

ADNI Commonly Used Tables

- Assessments
 - Diagnosis
 - * **Diagnostic Summary [ADNI1,GO,2]:** Diagnosis by each visit code (DXSUM_PDXCONV_ADNIALL.csv)
 - Neuropsychological and Functional Tests
 - * **ADAS Sub-Scores and Total Scores[ADNI1]:** ADAS-Cog total scores in ADNI1. TOTAL11 (11 items score) TOTALMOD (13 items score) (ADASSCORES.csv)
 - * **Alzheimer’s Disease Assessment Scale(ADAS) [ADNIGO,2]:** ADAS-Cog total scores in ADNIGO/2. TOTSCORE (11 items score) TOTAL13 (13 items score) (ADAS_ADNIGO2.csv)
 - * **Clinical Dementia Rating Scale(CDR)[ADNI1,GO,2]:** 6 domains (CDMEMORY, CDORIENT, CDJUDGE, CDCOMMUN, CDHOME, and CDCARE) and global(CDGLOBAL) scores are available. (CDR.csv)
 - * **Everyday Cognition - Participant Self Report[ADNIGO,2]:** Create each domain score by taking average (if at least half of the items are not missing for each domain). Total score use 39 items. (Note: VISSPAT5 is a duplicated field per DATADIC.csv) (ECOGPT.csv)
 - * **Functional Activities Questionnaires(FAQ)[ADNI1,GO,2]:** FAQTOTAL score (FAQ.csv)
 - * **Mini-Mental State Examination(MMSE)[ADNI1,GO,2]:** MMSCORE (MMSE.csv)
 - * **Neuropsychological Battery[ADNI1,GO,2]:** Neurobattery scores (i.e. LIMM-TOTAL (immediate recall total score), AVTOT1-AVTOT5 (Rey Auditory Verbal Learning Test scores)) (NEUROBAT.csv)
- Biospecimen
 - Biospecimen Results (UPENN data comes with data dictionary and method paper)
 - * **ApoE-Results[ADNI1,GO,2]:** It contains ApoE Genotyping results. (APOERES.csv)
 - * **UPENN-Biomarker Data[ADNI1]:** ADNI1: baseline abeta, tau, ptau. (UPENNBIOMK.csv)
 - * **UPENN-Longitudinal Biomarker Data[ADNI1]:** ADNI1: baseline & m12 abeta, tau. (UPENNBIOMK2.csv)
 - * **UPENN-Longitudinal Biomarker Data (3 yr)[ADNI1]:** ADNI1: baseline, m12, m24& m36 abeta, tau, ptau. (UPENNBIOMK3.csv)
 - * **UPENN-Longitudinal Biomarker Data (4 yr)[ADNI1]:** ADNI1: baseline, m12, m24, m36& m48 abeta, tau, ptau. (UPENNBIOMK4.csv)
 - * **UPENN-CSF Biomarkers[ADNIGO/2]:** ADNIGO/2: new subject baseline abeta, tau, ptau. (UPENNBIOMK5.csv)
 - * **UPENN-Second batch analysis of CSF biomarkers:** Longitudinal abeta, tau, ptau for 82 ADNI1 subjects, b1 and m24 for 32 ADNIGO subjects, and baseline for 309 ADNI2 subjects (UPENNBIOMK6.csv)
 - * **UPENN-CSF Biomarkers Methods[ADNIGO/2](PDF):** Method paper for UPENN biomarker data
 - * CSF Multiplex Proteomics, Serum Autoantibody, Redox reactive autoantibodies data, etc. are also available. (with data dictionaries and method papers.)
 - * **Laboratory Data:** Screening clinical lab results (i.e. urine, chemistry panel). Data contains some character coding (i.e. SCC09: No specimen received), and they can be treated as missing data. (LABDATA.csv)

