



What is ADNCA and Why is it Important?

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Introduction





Introduction

- Pharmacokinetics (PK) is the study of the effect of the body on a drug
 - Analysis of how a drug is absorbed, distributed, metabolized and eventually excreted from the body (ADME)
- Non-compartmental analysis (NCA) is one class of mathematical methods used to calculate PK parameters that describe, characterize and quantify this effect
 - Used to study the level of exposure to a drug based on serial drug concentration data collected from individual subjects
 - Typically performed using software designed to support PK Analysis using drug concentration data as one input, e.g. Phoenix WinNonlin
- The SDTMIG contains two domains to hold this data:
 - Pharmacokinetics Concentrations (PC) A findings domain that contains concentrations of drugs or metabolites in fluids or tissues as a function of time.
 - Pharmacokinetics Parameters (PP) A findings domain that contains pharmacokinetic parameters derived from pharmacokinetic concentration-time (PC) data.



Introduction

- CDISC Analysis Data Model Implementation Guide for Non-compartmental Analysis Input Data v1.0 (ADAMIG-NCA) (published in November 2021)
 - Provides the specification for the input dataset for NCA
 - Specifies many of the variables needed for PK parameter calculations as well as general naming conventions that can be used for additional variables
 - The input data format needs to comprehensively associate subject drug concentrations over time with study drug dosing, support the exclusion of specific records and subjects, and provide other supporting information as needed
 - Using this standard format supports submission to regulatory agencies as well as promoting compliance with ADaM standards





Non-Compartmental Analysis (NCA)

• NCA is a time-from-event based analysis that derives multiple parameters from time-concentration profiles for individual subjects







Analysis Dataset for Non-Compartmental Analysis Input Data (ADNCA) Metadata



Analysis Dataset Non-Compartmental Analysis (ADNCA)

- In the ADAMIG-NCA v1.0, the ADaM NCA input dataset is simply referred to as ADNCA
 - Not a required naming convention
 - Can have a different name if the convention for naming datasets outlined in the ADaM standards is followed:
 - Must start with 'AD' and cannot be longer than 8 characters: 'ADxxxxxx'
- ADNCA dataset structure is designed to support common NCAs, including analysis with both discrete timepoint measurements (e.g. plasma/serum concentrations) and measurements from collections over time intervals (e.g. urine samples)
 - May be used to create tabular and graphical data representations as needed for PK and PD data review for studies using NCA
 - It is not intended to be used to present graphical or tabular representations of PK parameter results from NCA
 - These data are typically represented in the SDTM Pharmacokinetics Parameters (PP) domain





Dataset Metadata

- The ADNCA dataset is designed to follow the ADaM Basic Data Structure (BDS)
 - BDS datasets contain one or more records per subject, per analysis parameter, per analysis timepoint (more information can be found in the ADaMIG available at: <u>https://www.cdisc.org/standards/foundational/adam</u>)
- Dataset Metadata

Data Structure Name	Data Structure Description	Class of Dataset	Subclass of Dataset	CDISC Notes
	Basic Data Structure	BASIC DATA	NON-COMPARTMENTAL	Dataset designed to support NCA. Primarily sourced from SDTM.PC and supplemented by information for the EX. EC. or other relevant
ADNCA	Analysis	STRUCTURE	ANALYSIS	domains.

• Note: The Data Structure Name, Description, and CDISC Notes are intended to provide information to assist data preparers. They are not intended to be metadata submitted in define.xml





Variable Metadata

- Some standard BDS and Analysis Dataset Subject-level (ADSL) variables that would commonly be used in ADNCA include:
 - STUDYID
 - USUBJID and SUBJID
 - SITEID
 - AGE or AAGE, and AGEU
 - SEX
 - RACE
 - TRTP and TRTPN
 - TRTA and TRTAN
 - DOSEP, DOSEA, and DOSEU

ADSL

APERIOD and APERIODC AVISIT and AVISITN ADT, ATM, and ADTM ASTDT, ASTTM, and ASTDTM AENDT, AENTM, and AENDTM **BDS** ATPT and ATPTN PARAM, PARAMCD, and PARAMN AVAL DTYPE

