Site _____ Subject Barcode _____

Visit Date _____

Confirmation of Consent (to be completed by interviewer)

I confirm that the participant has signed the informed consent.

Interviewer Name _____ MM/DD/YYYY _____

Case Inclusion Criteria - Must be "Yes"

1. Individuals with at least one CNS demyelinating event characteristic of MS, TM, ADEM, NMO, ON or CIS. A demyelinating event is defined as a symptom or constellation of symptoms referable to the disruption of the CNS white matter or myelin within gray matter. Characteristic syndromes include hemibody sensory or motor symptoms , mono-sensory symptoms, monoparesis, brainstem syndrome or cerebellar syndrome, lasting at least 24 hours and not acute in onset. ☐ No ☐ Yes
2. Individuals at least 18 years old and able to give informed consent. ☐ No ☐ Yes
3. Individuals willing and able to provide up to 110 ml blood via venipuncture. ☐ No ☐ Yes

Case Exclusion Criteria - Must be "No"

1. Individuals with clinical or radiological evidence of stroke, meningitis, neoplastic, peripheral nervous system or primary muscle disease, or other well characterized and defined diseases of the nervous system with the exception of MS, TM, ADEM, NMO, ON or CIS (to help eliminate related neurological signs/symptoms). ☐ No ☐ Yes
2. Individuals with a history of blood borne pathogens (e.g., Hepatitis, HIV/AIDS) due to Laboratory restrictions. ☐ No ☐ Yes
3. Individuals with a history of allogenic bone marrow transplant due to changes in genetic material. ☐ No ☐ Yes

Control Inclusion Criteria - Must be "Yes"

1. Related and unrelated individuals who have not experienced any CNS demyelinating events characteristic of MS, TM, ADEM, NMO, ON or CIS and have not been diagnosed with any demyelinating disease. ☐ No ☐ Yes
2. Individuals at least 18 years old and able to give informed consent. ☐ No ☐ Yes
3. Individuals willing and able to provide up to 110 ml blood via venipuncture. ☐ No ☐ Yes

Control Exclusion Criteria - Must be "No"

1. Individuals with clinical or radiological evidence of stroke, meningitis, neoplastic, peripheral nervous system or primary muscle disease, or other well characterized and defined diseases of the nervous system (to help eliminate related neurological signs/symptoms). ☐ No ☐ Yes
2. Individuals with a history of bloodborne pathogens (e.g., Hepatitis, HIV/AIDS) due to Laboratory restrictions. ☐ No ☐ Yes
3. Individuals with a history of allogenic bone marrow transplant due to changes in genetic material. ☐ No ☐ Yes

Laboratory Assessment

Date of blood draw

MM/DD/YYYY

Time of blood draw

HH:MM

When was the last time the participant had something to eat or drink besides water?

HH:MM MM/DD/YYYY

When was the last time the participant smoked? HH:MM MM/DD/YYYY ☐ Not applicable

Has the participant had any medications today (including birth control, vitamins, aspirin, etc.)? ☐ Yes ☐ No

If yes, specify medication names:

Within the last two weeks, when did the participant last have a dose of non-MS (TM, ADEM, NMO, ON) related medication (prescription or OTC)? ☐ Not applicable

MM/DD/YYYY

Specify medication name(s):

When did the participant last have a dose of MS (TM, ADEM, NMO, ON) related drug? ☐ Not applicable

MM/DD/YYYY

Specify medication name(s):

Has the participant had any immunizations in the last year (including flu shot)? ☐ Yes ☐ No ☐ Don't know

If yes, specify:

Has the participant had a tetanus shot in the last 10 years? ☐ Yes ☐ No ☐ Don't know

If yes, specify when:

MM/DD/YYYY

Has the participant had any alcohol or done any recreational drugs in...

the last 2 months? ☐ Yes ☐ No

the last 2 weeks? ☐ Yes ☐ No

the last 24 hours? ☐ Yes ☐ No

Specify:

Interview Information

Interview date (MM/DD/YYY)	Start time (HH:MM)	End time (HH:MM)

Has the participant experienced any of the following symptoms in the past 24 hours?

Runny nose	☐ Yes	☐ No
Cough/sore throat	☐ Yes	☐ No
Fever/chills/night sweats	☐ Yes	☐ No
Sinus infection	☐ Yes	☐ No
Diarrhea/vomiting	☐ Yes	☐ No
Rash	☐ Yes	☐ No
Shortness of breath	☐ Yes	☐ No

Other illnesses, specify: [ ]

Study Completion

Did the participant complete the study? ☐ Yes ☐ No

Date of withdrawal: [ ]
MM/DD/YYYY

Reason for withdrawal:

- ☐ Withdrew informed consent
- ☐ Lost to follow-up
- ☐ Screen failure
- ☐ Sponsor decision
- ☐ Death
- ☐ Investigator decision
- ☐ Other, specify: [ ]

Section I Demographic Information

1. Date of birth
MM/DD/YYYY

2. Gender ☐ Male ☐ Female

3. Height ☐ in ☐ cm

4. Weight ☐ lb ☐ kg

5. Dominant hand*

6. Education - number of years completed (including elementary school)

7. Current marital status*

8. Employment status - Select one

☐ Employed outside home ☐ Student ☐ Unemployed not looking for work

☐ Employed at home ☐ Worker's compensation ☐ Disabled, at age

☐ Homemaker ☐ Unemployed looking for work ☐ Retired, not disabled, at age

9. Domestic status

Living alone	☐ Yes	☐ No	Living with other relative	☐ Yes	☐ No
Living with spouse/partner	☐ Yes	☐ No	Living with friend/companion	☐ Yes	☐ No
Living with sibling	☐ Yes	☐ No	Living with domestic help	☐ Yes	☐ No
Living with children	☐ Yes	☐ No	Living with health related companion	☐ Yes	☐ No
Living with parent	☐ Yes	☐ No	Living in nursing or sheltered home	☐ Yes	☐ No

Section II Ethnic Background

10. Ethnicity

	Participant	Father	Mother	Father's father	Father's mother	Mother's father	Mother's mother
1. Hispanic or Latino	☐	☐	☐	☐	☐	☐	☐
2. Non Hispanic or Latino	☐	☐	☐	☐	☐	☐	☐
3. Don't know	☐	☐	☐	☐	☐	☐	☐

Race

1. American Indian or Alaska Native	☐	☐	☐	☐	☐	☐	☐
2. Middle Eastern	☐	☐	☐	☐	☐	☐	☐
3. South Asian*	☐	☐	☐	☐	☐	☐	☐
4. Other Asian	☐	☐	☐	☐	☐	☐	☐
5. Black or African American	☐	☐	☐	☐	☐	☐	☐
6. Native Hawaiian or other Pacific Islander	☐	☐	☐	☐	☐	☐	☐
7. White	☐	☐	☐	☐	☐	☐	☐
8. Don't know	☐	☐	☐	☐	☐	☐	☐

*South Asian countries include:India, Nepal, Pakistan, Bhutan, Bangladesh, Maldives, Sri Lanka and Suvadives.

11. Where was the participant born?

State/Province (if applicable) _____ Country _____

12. Where was the participant's father born?

State/Province (if applicable) _____ ☐ Don't know Country _____ ☐ Don't know

13. Where was the participant's mother born?

State/Province (if applicable) _____ ☐ Don't know Country _____ ☐ Don't know

14. In what countries were the participant's grandparents born?

Father's father _____ ☐ Don't know Father's mother _____ ☐ Don't know

Mother's father _____ ☐ Don't know Mother's mother _____ ☐ Don't know

Section III Family History

15. Parent and grandparent information - Please provide the following information for the participant's full biological parents and grandparents (do not include step-parents).

Relationship	Year of birth	Alive	MS	Dominant hand*
Father		☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Mother		☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Father's father		☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Father's mother		☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Mother's father		☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Mother's mother		☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't Know	

Section III Family History - Continued

16. Does the participant have any siblings? If yes, please provide the following information for the participant's full biological siblings (do not include half/step-siblings). Indicate the participant's place by marking the check box and leaving the remaining items blank. ☐ No ☐ Yes ☐ Don't know

Birth order	Year of birth	Gender	Alive	MS	Dominant hand*
First ☐		☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Second ☐		☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Third ☐		☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Fourth ☐		☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Fifth ☐		☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Sixth ☐		☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Seventh ☐		☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Eighth ☐		☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Ninth ☐		☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	

Section III Family History - Continued

16a. Does the participant have any half siblings? If yes, please provide the following information for the participant's half siblings. ☐ No ☐ Yes ☐ Don't know

Year of birth	Gender	Alive	MS	Dominant hand*
	☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
	☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
	☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
	☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	

17. Was the participant part of a multiple birth?

☐ No ☐ Yes

17a. If yes, was the participant identical or fraternal?

