Set up the patient according to the ADNI instruction manual. Use the 8-channel brain coil.

Use the electronic ADNI protocol that has been loaded on your scanner.

**NOTE:** The "adni14m4" pulse sequence used for series 2 and 3 is a work in progress pulse sequence that ADNI sites obtain from GE Healthcare.

Accept the "First Operating Mode" pop-up in Series 1. Consult the scanner’s user’s manual to understand this choice and its implications.

### SERIES 1

<table>
<thead>
<tr>
<th>coil</th>
<th>etl</th>
<th>scan time</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>8hrbrain</td>
<td></td>
<td>13</td>
<td>Use 8-channel brain coil.</td>
</tr>
</tbody>
</table>

### IMAGING PARAMETERS

- Scan plane mode: 3-plane (Whole Body gradient)
- Matrix/nex: 256 / 128 / 1
- Slice/space: 26 / 5 / 5
- AutoShim: On

### ACQUISITION TIMING

- Scan time: 13

### ADDITIONAL PARAMETERS

- Phase Corr: Image Acq. delay = 0
- Turbo Mode: 1
- Swap Fat Chem Shift: 1
- Slice Resolution: 100%
- MPGRAGE mode: 1
- TD or MPRAGE TR = 2400

### SERIES 2

<table>
<thead>
<tr>
<th>coil</th>
<th>etl</th>
<th>scan time</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sag MPRAGE</td>
<td>8hrbrain</td>
<td>7:42</td>
<td>Cover skin to skin. Remind the patient to hold still for this scan.</td>
</tr>
</tbody>
</table>

### IMAGING PARAMETERS

- Scan plane mode: Sag
- Matrix/nex: 192 / 192 / 1
- AutoShim: Off

### ACQUISITION TIMING

- Scan time: 7:42

### ADDITIONAL PARAMETERS

- Phase Corr: Image Acq. delay = 0
- Turbo Mode: 1
- Swap Fat Chem Shift: 1
- Slice Resolution: 100%
- MPRAGE mode: 1
- TD or MPRAGE TR = 2400

### SERIES 3

<table>
<thead>
<tr>
<th>coil</th>
<th>etl</th>
<th>scan time</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sag MPRAGE-repeat</td>
<td>8hrbrain</td>
<td>7:42</td>
<td>Prescribe same image locations as series 2, unless adjustment is needed (e.g. to correct for wrap). Remind the patient to hold still for this scan.</td>
</tr>
</tbody>
</table>

### IMAGING PARAMETERS

- Scan plane mode: Sag
- Matrix/nex: 192 / 192 / 1
- AutoShim: Off

### ACQUISITION TIMING

- Scan time: 7:42

### ADDITIONAL PARAMETERS

- Phase Corr: Image Acq. delay = 0
- Turbo Mode: 1
- Swap Fat Chem Shift: 1
- Slice Resolution: 100%
- MPRAGE mode: 1
- TD or MPRAGE TR = 2400

**NOTE:** Be sure to select the "Copy FOV, Thickness, Spacing" button for the graphic prescription. Otherwise, if you copy the slice locations from series 2, the number of slices might be reduced.

(Continued on next page)
### Series 4

**Coil:** 8hrbrain  
**Image Plane:** Sag  
**Mode:** 3D (ZOOM gradient)  
**Pulse Sequence:** GRE  
**Image Options:** EDR, Fast  
**Additional Parameters:**  
- **Scan Timing:**  
  - # Echoes: 1  
  - TR: min full  
  - Flip Angle: 2  
  - BW1/BW2: 62.5  
  - Scan Time: 36s  

**Comments:** Cover skin to skin.

### Series 5

**Coil:** BODY  
**Image Plane:** Sag  
**Mode:** 3D (ZOOM gradient)  
**Pulse Sequence:** GRE  
**Image Options:** EDR, Fast  
**Additional Parameters:**  
- **Scan Timing:**  
  - # Echoes: 1  
  - TR: min full  
  - Flip Angle: 2  
  - BW1/BW2: 62.5  
  - Scan Time: 36s  

**Comments:** Turn Body Coil on for this scan. Leave 8hrbrain coil plugged in, but accept change to Body Coil. (In other words, select "Apply".) Same image locations as series 4.

### Series 6

**Coil:** 8hrbrain  
**Image Plane:** Ax  
**Mode:** 2D (ZOOM gradient)  
**Pulse Sequence:** FSE-XL  
**Image Options:** EDR, Fast  
**Additional Parameters:**  
- **Scan Timing:**  
  - # Echoes: 2  
  - TR: 3000  
  - Flip Angle: 16  
  - BW1/BW2: 20.83  
  - Scan Time: 6.25s  

**Comments:** Accept change back to 8-channel Brain Coil. (In other words, select "Apply".)  
Prescribe 48 slices to cover head.

**Series 6 is the final patient series.**

Follow the ADNI instructions to complete the phantom scans.