

SUMMARY OF ADNICSE INVENTORY

ADNIUPENNBIOMARKER CORE

Last Updated: January 28th, 2016



Table of Contents



a. Figure 1 page 4 b. Table 1 page 5	Follow-Up Visits forADNI1 a. Figure 3bpage 14 b. Table 3bpage 15
2. Comparison of the number of Prepared Aliquots from Originally Received CSF Samples at BASELINE for all ADNI a. Figure 2a (BASELINE)	6. Number of Prepared Aliquots from Originally Received CSF Samples for ADNI 2 at BASELINE and Follow-Up Visits a. Figure 4apage 16 b. Table 4apage 17
	7. Number of Currently Available Prepared CSF Aliquots for ADNI 2 at BL

3. Comparison of Currently Available Prepared CSF Aliquots at BASELINE
for all ADNI
a. Figure 2c (BASELINE) page 9
b. Figure 2d (Yr 1 Follow-Up for ADNI 1) page 10

1. Percentage of Subjects Providing CSFs per ADNI study phase

4. Number of Prepared Aliquots from Originally Received CSF Samples at

a. Figure 3a	page 12
b. Table 3a	page 13

BASELINE and Follow-Up Visit for ADNI 1

7. Number of Currently Available Prepared CSF Aliquots for ADNI 2 at BI and Follow-Up Visits

5. Number of Currently Available Prepared CSF Aliquots at BASELINE and

Э.	Figure 4b	page 18
b.	Table 4b	page 19

8. Summary of CSF, Plasma, Serum, and Whole Blood Aliquots shipped to RARC-approved investigators

a. Table 5..... page 20

9. Graph and Table of Summary of CSF Aliquots used for Luminex runs a. Figure 6 and Table 6page 24
a. Figure 6 and rable 6page 2 f
10. Percentage of Subjects Providing CSF Samples per ADNI DOD visit
a. Figure7page 25
b. Table 7 page 26
11. Number of Prepared Aliquots from Originally Received CSF Samples
for ADNI DOD at BL and Yr 1 Follow-Up Visits
a. Figure 8page 27
b. Table 8page 28
12. Number of Currently Available Prepared CSF Aliquots for ADNI DOD at BL and Yr 1 Follow-Up Visits
a. Figure 9page 29
b. Table 9page 30

* Note: BL = "Baseline"

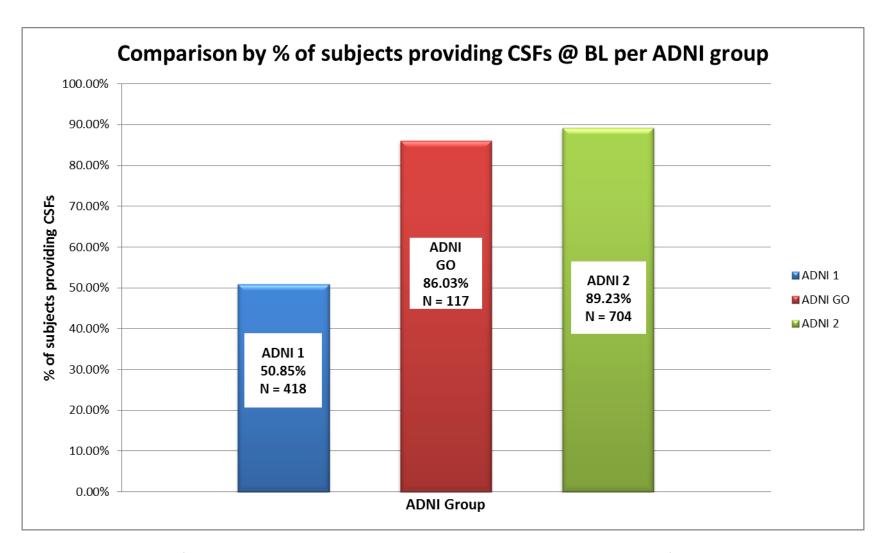


Figure 1. Comparison by Percentage of subjects who provided CSF Samples at Baseline in each ADNI Study Phase. The figure above compares the percentage of those enrolled in ADNI 1, ADNI GO, and ADNI 2 who provided CSFs at Baseline. As of *January 28th, 2016* (cut-off date used for this report), approximately 51% of ADNI 1 subjects provided CSF samples at baseline compared to 86% of ADNI GO subjects and at least 89% of ADNI 2 subjects. At least 89% of the 789 subjects enrolled in ADNI 2 have provided CSF samples at Baseline as of *January 28th, 2016*.

Subjects Providing CSFs at Baselinein each ADNI Study Phase (Table)

Summary Table of Percentage of subjects providing CSF samples within each ADNI Study Phase at Baseline and at 1 year Follow-Up

		Baseline(De Novo)	Year1Follow-Up(De Novo)		
ADNI Group	Number of Subjects enrolled as of <u>1/28/2016</u>	Number who provided CSF as of 1/28/2016	% who provided CSF per ADNI Group	Number who provided CSF as of 1/28/2016	% who provided CSF per ADNI group
ADNI1	822	418	50.85%	328	39.90%
ADNI GO	136	117	86.03%	1	0.74%
ADNI2	789	704	89.23%	1	0.13%
Total	1747	1239	70.92%	330	18.89%

Table 1. Summary Table of Percentage of subjects providing CSF samples within each ADNI Study Phase at Baseline and at 1 year Follow-Up. This is a summary table for Figure 1, detailing the number and percent of subjects providing CSF samples within each ADNI Study Phase, as well as the number of those who provided CSF samples at 1 year follow-up as of 1/28/2016. "De Novo" indicates that these are subjects who were initially enrolled in an ADNI study phase and followed up within that same study phase.

^{*} Note: There are no CSF aliquots at the 1 Year Follow-Up in ADNI GO and ADNI 2 since lumbar puncture is not required by protocol. In an exception, 1 CSF each at 1-year follow-up from ADNI GO and ADNI 2 were sent to U Penn.