☐ Identical ☐ Fraternal

17b. If yes, how many siblings altogether were involved in the multiple birth (including the participant)?

_____

18. Does the participant have any additional blood relatives (not marriage) that have been diagnosed with MS? If yes, please describe the specific relationship to the participant.

☐ No ☐ Yes ☐ Don't know

Relationship		Describe
1. Uncle(s) father's side	☐	
2. Uncle(s) mother's side	☐	
3. Aunt(s) father's side	☐	
4. Aunt(s) mother's side	☐	
5. 1st cousin(s) father's side	☐	
6. 1st cousin(s) mother's side	☐	
7. 2nd cousin(s) father's side	☐	
8. 2nd cousin(s) mother's side	☐	

Section III Family History - Continued

19. Does the participant have any children?

☐ No ☐ Yes ☐ Don't know

Partner Information - Please provide the following information for every person the participant has had a child with. Indicate the number of children birthed between the participant and each partner recorded. Refer to page 5, question 10 for ethnicity/race reference numbers.

Partner	Year of birth	Gender	Alive	MS	Dominant hand*
1.		☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	

Ethnicity ____ Mother's ethnicity ____ Father's ethnicity ____

Race ____ Mother's race ____ Father's race ____

Number of children ____ Birth state/Province ____ Birth country ____

Partner	Year of birth	Gender	Alive	MS	Dominant hand*
2.		☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	

Ethnicity ____ Mother's ethnicity ____ Father's ethnicity ____

Race ____ Mother's race ____ Father's race ____

Number of children ____ Birth state/Province ____ Birth country ____

Partner	Year of birth	Gender	Alive	MS	Dominant hand*
3.		☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	

Ethnicity ____ Mother's ethnicity ____ Father's ethnicity ____

Race ____ Mother's race ____ Father's race ____

Number of children ____ Birth state/Province ____ Birth country ____

Section III Family History - Continued

20. Participant's offspring - Please provide the following information regarding the participant's offspring. Indicate the corresponding partner number from question 19 for each child in the box next to the birth order.

Birth order	Partner	Year of birth	Gender	Alive	MS	Dominant hand*
First			☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Second			☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Third			☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Fourth			☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Fifth			☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Sixth			☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Seventh			☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Eighth			☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	
Ninth			☐ Male ☐ Female	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	

Section IV Demyelinating Diseases

☐ N/A - Mark if this is a Control without a demyelinating disease and skip to Section V - Medical history

21. Is the participant currently diagnosed with Multiple Sclerosis?

☐ No ☐ Yes

21a. If yes, at what age was the participant diagnosed with Multiple Sclerosis by a neurologist or other physician?

____ Years old

21b. Which of the following best characterizes the participant's disease?

Note: An exacerbation is defined as a development of new symptoms or a worsening of existing symptoms that lasts longer than 48 hours in the absence of a fever or infection.

☐	Clinically isolated syndrome (not Optic Neuritis or Transverse Myelitis) - Participant has experienced only one exacerbation. Date of occurrence ____ MM/DD/YYYY
☐	Relapsing remitting - Participant has experienced two or more exacerbations of being worse for a period of time followed by an improvement in condition. In between exacerbations the participant is stable.
☐	Secondary progressive - Participant's disease began with sporadic exacerbations separated by periods of stability and has changed to the point where symptoms have been getting progressively worse even when not having an exacerbation. At what age did this change take place? ____ Years old
☐	Primary progressive - From onset, participant's disease has steadily progressed, even when not having an exacerbation.

21c. Is the participant currently experiencing an exacerbation?

☐ No ☐ Yes ☐ Don't know

21d. **If no**, how long has it been since the start of the participant's last exacerbation?

____ ☐ Months ☐ Years ☐ Don't know

21e. How many relapses did the participant experience within the first two years? ____ ☐ Not applicable ☐ Don't know

21f. How many relapses has the participant experienced in the last year? ____ ☐ Not applicable ☐ Don't know

21g. Age of first symptom or exacerbation (may have occurred before clinical diagnosis)? ____ Years old

21h. Age of second symptom or exacerbation? ____ Years old ☐ Not applicable

Section IV Demyelinating Diseases

21. Is the participant currently diagnosed with Transverse Myelitis?

☐ No ☐ Yes

21a. Date of diagnosis

MM/DD/YYYY

21b. Date of symptom onset

MM/DD/YYYY

21c. Date of clinical nadir (when symptoms were at their worst)

MM/DD/YYYY

21d. Date of first treatment ☐ None

MM/DD/YYYY

21e. Treatments for first attack

☐ Steroids
☐ Plasmapheresis
☐ Cytoxan
☐ Other, specify:
☐ Don't know

21f. Prior illness (within 30 days of onset)

☐ No
☐ Yes, specify date of onset:
☐ Don't know

MM/DD/YYYY

If Yes, specify illness (check all that apply):

☐ Fever ☐ Chills ☐ Muscle aches ☐ Diarrhea
☐ Nausea ☐ Vomiting ☐ Coughing ☐ Stuffy nose

☐ Other, specify:
☐ Don't know

21g. Prior vaccination (within 30 days of symptoms onset)

☐ No
☐ Yes, specify date:
☐ Don't know

MM/DD/YYYY

If Yes, specify vaccine (check all that apply):

☐ Chickenpox (varicella) ☐ German measles (rubella) ☐ Measles (rubeola)
☐ Smallpox ☐ Mumps ☐ Hepatitis A
☐ Hepatitis B ☐ Polio (shot) ☐ Polio (oral vaccine)
☐ Rabies ☐ Travel ☐ Flu shot
☐ Strep ☐ Meningococcal ☐ Don't know

Section IV Demyelinating Diseases

21h. Have there been multiple attacks?

☐ No ☐ Yes ☐ Don't know

Date of subsequent attacks	Treatment of subsequent attacks	
MM/DD/YYYY	☐ Steroids ☐ Plasmapheresis ☐ Cytoxan ☐ Don't know	☐ None ☐ Other, specify:
MM/DD/YYYY	☐ Steroids ☐ Plasmapheresis ☐ Cytoxan ☐ Don't know	☐ None ☐ Other, specify:
MM/DD/YYYY	☐ Steroids ☐ Plasmapheresis ☐ Cytoxan ☐ Don't know	☐ None ☐ Other, specify:

Section IV Demyelinating Diseases

21. Is the participant currently diagnosed with Neuromyelitis Optica?

☐ No ☐ Yes

21a. Date of NMO diagnosis

MM/DD/YYYY

21b. Date of first symptoms

MM/DD/YYYY

21c. Were first symptoms visual or spinal (walking, sensory changes, bowel/bladder)?

☐ Visual
☐ Spinal
☐ Both
☐ Don't know

21d. Date of treatment ☐ None

MM/DD/YYYY

21e. Treatment for first attack

☐ Steroids
☐ Plasmapheresis
☐ Other, specify:
☐ Don't know

21f. Date of second attack ☐ Not applicable

MM/DD/YYYY

21g. Were symptoms of second attack visual or spinal?

☐ Visual
☐ Spinal
☐ Both
☐ Don't know

21h. Date of last attack before this interview ☐ Listed above

MM/DD/YYYY

21i. Were symptoms of last attack visual or spinal?

☐ Visual
☐ Spinal
☐ Both
☐ Don't know

21j. Has the participant ever been on immunomodulatory drugs (Copaxone, IFNs, etc.)?

☐ No
☐ Yes, specify medication name(s):
☐ Don't know

Section IV Demyelinating Diseases

21. Is the participant currently diagnosed with Optic Neuritis?

☐ No ☐ Yes

21a. Date of diagnosis ____ MM/DD/YYYY

21b. Date of first attack ____ MM/DD/YYYY

21c. Date of first treatment ____ MM/DD/YYYY ☐ None

21d. Treatments for first attack

☐ Steroids
☐ Plasmapheresis
☐ Cytoxan
☐ Other, specify: ____
☐ Don't know

21e. Which eye?

☐ Right ☐ Left ☐ Both ☐ Don't know

21f. Was pain present in the eye?

☐ No ☐ Yes ☐ Don't know

21g. Was color vision affected?