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Other Input data for ADNCA

- SDTM Domains
 - Exposure (EX) and/or Exposure as Collected (EC)
 - EXSTDTC, EXENDTC, EXDOSE, EXROUTE, ECOCCUR
 - Pharmacokinetics Concentrations (PC)
 - PCTPT, PCDTC, PCRFTDTC, PCSTRESC, PCSTRESU, PCSPEC, VISITNUM, VISIT
- ADaM Subject-Level Analysis Dataset (ADSL)
 - Common baseline characteristics used in NCA*:
 - BMIBL (body mass index, BMI, at baseline, associated with the time of reference dosing) and BMIBLU (units)
 - HTBL (height at baseline, associated with the time of reference dosing) and HTBLU (units)
 - WTBL (weight at baseline, associated with the time of reference dosing) and WTBLU (units)

*Due to needs of common analysis tools such as Phoenix WNL, units for baseline characteristics are stored in separate variables, rather than as part of the label © Copyright 2024 Certara, Inc. All rights reserved.





Notable New Standard Variables

• Exclusion Flags

Variable Name	Variable Label	Туре	Codelist/Controlled Terms	Core	CDISC Notes
NCAXFL	PK NCA Exclusion Flag	Char	Y	Permissible	Flag for exclusion of a record into a PK NCA calculation (Y = exclusion, Null = inclusion)
NCAXFN	PK NCA Exclusion Flag (N)	Num	1	Permissible	Numeric flag for exclusion of a record into a PK NCA calculation (1 = exclusion, Null = inclusion). NCAXFN can only be included if NCAXFL is also included.
NCAwXRS	Reason w for PK NCA Exclusion	Char		Permissible	This variable is used to explain why the record is not included in the PK NCA.
PKSUMXF	PK Summary Exclusion Flag	Char	Y	Permissible	Flag for exclusion of a record from a PK summary (1 = exclusion, Null = inclusion)
PKSUMXFN	PK Summary Exclusion Flag (N)	Num	1	Permissible	Numeric flag for exclusion of a record from a PK summary (1 = exclusion, Null = inclusion). PKSUMXFN can only be included if PKSUMXFL is also included.





Notable New Standard Variables

• Dosing and Metabolite Variables

Variable	Variable Label	Tuno	Codelist/Controlled	Coro	
METABFL	Metabolite Flag	Char	Y	Conditional	Flag to designate if observations within a subject are associated with a metabolite. Required if parent drug and metabolites are present in the dataset.
DOSPCTDF	Percent Diff. Nominal vs. Actual Dose	Num		Conditional	Derived variable using a standard percent difference formula: (100*(DOSEA- DOSEP)/(DOSEP)). DOSPCTDF is required if both DOSEA and DOSEP are populated.
DOSEFRQ	Dose Frequency	Char	(FREQ)	Conditional	Usually expressed as the number of repeated administrations of DOSE within a specific time period for multiple dose studies.
FANLDTM	First Datetime of Dose for Analyte	Num		Permissible	Date and time of first exposure to treatment associated with PARAM and ANALYTE for a subject in a study where multiple doses have been given. If treatment is given over a duration multiple times, this variable will reflect the start date and time of the first dose.
FANLEDTM	First End Datetime of Dose for Analyte	Num		Permissible	End date and time of first exposure to treatment associated with PARAM and ANALYTE for a subject in a study where multiple doses have been given. If treatment is given over a duration multiple times, this variable will reflect the end date and time of the first dose.