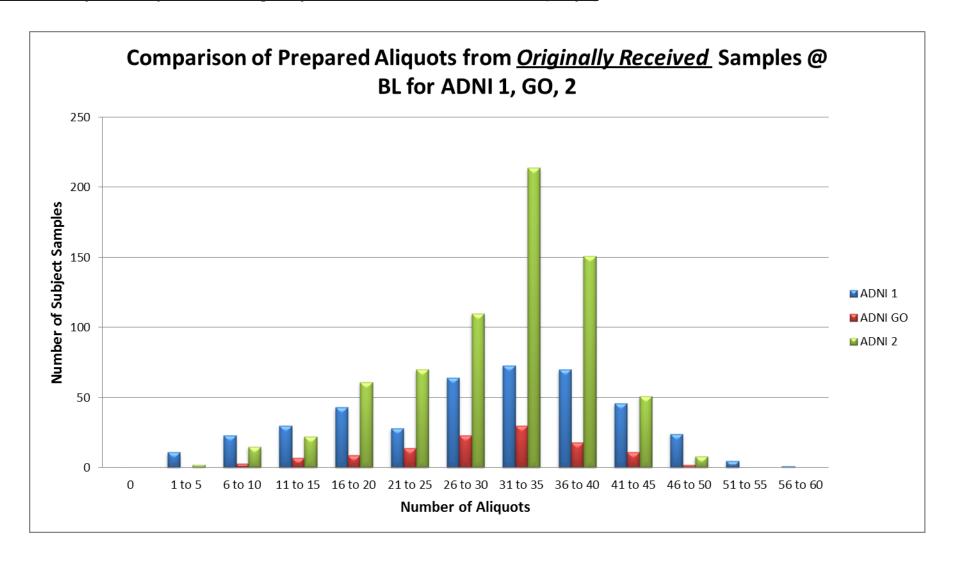


Figure 2a. Comparison of Prepared Aliquots from Originally Received CSF Samples at Baseline for ADNI 1, GO, and 2. The graph above displays the number of CSF aliquots originally received as well as the number of subjects who have provided CSF samples at Baseline in ADNI 1, GO, and 2 as of *January 28th*, 2016. The volume of each CSF aliquot is 0.5 ml. For example, we originally received between 31 and 35 CSF aliquots per subject from 73 individuals enrolled in ADNI 1, compared to 30 individuals enrolled in ADNI GO, and 214 individuals enrolled in ADNI 2.

Number of Prepared Aliquots from Originally Received CSF Samples at 1-Yr Follow-Up for ADNI 1 (Graph)

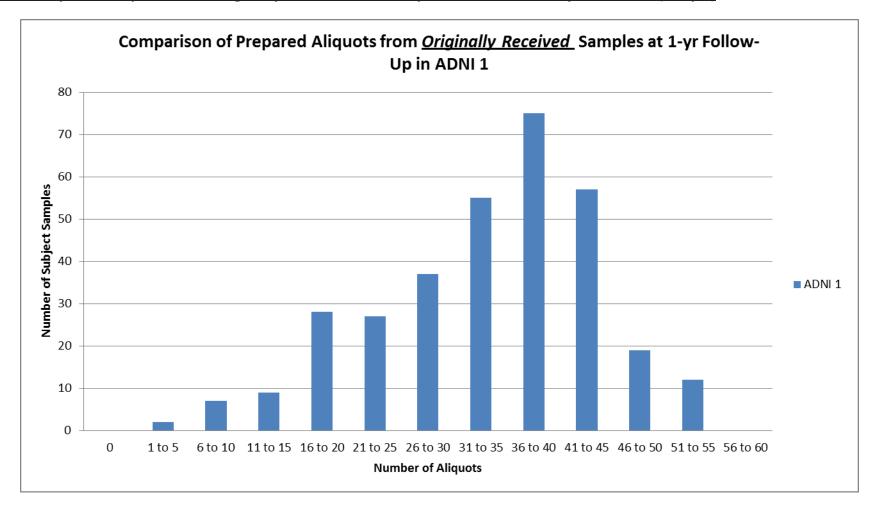


Figure 2b. Number of Prepared Aliquots from Originally Received CSF Samples at 1-yr Follow-Up for ADNI 1. The graph above displays the number of CSF aliquots originally received as well as the number of subjects who have provided CSF samples at 1 year Follow-Up in ADNI 1 as of *January 28th, 2016*. The volume of each CSF aliquot is 0.5 ml. For example, we originally received between 31 and 35 CSF aliquots per subject from 55 individuals enrolled in ADNI 1 at 1 year follow-up.

Note: There are no CSF aliquots at the 1 Year Follow-Up for ADNI GO and ADNI 2 since the lumbar puncture is not required by protocol. In an exception, 1 CSF each at 1-year follow-up from ADNI GO and ADNI 2 were sent to U Penn.

Number of Prepared Aliquots from Originally Received CSF Samples at BL,1-yr and 2- Yr Follow-Up for all ADNI (Table)

Summary Table of Prepared Aliquots from Originally Received CSF Samples provided by subjects within each ADNI phase:

Number of Subjects (<i>Originally received</i>)										
	AD	NI 1 (De No	ovo)	ADN	IGO (De No	ovo)	AD	NI 2 (De No	vo)	
Number of Aliquots	BL	Yr 1	Yr 2	BL	Yr 1*	Yr 2	BL	Yr 1*	Yr 2	
0	0	0	0	0	0	0	0	0	0	
1 to 5	11	2	0	0	0	0	2	0	3	
6 to 10	23	7	3	3	0	0	15	0	6	
11 to 15	30	9	7	7	0	0	22	0	5	
16 to 20	43	28	9	9	0	0	61	0	10	
21 to 25	28	27	14	14	0	0	70	0	21	
26 to 30	64	37	23	23	0	0	110	0	44	
31 to 35	73	55	30	30	1	0	214	1	82	
36 to 40	70	75	18	18	0	0	151	0	71	
41 to 45	46	57	11	11	0	0	51	0	19	
46 to 50	24	19	2	2	0	0	8	0	9	
51 to 55	5	12	0	0	0	0	0	0	0	
56 to 60	1	0	0	0	0	0	0	0	0	
Total	418	328	101	117	1	0	704	1	270	

Table 2ab. Summary Table of Prepared Aliquots from Originally Received CSF Samples provided by subjects within each ADNI phase. Table 2ab

(above)corresponds to Figures 2a and 2b, detailing the frequency of CSF aliquots initially provided by subjects at Baseline and at 1 year follow-up within each study phase (ADNI 1, GO, and 2). Again, "De Novo" indicates that these are subjects who were initially enrolled in an ADNI study phase and followed up within that same study phase. ADNI 1 "De Novo", for example, indicates that we originally received between 26 and 30 CSF aliquots per subject provided from 64 individuals who were initially enrolled in ADNI 1 at Baseline, compared to 37 ADNI 1 individuals at the 1 year follow-up within the ADNI 1 study phase. *Note: There are no CSF aliquots at the 1 Year Follow- Up in ADNI GO and ADNI2sincelumbar puncture is not required by protocol. In an exception, 1 CSF each at 1-year follow-up from ADNI GO and ADNI2 were sent to U Penn.