☐ No ☐ Yes ☐ Don't know

21h. Degree of recovery from first attack ____ %

21i. Any recurrences? ☐ No ☐ Yes

Date of recurrence	Eye*	Treatment of recurrence
____ MM/DD/YYYY	____	☐ Steroids ☐ Plasmapheresis ☐ Cytoxan ☐ Don't know ☐ Other, specify below: ____ ☐ None
____ MM/DD/YYYY	____	☐ Steroids ☐ Plasmapheresis ☐ Cytoxan ☐ Don't know ☐ Other, specify below: ____ ☐ None
____ MM/DD/YYYY	____	☐ Steroids ☐ Plasmapheresis ☐ Cytoxan ☐ Don't know ☐ Other, specify below: ____ ☐ None

Section IV Demyelinating Diseases

21. Is the participant currently diagnosed with Acute Disseminated Encephalomyelitis?

☐ No ☐ Yes

21a. Date of diagnosis _____ MM/DD/YYYY

21b. Date of first symptoms _____ MM/DD/YYYY

21c. Date of first treatment _____ ☐ None MM/DD/YYYY

21d. Treatment

☐ Steroids
☐ Plasmapheresis
☐ Cytoxan
☐ Other, specify: _____
☐ Don't know

21e. Hospitalization for treatment

☐ No
☐ Yes, specify number of days: _____ days
☐ Don't know

21f. Prior illness (within 30 days of onset)

☐ No
☐ Yes, specify date of onset: _____ MM/DD/YYYY
☐ Don't know

If Yes, specify illness (check all that apply):

☐ Fever ☐ Chills ☐ Muscle aches ☐ Diarrhea
☐ Nausea ☐ Vomiting ☐ Coughing ☐ Stuffy nose

☐ Other, specify: _____
☐ Don't know

21g. Prior vaccination (within 30 days of symptoms onset)

☐ No
☐ Yes, specify date: _____ MM/DD/YYYY
☐ Don't know

If Yes, specify vaccine (check all that apply):

☐ Chickenpox (varicella) ☐ German measles (rubella) ☐ Measles (rubeola)
☐ Smallpox ☐ Mumps ☐ Hepatitis A
☐ Hepatitis B ☐ Polio (shot) ☐ Polio (oral vaccine)
☐ Rabies ☐ Travel ☐ Flu shot
☐ Strep ☐ Meningococcal ☐ Don't know

Section IV Demyelinating Diseases

22. Please indicate which of the following symptoms the participant has experienced for 2 or more days during an MS, TM, ADEM, NMO, or ON exacerbation. Specify whether the symptom occurred during the **First Exacerbation** and whether the participant is **Currently Experiencing, Ever Experienced,** or **Never Experienced** the symptom.

Demyelinating diseases	First	Ever	Currently	Never
1. Weakness in arms/hands	☐	☐	☐	☐
2. Weakness in legs/feet	☐	☐	☐	☐
3. Difficulty walking/dragging a foot	☐	☐	☐	☐
4. Loss of coordination in arms/hands	☐	☐	☐	☐
5. Loss of coordination in legs/feet	☐	☐	☐	☐
6. Stiffness	☐	☐	☐	☐
7. Difficulty with balance	☐	☐	☐	☐
8. Shaking or tremors	☐	☐	☐	☐
9. Paralysis of half or whole face	☐	☐	☐	☐
10. Facial twitching	☐	☐	☐	☐
11. Speech articulation	☐	☐	☐	☐
12. Difficulty with swallowing	☐	☐	☐	☐
13. Blindness or blurry vision in one eye or both	☐	☐	☐	☐
14. Disturbed vision e.g., double vision, objects moving, etc.	☐	☐	☐	☐
15. Sensory symptoms; loss of feeling, painful feeling,unable to feel position of fingers/arms/legs, swollen feeling	☐	☐	☐	☐
16. Vertigo	☐	☐	☐	☐
17. Sharp, painful feeling in face not due to trauma or injury (Trigeminal neuralgia)	☐	☐	☐	☐
18. Electric shock-like feeling when bending neck	☐	☐	☐	☐
19. Itching, not due to other causes e.g. psoriasis, insect bites, etc.	☐	☐	☐	☐
20. Burning sensation in feet	☐	☐	☐	☐
21. Cognitive difficulties e.g., memory problems	☐	☐	☐	☐
22. Sexual dysfunction, not caused by medication	☐	☐	☐	☐
23. Urinary problems e.g., unusual urgency or hesitancy	☐	☐	☐	☐
24. Trouble with bowel movements	☐	☐	☐	☐
25. Fatigue	☐	☐	☐	☐
26. Changes in mood or depression considered out of the ordinary	☐	☐	☐	☐
27. Total paralysis of legs	☐	☐	☐	☐
28. Total paralysis of arms	☐	☐	☐	☐
29. Need for mechanical ventilation	☐	☐	☐	☐
30. Other:	☐	☐	☐	

Section V Medical History

23a. Has the participant experienced any significant head injuries?

☐ No ☐ Yes

Description of injury

Cause of injury

Date occurred (MM/YYYY)

Age ☐ Years

Loss of consciousness ☐ No ☐ Yes

Medical attention received - check all that apply

☐ M.D. visit ☐ Hospitalization ☐ Rehabilitation

☐ E.R. visit ☐ Surgery ☐ Intensive care

Complications/Outcome

Description of injury

Cause of injury

Date occurred (MM/YYYY)

Age ☐ Years

Loss of consciousness ☐ No ☐ Yes

Medical attention received - check all that apply

☐ M.D. visit ☐ Hospitalization ☐ Rehabilitation

☐ E.R. visit ☐ Surgery ☐ Intensive care

Complications/Outcome

23b. Has the participant experienced any significant spine injuries?

☐ No ☐ Yes

Description of injury

Cause of injury

Date occurred (MM/YYYY)

Age ☐ Years

Loss of consciousness ☐ No ☐ Yes

Medical attention received - check all that apply

☐ M.D. visit ☐ Hospitalization ☐ Rehabilitation

☐ E.R. visit ☐ Surgery ☐ Intensive care

Complications/Outcome

Description of injury

Cause of injury

Date occurred (MM/YYYY)

Age ☐ Years

Loss of consciousness ☐ No ☐ Yes

Medical attention received - check all that apply

☐ M.D. visit ☐ Hospitalization ☐ Rehabilitation

☐ E.R. visit ☐ Surgery ☐ Intensive care

Complications/Outcome

Section V Medical History - Continued

23c. Has the participant experienced any significant injuries other than head or spine?

☐ No ☐ Yes

Description of injury [ ]

Cause of injury [ ]

Date occurred (MM/YYYY) [ ]

Age [ ] Years

Loss of consciousness

☐ No ☐ Yes

Medical attention received - check all that apply

☐ M.D. visit ☐ Hospitalization ☐ Rehabilitation
☐ E.R. visit ☐ Surgery ☐ Intensive care

Complications/Outcome [ ]

Description of injury [ ]

Cause of injury [ ]

Date occurred (MM/YYYY) [ ]

Age [ ] Years

Loss of consciousness

☐ No ☐ Yes

Medical attention received - check all that apply

☐ M.D. visit ☐ Hospitalization ☐ Rehabilitation
☐ E.R. visit ☐ Surgery ☐ Intensive care

Complications/Outcome [ ]

24. Has the participant undergone any surgeries (e.g., dental extraction, tonsillectomy, D&C, etc.)?

☐ No ☐ Yes

Type of surgery	Age	General anesthesia	Local anesthesia
[ ]	[ ] Years	☐ No ☐ Don't know ☐ Yes	☐ No ☐ Don't know ☐ Yes
[ ]	[ ] Years	☐ No ☐ Don't know ☐ Yes	☐ No ☐ Don't know ☐ Yes
[ ]	[ ] Years	☐ No ☐ Don't know ☐ Yes	☐ No ☐ Don't know ☐ Yes
[ ]	[ ] Years	☐ No ☐ Don't know ☐ Yes	☐ No ☐ Don't know ☐ Yes
[ ]	[ ] Years	☐ No ☐ Don't know ☐ Yes	☐ No ☐ Don't know ☐ Yes
[ ]	[ ] Years	☐ No ☐ Don't know ☐ Yes	☐ No ☐ Don't know ☐ Yes
[ ]	[ ] Years	☐ No ☐ Don't know ☐ Yes	☐ No ☐ Don't know ☐ Yes
[ ]	[ ] Years	☐ No ☐ Don't know ☐ Yes	☐ No ☐ Don't know ☐ Yes

Section V Medical History - Continued

25. Has the participant or any blood relative had any of the following autoimmune or inflammatory diseases/disorders? If yes, complete the chart and provide the age of onset for the participant only.