Notable New Standard Variables

• Reference Dates for Dose Variables

			Codelist/Controlled		
Variable Name	Variable Label	Туре	Terms	Core	CDISC Notes
PCRFTDT	Reference Date of Dose for Analyte	Num		Required	Date of reference exposure to treatment associated with PARAM and ANALYTE. Based on PC.PCRFTDTC and related to the analyzed profile. If this is a treatment over time, then this is typically the start of the dosing duration.
PCRFTTM	Reference Time of Dose for Analyte	Num		Required	Time of reference exposure to treatment associated with PARAM and ANALYTE. Based on PC.PCRFTDTC and related to the analyzed profile. If this is a treatment over time, then this is typically the start of the dosing duration.
PCRFTDTM	Reference Datetime of Dose	Num		Required	Date and time of reference exposure to treatment associated with PARAM and ANALYTE. Based on PC.PCRFTDTC and related to the analyzed profile. If this is a treatment over time, then this is typically the start of the dosing duration.
PCRFEDTM	Ref. End Datetime of Dose for Analyte	Num		Conditional	The end date and time of the reference exposure to treatment associated with PARAM and ANALYTE. Must be related to the time recorded in PC.PCRFTDTC and to the analyzed profile. If dosing occurs over an interval, this should be populated. If populated, ADOSEDUR and DOSEDURU are required to be filled out.
ADOSEDUR	Actual Duration of Treatment Dose	Num		Conditional	Total treatment duration, as measured in units given in DOSEDURU, derived from PCRFEDTM-PCRFTDTM. This record is generally considered to be associated with an infusion dose and is distinct from TRTDURD, TRTDURM, and TRTDURY, which reference the duration of the entire study rather than the duration of a single treatment event.



Notable New Standard Variables

• Nominal and Actual Elapsed Time from Dose Variables

			Codelist/Controlled		
Variable Name	Variable Label	Туре	Terms	Core	CDISC Notes
	Nominal Rel.				
	Time from Ref.				This is the planned elapsed time (for sample point or start of
NRRLT	Dose	Num		Required	sampling interval) from reference exposure to study treatment.
	Actual Rel. Time				This is the actual elapsed time (for sample point or start of sampling
ARRLT	from Ref. Dose	Num		Required	interval) from reference exposure to study treatment.
	Modified Rel.				This variable could be used to modify the ARRLT variable based on
	Time from Ref.				analysis needs (e.g., setting negative values to zero or having a mix
MRRLT	Dose	Num		Permissible	of nominal and actual time based of TMPCTDF).
	Rel. Time from				
RRLTU	Ref. Dose Unit	Char	(PKUNIT)	Required	This is the unit for all elapsed times from reference dose.





Notable New Standard Variables

• Concentration Results and Units Variables

			Codelist/Controlled	-	
Variable Name	Variable Label	Туре	Terms	Core	CDISC Notes
AVALU	Analysis Value Unit	Char	(PKUNIT)	Required	Unit for AVAL
PCSTRESC	Character Result/Finding in Std Format	Char		Conditional	Character results/findings in a standard format. The purpose of this column is to capture which records are BLQ or LLOQ in the AVAL column. This column must be a direct copy of PC.PCSTRESC.
PCSTRESU	Standard Units	Char	(PKUNIT)	Conditional	Standardized unit associated with AVAL. Units associated with AVAL are needed for clear NCAs. This column must be a direct copy of PC.PCSTRESU.
PCLLOQ	Lower Limit of Quantitation	Num		Conditional	Indicates the lower limit of quantitation for an assay. Must be a direct copy of PC.PCLLOQ.
ALLOQ	Analysis Lower Limit of Quantitation	Num		Conditional	Indicates the lower limit of quantitation for an assay. Use if PC.PCLLOQ does not support analysis needs.





Standard BDS Variables with stronger 'Core'

Variable Name	Variable Label	Туре	Codelist/Controlled Terms	Core	CDISC Notes
DOSEA	Actual Treatment Dose	Num		Required	DOSEA represents the actual treatment dosage associated with the record. This is the actual numeric amount of the dose used for the NCA analysis and may differ from the EX.EXDOSE.
DOSEU	Treatment Dose Units	Char	(UNIT)	Required	The units for DOSEP and DOSEA. It is permissible to use suffixes such as "P" and "A" to record different units for DOSEP and DOSEA, with labels modified accordingly.
					The analysis visit description; required if an analysis is done by nominal, assigned or analysis visit. AVISIT may contain the visit names as observed (i.e., from SDTM VISIT), derived visit names, time window names, conceptual descriptions (such as Average, Endpoint, etc.), or a combination of any of these. AVISIT is a derived field and does not have to map to VISIT from the SDTM. AVISIT represents the analysis visit of the record, but it does not mean that the record was analyzed. There are often multiple records for the same subject and parameter
AVISIT	Analysis Visit	Char		Required	that have the same value of AVISIT.