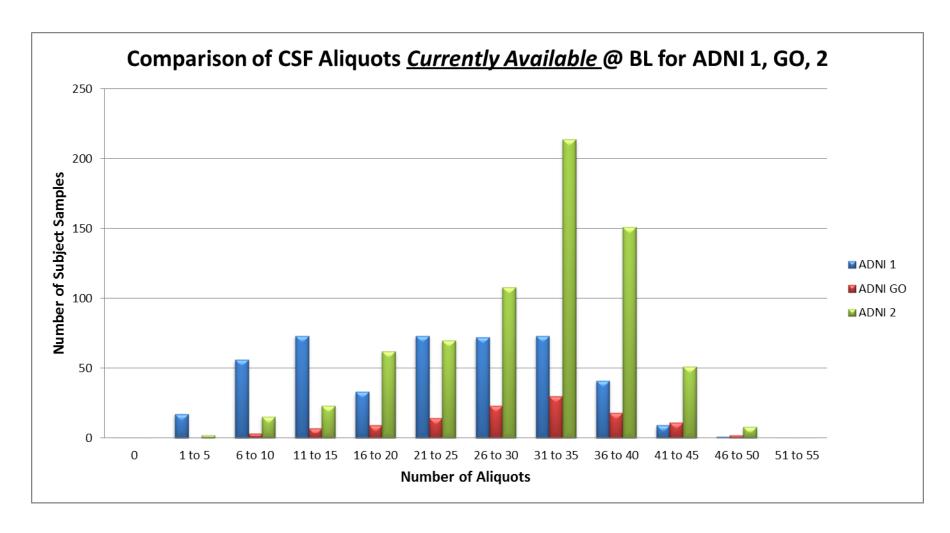
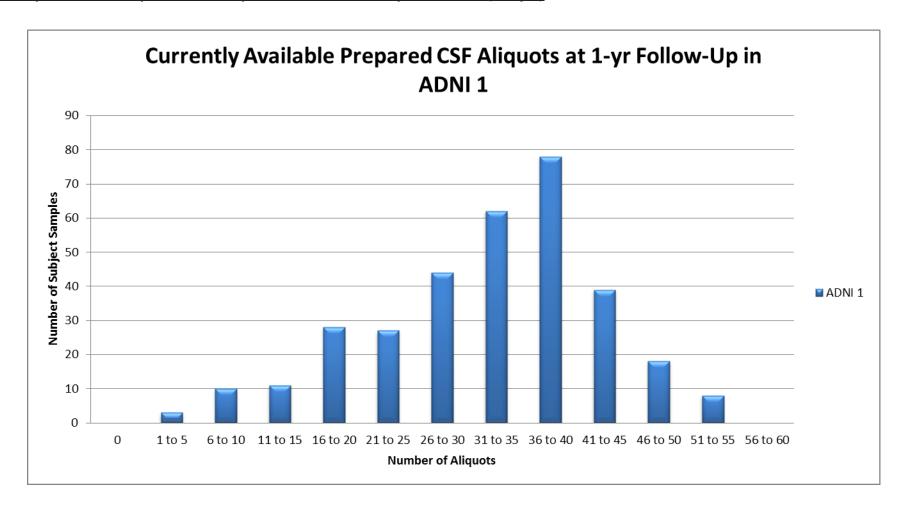


Figure 2c. Comparison of Currently Available Prepared CSF Aliquots at Baseline for ADNI 1, GO, and 2. The graph above displays the number of subjects who have provided CSF samples at Baseline in ADNI 1, GO, and 2 as of *January 28th*, 2016. The volume of each CSF aliquot is 0.5 ml. For example, we currently have between 31 and 35 CSF aliquots per subject from 73 individuals enrolled in ADNI 1, compared to 30 individuals enrolled in ADNI 2.

Currently Available Prepared CSF Aliquots at 1-Yr Follow-Up for ADNI1 (Graph)



<u>Figure 2d. Currently Available Prepared CSF Aliquots at 1-yr Follow-Up for ADNI 1.</u> The graph above displays the number of subjects who have provided CSF samples at 1 year Follow-Up in ADNI 1. The volume of each CSF aliquot is 0.5 ml. For example, we currently have between 31 and 35 CSF aliquots per subject from 62 individuals enrolled in ADNI 1 at 1 year follow-up.

Note: There are no CSF aliquots at the 1 Year Follow-Up for ADNI GO and ADNI 2 since the lumbar puncture is not required by protocol. In one exception, 1 CSFs each at the 1-year follow-up from ADNI GO and ADNI 2 were sent to U Penn.

<u>Currently Available Prepared CSF Aliquots at BL and 1-yr Follow-Up for all ADNI (Table)</u>

Summary Table of Currently Available Prepared CSF Aliquots provided by subjects within each ADNI Study Phase

Number of Subjects (Currently Available)										
	ADNI1(D	De Novo)	ADNIGO(De Novo)	ADNI 2 (De Novo)					
Number of Aliquots	BL	Yr 1	BL	Yr 1*	BL	Yr 1*				
0	0	0	0	0	0	0				
1 to 5	17	3	0	0	2	0				
6 to 10	56	10	3	0	15	0				
11 to 15	43	11	7	0	23	0				
16 to 20	33	28	9	0	62	0				
21 to 25	73	27	14	0	70	0				
26 to 30	72	44	23	0	108	0				
31 to 35	73	62	30	1	214	1				
36 to 40	41	78	18	0	151	0				
41 to 45	10	39	11	0	51	0				
46 to 50	0	18	2	0	8	0				
51 to 55	1	8	0	0	0	0				
Total	418	328	117	1	704	1				

Table 2cd. Summary Table of Currently Available Prepared CSF aliquots provided by subjects within each ADNI Study Phase. Table 2cd (above) corresponds to Figures 2c and 2d, detailing the frequency of CSF aliquots currently available that are provided by subjects at Baseline and at 1 year follow-up within each study phase (ADNI1, GO, and 2). Again, "De Novo" indicates that these are subjects who were initially enrolled in an ADNI study phase and followed up within that same study phase. ADNI1 "De Novo", for example, indicates that there are currently between 31 and 35 CSF aliquots per subject provided from 73 ADNI1 individuals at Baseline, and 62 ADNI1 individuals at the 1 year follow-up within the ADNI1 study phase. * Note: There are no CSF aliquots at the 1 Year Follow-Up in ADNI GO and ADNI 2 since lumbar puncture is not required by protocol. 1 CSFs each, though not required at 1-yr follow-up in ADNI GO and ADNI 2, were sent to UPenn.

Number of Prepared Aliquots from Originally Received CSF Samples at BL and Follow-Up in ADNI 1 (Graph)

