts or microhemorrhages.

a. Old infarcts observed grossly, including lacunes?  
(CHECK ONE)  
**NPINF**

0 No **(SKIP TO QUESTION 12b)**  
 1 Yes **(COMPLETE QUESTIONS 12a1–12a4)**  
 8 Not assessed **(SKIP TO QUESTION 12b)**  
 9 Missing/unknown **(SKIP TO QUESTION 12b)**

*NOTE: Number column cannot be left blank if Question 12a=Yes. Size of infarct columns should be left blank if not applicable. **Not assessed = 88 Missing = 99***

Location of old infarcts	Number	Size of largest (greatest dimension in cm)	Size of next (greatest dimension in cm)	Size of next (greatest dimension in cm)
1. Cerebral cortex	<b>NPINF1A</b>	<b>NPINF1B</b>	<b>NPINF1D</b>	<b>NPINF1F</b>
2. Subcortical cerebral white matter and periventricular white matter	<b>NPINF2A</b>	<b>NPINF2B</b>	<b>NPINF2D</b>	<b>NPINF2F</b>
3. Deep cerebral gray matter or internal capsule	<b>NPINF3A</b>	<b>NPINF3B</b>	<b>NPINF3D</b>	<b>NPINF3F</b>
4. Brainstem or cerebellum	<b>NPINF4A</b>	<b>NPINF4B</b>	<b>NPINF4D</b>	<b>NPINF4F</b>

*NOTE: For large cortical infarcts that include underlying white or gray matter, indicate as cortical infarct. For subcortical infarcts that include both white matter and gray matter, indicate whichever region is primarily affected.*

b. Were single or multiple old hemorrhages observed grossly?

**NPHEMO**

- 0 No **(SKIP TO QUESTION 12c)**
- 1 Yes **(COMPLETE QUESTIONS 12b1–12b3)**
- 8 Not assessed **(SKIP TO QUESTION 12c)**
- 9 Missing/unknown **(SKIP TO QUESTION 12c)**

(CHECK ONE BOX PER ROW)

	No	Yes	Not assessed	Missing/unknown
1. Subdural or epidural hemorrhage <b>NPHEMO1</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
2. Primary parenchymal hemorrhage <b>NPHEMO2</b> <i>Include those &gt;5mm. If ≤5mm, include as microbleed; see Question 12d.</i>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
3. Secondary parenchymal hemorrhage (e.g., tumor, vascular malformation) <b>NPHEMO3</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9

c. Old microinfarcts (not observed grossly)?

(CHECK ONE)

**NPOLD**

- 0 No **(SKIP TO QUESTION 12d)**
- 1 Yes **(COMPLETE QUESTIONS 12c1–12c4)**
- 8 Not assessed **(SKIP TO QUESTION 12d)**
- 9 Missing/unknown **(SKIP TO QUESTION 12d)**

(OLD MICROINFARCTS — CHECK ONE BOX PER ROW)

	0	1	2	3 or more	Not assessed	Missing/unknown
1. Number in screening sections of cerebral cortex (gray matter of cerebral cortex) <b>NPOLD1</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 8	<input type="checkbox"/> 9
2. Number in screening sections of subcortical white matter and periventricular white matter <b>NPOLD2</b>		<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 8	<input type="checkbox"/> 9
3. Number in screening sections of subcortical gray matter <b>NPOLD3</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 8	<input type="checkbox"/> 9
4. Number in brainstem and cerebellum <b>NPOLD4</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 8	<input type="checkbox"/> 9

d. Old cerebral microbleeds?

(CHECK ONE)

*Include old hemorrhages that are ≤5mm.*

**NPOLDD**

- 0 No **(SKIP TO QUESTION 12e)**
- 1 Yes **(COMPLETE QUESTIONS 12d1–12d4)**
- 8 Not assessed **(SKIP TO QUESTION 12e)**
- 9 Missing/unknown **(SKIP TO QUESTION 12e)**

(OLD MICROBLEEDS — CHECK ONE BOX PER ROW)	0	1	2	3 or more	Not assessed	Missing/unknown
1. Number in screening sections of cerebral cortex <b>NPOLDD1</b>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>		
2. Number in screening sections of subcortical white matter and periventricular white matter <b>NPOLDD2</b>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>		
3. Number in screening sections of subcortical gray matter <b>NPOLDD3</b>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>		
4. Number in brainstem and cerebellum <b>NPOLDD4</b>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>		