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ADNCA Example and CDISC Conformance Rules

ADNCA Example

• This example shows concentration data from both plasma and urine samples for one subject, STD1-56-001, on Day 1

									_						
USUBJID	PARAM	PARAMCD	NRRLT	NERRLT	RRLTU	ATPT	AVISI	PCSPEC	AVAL	PCSTRESU	PCRFTDTM		NCAEXFL	NCAXFN	NCA1XRS
STD1-56-00	Plasma Analyte A (ug/L)	PANALYTA	0		h	Predose	DA 1	PLASMA	0	ug/L	2021-12-26T08: 0	0:00			
STD1-56-00	Plasma Analyte A (ug/L)	PANALYTA	0.5		h	0.5 H	DA 1	PLASMA	115	ug/L	2021-12-26T08: 0	0:00			
STD1-56-00	Plasma Analyte A (ug/L)	PANALYTA	2		h	2 H	DA 1	PLASMA	1320	ug/L	2021-12-26T08:)0	0:00			
STD1-56-00	Plasma Analyte A (ug/L)	PANALYTA	4		h	4 H	DA 1	PLASMA	1450	ug/L	2021-12-26T08: 0	0:00			
STD1-56-00	Plasma Analyte A (ug/L)	PANALYTA	8		h	8 H	DA 1	PLASMA		ug/L	2021-12-26T08:)0	0:00	Y	1	Missing AVAL Value
STD1-56-00	Plasma Analyte A (ug/L)	PANALYTA	12		h	12 H	DA 1	PLASMA	2427	ug/L	2021-12-26T08:)0	0:00			
STD1-56-00	Plasma Analyte A (ug/L)	PANALYTA	24		h	24 H	DA 1	PLASMA	3621	ug/L	2021-12-26T08:)0	0:00			
STD1-56-00	Urine Analyte A (ug/L)	UANALYTA	-4	0	h	-4 H to Predose	DA 1	URINE	0	ug/L	2021-12-26T08:)0	0:00			
STD1-56-00	Urine Analyte A (ug/L)	UANALYTA	0	4	h	0 to 4 H	DA 1	URINE	34.5	ug/L	2021-12-26T08:)0	0:00			
STD1-56-00	Urine Analyte A (ug/L)	UANALYTA	4	8	h	4 to 8 H	DA 1	URINE	84.2	ug/L	2021-12-26T08:)0	0:00			
STD1-56-00	Urine Analyte A (ug/L)	UANALYTA	8	12	h	8 to 12 H	DA 1	URINE	65.1	ug/L	2021-12-26T08:)0	0:00			
STD1-56-00	Urine Analyte A (ug/L)	UANALYTA	12	24	h	12 to 24 H	DA 1	URINE	12.5	ug/L	2021-12-26T08:)0	0:00			
STD1-56-00	Plasma Analyte B (ug/L)	PANALYTB	0		h	Predose	DA 1	PLASMA	0	ug/L	2021-12-26T08:)0	0:00			
STD1-56-00	Plasma Analyte B (ug/L)	PANALYTB	0.5		h	0.5 H	DA 1	PLASMA	98.1	ug/L	2021-12-26T08:)0	0:00			
STD1-56-00	Plasma Analyte B (ug/L)	PANALYTB	2		h	2 H	DA 1	PLASMA	118.3	ug/L	2021-12-26T08:)0	0:00			
STD1-56-00	Plasma Analyte B (ug/L)	PANALYTB	4		h	4 H	DA 1	PLASMA	120.9	ug/L	2021-12-26T08: 0	0:00			
STD1-56-00	Plasma Analyte B (ug/L)	PANALYTB	8		h	8 H	DAY	PLASMA	87.4	ug/L	2021-12-26T08:0	:00			
												X			