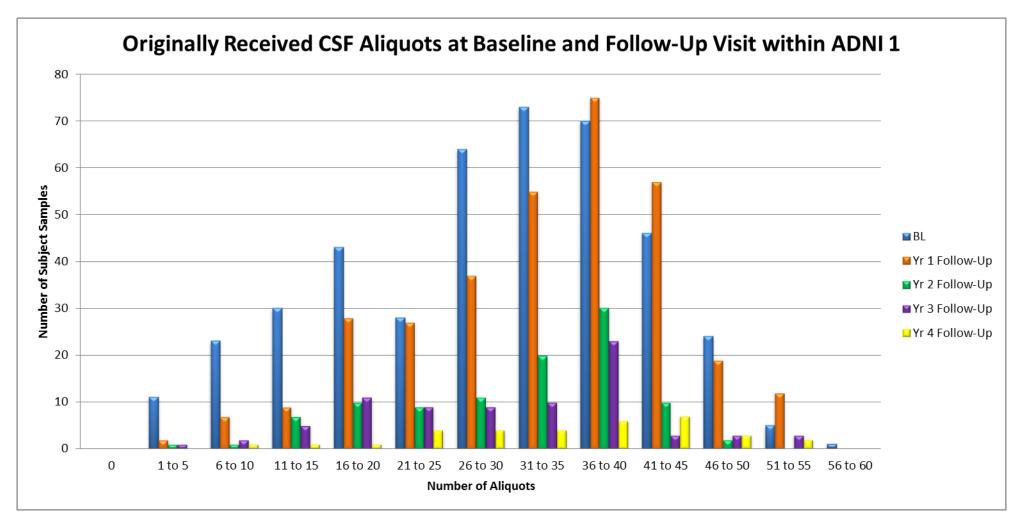


Figure 3a. Number of Prepared Aliquots from Originally Recived CSF Samples at Baseline and Follow-Up Visit within ADNI 1. The graph above displays the number of subjects with CSF samples who were initially enrolled in ADNI1 and followed up within the ADNI1 study phase. For example, of those enrolled in ADNI1, we originally received between 31 and 35 CSF aliquots per subject from 73 individuals (first bar in blue) at Baseline compared to 55 individuals (2nd bar in red) at 1-year follow-up, 20 individuals (3rd bar in green) at 2-year follow-up, 10 individuals (4th bar in purple) at 3-year follow-up, and 4 individuals (5th bar in light blue) at the 4- year follow-up.

Number of Prepared Aliquots from Originally Received CSF Samples at BL and Follow-Up in ADNI 1 (Table)

Summary Table of Prepared Aliquots from Originally Received CSF Samples provided by ADNI1 subjects at Baseline and at Follow-Up Visits within ADNI1

Number of Subjects (Originally Received)										
		ADNI 1 Longitudinal Samples								
Count	BL	Yr 1 Follow-Up	Yr 2 Follow-Up	Yr 3 Follow-Up	Yr 4 Follow-Up					
0	0	0	0	0	0					
1 to 5	11	2	1	1	0					
6 to 10	23	7	1	2	1					
11 to 15	30	9	7	5	1					
16 to 20	43	28	10	11	1					
21 to 25	28	27	9	9	4					
26 to 30	64	37	11	9	4					
31 to 35	73	55	20	10	4					
36 to 40	70	75	30	23	6					
41 to 45	46	57	10	3	7					
46 to 50	24	19	2	3	3					
51 to 55	5	12	0	3	2					
56 to 60	1	0	0	0	0					
Total	418	328	101	79	33					

Table 3a. Number of Prepared Aliquots from Originally Received CSF Samples at Baseline and Follow-Up Visits within ADNI 1. The table above corresponds to Figure 3a and displays the number of subjects with CSF samples who were initially enrolled in ADNI 1 and followed up within the ADNI 1 study phase. For example, of those enrolled in ADNI 1, we initially received between 31 and 35 CSF aliquots per subject from 73 individuals at Baseline compared to 55 individuals at 1-year follow-up, 20 individuals at 2-year follow-up, 10 individuals at 3-year follow-up, and 4 individuals at the 4-year follow-up.

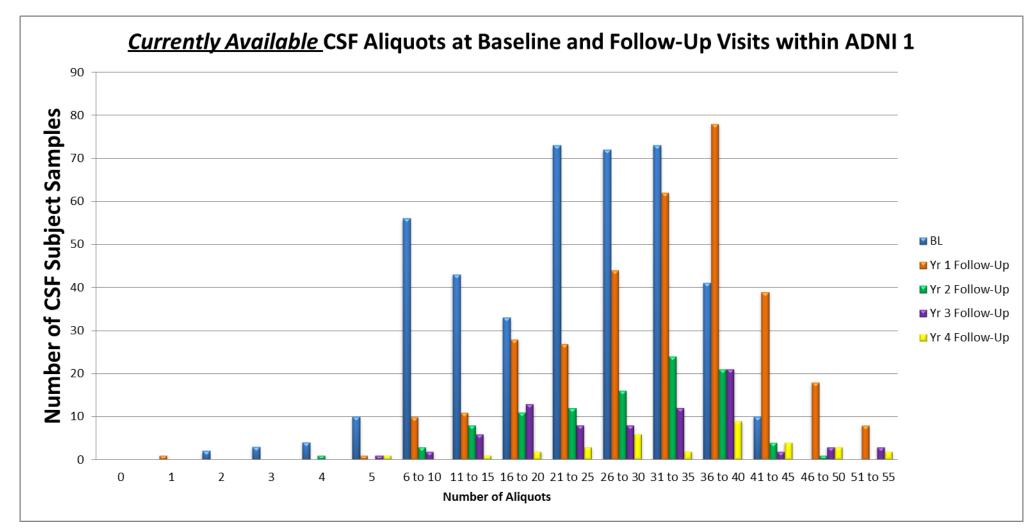


Figure 3b. Number of <u>Currently Available Prepared CSF Aliquots at Baseline and Follow-Up Visits within ADNI 1.</u> The graph above displays the number of subjects with CSF samples who were initially enrolled in ADNI 1 and followed up within the ADNI 1 study phase. For example, of those enrolled in ADNI 1, we have between 31 and 35 CSF aliquots per subject from 73 individuals (first bar in blue) at Baseline compared to 62 individuals (2nd bar in red) at 1-year follow-up, 24 individuals (3rd bar in green) at 2-year follow-up, 12 individuals (4th bar in purple) at 3-year follow-up, and 2 individuals (5nd bar in light blue) at the 4-year follow-up.

Currently Available Prepared CSF Aliquots at BL and Follow-Up in ADNI 1 (Table)

Summary Table of Currently Available PreparedCSF Aliquots provided by ADNI1 subjects at Baseline and at Follow-Up Visits within ADNI1

	Number of Subjects (Currently Available)								
		ADNI 1 Longitudinal Samples							
Number of Aliquots	BL	Yr 1 Follow-Up	Yr 2 Follow-Up	Yr 3 Follow-Up	Yr 4 Follow-Up				
0	0	0	0	0	0				
1	0	1	0	0	0				
2	1	1	0	0	0				
3	3	0	0	0	0				
4	4	0	1	0	0				
5	9	1	0	1	1				
6 to 10	56	10	3	2	0				
11 to 15	43	11	8	6	1				
16 to 20	33	28	11	13	2				
21 to 25	73	27	12	8	3				
26 to 30	72	44	16	8	6				
31 to 35	73	62	24	12	2				
36 to 40	41	78	21	21	9				
41 to 45	9	39	4	2	4				
46 to 50	1	18	1	3	3				
51 to 55	0	8	0	3	2				
Total	418	328	101	79	33				

Table 3b. Summary Table of <u>Currently Available</u> Prepared CSF Aliquots provided by ADNI 1 subjects at Baseline and at Follow-Up Visits within ADNI 1. Table 3b (above) corresponds to Figure 3b, detailing the number of subjects enrolled in ADNI 1 that provided CSF samples at Baseline as well as during the follow-up visits within the ADNI 1 study phase. For example, of those enrolled in ADNI 1, we have between 31 and 35 CSF aliquots per subject from 73 individuals (first bar in blue) at Baseline compared to 62 individuals (2nd bar in red) at 1-year follow-up, 24 individuals (3rd bar in green) at 2-year follow-up, 12 individuals (4th bar in purple) at 3- year follow-up, and 2 individuals (5th bar in light blue) at the 4-year follow-up.