  

(CHECK ONE BOX PER ROW)	None	Mild	Moderate	Severe	Not assessed	Missing/unknown
e. Arteriolosclerosis? (CHECK ONE) <i>(Assessed in subcortical white or gray matter)</i> <b>NPARTER</b>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>		
f. White matter rarefaction? (CHECK ONE) <i>(H&amp;E or myelin stain may be used)</i> <b>NPWMR</b>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>		

  

g. Other pathologic changes related to ischemic or vascular disease not previously specified? **NPPATH**

<sub>0</sub> No **(SKIP TO QUESTION 13)**  
 <sub>1</sub> Yes **(COMPLETE QUESTIONS 12g1–12g12)**  
 <sub>8</sub> Not assessed **(SKIP TO QUESTION 13)**  
 <sub>9</sub> Missing/unknown **(SKIP TO QUESTION 13)**

  

(CHECK ONE BOX PER ROW)	No	Yes	Not assessed	Missing/unknown
1. Laminar necrosis <b>NPNEC</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>
2. Acute neuronal necrosis <b>NPPATH2</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>
3. Acute/subacute gross infarcts <b>NPPATH3</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>
4. Acute/subacute microinfarcts <b>NPPATH4</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>
5. Acute/subacute gross hemorrhage <b>NPPATH5</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>
6. Acute/subacute microhemorrhage <b>NPPATH6</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>
7. Vascular malformation of any type <b>NPPATH7</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>
8. Aneurysm of any type <b>NPPATH8</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>
9. Vasculitis of any type <b>NPPATH9</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>
10. CADASIL <b>NPPATH10</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>
11. Mineralization of blood vessels <b>NPPATH11</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>8</sub>	<input type="checkbox"/> <sub>9</sub>
12. Other (SPECIFY): <b>NPPATHO, NPPATHOX</b> _____	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>		

**13. LEWY BODY PATHOLOGY (as determined by alpha-synuclein IHC).** This score is independent of the clinical presentation.

Is there evidence of Lewy body pathology?

(CHECK ONE)

**NPLBOD**

- 0 No
- 1 Brainstem predominant
- 2 Limbic (transitional)
- 3 Neocortical (diffuse)
- 4 Amygdala predominant
- 5 Olfactory bulb
- 8 Not assessed
- 9 Missing/unknown

**14. NEURON LOSS IN THE SUBSTANTIA NIGRA** (CHECK ONE) **NPNLOSS**

- 0 None
- 1 Mild
- 2 Moderate
- 3 Severe
- 8 Not assessed
- 9 Missing/unknown

**15. HIPPOCAMPAL SCLEROSIS (CA1 and/or subiculum)** (CHECK ONE) **NPHIPSCL**

- 0 None
- 1 Unilateral
- 2 Bilateral
- 3 Present but laterality not assessed
- 8 Not assessed
- 9 Missing/unknown

**16. DISTRIBUTION OF TDP-43 IMMUNOREACTIVE INCLUSIONS**

Region (CHECK ONE BOX PER ROW)	No	Yes	Not assessed	Missing/unknown
a. Spinal cord <b>NPTDPA</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
b. Amygdala <b>NPTDPB</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
c. Hippocampus <b>NPTDPC</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
d. Entorhinal/inferior temporal cortex <b>NPTDPD</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
e. Neocortex <b>NPTDPE</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9

**17. FRONTOTEMPORAL LOBAR DEGENERATION AND OTHER TAUOPATHIES**

Evaluation should follow published guidelines. For details of specific diagnoses and a classification diagram of FTLT subtypes, see the Coding Guidebook for the NACC Neuropathology Data Form.

a. FTLT with tau pathology (FTLT-tau) or other tauopathy  
(CHECK ONE)  
**NPFTDTAU**

- 0 No **(SKIP TO QUESTION 17c)**
- 1 Yes **(COMPLETE QUESTIONS 17b1 – 17b10)**
- 8 Not assessed **(SKIP TO QUESTION 17c)**
- 9 Missing/unknown **(SKIP TO QUESTION 17c)**

b. FTLT-tau subtype

(CHECK ONE BOX PER ROW)