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- Genetic
 - SNP genotype data are available in several zip files.
- Enrollment
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 - * **ADNI2 Visit Codes Lookup[ADNI2]:** VISCODE2 assignment for ADNI2. VISCODE2 can tell you the longitudinal progression (i.e. m12, m24) (ADNI2_VISITID.csv)
 - * **Arm[ADNI1,GO,2]:** ADNI1:Randomized arm assignment. ADNIGO/2: Screening diagnosis (1:NL,2:MCI(LMCI in ADNI2),3:AD,10:EMCI,11:SMC) (ARM.csv)
 - * **Visits[ADNI1,GO,2]:** Dictionary of 'VISCODE' (VISITS.csv)
 - * **Registry[ADNI1,GO,2]:** Contains key variables such as EXAMDATE, whether visit was conducted, and participant status by each visit.(REGISTRY.csv)
- Imaging
 - MR Imaging Analysis (Each data comes with data dictionary and method paper)
 - * **Fox Lab BSI Measures[ADNI1/GO/2]:** Brain and Ventricular Boundary Shift Integral in ADNI1/GO/2. VBSI: ventricular BSI. DBCBBSI: Whole brain classic BSI. KMNDBCBSI: Whole brain KN-BSI. HBSI_R, HBSI_L: Hippocampal BSI Right/Left. (FOXLABBSI.csv)
 - * **Mayo Task-Free fMRI Summary Metric of DMN ROIs[ADNIGO/2]:** fMRI summary in ADNIGO/2. PDMNRV: Posterior default mode network(DMN) RV. DMNRVR: DMN RV-ratio (MAYOADRIL_MRI.FMRI.csv)
 - * **Mayo TBM-SyN Based Scores[ADNIGO/2]:** longitudinal MRI measures in ADNIGO/2. TBMSYNSCOR: mean over 31 ROIs. (MAYOADRIL_MRI.TBMSYN.csv)
 - * **MRI Infacts[ADNI1,GO,2]:** longitudinal records of MRI detected strokes. STROKE_TYPE: thrombosis or hemorrhage. (MRI_INFARCTS.csv)
 - * **Stroke Summary Version 2[ADNI1]:** Whole brain white matter hyperintensity in ADNI1. WHITMATHYP: white matter hyperintensity volume – whole brain (STROKESUM.V2.csv)
 - * **UA-MRI SPM VBM Analysis[ADNI1]:** Using longitudinal voxel based morphometry (VBM) processing steps in ADNI1. Left hippocampal region = average(HIPPL AMTGDL). RECNO: image sets used for analysis(UASPMVBM.csv)
 - * **UCD Total Cranial Vault Segmentation[ADNI1]:** Total cranial volumes for 810 ADNI1 subjects. T2TCV: T2 total intracranial volume (TCV.csv)
 - * **UCL-Boundary Shift Integral Summaries[ADNI1]:** Boundary Shift Integral in ADNI1. (BSI.csv)
 - * **UCLA DTI ROI Summary Measures[ADNIGO/2]:** Diffusion Tensor Imaging Summary in ADNIGO/2, including FA and MD in a variety of regions. (DTIROI.csv)
 - * **UCLA Tensor Based Morphometry Version 2[ADNI1/GO/2]:** Tensor-based morphometry in ADNIGO/2. MEASURE_1: Numerical summary of cumulative temporal lobe atrophy; summaries are scaled by 1000 (e.g. 1000: no change, 1200: 20% increase, 800: 20% loss) (TBM.csv)
 - * **UCSD-Derived Volumes[ADNI1]:** Volumetric and cortical thickness data for ADNI1. Several variables including LHIPPOC: left hippocampus RHIPPOC: right. VENTRICLES: ventricles. BRAIN: whole brain. (UCSDVOL.csv)
 - * **UCSF ASL Perfusion CBF by FreeSurfer ROI[ADNIGO/2]:** Cerebral blood flow (CBF) measures in ADNIGO/2 for FreeSurfer ROIs. (UCSFASLFS.csv)
 - * **UCSF-Cross-Sectional FreeSurfer(FreeSurfer Version4.3):** MRI measures (volumes and cortical thickness) for 1.5T MRI in ADNI1/GO/2. hippocampal volume=(ST29SV+ST88SV)/2. whole brain volume= sum(of ST128SV ST17SV

ADNI Commonly Used Tables

ST18SV ST19SV ST20SV ST61SV ST16SV ST53SV ST42SV ST29SV ST12SV
ST11SV ST65SV ST76SV ST77SV ST78SV ST79SV ST120SV ST75SV ST112SV
ST101SV ST88SV ST71SV ST70SV ST124SV) (UCSFFSX.csv)