Number of Prepared Aliquots from Originally Received CSF Samples at BL and Follow-Up in ADNI 2 (Graph)

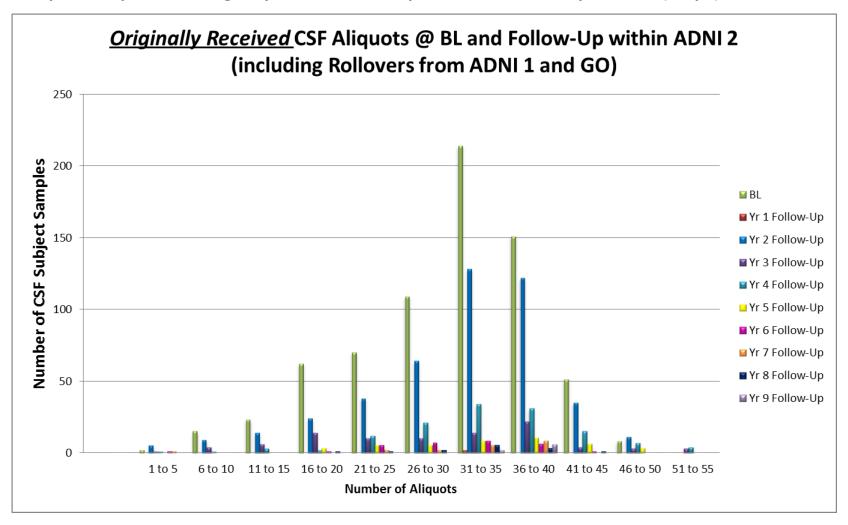


Figure 4a. Number of Prepared Aliquots from Originally Received CSF Samples for ADNI 2 Phase at Baseline and Follow-Up Visits (including Roll-over Subjects from ADNI 1 and ADNI G O). The graph above displays the number of subjects who have provided CSF samples during the ADNI 2 study phase at baseline and at follow-up visits. Subjects who provided CSF samples at baseline in ADNI 2 are those who were initially enrolled in ADNI 2. The follow-up visits here include subjects who rolled over into ADNI 2 from either ADNI or ADNI GO. For example, we originally received between 31 and 35 CSF aliquots per subject from 214 individuals at baseline, compared to 1 individual at 1-year follow-up, 128 individuals at 2-year follow-up, 14 individuals at 3-year follow-up, 34 individuals at 4 year follow up, 8 individuals at 5-year follow-up, 8 individuals at 6-year follow-up, 5 individuals at 8-year follow-up and 2 at 8-year follow-up.

Number of Prepared Aliquots from Originally Received CSF Samples at BL and Follow-Up in ADNI 2 (Table)

<u>Summary Table of Prepared Aliquots from Originally Received CSF Samples from Subjects at Baseline and at Follow-Up visits in ANDI 2 (including Roll-overs from ADNI 1 and GO)</u>

	ADNI2 (including Roll-over Subjects from ADNI1 and ADNIGO) - Originally Received											
Number of CSF Aliquots	BL	Yr 1 Follow-Up	Yr 2 Follow-Up	Yr 3 Follow-Up	Yr 4 Follow-Up	Yr 5 Follow-Up	Yr 6 Follow-Up	Yr 7 Follow-Up	Yr 8 Follow-Up	Yr 9 Follow-Up		
0	0	0	0	0	0	0	0	0	0	0		
1 to 5	2	0	5	1	1	0	1	1	0	0		
6 to 10	15	0	9	4	1	0	0	0	0	0		
11 to 15	23	0	14	6	3	0	0	0	0	0		
16 to 20	62	0	24	14	2	3	1	0	1	0		
21 to 25	70	0	38	10	12	5	5	2	1	0		
26 to 30	108	0	64	10	21	5	7	2	2	0		
31 to 35	214	1	128	14	34	8	8	5	5	2		
36 to 40	151	0	122	22	31	10	6	8	3	6		
41 to 45	51	0	35	4	15	6	1	0	1	0		
46 to 50	8	0	11	3	7	3	0	0	0	0		
51 to 55	0	0	0	3	4	0	0	0	0	0		
Total	704	1	450	91	131	40	29	18	13	8		

Table 4a. Summary Table of Prepared Aliquots from Originally Received CSF Samples from subjects at Baseline and at Follow-Up visits in ADNI 2 (including Roll-over Subjects from ADNI 1 and ADNI GO). This is a summary table corresponding to Figure 4a, detailing the number of subjects who provided CSF samples at baseline in ADNI 2 (ADNI 2 enrollees only) as well as at follow-up visits (including subjects who rolled over into ADNI 2 from either ADNI 1 or ADNI GO).

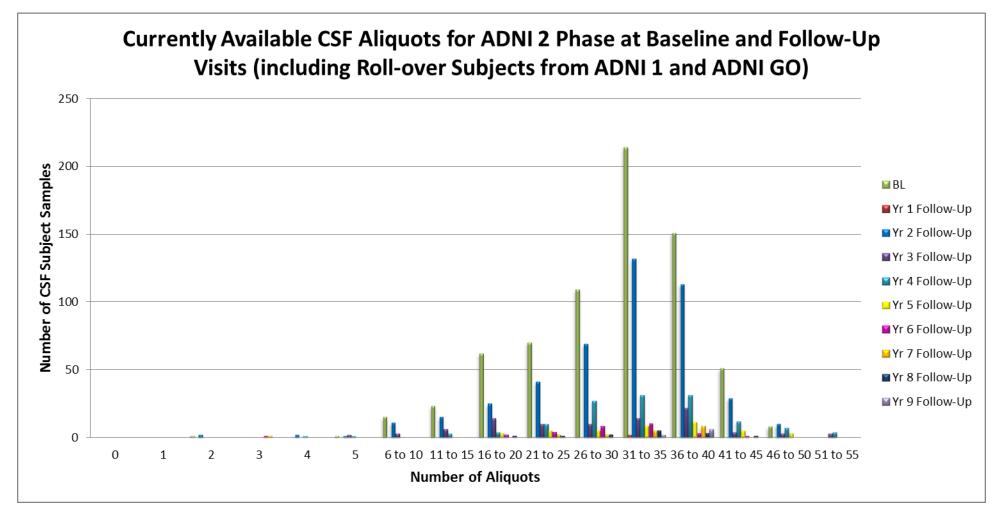


Figure 4b. Number of Currently Available Prepared CSF Aliquots for ADNI 2 Phase at Baseline and Follow-Up Visits (including Roll-over Subjects from ADNI 1 and ADNI GO). The graph above displays the number of subjects who have provided CSF samples during the ADNI 2 study phase at baseline and at follow-up visits. Subjects who provided CSF samples at baseline in ADNI 2 are those who were initially enrolled in ADNI 2. The follow-up visits here include subjects who rolled over into ADNI 2 from either ADN1 or ADNI GO. For example, we currently have between 31 and 35 aliquots per subject from 214 individuals at baseline, compared to 2 individuals at 1 year follow-up, 132 individuals at 2 year follow-up, 14 individuals at 3 year follow-up, 31 individuals at 4 year follow-up, 8 individuals at 5 year-follow-up, and 10 individuals at 6-year follow-up, 5 individuals at 7-year follow-up, 5 individuals at 8-year follow-up and 2 individuals at 9 year follow-up.