Disease/Disorder	Participant*	Age of onset (years)	Father	Mother	Sibling	Paternal relative	Maternal relative	Child/Grandchild	Don't know	None
1. Guillain-Barre syndrome			☐	☐	☐	☐	☐	☐	☐	☐
2. Myasthenia gravis			☐	☐	☐	☐	☐	☐	☐	☐
3. Graves disease			☐	☐	☐	☐	☐	☐	☐	☐
4. Hyperthyroidism			☐	☐	☐	☐	☐	☐	☐	☐
5. Hashimoto's thyroiditis			☐	☐	☐	☐	☐	☐	☐	☐
6. Hypothyroidism			☐	☐	☐	☐	☐	☐	☐	☐
7. Dermatomyositis			☐	☐	☐	☐	☐	☐	☐	☐
8. Polymyositis			☐	☐	☐	☐	☐	☐	☐	☐
9. Addison's disease			☐	☐	☐	☐	☐	☐	☐	☐
10. Systemic lupus erythematosus			☐	☐	☐	☐	☐	☐	☐	☐
11. Rheumatoid arthritis			☐	☐	☐	☐	☐	☐	☐	☐
12. Other arthritis/don't know the type			☐	☐	☐	☐	☐	☐	☐	☐
13. Crohn's disease			☐	☐	☐	☐	☐	☐	☐	☐
14. Ankylosing spondylitis			☐	☐	☐	☐	☐	☐	☐	☐
15. Polyglandular autoimmune syndrome			☐	☐	☐	☐	☐	☐	☐	☐
16. Autoimmune hemolytic anemia			☐	☐	☐	☐	☐	☐	☐	☐
17. Sarcoidosis			☐	☐	☐	☐	☐	☐	☐	☐
18. Vasculitis or arteritis			☐	☐	☐	☐	☐	☐	☐	☐
19. Anterior uveitis or iritis			☐	☐	☐	☐	☐	☐	☐	☐
20. Psoriasis			☐	☐	☐	☐	☐	☐	☐	☐
21. Eczema			☐	☐	☐	☐	☐	☐	☐	☐
22. Primary biliary cirrhosis			☐	☐	☐	☐	☐	☐	☐	☐
23. Type 1 diabetes mellitus			☐	☐	☐	☐	☐	☐	☐	☐
24. Polymyalgia rheumatica			☐	☐	☐	☐	☐	☐	☐	☐
25. Rheumatic fever			☐	☐	☐	☐	☐	☐	☐	☐

Section V Medical History - Continued

25. Autoimmune and inflammatory diseases/disorders continued.

Disease/Disorder	Participant*	Age of onset (years)	Father	Mother	Sibling	Paternal relative	Maternal relative	ChildGrandchild	Don't know	None
26. Scleroderma			☐	☐	☐	☐	☐	☐	☐	☐
27. Vitiligo			☐	☐	☐	☐	☐	☐	☐	☐
28. Asthma			☐	☐	☐	☐	☐	☐	☐	☐
29. Seasonal allergies			☐	☐	☐	☐	☐	☐	☐	☐
30. Sjogren's syndrome			☐	☐	☐	☐	☐	☐	☐	☐
31. Ulcerative colitis			☐	☐	☐	☐	☐	☐	☐	☐
32. Goodpasture's syndrome			☐	☐	☐	☐	☐	☐	☐	☐
33. Idiopathic thrombocytopenic purpura			☐	☐	☐	☐	☐	☐	☐	☐
34. Inflammatory arthropathies			☐	☐	☐	☐	☐	☐	☐	☐
35. Autoimmune hepatitis (liver disease)			☐	☐	☐	☐	☐	☐	☐	☐
36. Celiac disease			☐	☐	☐	☐	☐	☐	☐	☐
37. Food/drug allergy:			☐	☐	☐	☐	☐	☐	☐	☐
38. Food/drug allergy:			☐	☐	☐	☐	☐	☐	☐	☐
39. Food/drug allergy:			☐	☐	☐	☐	☐	☐	☐	☐
40. Other:			☐	☐	☐	☐	☐	☐	☐	☐
41. Other:			☐	☐	☐	☐	☐	☐	☐	☐
42. Other:			☐	☐	☐	☐	☐	☐	☐	☐

Section V Medical History - Continued

26.Has the participant or any blood relative had any of the following neurological diseases/disorders? If yes, complete the chart and provide the age of onset for the participant only.

Disease/Disorder	Participant*	Age of onset (years)	Father	Mother	Sibling	Paternal relative	Maternal relative	Child/Grandchild	Don't know	None
1. Bell's palsy			☐	☐	☐	☐	☐	☐	☐	☐
2. Trigeminal neuralgia/Tic douloureux			☐	☐	☐	☐	☐	☐	☐	☐
3. Amyotrophic lateral sclerosis (Lou Gehrig's disease)			☐	☐	☐	☐	☐	☐	☐	☐
4. Meningitis or encephalitis			☐	☐	☐	☐	☐	☐	☐	☐
5. Parkinson's disease			☐	☐	☐	☐	☐	☐	☐	☐
6. Migraine headaches			☐	☐	☐	☐	☐	☐	☐	☐
7. Transverse myelitis			☐	☐	☐	☐	☐	☐	☐	☐
8. Epilepsy or seizures			☐	☐	☐	☐	☐	☐	☐	☐
9. Optic neuritis			☐	☐	☐	☐	☐	☐	☐	☐
10. Alzheimer's disease			☐	☐	☐	☐	☐	☐	☐	☐
11. Stroke			☐	☐	☐	☐	☐	☐	☐	☐
12. Other:			☐	☐	☐	☐	☐	☐	☐	☐
13. Other:			☐	☐	☐	☐	☐	☐	☐	☐
14. Other:			☐	☐	☐	☐	☐	☐	☐	☐

Section V Medical History - Continued

27. Has the participant or any blood relative had any of the following infectious diseases/disorders? If yes, complete the chart and provide the age of onset for the participant only.

Disease/Disorder	Participant*	Age of onset (years)	Father	Mother	Sibling	Paternal relative	Maternal relative	Child/Grandchild	Don't know	None
1. Mononucleosis/Epstein Barr virus	☐		☐	☐	☐	☐	☐	☐	☐	☐
2. Viral hepatitis (A, B, C)	☐		☐	☐	☐	☐	☐	☐	☐	☐
3. Chickenpox	☐		☐	☐	☐	☐	☐	☐	☐	☐
4. Shingles	☐		☐	☐	☐	☐	☐	☐	☐	☐
5. German measles (rubella)	☐		☐	☐	☐	☐	☐	☐	☐	☐
6. Measles (rubeola)	☐		☐	☐	☐	☐	☐	☐	☐	☐
7. Strep throat	☐		☐	☐	☐	☐	☐	☐	☐	☐
8. Mumps	☐		☐	☐	☐	☐	☐	☐	☐	☐
9. Febrile seizures	☐		☐	☐	☐	☐	☐	☐	☐	☐
10. Lyme disease	☐		☐	☐	☐	☐	☐	☐	☐	☐
11. Polio	☐		☐	☐	☐	☐	☐	☐	☐	☐
12. Tuberculosis	☐		☐	☐	☐	☐	☐	☐	☐	☐
13. Cold sores	☐		☐	☐	☐	☐	☐	☐	☐	☐
14. Syphilis	☐		☐	☐	☐	☐	☐	☐	☐	☐
15. Gonorrhea	☐		☐	☐	☐	☐	☐	☐	☐	☐
16. Genital herpes	☐		☐	☐	☐	☐	☐	☐	☐	☐
17. Chlamydia	☐		☐	☐	☐	☐	☐	☐	☐	☐
18. HIV/AIDS	☐		☐	☐	☐	☐	☐	☐	☐	☐
19. Mycoplasma pneumonia	☐		☐	☐	☐	☐	☐	☐	☐	☐
20. Other:	☐		☐	☐	☐	☐	☐	☐	☐	☐
21. Other:	☐		☐	☐	☐	☐	☐	☐	☐	☐
22. Other:	☐		☐	☐	☐	☐	☐	☐	☐	☐

Section V Medical History - Continued

28. Has the participant or any blood relative had any of the following cancers (primary)? If yes, complete the chart and provide the age of onset for the participant only.