CDISC Conformance Rules for ADNCA

- CDISC conformance rules specific to ADNCA
 - Published in <u>ADaM Conformance Rules v5.0</u>
 - 84 rules under 'NON-COMPARTMENTAL ANALYSIS' subclass
 - Rules to check for presence of 'Required' variables
 - Others check values for flag variables, e.g. Value is not Y or null
 - Rules that check for conditional and paired variables
 - Example: COHORTN is present and COHORT is not present
 - Available in P21 Enterprise engine 2405.0 (released August 2024)





ADNCA Dataset Creation and PK Parameter Results in Phoenix



Creation of CDISC ADNCA dataset

□··· T ADPP SDTM 32 CDISC Example	CDISC	•	Create CDISC Domains					
Data Deta Disc Output ADNCA ADPC ADPP	Press 'Vie Note that	w in External Viewer' to vie external viewers can be lim	Create Submission Files Create Pinnacle21 Validation and Export SAS Transport Files	d SDRG Reports.				
	PkSubmit	Apply Expressions based on ADaM	Implementation Guide for NCA v1.0		Preview of Master	Concentration Data	-	
	Column Name		Expression	Concentration Data				
	STUDYID	Study_ID		Subject	Subject_Group	NominalTime	AnalysisNominalTime	Interval
	USUBJID	#cs r.Get <string>("Subject").Contains(r.Get</string>	t <string>("Study_ID"))? r.Get<string>("Subject") : r.Get<st< td=""><td>51111-1234-101</td><td>STITI-1234-101,Analyte,Peri</td><td>15</td><td>15</td><td> </td></st<></string></string>	51111-1234-101	STITI-1234-101,Analyte,Peri	15	15	
	SUBJID	SUBJID		51111-1234-101	STITI-1234-101,Analyte,Peri	ci	ci	
Data Validation	SITEID	SITEID		51111-1234-101	S1111-1234-101,Analyte,Perio	50	50	—— II
Dav Time Adjustmente	ASEQ	#cs action("POST_PROCESSED", r)		S1111-1224-101	S1111-1224-101 Apalita Pari	45	40	——————————————————————————————————————
	AGE	Age		S1111-1234-101	S1111-1224-101, Analyte, Perio	00	00	II
	SEX	Gender		51111-1234-101	S1111-1234-101,Analyte,Peni	90	120	II
	RACE	Race		51111-1224-101	S1111-1224-101,Analyte,Peni	120	120	
庄 ··· 🛍 dm	TRTP	#cs action("POST_PROCESSED", r)		51111-1224-101	S1111-1224-101,Analyte,Peri	240	240	
	TRTPN	#cs action("POST_PROCESSED", r)		51111-1234-101	S1111-1234-101,Analyte,Peni	240	240	II
Documents	TRTA	#cs action("POST_PROCESSED", r)		S1111-1224-101	S1111-1224-101 Analyte, Peri	490	490	I I
ison	TRTAN	#cs action("POST_PROCESSED", r)		3111-1234-101	3111-1234-101,Analyte,Fen	400	400	~ ~
	DOSEP	Dose			Preview of ADNCA	Data		
	DOSEA	ActualDose		ADNCA.xpt				
+ sx	DOSEU	DoseUnits		STUDYID	USUBJID	SUBJID	SITEID	A\$ ^
i mi	APERIOD	Visit		SIIII	\$1111-1234-101	101	1234]]
	APERIODC	Visit		SIIII	S1111-1234-101	101	1234]]
	AVISIT	'DAY '+VisitNum		SIII	51111-1234-101	101	1234	—— II
····· 🔐 adnca	AVISITN	VisitNum			51111-1234-101	101	1234	
adpc	ADT	#cs r.Get <string>("SamplingDateTime").To</string>	ISO8601Date()	51111	51111-1234-101	101	1234	——————————————————————————————————————
adon	ATM	#cs r.Get <string>("SamplingDateTime").To</string>	ISO8601Time()	51111	51111-1234-101	101	1234	——————————————————————————————————————
dopp	ADTM	#cs r.Get <string>("SamplingDateTime").To</string>	ISO8601DateTime()	51111	51111-1234-101	101	1234	——————————————————————————————————————
CO	ASTDT	#cs r.Get <string>("IntervalSamplingStartD</string>	ateTime").ToISO8601Date()	51111	S1111-1234-101	101	1234	—— II
pc	ASTIM	#cs r.Get <string>("IntervalSamplingStartD</string>	ate lime"). IolSO8601Time()	5111	S1111-1234-101	101	1224	
DD	ASIDIM	#cs r.Get <string>("IntervalSamplingStartD</string>	ate i ime"). IoisO8601Date i ime()	5111	S1111-1234-101	101	1224	
	AENDI	#cs r.Get <string>("IntervalSamplingEndDa</string>	terime").1015U8601Date()	<	5111-1254-101		12.54	> ×
reliec	AENIM		terime).1015080011ime()					
				0			Apply Previous	Submit