Currently Available Prepared CSF Aliquots at BL and Follow-Up in ADNI 2 (Table)

Summary Table of Subjects providing CSF samples at Baseline and at Follow-Up visits in ADNI 2 (including Roll-overs from ADNI 1 and GO)

ADNI 2 (including Roll-over Subjects from ADNI 1 and ADNI GO) – Currently Available										
Number of Aliquots	BL	Yr 1 Follow-Up	Yr 2 Follow-Up	Yr 3 Follow-Up	Yr 4 Follow-Up	Yr 5 Follow-Up	Yr 6 Follow-Up	Yr7 Follow-Up	Yr 8 Follow-Up	Yr 9 Follow-Up
0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0
2	1	0	2	0	0	0	0	0	0	0
3	0	0	0	0	0	0	1	1	0	0
4	0	0	2	0	1	0	0	0	0	0
5	1	0	1	2	1	0	0	0	0	0
6 to 10	15	0	11	3	0	0	0	0	0	0
11 to 15	23	0	15	6	3	0	0	0	0	0
16 to 20	62	0	25	14	4	3	2	0	1	0
21 to 25	70	0	41	10	10	5	4	2	1	0
26 to 30	108	0	69	10	27	5	8	2	2	0
31 to 35	214	2	132	14	31	8	10	5	5	2
36 to 40	151	0	113	22	31	11	3	8	3	6
41 to 45	51	0	29	4	12	5	1	0	1	0
46 to 50	8	0	10	3	7	3	0	0	0	0
51 to 55	0	0	0	3	4	0	0	0	0	0
Total	704	2	450	91	131	40	29	18	13	8

Table 4b. Summary Table of Subjects providing CSF samples at Baseline and at Follow-Up visits in ADNI 2 (including Roll-over Subjects from ADNI 1 and ADNI GO). This is a summary table corresponding to Figure 4b, detailing the number of subjects who provided CSF samples at baseline in ADNI 2 (ADNI 2 enrollees only) as well as at follow-up visits (including subjects who rolled over into ADNI 2 from either ADNI 1 or ADNI GO).

<u>Table 5. Summary of CSF, Plasma, Serum, Whole Blood Aliquots shipped to RARC-approved investigators</u>

Shipment Date	Principal Investigator	Project	Specimen Type	Specimen Number	Data Upload to ADNI/LONI
9/15/2015	Ian Sherriff, PI Araclon Biotech	Aβ1-42 and Aβ1-40	Plasma	784 ADNI1, GO, 2 longitudinal aliquot samples 759 PLA aliquots 25 Replicates	Data uploaded on 2/16/2016
3/17/2015	Jing Zhang, PI Harborview Medical Center, University of Washington School of Medicine	Total α-syn Ser129 Phosphorylated α-syn	CSF	*372 ADNI1 Baseline CSF aliquots samples *transferred from Geoff Baird 461 ADNI1, GO, 2 longitudinal aliquot samples 446 CSFs 15 Replicates	Study in Progress
9/23/2014	Dr. Kaj Blennow, Pl Clinical Neurochemistry Lab	Tau Plasma	Plasma	595 ADNI1 aliquot samples 579 Baseline PLA 16 Replicates	Data uploaded on 8/4/2015
07/09/2014	Allan Levey , PI Emory University School of Medicine	DDE**	Plasma	221 ADNI1 aliquot samples 211 Baseline PLA 10 replicates	Data uploaded on 11/12/2014
05/19/2014	Dr. Kaj Blennow, Pl Clinical Neurochemistry Lab	Cerebrospinal fluid levels of neurogranin Neurofilament Light (NFL)	CSF	416 ADNI1 aliquot samples 400 Baseline CSFs 16 Replicates	Data uploaded on 8/20/2014
05/19/2014	Rima Kaddurah-Daouk, , PI Duke University	Metabolic Pathways and Networks in Alzheimer¹s Disease	Serum	833 ADNI1 aliquot samples 813 Baseline SER 20 Replicates	Data uploaded on 8/14/2015
10/28/2013	Courtney Sutphen, PI Washington University Lab of Dr. Anne Faganand David Holtzman	YKL-40 and VILIP-1 in Longitudinal CSF sample sets	CSF	612 ADNI1, GO, 2 longitudinal aliquot samples 597 CSFs 15 Replicates	Data uploaded on 7/15/2015

Week of 9/24/2012	Lee Honigsberg, PI Nicholas Lewin-Koh, Angus Nairn, Les Shaw, Dan Spellman, Kristin Wildsmith, co-investigators Steve Hoffmann, PhD Scientific Program Manager The FNIH Biomarkers Consortium	CSF proteomic study Caprion using mrm mass spectrometry	CSF	306 ADNI1 aliquot samples 290 Baseline CSFs 16 Replicates	Data uploaded on 4/04/2014
9/12/2012	Dr.Robert Nagele, PI UMDNJ	Autoantibody biomarkers for detection and diagnosis of Alzheimer's disease	Serum	100 ADNI1 aliquot samples 50 Baseline MCI 50 Baseline NL	Data uploaded on 11/1/2012
5/9/2012	Geoff Baird, PI Thomas Montine and Elaine Peskind, co-investigators University of Washington	Analyzing the CSF proteome with an oligonucleotideaptamer array	CSF and Plasma	727 ADNI1 aliquot samples 372 Baseline CSFs and matching 355 PLA	Samples forwarded to Jing Zhang, PI
1/17/2012	Lee Honigsberg Nicholas Lewin-Koh, Angus Nairn, Les Shaw, Dan Spellman, Kristin Wildsmith, co-Pis	Pilot Study CSF proteomics project Caprion using mrm mass spectrometry*	CSF	25 ADNI1 aliquot samples 20 Baseline CSFs: 10 AD, 10 NL and 5 aliquots of a CSF pool	Data uploaded on 4/04/2014 with previous Protemic
9/26/2011	Mary J Savage, PI Dan Holder, co- PI Merck Judy Siuciak, PhD Scientific Program Manager The FNIH Biomarkers Consortium	BACE and sAPP in CSF	CSF	402 ADNI1 aliquot samples 382 Baseline CSF 20 Replicates	Data uploaded on 4/24/2012
8/9/2011	William Potter, PI Eve Pickering, Mitch Kling, Les Shaw, Fred Immerman, co- investigators Judy Siuciak, PhD Scientific Program Manager The FNIH Biomarkers Consortium	CSF proteomic study RBM*	CSF	317 ADNI1 aliquot samples 311 Baseline CSFs 16 Replicates	Data uploaded on 01/03/2012