Disease/Disorder	Participant*	Age of onset (years)	Father	Mother	Sibling	Paternal relative	Maternal relative	Child/Grandchild	Don't know	None
1. Breast cancer			☐	☐	☐	☐	☐	☐	☐	☐
2. Prostate cancer			☐	☐	☐	☐	☐	☐	☐	☐
3. Lung cancer			☐	☐	☐	☐	☐	☐	☐	☐
4. Colon cancer			☐	☐	☐	☐	☐	☐	☐	☐
5. Ovarian cancer			☐	☐	☐	☐	☐	☐	☐	☐
6. Skin cancer			☐	☐	☐	☐	☐	☐	☐	☐
7. Metastatic brain tumor			☐	☐	☐	☐	☐	☐	☐	☐
8. Primary brain tumor			☐	☐	☐	☐	☐	☐	☐	☐
9. Lymphoma			☐	☐	☐	☐	☐	☐	☐	☐
10. Leukemia			☐	☐	☐	☐	☐	☐	☐	☐
11. Head & neck cancer			☐	☐	☐	☐	☐	☐	☐	☐
13. Renal cancer			☐	☐	☐	☐	☐	☐	☐	☐
14. Cervical cancer			☐	☐	☐	☐	☐	☐	☐	☐
15. Other:			☐	☐	☐	☐	☐	☐	☐	☐
16. Other:			☐	☐	☐	☐	☐	☐	☐	☐
17. Other:			☐	☐	☐	☐	☐	☐	☐	☐

Section V Medical History - Continued

29. Has the participant or any blood relative had any of the following other diseases/conditions? If yes, complete the chart and provide the age of onset for the participant only.

Disease/Disorder	Participant*	Age of onset (years)	Father	Mother	Sibling	Paternal relative	Maternal relative	Child/Grandchild	Don't know	None
1. Chronic fatigue syndrome	☐		☐	☐	☐	☐	☐	☐	☐	☐
2. Fibromyalgia	☐		☐	☐	☐	☐	☐	☐	☐	☐
3. Raynaud's syndrome	☐		☐	☐	☐	☐	☐	☐	☐	☐
4. Diabetes mellitus (not type I, unrelated to pregnancy)	☐		☐	☐	☐	☐	☐	☐	☐	☐
5. Gallstones	☐		☐	☐	☐	☐	☐	☐	☐	☐
6. Gastric or duodenal ulcer	☐		☐	☐	☐	☐	☐	☐	☐	☐
7. Kidney stones	☐		☐	☐	☐	☐	☐	☐	☐	☐
8. Other kidney disease:	☐		☐	☐	☐	☐	☐	☐	☐	☐
9. Endometriosis	☐		☐	☐	☐	☐	☐	☐	☐	☐
10. Uterine fibroids	☐		☐	☐	☐	☐	☐	☐	☐	☐
11. Polycystic ovarian syndrome	☐		☐	☐	☐	☐	☐	☐	☐	☐
12. Interstitial cystitis (not urinary tract infection)	☐		☐	☐	☐	☐	☐	☐	☐	☐
13. Anemia/low blood count	☐		☐	☐	☐	☐	☐	☐	☐	☐
14. Heart disease	☐		☐	☐	☐	☐	☐	☐	☐	☐
15. Vascular malformation or aneurism Location:	☐		☐	☐	☐	☐	☐	☐	☐	☐
16. High cholesterol	☐		☐	☐	☐	☐	☐	☐	☐	☐
17. Hypertension	☐		☐	☐	☐	☐	☐	☐	☐	☐
18. Stroke	☐		☐	☐	☐	☐	☐	☐	☐	☐
19. Obesity	☐		☐	☐	☐	☐	☐	☐	☐	☐
20. Emphysema/Bronchitis/COPD	☐		☐	☐	☐	☐	☐	☐	☐	☐
21. Osteoporosis	☐		☐	☐	☐	☐	☐	☐	☐	☐
22. Alcoholism	☐		☐	☐	☐	☐	☐	☐	☐	☐

Section V Medical History - Continued

29. Other diseases/conditions continued.

Disease/Disorder	Participant*	Age of onset (years)	Father	Mother	Sibling	Paternal relative	Maternal relative	Child/Grandchild	Don't know	None
23. Drug addiction			☐	☐	☐	☐	☐	☐	☐	☐
24. Dementia			☐	☐	☐	☐	☐	☐	☐	☐
25. Mental illness			☐	☐	☐	☐	☐	☐	☐	☐
26. Depression			☐	☐	☐	☐	☐	☐	☐	☐
27. Pernicious anemia (associated with B12 deficiency)			☐	☐	☐	☐	☐	☐	☐	☐
28. Osteoarthritis			☐	☐	☐	☐	☐	☐	☐	☐
29. Other			☐	☐	☐	☐	☐	☐	☐	☐
30. Other:			☐	☐	☐	☐	☐	☐	☐	☐
31. Other:			☐	☐	☐	☐	☐	☐	☐	☐

Section V Medical History - Continued

30. Has the participant received any of the following vaccinations?

Disease	Vaccinated	Age (years)	Country
1. Chickenpox (varicella)	☐ No ☐ Yes ☐ Don't know	☐ < 5 ☐ 5 - 9 ☐ 10-14 ☐ 15 - 19 ☐ 20 - 25 ☐ > 25	
2. German Measles (rubella)	☐ No ☐ Yes ☐ Don't know	☐ < 5 ☐ 5 - 9 ☐ 10-14 ☐ 15 - 19 ☐ 20 - 25 ☐ > 25	
3. Measles (rubeola)	☐ No ☐ Yes ☐ Don't know	☐ < 5 ☐ 5 - 9 ☐ 10-14 ☐ 15 - 19 ☐ 20 - 25 ☐ > 25	
4. Smallpox	☐ No ☐ Yes ☐ Don't know	☐ < 5 ☐ 5 - 9 ☐ 10-14 ☐ 15 - 19 ☐ 20 - 25 ☐ > 25	
5. Mumps	☐ No ☐ Yes ☐ Don't know	☐ < 5 ☐ 5 - 9 ☐ 10-14 ☐ 15 - 19 ☐ 20 - 25 ☐ > 25	
6. Hepatitis A	☐ No ☐ Yes ☐ Don't know	☐ < 5 ☐ 5 - 9 ☐ 10-14 ☐ 15 - 19 ☐ 20 - 25 ☐ > 25	
7. Hepatitis B	☐ No ☐ Yes ☐ Don't know	☐ < 5 ☐ 5 - 9 ☐ 10-14 ☐ 15 - 19 ☐ 20 - 25 ☐ > 25	
8. Polio (shot)	☐ No ☐ Yes ☐ Don't know	☐ < 5 ☐ 5 - 9 ☐ 10-14 ☐ 15 - 19 ☐ 20 - 25 ☐ > 25	
9. Polio (oral vaccine)	☐ No ☐ Yes ☐ Don't know	☐ < 5 ☐ 5 - 9 ☐ 10-14 ☐ 15 - 19 ☐ 20 - 25 ☐ > 25	
10. Rabies	☐ No ☐ Yes ☐ Don't know	☐ < 5 ☐ 5 - 9 ☐ 10-14 ☐ 15 - 19 ☐ 20 - 25 ☐ > 25	
11. Travel (e.g., yellow fever, cholera, etc.) Specify: ____	☐ No ☐ Yes ☐ Don't know	☐ < 5 ☐ 5 - 9 ☐ 10-14 ☐ 15 - 19 ☐ 20 - 25 ☐ > 25	
12. Flu shot	☐ No ☐ Yes ☐ Don't know	☐ < 5 ☐ 5 - 9 ☐ 10-14 ☐ 15 - 19 ☐ 20 - 25 ☐ > 25	

Year of most recent flu shot: ____

Does the participant receive a flu shot every year? ☐ No ☐ Yes

If yes, for how many consecutive years? ____ Years

Section V Medical History - Continued

30. Has the participant received any of the following vaccinations?

Disease	Vaccinated	Age (years)		Country
13. Strep	☐ No ☐ Yes ☐ Don't know	☐ < 5 ☐ 5 - 9 ☐ 10-14	☐ 15 - 19 ☐ 20 - 25 ☐ > 25	
14. Meningococcal	☐ No ☐ Yes ☐ Don't know	☐ < 5 ☐ 5 - 9 ☐ 10-14	☐ 15 - 19 ☐ 20 - 25 ☐ > 25	
15. Other:		☐ < 5 ☐ 5 - 9 ☐ 10-14	☐ 15 - 19 ☐ 20 - 25 ☐ > 25	
16. Other:		☐ < 5 ☐ 5 - 9 ☐ 10-14	☐ 15 - 19 ☐ 20 - 25 ☐ > 25	
17. Other:		☐ < 5 ☐ 5 - 9 ☐ 10-14	☐ 15 - 19 ☐ 20 - 25 ☐ > 25	

31. Was the participant breast fed as an infant?

☐ No

☐ Yes, for approximately how many months was the participant breast fed? ☐ months ☐ < 1 month

☐ Yes, unsure for how long

☐ Don't know

Section VI Reproductive Health

☐ N/A - Mark if this is a male and skip to Section VII

32. Is the participant currently pregnant?

☐ No ☐ Yes

32a. If yes, what is the duration of this current pregnancy in weeks?

