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 "adni" pulse sequence used for series 2 and 3 is a works in progress pulse sequence that ADNI sites obtain from GE Healthcare.

SERIES	1. 3 plane loc.	scan plane	*IMAGING PARAMETERS* 3-plane	matrix/nex	*ACQUISITION TIMING* 256 / 128 / 1
coil	8hrbrain	mode	(Whole Body gradient)	fov (cm)	26
etl		SAT		slice/space	5 / 5
scan time	:13			autoshim	On

comments   Use 8-channel brain coil.

SERIES	2. Sag MPRAGE	scan plane	*IMAGING PARAMETERS* Sag	matrix/nex	*ACQUISITION TIMING* 192 / 192 / 1
coil	8hrbrain	mode	3D (ZOOM gradient)	phase fov	
SCAN TIMING		pulse seq	SPGR	locs/pause	
#echos	1	image opts.	EDR, IrPrep, Fast	freq. direct.	S/I
te	min full	psd name	adni	fc direct	
Prep time	1000		*ADDITIONAL PARAMETERS*	phase corr	
flip angle	8		turbo mode = 1	autoshim	On
etl		User CVs	swap fat chem shift = 1		*SCANNING RANGE*
bw1/bw2	15.63		slice resolution = 100%	fov	24
scan time	7:42		mprage mode = 1	slice/space	1.2mm 170 locs/slab
			TD or mprageTR=2400		

comments   Cover skin to skin. Remind the patient to hold still for this scan.

SERIES	3.MPRAGE-repeat	scan plane	*IMAGING PARAMETERS* Sag	matrix/nex	*ACQUISITION TIMING* 192 / 192 / 1
coil	8hrbrain	mode	3D (ZOOM gradient)	phase fov	
SCAN TIMING		pulse seq	SPGR	locs/pause	
#echos	1	image opts.	EDR, IrPrep, Fast	freq. direct.	S/I
te	min full	psd name	adni	fc direct	
Prep time	1000		*ADDITIONAL PARAMETERS*	phase corr	
flip angle	8		turbo mode = 1	autoshim	Off
etl		User CVs	swap fat chem shift = 1		*SCANNING RANGE*
bw1/bw2	15.63		slice resolution = 100%	fov	24
scan time	7:42		mprage mode = 1	slice/space	1.2mm 170 locs/slab
			TD or mprageTR=2400		

comments   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.

SERIES — 4. Sag B1 Cal PA

SERIES	4. Sag B1 Cal PA	scan plane	Sag	matrix/nex	128 / 128 / 1	
coil	8hrbrain	mode	3D (ZOOM gradient)	phase fov		
	SCAN TIMING	pulse seq	GRE	locs/pause		
#echos	1	image opts.	EDR, Fast	freq. direct.	S/I	
te	min full	psd name		fc direct		
tr			*ADDITIONAL PARAMETERS*	Auto Shim	On	
flip angle	2				*SCANNING RANGE*	
etl		User CVs	Image acq. delay=0	fov	30	
bw1/bw2	62.5		Turbo Mode =1	slice/space	2.5mm locs/slab=96	
scan time	:36		Slice resolution=100%			

comments — Cover skin to skin.

SERIES	5. Sag B1 Cal PA	scan plane	Sag	matrix/nex	128 / 128 / 1	
coil	**BODY**	mode	3D (ZOOM gradient)	phase fov		
	SCAN TIMING	pulse seq	GRE	locs/pause		
#echos	1	image opts.	EDR, Fast	freq. direct.	S/I	
te	min full	psd name		fc direct		
tr			*ADDITIONAL PARAMETERS*	Auto Shim	Off	
flip angle	2				*SCANNING RANGE*	
etl		User CVs	Image acq. delay=0	fov	30	
bw1/bw2	62.5		Turbo Mode =1	slice/space	2.5mm locs/slab=96	
scan time	:36		Slice resolution=100%			

comments — Turn Body Coil on for this scan. Leave 8hrbrain coil plugged in, but accept change to Body Coil
Same image locations as series 4.

SERIES			*IMAGING PARAMETERS*		*ACQUISITION TIMING*
coil	6. Ax PD/T2 FSE	scan plane	Ax	matrix/nex	256 / 256 / 1
	8hrbrain	mode	2D (ZOOM gradient)	phase fov	0.9
	SCAN TIMING	pulse seq	FSE-XL	acqs/pause	0
#echoes	**2**	image opts.	EDR, Fast	freq. direct.	A/P
te	min full / TE2=100	psd name		fc direct	
TR	3000		*ADDITIONAL PARAMETERS*	Autoshim	Off
flip angle			Filter Choices=none	phase corr	
etl	16	User CVs	blurring cancellation=0		*SCANNING RANGE*
bw1/bw2	20.83			fov	24
scan time	6:25			slice/space	48 loc, 3mm interleaved

comments — Accept change back to 8-channel Brain Coil
Prescribe 48 slices to cover head.

Series 6 is the final patient series.

Follow the ADNI instructions to complete the phantom scans.