3/24/2011	Jing Zhang, PI Harborview Medical Center University of Washington School of Medicine	ADNI RARC CSF Proteomic study	CSF	390 ADNI1 aliquot samples Baseline CSFs: 92 AD, 187 MCI, 111 NC	Data uploaded on 3/11/2013 and 7/12/2013
5/12/2010	1. Holly Soares, PI (2010-2011) Pfizer Eve Pickering & Fred Immerman Statistical analyses William Potter, Max Kuhn, David Shera, Mats Ferm, Robert A Dean, Adam J Simon, Frank Swenson, Judy Siuciak, June Kaplow, Madhay Thambisetty, Panayiotis Zagouras, Walter Koroshetz, Hong Wan, John Q Trojanowski, Leslie M Shaw, co- Investigators David Lee Scientific Program Manager Judy Siuciak Scientific Program Manager The FNIH Biomarkers Consortium Foundation for the National Institutes of Health	Plasma proteomic study Rules Based Medicine (RBM)*	Plasma	1065 ADNI1 aliquot samples Baseline PLA: 394 MCI, 111 AD, 57 NL Year 1 PLA: 349 MCI, 98 AD, 56 NL	Plasma proteomics RBM study Nov 19, 2010 CSF proteomics RBM study January 3,2012
	2. William Potter, PI (2011- 2013) Eve Pickering & Fred Immerman Statistical analyses Mitch Kling	CSF proteomic study RBM	CSF	317 ADNI1 aliquot samples 311 Baseline CSFs 16 Replicates	

3/1/2010	John A. McIntyre, PI St. Francis Hospital	Redox Reactive Autoantibodies in ADNI subjects RARC/study phase 2	Serum	90 ADNI1 aliquot samples Baseline SER: 30 NC, 30 MCI and 30 AD	Data uploaded on 07/21/2011
7/14/2009	John A. McIntyre, PI St. Francis Hospital	Redox Reactive Autoantibodies in ADNI subjects, RARC/study phase 1	Serum	18 ADNI1 aliquot samples Baseline SER: 6 NC, 6 MCI and 6 AD	Data uploaded on 11/29/2009
7/13/2009	Lucas Restrepo, PI UCLA	Immuno signature of Alzheimer's Disease: using a blood plasma test	Plasma	100 ADNI1 aliquot samples Baseline PLA: 50 AD & 50 NL	Study not done due to lack of funding
12/4/2007	Andy Saykin, PI (2007- 2009) Dietrich Stephan, co-PI Indiana University Steven Potkin, PI (2007- 2009) UC Irvine Andrew Saykin, co-PI Indiana University	Whole genome analysis of ADNI1 cohort following DNA extraction(at Cogenics) Genetic association analysis of the ADNI 1 cohort	Whole blood	807 ADNI1 aliquot samples ADNI 1 Screening/Visit1 ApoE residual samples	Data uploaded on 3/16/2009

Type of Sample Shipped	Total # Aliquots Shipped
CSF	3618
Plasma	2336
Serum	1041
Whole Blood	807
Total Shipped	7802

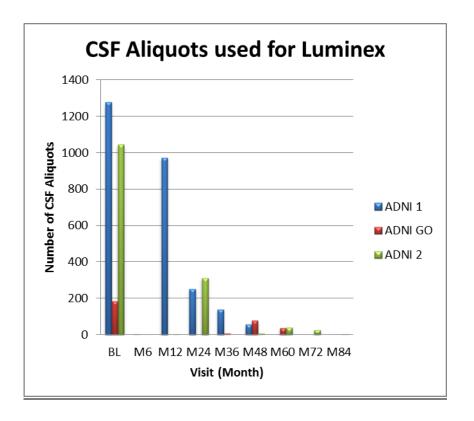
Summary of CSF, Plasma, Serum, Whole Blood Aliquots shipped out. The table above is a description of aliquots that were sent out to other investigators in the past 9 years (2007 through 2016). A total of 3618 CSF aliquots, 2336 plasma aliquots, 1041 serum aliquots, and 807 whole blood samples have been shipped out to these investigators.

^{*}PPSB Proteomic studies

^{**} DDE, a metabolite of pesticide DDT (dichloro-diphenyl-trichloroethane)

^{***}GRAND TOTAL of prepared CSF, Plasma, and Serum Aliquots: 325,858

<u>Summary of ADNI1, GO & 2 CSF aliquots used for Luminex runs</u>



Visit	ADNI1	ADNI GO	ADNI 2	Total
BL	876	182	1044	2502
M6	1	0	0	1
M12	973	0	1	974
M24	251	0	310	561
M36	139	7	0	146
M48	56	77	7	140
M60	0	37	39	76
M72	0	0	25	25
M84	0	0	3	3
Total	2296	303	1429	4028

Figure 6. Graph of Summary of ADNI1, 2 & GOCSF Aliquots used for Luminex runs

Table 6. Summary of ADNI1, 2 & GOCSF aliquots used for Luminex runs.

Both Figure 6 and Table 6 provide a description of the CSF aliquots that were used for luminex runs. In total, 2296 CSF aliquots from ADNI 1, 303 aliquots from ADNI GO, and 1429 aliquots from ADNI 2 have been analyzed as of *January 28th, 2016*.

^{*} Note: A summary report of frozen residual aliquots from ADNIGO/2 stored in the ADNI Biobank at UPenn is in preparation.

^{**}Note: A total of 400 additional ADNI 1 Baseline CSF Aliquots were analyzed using mass spectrometry.