	No	Yes	Not assessed	Missing/unknown
1. FTLT-tau (PiD) <b>NPICK</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
2. Other 3R tauopathy <b>NPFTDT2</b> (Includes <i>MAPT</i> mutation tauopathy)	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
3. FTLT-tau (CBD) <b>NPCTORT</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
4. FTLT-tau (PSP) <b>NPPTROG</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
5. Argrophilic grains <b>NPFTDT5</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
6. Other 4R tauopathy <b>NPFTDT6</b> (Includes sporadic multiple systems tauopathy, globular glial tauopathy, <i>MAPT</i> mutation tauopathy)	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
7. Chronic traumatic encephalopathy <b>NPFTDT7</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
8. Amytrophic lateral sclerosis (ALS)/ Parkinsonism-dementia complex of Guam <b>NPFTDT8</b>		<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
9. Tangle dominant disease <b>NPFTDT9</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
10. Other 3R + 4R tauopathy <b>NPFTDT10</b> (Includes unclassifiable, focal, glial only, <i>MAPT</i> mutation tauopathy, NOS)	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9

c. FTLT with TDP-43 pathology (FTLT-TDP)?  
(CHECK ONE)

**NPFTDTDP**

- 0 No
- 1 Yes
- 8 Not assessed
- 9 Missing/unknown



<p>d. ALS/motor neuron disease (MND) present? (CHECK ONE)</p> <p><b>NPALSMND</b></p>	<p><input type="checkbox"/> 0 No</p> <p><input type="checkbox"/> 1 Yes, with TDP-43 inclusions in motor neurons</p> <p><input type="checkbox"/> 2 Yes, with FUS inclusions in motor neurons</p> <p><input type="checkbox"/> 3 Yes, with SOD1 inclusions in motor neurons</p> <p><input type="checkbox"/> 4 Yes, with other inclusions</p> <p><input type="checkbox"/> 5 Yes, with no specific inclusions</p> <p><input type="checkbox"/> 8 Not assessed</p> <p><input type="checkbox"/> 9 Missing/unknown</p>																																								
<p>e. Other FTLD? (CHECK ONE)</p> <p><b>NPOFTD</b></p>	<p><input type="checkbox"/> 0 No <b>(SKIP TO QUESTION 18a)</b></p> <p><input type="checkbox"/> 1 Yes <b>(COMPLETE QUESTIONS 17f1 – 17f5)</b></p> <p><input type="checkbox"/> 8 Not assessed <b>(SKIP TO QUESTION 18a)</b></p> <p><input type="checkbox"/> 9 Missing/unknown <b>(SKIP TO QUESTION 18a)</b></p>																																								
<p>f. Other FTLD subtype (CHECK ONE BOX PER ROW)</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="background-color: #333; color: white;"> <th style="width: 60%;"></th> <th style="width: 10%; text-align: center;">No</th> <th style="width: 10%; text-align: center;">Yes</th> <th style="width: 10%; text-align: center;">Not assessed</th> <th style="width: 10%; text-align: center;">Missing/unknown</th> </tr> </thead> <tbody> <tr style="background-color: #eee;"> <td colspan="5"><b>FTLD-FUS</b></td> </tr> <tr> <td>1. Atypical FTLD-U (aFTLD-U) <b>NPOFTD1</b></td> <td style="text-align: center;"><input type="checkbox"/> 0</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 8</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>2. NIFID (neuronal intermediate filament inclusions disease) <b>NPOFTD2</b></td> <td></td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 8</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>3. BIBD (basophilic inclusion body disease) <b>NPOFTD3</b></td> <td style="text-align: center;"><input type="checkbox"/> 0</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 8</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr style="background-color: #eee;"> <td colspan="5"><b>FTLD other</b></td> </tr> <tr> <td>4. FTLD-UPS (ubiquitin-proteasome system [ubiquitin or p62 positive, tau/TDP-43/FUS negative inclusions]) <b>NPOFTD4</b></td> <td></td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 8</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> <tr> <td>5. FTLD-NOS (includes dementia lacking distinctive histology (DLDH) and FTLD with no inclusions (FTLD-NI) detected by tau, TDP-43, or ubiquitin/p62 IHC) <b>NPOFTD5</b></td> <td style="text-align: center;"><input type="checkbox"/> 0</td> <td style="text-align: center;"><input type="checkbox"/> 1</td> <td style="text-align: center;"><input type="checkbox"/> 8</td> <td style="text-align: center;"><input type="checkbox"/> 9</td> </tr> </tbody> </table>			No	Yes	Not assessed	Missing/unknown	<b>FTLD-FUS</b>					1. Atypical FTLD-U (aFTLD-U) <b>NPOFTD1</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9	2. NIFID (neuronal intermediate filament inclusions disease) <b>NPOFTD2</b>		<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9	3. BIBD (basophilic inclusion body disease) <b>NPOFTD3</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<b>FTLD other</b>					4. FTLD-UPS (ubiquitin-proteasome system [ubiquitin or p62 positive, tau/TDP-43/FUS negative inclusions]) <b>NPOFTD4</b>		<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9	5. FTLD-NOS (includes dementia lacking distinctive histology (DLDH) and FTLD with no inclusions (FTLD-NI) detected by tau, TDP-43, or ubiquitin/p62 IHC) <b>NPOFTD5</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
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**18. OTHER PATHOLOGIC DIAGNOSES**

