

DATA & SAMPLES/DATA TYPES/BIOSPECIMEN

One of the goals of ADNI is the collection of biospecimens, including blood, urine (only during ADNI1), and cerebrospinal fluid (CSF) from participants. Interested investigators, whether associated with an ADNI site or not, are encouraged to apply for the use of this limited resource. However, the use of ADNI samples for technology development or comparisons among different technologies is not recommended for well-established analysis unless preliminary data shows superior performance.

The biospecimens collection schedule for each ADNI phase are provided below.

ADNI 1 BIOSPECIMEN COLLECTION

All Participants:	Urine	all visits
	Plasma from Blood	all visits
	Serum from Blood	all visits
	CSF ¹	baseline and month 12
	Blood for NCRAD	baseline
	Blood for APOE	screening
	Cell Immortalization	baseline

CSF¹: CSF was not collected from everyone in ADNI-1, just those who volunteered and consented to have a lumbar puncture. Urine and blood were collected from everyone.

ADNI GO BIOSPECIMEN COLLECTION

EMCI Participants:	CSF	screening
	Plasma from Blood	all visits
	Serum from Blood	all visits
	APOE/GWAS	baseline

	RNA	baseline
	Cell Immortalization	baseline
ADNI 1 Continuing Participants:	RNA	initial
	GWAS	initial
	Cell Immortalization	initial

ADNI 2 BIOSPECIMEN COLLECTION

New Controls, EMCI and LMCI Participants:	CSF	baseline and every two years
	Buffy Coat	all visits
	Plasma from Blood	all visits
	Serum from Blood	all visits
	RNA	baseline, then yearly
	APOE/GWAS	baseline
	Cell Immortalization	baseline
New AD Participants:	CSF	baseline and Month 24
	Buffy Coat	all visits
	Plasma from Blood	all visits
	Serum from Blood	all visits
	RNA	baseline, Months 12 and 24
	APOE/GWAS	baseline
	Cell Immortalization	baseline
ADNI 1/GO Continuing Participants:	CSF	1st ADNI 2 visit, then every two years
	Buffy Coat	1st ADNI 2 visit, then yearly

	Plasma from Blood	1st ADNI 2 visit, then yearly
	Serum from Blood	1st ADNI 2 visit, then yearly
	RNA	1st ADNI 2 visit, then yearly
	GWAS	1st ADNI 2 visit if not obtained in ADNI GO

ADNI 3 BIOSPECIMEN COLLECTION

Newly Enrolled Participants:	CSF	baseline and every two years
	Buffy Coat	all visits
	Plasma from Blood	all visits
	Serum from Blood	all visits
	RNA	all visits
	PBMCs	baseline
	APOE/GWAS	baseline
	Cell Immortalization	baseline
Rollover Participants:	CSF	initial visit and every two years
	Buffy Coat	all visits
	Plasma from Blood	all visits
	Serum from Blood	all visits
	RNA	all visits
	PBMCs	baseline

ADNI 4 BIOSPECIMEN COLLECTION

Remote Blood Cohort	Plasma and serum from blood for biomarkers and genetic analysis	baseline, months 24, 48
New In-Clinic Participants:	CSF - optional	baseline, months 24, 48 ^{1,2} baseline, month 24 ³
	Buffy Coat	baseline ¹ , all visits ² baseline, months 12 and 24 ³
	Plasma and serum from Blood	baseline, months 24, 48 ¹ , all visits ² , baseline, months 12, 24 ³
	RNA	baseline ¹ , all visits ² baseline, months 12, 24 ³
	PBMCs	baseline
	APOE/GWAS	baseline
Rollover In-Clinic Participants:	CSF - optional	baseline, months 24, 48 ^{4,5} baseline, month 24 ⁶ months 12, 36 ^{7,8} month 12 ⁹
	Buffy Coat	baseline, months 24, 48 ⁴ all visits ^{5,8} baseline, months 12, 24 ^{6,9} baseline, months 12, 36 ⁷
	Plasma and serum from Blood	baseline, months 24, 48 ⁴ all visits ^{5,8} baseline, months 12, 24 ^{6,9} baseline, months 12, 36 ⁷
	RNA	baseline, months 24, 48 ⁴ all visits ^{5,8} baseline, months 12, 24 ^{6,9} baseline, months 12, 36 ⁷
	PBMCs	baseline
	GWAS	baseline

1 – cognitively normal (CN) new participants, 2 – MCI/converter new participants, 3 – demented (DEM) new participants, 4 – CN rollovers who did not have a PET scan (Amyloid and/or Tau) in their final year of ADNI3, 5 - MCI/Converter rollovers who did not have a PET scan (Amyloid and/or Tau) in their final year of ADNI3, 6 - DEM rollovers who did not have a PET scan (Amyloid and/or Tau) in their final year of ADNI3, 7 - CN rollovers who did have a PET scan (Amyloid and/or Tau) in their final year of ADNI3, 8 - MCI/Converters rollovers who did have a PET scan (Amyloid and/or Tau) in their final year of ADNI3, 9 - DEM rollovers who did have a PET scan (Amyloid and/or Tau) in their final year of ADNI3.