PK Submit Overview





Data Preparation

1

Data Modification

2

Finalize PK Data

3

CDISC Creation and Validation

4

- Map to Data Model
- Merge Data
- Data Validation Checks

- Set Analysis Profiles
- Apply BLQ Rules
- Sample Duplication
- Visual and Conditional Exclusions

- AUCtau for Single Dose
- Slope Selector
- Ratios
- Conditional Exclusions
- Create PK-Related CDISC Domains, including ADNCA
- Generate
 Submission Files
- Validate using Pinnacle21 Community



PK Submit: Data Prep Overview

Merge Configuration

PC (Concentration) EX (Doses)

Dataset: Test PK Submit 1.Data.PC Category: Samples

1	
Data	
Preparation	

Map to Data Model

Data Validation Checks

Merge Data

ullet

•

Order	Result Column	Result Column Source Name Converter		Mapping Required	Ŷ
1	Subject	USUBJID		*	
2	Analyte	PCTEST		*	
3	Matrix	PCSPEC	ToUpper	*	
4	NominalTime	PCTPTNUM		*	
5	AnalysisNominalTime	PCTPTNUM		*	
6	Concentration	PCORRES		*	
7	ConcentrationUnits	PCORRESU	.	*	~

-5	Sample Day/Tir	ne Adjustments			
	Day 🝸	AnalysisDay 🝸	NominalTime T	AnalysisNominalTime T	-
	1	1	2	2	
	2	2	0	0	
	2	2	0.5	0.5	
	2	2	1	1	
	2	2	2	2	
	2	2	4	4	
	2	2	8	8	
	2	2	12	12	
	2	2	24	24	
	3	3	0.5	0.5	
	3	3	1	1	
	3	3	2	2	-

Source Type PC (Concentration) EX (Doses) DM (Demographics) ADSL (ADaM Subject Level)

Data Validation

/alidation Checks		
Name	Severity	Description
SUBJECT_MISSING	High	Verify that SUBJECT is valued for all rows.
CONC_MISSING	High	Verify that Concentration is valued for all rows.
ANALYSISDAY_MISSING	High	Verify that AnalysisDay is valued for all rows.
NOMINALTIME_MISSING	High	Verify that NominalTime is valued for all rows.
SAMPLINGDATETIME_MISSING	Low	Verify that SamplingDateTime is valued for all rows.
DOSEDATETIME_MISSING	Low	Verify that DoseDateTime is valued for all rows.
ANALYTE_MISSING	High	Verify that Analyte is valued for all rows.
DOSE_MISSING	Medium	Verify that Dose is valued for all rows.
		×

sues			
Name T	Identifier T	Message	r
DOSEDATETIME_MISSING	Subject=[Test Study1-1001A]; Day=[1]; Nominal	A value is required for [DoseDateTime].	
DOSE MISSING	Subject (Test Studie) 100101; Dev. [1]: Newsing	A university and fee (Decel	



PK Submit: Analysis Overview

2 Data Modification



- Set Analysis Profiles
- Apply BLQ Rules
- Sample Duplication
- Visual and Conditional Exclusions