☐ weeks

33. Has the participant ever been pregnant?

☐ No ☐ Yes

Year ended	Duration	Outcome*	Breastfed (how long?)		
☐	☐ Months	☐	☐ No ☐ Yes	☐	☐ months ☐ <1 month
☐	☐ Months	☐	☐ No ☐ Yes	☐	☐ months ☐ <1 month
☐	☐ Months	☐	☐ No ☐ Yes	☐	☐ months ☐ <1 month
☐	☐ Months	☐	☐ No ☐ Yes	☐	☐ months ☐ <1 month
☐	☐ Months	☐	☐ No ☐ Yes	☐	☐ months ☐ <1 month
☐	☐ Months	☐	☐ No ☐ Yes	☐	☐ months ☐ <1 month
☐	☐ Months	☐	☐ No ☐ Yes	☐	☐ months ☐ <1 month
☐	☐ Months	☐	☐ No ☐ Yes	☐	☐ months ☐ <1 month
☐	☐ Months	☐	☐ No ☐ Yes	☐	☐ months ☐ <1 month
☐	☐ Months	☐	☐ No ☐ Yes	☐	☐ months ☐ <1 month
☐	☐ Months	☐	☐ No ☐ Yes	☐	☐ months ☐ <1 month
☐	☐ Months	☐	☐ No ☐ Yes	☐	☐ months ☐ <1 month
☐	☐ Months	☐	☐ No ☐ Yes	☐	☐ months ☐ <1 month

Section VI Reproductive Health - Continued

34. At what age did the participant's menstrual cycles begin? ____ years old

35. Have the participant's natural menstrual cycles ceased permanently?

☐ No ☐ Yes ☐ Don't know

35a. If no or don't know, what was the date of the participant's last menstrual cycle? ____

MM/DD/YYYY

35b. If yes, at what age did the participant's natural menstrual cycles cease?

____ years old

35c. If yes, for what reason did the participant's natural menstrual cycles cease?

☐ Natural ☐ Surgical ☐ Radiation or chemotherapy

36. Has the participant had any of the following menstrual problems?

Problem	Had in the past	Had in the past two months	Age (onset)
1. Irregular menstrual cycles	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	____ years
2. Excessive pain during menses	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	____ years
3. Excessive bleeding during menses	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	____ years
4. Premenstrual syndrome	☐ No ☐ Yes ☐ Don't know	☐ No ☐ Yes ☐ Don't know	____ years

37. Has the participant ever had any other menstrual problems?

☐ No
☐ Yes, specify: ____
☐ Don't know

38. Has the participant had her uterus surgically removed?

☐ No
☐ Yes, at what age did the participant have her uterus removed? ____ years old

39. Has the participant had either of her ovaries surgically removed?

☐ No
☐ Yes, how many ovaries did she have removed? ____ At what age? ____ years old

Section VII - Environmental Exposures

40. Did the participant's mother smoke tobacco at any time while pregnant with the participant?

☐ No ☐ Yes ☐ Don't know

41. Did anyone regularly smoke in the participant's home during childhood?

☐ No ☐ Yes ☐ Don't know

42. Has the participant lived with anyone who regularly smoked inside their home?

☐ No ☐ Yes ☐ Don't know

42a. If yes, for approximately how many years in total?

_____ years

42b. If yes and an MS, CIS, TM, ADEM, NMO or ON participant, for approximately how many years prior to the onset of symptoms? _____ years

Section VII - Environmental Exposures - Continued

43. Has the participant ever used tobacco more frequently than once per month?

☐ No ☐ Yes

Type of product*	Years used		# per day
		to	
		to	
		to	
		to	
		to	
		to	
		to	
		to	
		to	
		to	
		to	
		to	
		to	
		to	
		to	
		to	
Other:		to	
Other:		to	
Other:		to	

Site | Subject Barcode | Visit Date

Section VII - Environmental Exposures - Continued

44. Please provide the following information for all of the residences the participant has lived in for longer than one year.

Residence | Years lived

City | State/province | Country | to

Nearby substance emitting facilities (within 1 mile)
☐ No ☐ Yes - Specify below ☐ Don’t know

Primary source of drinking water*
a.
b.

Residence | Years lived

City | State/province | Country | to

Nearby substance emitting facilities (within 1 mile)
☐ No ☐ Yes - Specify below ☐ Don’t know

Primary source of drinking water*
a.
b.

Residence | Years lived

City | State/province | Country | to

Nearby substance emitting facilities (within 1 mile)
☐ No ☐ Yes - Specify below ☐ Don’t know

Primary source of drinking water*
a.
b.

Residence | Years lived

City | State/province | Country | to

Nearby substance emitting facilities (within 1 mile)
☐ No ☐ Yes - Specify below ☐ Don’t know

Primary source of drinking water*
a.
b.

Residence | Years lived

City | State/province | Country | to

Nearby substance emitting facilities (within 1 mile)
☐ No ☐ Yes - Specify below ☐ Don’t know

Primary source of drinking water*
a.
b.

Section VII - Environmental Exposures - Continued

45. Please provide the following information for all of the types of jobs the participant has held for longer than one year.

Type of job*

Other, specify:

Type of business

Worked from (year to year) to

Main activities/Duties

Work setting*

Hours per week hours

Type of job*

Other, specify:

Type of business

Worked from (year to year) to

Main activities/Duties

Work setting*

Hours per week hours

Type of job*

Other, specify:

Type of business

Worked from (year to year) to

Main activities/Duties

Work setting*

Hours per week hours

Type of job*

Other, specify:

Type of business

Worked from (year to year) to

Main activities/Duties

Work setting*

Hours per week hours

Type of job*

Other, specify:

Type of business

Worked from (year to year) to

Main activities/Duties

Work setting*

Hours per week hours

Section VII - Environmental Exposures - Continued

46. To the best of their knowledge, has the participant been exposed to any of the following chemicals or physical agents on a regular basis for one month or longer?

Chemical/Agent	Exposed?*	Age at onset	Length of exposure	Months	Years	Route*
1. Lead in any form				☐	☐	
2. Mercury in any form (not fillings)				☐	☐	
3. Zinc in any form				☐	☐	
4. Insecticides				☐	☐	
5. Herbicides				☐	☐	
6. Fungicides				☐	☐	
7. Fumigants				☐	☐	
8. Oil-based paints				☐	☐	
9. Paint thinners				☐	☐	
10. Paint strippers				☐	☐	
11. Varnishes				☐	☐	
12. Adhesives				☐	☐	
13. Dyes or printing inks				☐	☐	
14. Cutting, cooling, or lubricating oils				☐	☐	
15. Gasoline, diesel fuel, motor/fuel oil				☐	☐	
16. Antifreeze or coolants				☐	☐	
17. Degreasers/other cleaning agents				☐	☐	
18. Mineral spirits or white spirits				☐	☐	
19. Solvents like toluene or xylene				☐	☐	
20. Dry cleaning agents				☐	☐	
21. General anesthesia				☐	☐	
22. Products used by hairdressers				☐	☐	
23. Other:				☐	☐	
24. Other:				☐	☐	
25. Other:				☐	☐	

Section VII - Environmental Exposures - Continued

47. Has the participant engaged in any of the following hobbies or activities?

Hobby/Activity	Engaged in?*	Age began	For how long?	Months	Years
1. Hunting with a shotgun or muzzle loader				☐	☐
2. Reloading ammunition				☐	☐
3. Shooting skeet, trap, or targets				☐	☐
4. Shooting on an indoor range				☐	☐
5. Making fishing weights				☐	☐
6. Painting with oil based paints				☐	☐
7. Glazing ceramics				☐	☐
8. Making stained glass				☐	☐
9. Making silver jewelry				☐	☐
10. Developing photographs				☐	☐
11. Building models using glue				☐	☐
12. Painting or refinishing furniture				☐	☐
13. Repairing cars/boats, other than flat tires and oil changes				☐	☐
14. Gardening or other yard work				☐	☐
15. Other:				☐	☐
16. Other:				☐	☐
17. Other:				☐	☐

Section VII - Environmental Exposures - Continued

48. Has the participant engaged in any sports or related physical activities for longer than a year?
- ☐ No
- ☐ Yes
- ☐ Don't know

Sport/physical activity	Setting	Length (year to year)		
			to	
			to	
			to	
			to	
			to	
			to	

49. Has the participant ever lived in a house with pets or been in frequent contact with other types of animals?
- ☐ No
- ☐ Yes
- ☐ Don't know

Animal	Length (year to year)		
		to	
		to	
		to	
		to	
		to	
		to	

Section VII - Environmental Exposures - Continued

50. What is the participant's untanned skin tone?*

51. How does the participant's skin react when exposed to the sun in the summer for the first time without sunscreen?*

52. At the end of summer or after a two week holiday, what kind of tan would the participant have?*

53. Does the participant's skin burn after one hour of exposure, in the middle of the day, for the first time in summer, without sunscreen?