(CHECK ONE BOX PER ROW)		No	Yes	Not assessed	Missing/unknown
a.	Pigment-spheroid degeneration/NBIA <b>NPPDXA</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
b.	Multiple system atrophy <b>NPPDXB</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
c.	Prion disease <b>NPPDXC</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
d.	Trinucleotide disease (Huntington disease, SCA, other) <b>NPPDXD</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
e.	Malformation of cortical development <b>NPPDXE</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
f.	Metabolic/storage disorder of any type <b>NPPDXF</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
g.	WM disease, leukodystrophy <b>NPPDXG</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
h.	WM disease, multiple sclerosis or other demyelinating disease <b>NPPDXH</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
i.	Contusion/traumatic brain injury of any type, acute <b>NPPDXI</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
j.	Contusion/traumatic brain injury of any type, chronic <b>NPPDXJ</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
k.	Neoplasm, primary <b>NPPDXK</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
l.	Neoplasm, metastatic <b>NPPDXL</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
m.	Infectious process of any type (encephalitis, abscess, etc.) <b>NPPDXM</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
n.	Herniation, any site <b>NPPDXN</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
o.	Trisomy 21/Down syndrome <b>NPPDXO</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
p.	AD-related genes (dominantly inherited); do not include APOE or other polymorphisms or genetic risk factors. <b>NPPDXP</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
q.	FTLD-related genes (dominantly inherited); do not include polymorphisms or genetic risk factors. <b>NPPDXQ</b>	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 8	<input type="checkbox"/> 9
r.	Other (SPECIFY): <b>NPPDXR, NPPDXRX</b> _____	<input type="checkbox"/> 0	<input type="checkbox"/> 1		
s.	Other (SPECIFY): <b>NPPDXS, NPPDXSX</b> _____	<input type="checkbox"/> 0	<input type="checkbox"/> 1		
t.	Other (SPECIFY): <b>NPPDXT, NPPDXTX</b> _____	<input type="checkbox"/> 0	<input type="checkbox"/> 1		

**19. BANKED BIOSPECIMENS.** Use this section to record information related to the storage and accessibility of brain, blood, plasma, serum, DNA, and CSF.

**Indicate which of the following specimens are available in the Neuropathology Core at your Center, understanding that some of these biospecimens also may be banked in other Cores.**

(CHECK ONE BOX PER ROW)

	No	Yes	Missing/ unknown
a. Banked frozen brain or half brain <b>NPBNKA</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>9</sub>
b. Banked frozen wedge of cerebellum or other sample for future DNA prep <b>NPBNKB</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>9</sub>
c. Formalin- or paraformaldehyde-fixed brain <b>NPBNKC</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>9</sub>
d. Paraffin-embedded blocks of brain regions <b>NPBNKD</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>9</sub>
e. Banked postmortem CSF <b>NPBNKE</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>9</sub>
f. Banked postmortem blood or serum <b>NPBNKF</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>9</sub>
g. Banked DNA <b>NPBNKG</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>9</sub>
h. Full autopsy performed? <b>NPFAUT</b>	<input type="checkbox"/> <sub>0</sub>	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>9</sub>
If full autopsy, major findings:			
1. <b>NPFAUT1</b> _____			
2. <b>NPFAUT2</b> _____			
3. <b>NPFAUT3</b> _____			
4. <b>NPFAUT4</b> _____			