Υ.	Analyte 🛛 🝸	Gender 🛛 🝸	Treatment 🛛 🝸	SUBJ
	Analyte	F	10 mg TABLET	S1111-1234-10
	Analyte	F	20 mg TABLET	S1111-1234-10
	Analyte	F	10 mg TABLET	S1111-1234-1
	Analyte	F	20 mg TABLET	S1111-1234-10
	Analyte	F	10 mg TABLET	
	Analyte	F	20 mg TABLET	
	Analyte	F	10 mg TABLET	
	Analyte	F	20 mg TABLET	

Rules Selection			Enter Fixed Concentration Value:
Available	Select >> << Remove	Selected Use sample of adjacent pr	 Impute Predose samples (Apply t Impute Tau samples (Apply to adj

Execute

Reset

vesuits				
Subject 🛛 🝸	AnalysisDay 🝸	Matrix T	Analyte 🛛 🝸	Gen ^
S1111-1234-101	1	PLASMA	Analyte	F
S1111-1234-101	1	PLASMA	Analyte	F
S1111-1234-101	1	PLASMA	Analyte	F
S1111-1234-101	1	PLASMA	Analyte	F
S1111-1234-101	1	PLASMA	Analyte	F
S1111-1234-101	1	PLASMA	Analyte	F
S1111-1234-101	1	PLASMA	Analyte	F
S1111-1234-101	1	PLASMA	Analyte	F
S1111-1234-101	2	PLASMA	Analyte	F



PK Submit: PK Parameters Overview

PK Parameters selection > PK Parameter Exclusion

Finalize PK Data

3

- AUCtau for Single Dose
- Slope Selector
- Ratios
- Conditional Exclusions

PK Parameters	^		Selected PK Parameters	~
Accumulation_Index			AUClast	
UC_%Extrap_obs			AUClast_D	
UC_%Extrap_pred		Select >>	Cmax	
UC_TAU		Let a Demonstra	Cmax_D	
AUC_TAU_%Extrap		<< Remove	HL_Lambda_z	
AUC_TAU_D				
AUC_TAU_MW				
AUCall				
AUCall_D				
UCall_MW				
UCINF_D_obs				
AUCINF_D_pred		Load		
AUCINF_obs		Cours.		
AUCinf_obs_MW		Save		
AUCINF_pred				
AUClast_MW				
ALIMC %Extrap obs	\sim			

PK Katio	Concentration Rati	0				
Parameters		Ratio Variable	Analys	isDav		
AUCall_MW	^	Deferrer Meler	4	,		
AUCINF_D_o	bs	Reference value	1			
AUCINF_D_p	ored	Prefix Test Value(s)	R = acc	cumulation ratio	•	•
AUCINF_obs	;	14				
AUCinf_obs_	MW		_			
ALICINE pre						
noenn_pre	a					
AUClast	a	Select Sort Keye				
AUClast AUClast_D		Select Sort Keys	^	Select >>	Selected	^
AUClast AUClast_D AUClast_MW	a 	Select Sort Keys Available AnalysisDay	<u>^</u>	Select >>	Selected Analyte	^
AUClast AUClast_D AUClast_MW		Select Sort Keys Available AnalysisDay ApplyExclusionToPC		Select >> << Remove	Selected Analyte Gender	^
AUClast AUClast_D AUClast_MW AUCLast_MW	a V rap_obs	Select Sort Keys Available AnalysisDay ApplyExclusionToPC ConcentrationUnits		Select >> << Remove Add All	Selected Analyte Gender Matrix	
AUClast AUClast_D AUClast_MW AUMC_%Ext AUMC_%Ext	a // rap_obs rap_pred	Select Sort Keys Available AnalysisDay ApplyExclusionToPC ConcentrationUnits <		Select >> << Remove Add All Remove All	Selected Analyte Gender Matrix <	^
AUClast AUClast_D AUClast_MW AUMC_%Ext AUMC_%Ext AUMC_TAU	a y rap_obs rap_pred	Select Sort Keys Available AnalysisDay ApplyExclusionToPC ConcentrationUnits Add Image Information	dividual V	Select >> << Remove Add All Remove All alues	Selected Analyte Gender Matrix	∧





