



connect·share·advance

Every Click Counts: A Smarter Way to Annotate CRFs

Prasanth Prabhakaran, Roshan
Stanly/ 20-June-2026

phuse.global



Agenda

connect·share·advance

Macro Workflow

Step-by-step Process

Demo

Questions?





Workflow

Getting CRF Properties



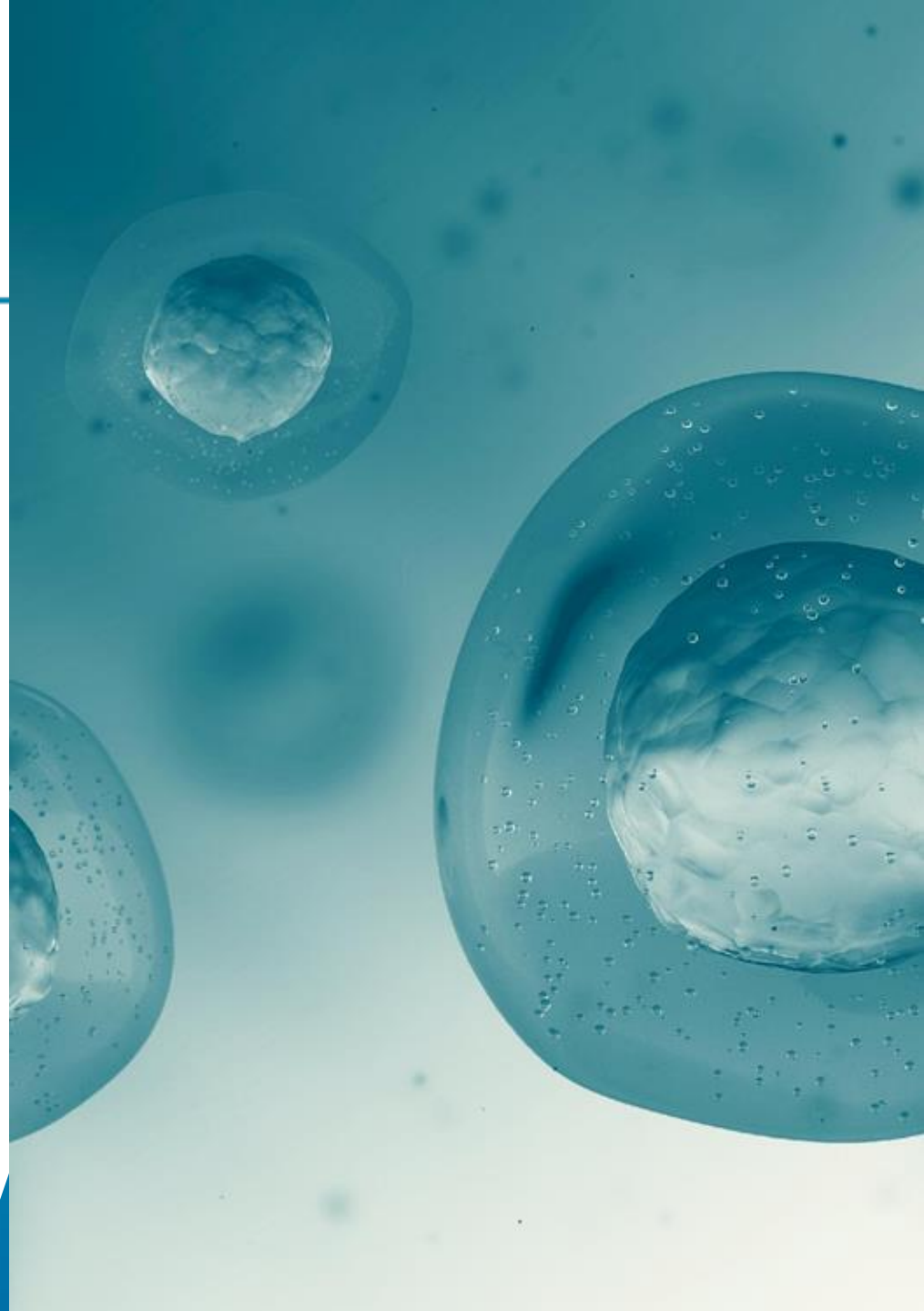
Creating Reference CRF file



Preparing *Mapping* Excel sheet to macro input



Create *annotation.fdf* and import annotations into the final *acrf.pdf*





Step 1: Getting CRF Properties

- Run the R function `acrf_properties(acrf_file = "acrf.pdf")`
- The function will generate a spreadsheet named `annotation_map.xlsx` with a sheet called Properties