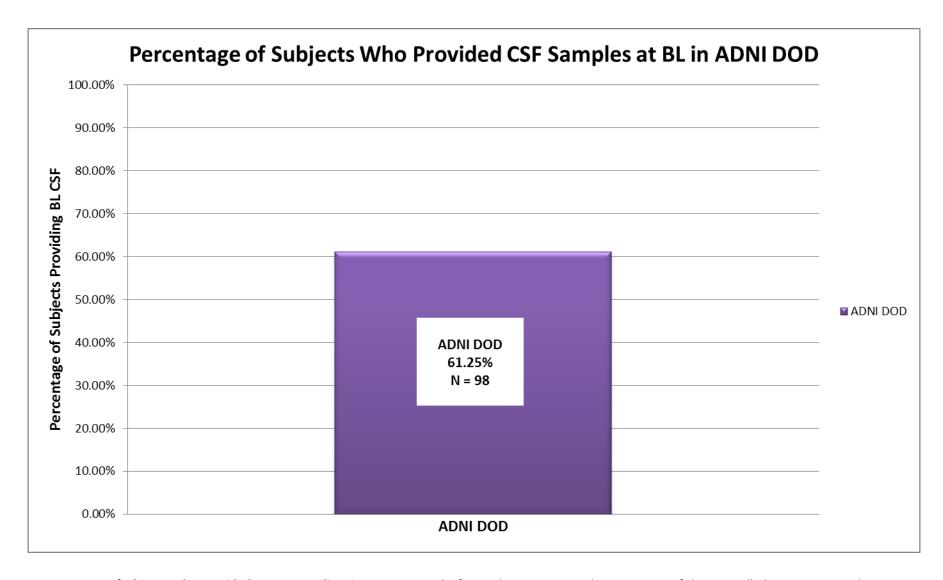


Figure 7. Percentage of subjects who provided <u>CSFs</u> at Baseline in ADNI DOD. The figure above compares the percentage of those enrolled in ADNI DOD who provided CSFs at Baseline. As of *January 28th, 2016* (cut-off date used for this report), approximately 61.25% of ADNI DOD subjects provided CSF samples at baseline.

Subjects Providing CSFs at Baseline in each ADNI DOD (Table)

<u>Summary Table of Percentage of subjects providing CSF samples within ADNI DOD at Baseline</u>

	Baseline			
ADNI Group	Number of Subjects enrolled as of 1/28/2016	Numberwho provided CSF as of		% who provided CSF
ADNI DOD	160		98	61.25%

Table 7. Summary Table of Percentage of subjects providing CSF samples within ADNI DOD at Baseline. This is a summary table for Figure 7, detailing the number and percent of subjects providing CSF samples within ADNI DOD as of **1/28/2016**.

Number of Prepared Aliquots from Originally Received CSF Samples at BL in ADNI DOD (Graph)

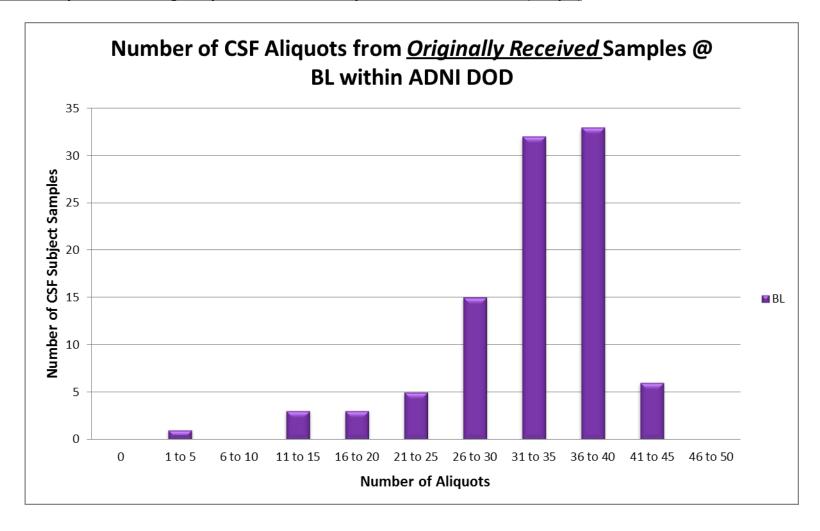


Figure 8. Number of Prepared Aliquots from Originally Received CSF Samples for ADNI DOD at Baseline. The graph above displays the number of subjects who have provided CSF samples during the ADNI DOD at baseline. We originally received between 31 and 35 CSF aliquots per subject from 25 individuals at baseline.

Prepared Aliquots from Originally Received CSF Samples at BL in ADNI DOD (Table)

Summary Table of Prepared Aliquots from Originally Received CSF Samples from subjects at Baseline in ADNI DOD

ADNI DOD - <u>Originally</u> <u>Received</u>			
Number of			
CSF			
Aliquots	BL		
0	0		
1 to 5	1		
6 to 10	0		
11 to 15	3		
16 to 20	3		
21 to 25	5		
26 to 30	15		
31 to 35	32		
36 to 40	33		
41 to 45	6		
46 to 50	0		
Total	98		

Table 8. Summary Table of Prepared CSF Aliquots from Originally Received samples at Baseline in ADNI DOD. This is a summary table corresponding to Figure 8, detailing the number of subjects who provided CSF samples at baseline in ADNI DOD.

Currently Available Prepared CSF Aliquots at BL in ADNI DOD (Graph)

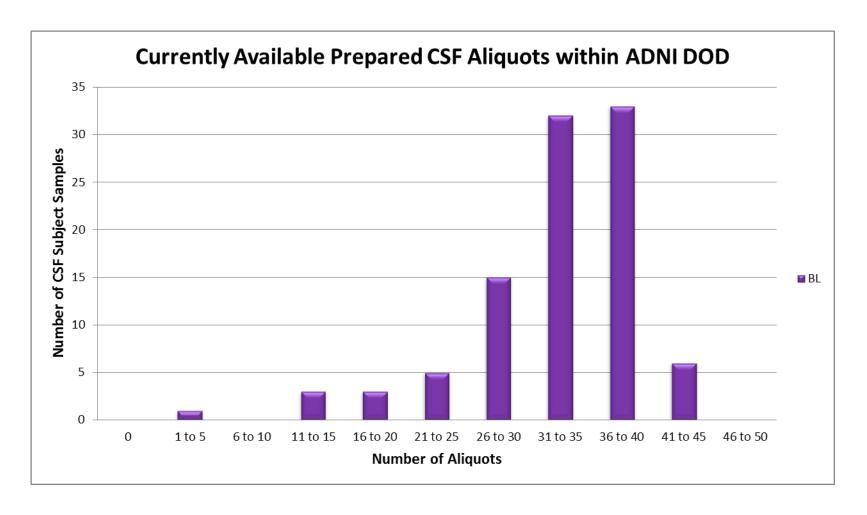


Figure 9. Number of <u>Currently Available</u> **Prepared CSF Aliquots for ADNI DOD at Baseline.** The graph above displays the number of subjects who have provided CSF samples during the ADNI DOD at baseline. We currently have between 31 and 35 CSF aliquots per subject from 32 individuals at baseline.

<u>Currently Available Prepared CSF Aliquots at BL in ADNI DOD (Table)</u>

<u>Summary Table of Subjects providing CSF samples at Baseline in ADNI DOD</u>

ADNI DOD - <u>Currently</u> <u>Available</u>		
Number of		
CSF		
Aliquots	BL	
0	0	
1 to 5	1	
6 to 10	0	
11 to 15	3	
16 to 20	3	
21 to 25	5	
26 to 30	15	
31 to 35	32	
36 to 40	33	
41 to 45	6	
46 to 50	0	
Total	98	

Table 9. Summary Table of Subjects providing CSF samples at Baseline in ADNI DOD. This is a summary table corresponding to Figure 9, detailing the number of subjects who provided CSF samples at baseline in ADNI DOD.