PK Submit: CDISC Overview (ADNCA Creation)

PK:

CDISC Creation and Validation

4

- **Create PK-Related** CDISC Domains, including ADNCA
- Generate **Submission Files**
- Validate using Pinnacle21 Community

erated by PK	Column Name	Expression	<u>^</u>				
nit [.]	TUDYID	Study_ID					
U	ISUBJID	#cs r.Get <string>("Subject").Contains(r.Get<string>("Study_ID"))? r.Get<string></string></string></string>	"Subject") : r.Get <st< td=""><td></td><td></td><td></td><td></td></st<>				
S	UBJID	SUBJID					
s	ITEID	SITEID					
A	SEQ	#cs action("POST_PROCESSED", r)					
A	GE	Age					
s	EX	Gender					
	ACE	Race	Constantine Data	Preview of Master	Concentration Data		5
DEC.	RTP	#cs action("POST_PROCESSED", r)	Concentration Data				
T	RTPN	#cs action("POST_PROCESSED", r)	Subject	Subject_Group	NominalTime	AnalysisNominalTime	Interval
т	RTA	#cs action("POST_PROCESSED", r)	\$1111-1234-101	S1111-1234-101,Analyte,Peri	0	0	
РС	RTAN	#cs action("POST_PROCESSED", r)	S1111-1234-101	S1111-1234-101,Analyte,Perio	15	15	
D.D.	OSEP	Dose	\$1111-1234-101	S1111-1234-101,Analyte,Peri	30	30	
	OSEA	ActualDose	\$1111-1234-101	S1111-1234-101,Analyte,Peri	45	45	
NCA	OSEU	DoseUnits	S1111-1234-101	S1111-1234-101, Analyte, Perio	60	60	
A	PERIOD	Visit	S1111-1234-101	S1111-1234-101,Analyte,Peri	90	90	
A	PERIODC	Visit	S1111-1234-101	S1111-1234-101,Analyte,Peri	120	120	
A	VISIT	'DAY '+VisitNum	S1111-1234-101	S1111-1234-101,Analyte,Peri	180	180	
A	VISITN	VisitNum	S1111-1234-101	S1111-1234-101, Analyte, Peri	240	240	
A	DT	#cs r.Get <string>("SamplingDateTime").ToISO8601Date()</string>	S1111-1234-101	S1111-1234-101, Analyte, Perio	360	360	
A	TM	#cs r.Get <string>("SamplingDateTime").ToISO8601Time()</string>	S1111-1234-101	S1111-1234-101, Analyte, Peri	480	480	
A	DTM	#cs r.Get < string > ("SamplingDateTime").ToISO8601DateTime()					
А	STDT	#cs r.Get <string>("IntervalSamplingStartDateTime").ToISO8601Date()</string>	ADNCA.xpt	Preview of ADNCA	Data		
А	STTM	#cs r.Get <string>("IntervalSamplingStartDateTime").ToISO8601Time()</string>	STUDYID	USUBJID	SUBJID	SITEID	AS
А	STDTM	#cs r.Get <string>("IntervalSamplingStartDateTime").ToISO8601DateTime()</string>	\$1111	S1111-1234-101	101	1234	
A	ENDT	#cs r.Get <string>("IntervalSamplingEndDateTime").ToISO8601Date()</string>	S1111	S1111-1234-101	101	1234	
A	ENTM	#cs r.Get <string>("IntervalSamplingEndDateTime").ToISO8601Time()</string>	S1111	S1111-1234-101	101	1234	
it Validation Window Hele			S1111	S1111-1234-101	101	1234	
valuation window hep	,		S1111	S1111-1234-101	101	1234	
a Preparation Wizard			S1111	S1111-1234-101	101	1234	
lysis Wizard		P Demo Project	S1111	S1111-1234-101	101	1234	
Analysis		Contract Contract	S1111	S1111-1234-101	101	1234	
	Courts CDICCT	Sumalar .	S1111	S1111-1234-101	101	1234	
	Create CDISC L	/omains	S1111	S1111-1234-101	101	1234	
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