	A	B	C	D	E
1	page	height	width	lmargin	rmargin
2	52	792	612	90	522

```
library(pdftools)  
pdf_data <- pdf_data(acrf_file)
```



Step 2: Creating Reference aCRF File

- Execute the macro: %autoanno(usage=ref);
- It will generate Excel sheets named "Mapping" and will be added to the spreadsheet annotation_map.xlsx
- Also, this macro will generate the file: ref_acrf.fdf.
- Import ref_acrf.fdf file into the aCRF file and create acrf_ref.pdf file as a reference for aCRF annotation

	A	B	C	D	E	F	G
1	page	text	type	position	domain_order	align	width
2							

Mapping



Step-2 Creating Reference aCRF File

1		1
2		2
3		3
4		4
5		5
6		6
7		7
8	Form: Demographics	8
9	Generated On: [REDACTED]	9
10		10
11	Birth Date	11
12		12
13	Age at Time of Consent	13
14		14
15	Fixed Unit: Years	15
16		16
17	Sex	17
18		18
19	Is the subject of childbearing potential?	19
20		20
21	Reason not childbearing	21
22		22
23		23
24	Ethnicity	24
25		25
26	Race (select all that apply)	26
27		27
28	White	28
29		29
30		30
31	Asian	31
32		32
33	Black or African American	33
34		34
35	American Indian or Alaska Native	35
36		36
37	Native Hawaiian or Other Pacific Islander	37
38		38
39		39
40	Not Reported	40
41		41
42		42
43	Other	43
44		44
45		45
46		46

1		1
2		2
3		3
4		4
5		5
6		6
7	[REDACTED]	7
8	Form: Demographics	8
9	Generated On: [REDACTED]	9
10		10
11	Birth Date	11
12		12
13	Age at Time of Consent	13
14		14
15		15
16		16



Step 3: Preparing the Excel Sheet “Mapping”

connect·share·advance

Add the annotation text inputs for the macro in the “Mapping” sheet of the annotation_map.xlsx spreadsheet.

page	text	type	position	domain_order	align	width	
6	DM (Demographics)	1	5	1	LEFT		
6	RP (Reproductive System Findings)	1	5	2	CENTER		
6	AGE	2	15	1	RIGHT		
6	AGEU = YEARS	3	14	1	CENTER		
6	BRTHDTC	2	11	1	RIGHT		
6	ETHNIC	2	24	1	RIGHT		
6	RACE	2	27	1	RIGHT		
6	RPORRES when RPTSTCD = CHILDPOT	2	19	2	RIGHT		
6	RPREASND when RPSTAT=NOT DONE	2	22	2	RIGHT		
6	SEX	2	17	1	RIGHT		
6	When multiple values are selected then RACE = N	3	38	1	RIGHT		



Step 4: Creating annotation.fdf and Adding Annotations in aCRF

connect·share·advance

- **Execute the macro: %autoanno;**
- **The macro will generate an FDF file named annotation.fdf.**
- **Import annotation.fdf file into the aCRF file and create acrf.pdf file**
- **All the annotation will be imported based on the Excel sheet “Mapping”**



Preview of Final Output

DM (Demographics)

DS (Disposition)

[REDACTED]

Form: Informed Consent

Generated On: [REDACTED]

DSTERM = INFORMED
CONSENT OBTAINED

Was Informed Consent provided?

[NOT SUBMITTED]

Date Informed Consent Form Signed

RFICDTC
DSDTC / DSSTDTC

Version Number of protocol consented to

DSREFID

Is the subject being re-screened?

RESCRN in SUPPDS



Preview of Final Output

DM (Demographics)

RP (Reproductive System Findings)

[REDACTED]

Form: Demographics

Generated On: [REDACTED]

Birth Date

BIRTHDT

Age at Time of Consent

AGEU = YEARS

Fixed Unit: Years

AGE

Sex

SEX

Is the subject of childbearing potential?

RPORRES when
RPTESTCD = CHILDPOT

Reason not childbearing

RPREASND when
RPSTAT=NOT DONE

Ethnicity

ETHNIC



connect·share·advance

Demo

phuse.global

connect·share·advance



THANK YOU!