- ☐ No
- ☐ Yes, and then it peels
- ☐ Yes, without peeling
- ☐ Don't know

53a. If yes, how does the participant's skin react after burning?

- ☐ Fades to tan
- ☐ Fades to original skin tone
- ☐ Don't know

54. How many times has the participant had a sunburn that has lasted more than two days?*

Section VIII - Medications and Nutritional Supplements

55. For Cases only - Has the participant been administered any MS disease modifying medications (Rebif, Copaxone, Betaseron, Avonex, Novantrone, etc.)?

☐ No ☐ Yes ☐ Don't know

Drug	Rte.*	Dose (include units)	Freq.	Start date (MM/YYYY)	Stop date (MM/YYYY)	Reason stopped*

56. For Cases only - Has the participant been administered any relapse/attack medications (adrenocorticotropic hormone, prednisone, intravenous methylprednisone, etc.)? ☐ No ☐ Yes ☐ Don't know

Drug	Rte.*	Dose (include units)	Freq.	Start date (MM/YYYY)	Duration			Reason stopped*
					Taper ☐		☐ Days ☐ Months ☐ Years	
					Taper ☐		☐ Days ☐ Months ☐ Years	
					Taper ☐		☐ Days ☐ Months ☐ Years	
					Taper ☐		☐ Days ☐ Months ☐ Years	
					Taper ☐		☐ Days ☐ Months ☐ Years	
					Taper ☐		☐ Days ☐ Months ☐ Years	
					Taper ☐		☐ Days ☐ Months ☐ Years	
					Taper ☐		☐ Days ☐ Months ☐ Years	

Section VIII - Medications and Nutritional Supplements - Continued

57. Is the participant currently taking or have they in the past taken any other medications, doctor prescribed or over the counter, for longer than two months? ☐ No ☐ Yes ☐ Don't know

Drug	Rte.*	Dose (include units)	Freq.	Start date (MM/YYYY)	Stop date (MM/YYYY)	Reason stopped*

58. Does the participant currently take a multivitamin (exclude individual vitamins)?
☐ No ☐ Yes ☐ Don't know

58a. If yes, how many does the participant take per week?*

58b. If yes, what specific brand does the participant usually use?

58c. If yes, when did the participant last take a multivitamin?
MM/DD/YYYY

59. Has the participant received plasmapheresis?
☐ No ☐ Yes ☐ Don't know

60. Has the participant received any experimental treatments?
☐ No ☐ Yes ☐ Don't know

60a. If yes, please describe:

61. Is the participant on a modified diet (Swank, vegan, vegetarian, kosher, etc.)?
☐ No ☐ Yes ☐ Don't know

Section VIII - Medications and Nutritional Supplements - Continued

62. Does the participant regularly take any of the following supplements?

Supplement	Taken ?*	Occasional or continuous use*	If continuous, how long?
1. Vitamin A			☐ Days ☐ Months
2. Beta carotene			☐ Days ☐ Months
3. Vitamin C			☐ Days ☐ Months
4. Vitamin B-6			☐ Days ☐ Months
5. Vitamin D			☐ Days ☐ Months
6. Vitamin E			☐ Days ☐ Months
7. Calcium (includes Tums, etc.)			☐ Days ☐ Months
8. Selenium			☐ Days ☐ Months
9. Niacin			☐ Days ☐ Months
10. Zinc			☐ Days ☐ Months
11. Metamucil/Citrucel (fiber)			☐ Days ☐ Months
12. Potassium			☐ Days ☐ Months
13. Chromium			☐ Days ☐ Months
14. Folic acid			☐ Days ☐ Months
15. Iron			☐ Days ☐ Months

Section VIII - Medications and Nutritional Supplements - Continued

62. Does the participant regularly take any of the following supplements?

Supplement	Taken ?*	Occasional or continuous use*	If continuous, how long?
16. Soy estrogen			☐ Days ☐ Months
17. Magnesium			☐ Days ☐ Months
18. Lecithin			☐ Days ☐ Months
19. B-complex			☐ Days ☐ Months
20. St. John's wort			☐ Days ☐ Months
21. Gingko biloba			☐ Days ☐ Months
22. Cod liver oil			☐ Days ☐ Months
23. Vitamin B-12			☐ Days ☐ Months
24. Co-enzyme Q10			☐ Days ☐ Months
25. DHEA			☐ Days ☐ Months
26. Fish oil			☐ Days ☐ Months
27. Garlic			☐ Days ☐ Months
28. Evening primrose oil			☐ Days ☐ Months
29. Echinachea			☐ Days ☐ Months
30. Ginseng			☐ Days ☐ Months

Section VIII - Medications and Nutritional Supplements - Continued

62. Does the participant regularly take any of the following supplements?

Supplement	Taken ?*	Occasional or continuous use*	If continuous, how long?	
31. Bee stings				☐ Days ☐ Months
32. Other:				☐ Days ☐ Months
33. Other:				☐ Days ☐ Months

Section IX - Conclusion

63. Are there any significant events or factors, not captured in this questionnaire, that the participant would like to report which may relate to the onset of their demyelinating disease?

☐ No ☐ Yes

64. Does the participant have any questions or comments regarding this questionnaire or this study?

☐ No ☐ Yes

Diagnosis for Study Ascertainment

Name of enrolling physician

Date

MM/DD/YYYY

Section I - Clinically observed signs: List the participant's signs of MS (CIS, TM, ADEM, NMO, or ON) as observed by a neurologist and check the appropriate column(s) to indicate when each was exhibited.

Observed sign	At onset	In relapses	Currently	Never observed/ Don't know
1. Cognitive dysfunction (slow information processing speed, executive dysfunction, memory loss, MMSE < 26, etc.)	☐	☐	☐	☐
2. Babinski sign	☐	☐	☐	☐
3. Changes in mood/depression	☐	☐	☐	☐
4. Sensory loss/impairment	☐	☐	☐	☐
5. Dysarthria	☐	☐	☐	☐
6. Bulbar dysfunction (eg., dysphagia)	☐	☐	☐	☐
7. Scotoma	☐	☐	☐	☐
8. Facial paresis	☐	☐	☐	☐
9. Facial twitching	☐	☐	☐	☐
10. Tremor	☐	☐	☐	☐
11. Spasticity	☐	☐	☐	☐
12. Weakness in upper extremities	☐	☐	☐	☐
13. Clumsy or useless hand syndrome	☐	☐	☐	☐
14. Appendicular ataxia in upper extremities	☐	☐	☐	☐
15. Weakness in lower extremities	☐	☐	☐	☐
16. Appendicular ataxia in lower extremities	☐	☐	☐	☐
17. Gait disorder	☐	☐	☐	☐
18. Pathological brisk reflexes	☐	☐	☐	☐
19. Sensory level	☐	☐	☐	☐
20. Loss of color vision	☐	☐	☐	☐
21. Corrected visual acuity < 20/40	☐	☐	☐	☐

Diagnosis for Study Ascertainment

Section I (Cont.) - Clinically observed signs: List the participant's signs of MS (CIS, TM, ADEM, NMO, ON) as observed by a neurologist and check the appropriate column(s) to indicate when each was exhibited.

Observed Sign	At onset	In relapses	Currently	Never observed/ Don't know
22. Pale optic disc	☐	☐	☐	☐
23. Internuclear ophthalmoplegia	☐	☐	☐	☐
24. Sustained nystagmus	☐	☐	☐	☐
25. Disconjugate gaze	☐	☐	☐	☐
26. Other:	☐	☐	☐	
27. Other:	☐	☐	☐	
28. Other:	☐	☐	☐	

Diagnosis for Study Ascertainment

Section II - MRI: Please provide the following information and submit the report for the participant's **earliest available** MRI.

Brain MRI, date performed _____ ☐ Not done
MM/DD/YYYY

Spinal cord MRI, date performed _____ ☐ Not done
MM/DD/YYYY

	T1		Enhancing		T2/PD/FLAIR			
N/A = Not assessed	N/A	# of MS lesions	N/A	# of MS lesions	N/A	Total # of MS lesions	Locations	Consistent with demyelinating disease
1. Supratentorial	☐		☐		☐			☐
2. Infratentorial	☐		☐		☐			☐
3. Cervical	☐		☐		☐			☐
4. Thoracolumbar	☐		☐		☐			☐

Have any new lesions >= 3mm in diameter occurred in subsequent MRI's?
☐ No ☐ Yes ☐ Not applicable ☐ Don't know

If yes, were the new lesions enhancing or non-enhancing?
☐ Enhancing ☐ Non-enhancing ☐ Both

Section III - Cerebrospinal fluid: Please provide the following information and submit the report for the participant's earliest available cerebrospinal fluid draw that shows evidence of MS (CIS, TM, ADEM, NMO or ON).