- * **UCSF-FreeSurfer(Version5.1)Cross-sectional [ADNIGO,2]:** MRI measures (volumes and cortical thickness) for 3T MRI in ADNIGO/2. Some variable names are different from Version4.3. whole brain volume: replace ST19SV, ST20SV, ST78SV, SV79SV (version 4.3 variables) with ST147SV ST148SV ST150SV ST151SV (version 5.1 variables). (UCSFFSX51.csv)
- * **UCSF-Longitudinal FreeSurfer(FreeSurver Version 4.4):** MRI measure using longitudinal scans in ADNI1. (UCSFFSL.csv)
- * **UCSF-Regional Atrophy Rates[ADNI1]:** Summaries of regional atrophy rates in ADNI1. (UCSFATRPHY.csv)
- PET Imaging Analysis (Each data comes with data dictionary and method paper)
 - * **Banner Alzheimer's Institute PET NMRC Summaries:** SPM summary from AV45 and FDG-PET in ADNI1/GO/2. HCI: hypometabolic convergence index for ADNI1 and some ADNIGO subjects. LONGHCI: Extension of HCI to longitudinal data. (BAIPETNMRC.csv)
 - * **NYU FDG-PET-Hippocampus (pons normalized):** FDG-PET: hippocampal glucose metabolism sampling in baseline and m24 of ADNI1. HIPRPONS: Right hip/pons normalized. HIPLPONS: Left hip/pons normalized. (NYUFDGHIP.csv)
 - * **sPAS Avid ADNI Florbetapir summaries:** Numeric summary of AV45 images using syngo.PET Amyloid Plaque (sPAP) and Avid Semi-Automated Method. AVID_STAGE_4_GLOBAL_SUVr: Average six region SUVr normalized by entire cerebellum for florbetapir (AV-45) images calculated using AVID semi-automated quantification (cutoff: 1.10 (SUVr>1.10: florbetapir positive)). SPAP_GLOBAL_SUVr: Average six region SUVr normalized by entire cerebellum for florbetapir (AV-45) images calculated using sPAP software (cutoff: 1.1186). (SPAP_AVID_FLORBETAPIR.csv)
 - * **UC Berkeley - AV45 Analysis[ADNIGO,2]:** AV45 PET measures in ADNIGO/2. SUMMARYSUVr_WHOLECEREBNORM: Summary variable (cutoff: 1.11). (UCBERKELEYAV45.csv)
 - * **UC Berkeley - FDG Analysis[ADNI1/GO/2]:** FDG PET measures in ADNI1/GO/2. Each observation has five regions of measures. (5 rows) To create summary variable: take average of the variable MEAN of 5 regions: L+R Temporal, L+R Angular, Post Cingulate. (UCBERKELEYFDG.csv)
 - * **UPitt-PIB PET Analysis[ADNI1]:** Numeric summary of PIB PET in 14 regions (all relative to cerebellum = 1). To create summary variable: take average of 4 regions (ACG, FRC, PAR, PRC) (PIBPETSUVr.csv)
 - * **UU-PET Analysis[ADNI1]:** Derived from Neurostat SSP analysis from PIB, FDG, AV45 PET in ADNI1/GO/2. SUMZ2:sum of pixel Z-scores greater than or equal to 2 standard deviations. SUMZ3:sum of pixel Z-scores greater than or equal to 3 standard deviations. PETTYPE: FDG, PIB or AV45. VISCODE/VISCODE2 may be missing in the data. (UUCACIR.csv)

ADNI Commonly Used Tables

- Study Info
 - Data & Database
 - * **ADNI 1.5T MRI Standardized Lists, ADNI 3T MRI Standardized Lists:** Standardized analysis sets of volumetric scans from ADNI1. (ADNI_1.5T_MRI_Standardized_Lists.zip, ADNI_3T_MRI_Standardized_Lists.zip)
 - * **Data dictionary[ADNI1,GO,2]:** Data dictionary for most clinical data. (DATADIC.csv)
 - * **Key ADNI tables merged into one table:** It contains some of the key variables in one table. (ADNIMERGE.csv)
 - * **Merged ADNI1/GO/2 Packages:** ADNI Merge packages for R, SAS, SPSS, and Stata.
- Subject Characteristics
 - Subject Demographics
 - * **Family History Questionnaire:** Information of parents and if they have siblings. yes=1/no=0/don't know=2 if their mother or father have dementia or having AD. (FHQ.csv)
 - * **Family History Questionnaire Subtable:** Information of siblings (if they have siblings in FHQ.csv). yes=1/no=0/don't know=2 if they have dementia or having AD (one row per each sibling). (RECFHQ.csv)
 - * **Subject Demographics[ADNI1,GO,2]:** Demographic information at screening. (PTDEMOG.csv)

More about data

- Data Organization
 - Data within a file are organized with each visit in a separate row (the 'long' format of data rather than the 'wide' format)
 - RID identifies rows belonging to the same individual.
- Notes about data
 - Missing data codes: Most use '-4' as missing, although a few will say '-1'. Check the data dictionary.
 - Common variables for linking files
 - * RID (patientID)
 - * VISCODE or VISCODE2 (visit code: sc, bl, m06, m12, etc.)
 - * EXAMDATE (date of assessment)
 - VISCODE='f' means the subject failed screening (ADNI1)
 - 'Baseline diagnosis' - actually two different ones
 - * Diagnosis at the screen visit
 - When randomization is assigned
 - Available in the arm table
 - * Diagnosis at baseline visit
 - Based on additional information than the diagnosis at randomization
 - Available in the diagnosis summary table
- About EXAMDATE in Clinical data
 - Clinical data in ADNIGO/2 do not include "EXAMDATE" (the date of the exam).
 - The variable 'USERDATE' is the data entry date, and may be very different from EXAMDATE.
 - Use the variable 'EXAMDATE' in 'REGISTRY' table as date of exam for all clinical data