Date performed _____ ☐ Not done
MM/DD/YYYY

Oligoclonal banding: ☐ No ☐ Yes, number of bands _____ ☐ Indeterminate ☐ Not assessed

IgG index: Elevated? ☐ No ☐ Yes, result _____ Normal range _____ ☐ Not assessed

White cell count: _____ /mm^3 ☐ Not assessed

Total protein: _____ ☐ mg/l ☐ mg/dl ☐ Not assessed

VDRL: ☐ Reactive ☐ Non-reactive ☐ Not assessed

Borrelia antibodies: ☐ Positive ☐ Negative ☐ Not assessed

Myelin basic protein: (ng/ml) ☐ Not elevated ☐ Elevated, result _____ Normal range _____ ☐ Not assessed

Diagnosis for Study Ascertainment

Section III Cerebrospinal fluid (Cont.): Please provide the following information and submit the report for the participant's subsequent cerebrospinal fluid draws.

Date performed _____ ☐ Not done

MM/DD/YYYY

Oligoclonal banding: ☐ No ☐ Yes, number of bands _____ ☐ Indeterminate ☐ Not assessed

IgG index: Elevated? ☐ No ☐ Yes, result _____ Normal range _____ ☐ Not assessed

White cell count: _____ /mm^3 ☐ Not assessed

Total protein: _____ ☐ mg/l ☐ mg/dl ☐ Not assessed

VDRL: ☐ Reactive ☐ Non-reactive ☐ Not assessed

Borrelia antibodies: ☐ Positive ☐ Negative ☐ Not assessed

Myelin basic protein: (ng/ml) ☐ Not elevated ☐ Elevated, result _____ Normal range _____ ☐ Not assessed

Section III Cerebrospinal fluid (Cont.): Please provide the following information and submit the report for the participant's subsequent cerebrospinal fluid draws.

Date performed _____ ☐ Not done

MM/DD/YYYY

Oligoclonal banding: ☐ No ☐ Yes, number of bands _____ ☐ Indeterminate ☐ Not assessed

IgG index: Elevated? ☐ No ☐ Yes, result _____ Normal range _____ ☐ Not assessed

White cell count: _____ /mm^3 ☐ Not assessed

Total protein: _____ ☐ mg/l ☐ mg/dl ☐ Not assessed

VDRL: ☐ Reactive ☐ Non-reactive ☐ Not assessed

Borrelia antibodies: ☐ Positive ☐ Negative ☐ Not assessed

Myelin basic protein: (ng/ml) ☐ Not elevated ☐ Elevated, result _____ Normal range _____ ☐ Not assessed

Diagnosis for Study Ascertainment

Section IV - Evoked potentials: Please provide the following information and report for the participant's **earliest available** evoked potentials exam.

	Date performed	Not done	Right side*	Left side*
1. Visual		☐		
2. Brainstem auditory		☐		
3. Somatosensory				
3a. Upper limbs		☐		
3b. Lower limbs		☐		

Section V - CNS biopsy: Please provide the following information and report for the participant's **earliest available** CNS biopsy.

Date performed

☐ Not done

MM/DD/YYYY

Result:

☐ Negative ☐ Indeterminate ☐ MS

☐ Other (specify):

Section VI - Standardized assessment scales : Please provide the following information for the participant's **earliest available** standardized assessment scales.

Earliest available:

		Date performed	
1. EDSS			☐ Not done
2. 25 ft. walk	sec.		☐ Not done
3. 9 hole peg	sec.		☐ Not done
4. Ambulation index			☐ Not done
5. MSFC			☐ Not done

Diagnosis for Study Ascertainment

Section VI (cont.) - Standardized assessment scales: Please provide the following information for the participant's **most recent** standardized assessment scales.

Most Recent:

			Date Performed	
1. EDSS				☐ Not done
2. 25 ft. walk		sec.		☐ Not done
3. 9 hole peg		sec.		☐ Not done
4. Ambulation index				☐ Not done
5. MSFC				☐ Not done

Section VII - Differential diagnosis: Please provide the following information and report for any of the following exams performed on the participant to rule out other conditions.

Condition (test)		Result	
Neuroophthalmic (e.g. slit lamp exam)	**Not Done**	**POS.**	**NEG.**
1. Uveitis	☐	☐	☐
2. Neuroretinitis	☐	☐	☐
3. Other _____		☐	☐
Genetic (Mendelian)			
4. Metachromatic leukodystrophy (arylsulfatase A)	☐	☐	☐
5. Adrenoleukodystrophy (serum very long chain fatty acids)	☐	☐	☐
6. Krabbe's disease (WBC betagalactocerebrosidase)	☐	☐	☐
7. CADASIL (Notch 3 gene mutation)	☐	☐	☐
8. Other _____		☐	☐
Metabolic			
9. B-12 deficiency	☐	☐	☐
10. Folate deficiency	☐	☐	☐
11. Vitamin E deficiency	☐	☐	☐
Neoplastic granulomatous disease/sarcoidosis			
12. ACE	☐	☐	☐
13. Chest X-ray	☐	☐	☐

Diagnosis for Study Ascertainment

Section VII (cont.)- Differential diagnosis:

Condition (test)	Result		
Infectious	**Not done**	**POS.**	**NEG.**
14. VDRL, MHA-TP, or RPR	☐	☐	☐
15. Borrelia IgG	☐	☐	☐
16. Borrelia IgM	☐	☐	☐
17. HTLV- I/II	☐	☐	☐
18. HIV	☐	☐	☐
19. HSV-1 antibody	☐	☐	☐
20. HSV-2 antibody	☐	☐	☐
21. CMV antibody	☐	☐	☐
22. Hepatitis A antibody	☐	☐	☐
23. Hepatitis B surface antigen	☐	☐	☐
24. Hepatitis B antibody	☐	☐	☐
25. Hepatitis C antibody	☐	☐	☐
26. Hepatitis C surface antigen	☐	☐	☐
Hypercoagulable/Inflammatory			
27. Sjogren's syndrome (SSA, SSB)	☐	☐	☐
28. Lupus (DS DNA)	☐	☐	☐
29. Protein S	☐	☐	☐
30. Protein C	☐	☐	☐
31. ANCA	☐	☐	☐
32. ESR	☐	☐	☐
33. Antiphospholipid antibody	☐	☐	☐
34. Anti-cardiolipin antibody	☐	☐	☐
35. Lupus anticoagulant	☐	☐	☐
36. ANA	☐	☐	☐
37. Rheumatoid factor	☐	☐	☐
38. C3	☐	☐	☐
39. C4	☐	☐	☐
40. General anti-ENA panel	☐	☐	☐
41. Leiden mutation	☐	☐	☐

Diagnosis for Study Ascertainment

Section VII (cont.)- Differential diagnosis:

Condition (test)	Not done	Result
Hematologic		
42. White blood count (x10^3/mm^3)	☐	
43. Red blood count (x10^6/mm^3)	☐	
44. Platelets (x10^3/mm^3)	☐	
45. Polys (absolute) (x10^3/mm^3)	☐	
46. Monocytes (absolute) (x10^3/mm^3)	☐	
47. EOS (absolute) (x10^3/mm^3)	☐	
48. Basos (absolute) (x10^3/mm^3)	☐	
49. Lymphs (absolute) (x10^3/mm^3)	☐	
Pathological specimens		
50. Biopsy	☐	
Tissue type		Result
51. Biopsy	☐	
Tissue type		Result
52. Biopsy	☐	
Tissue type		Result
53. Biopsy	☐	
Tissue type		Result

Section VIII - ASIA impairment scale

Has the participant been diagnosed with TM or NMO?

☐ No
☐ Yes
☐ Don't know

If Yes, what was the ASIA impairment scale score?

At onset: ☐ A ☐ B ☐ C ☐ D ☐ Don't Know

At most recent exam: ☐ A ☐ B ☐ C ☐ D ☐ Don't Know

INVESTIGATOR SIGNATURE

The investigator's signature on this page verifies that he/she has reviewed all the data recorded on the Case Report Form, and has reviewed all the data queries and resolutions pertaining to this Subject generated by the Sponsor and/or the site monitors.

Investigator's Signature

Date

MM/DD/YYYY