



## CDISC Italian User Network 2020

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cdisc



# PROTOCOL DEVIATIONS AND QUALITY IN VACCINES TRIALS

Overview of GSK processes from data collection to ADaM dataset

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This work is sponsored by GlaxoSmithKline Biologicals SA

# PROTOCOL DEVIATION

## Definition

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### – PROTOCOL DEVIATION

A variation from processes or procedures defined in a protocol. Deviations usually do not preclude the overall evaluability of subject data for either efficacy or safety, and are often acknowledged and accepted in advance by the sponsor.

NOTE: Good clinical practice recommends that deviations be summarized by site and by category as part of the report of study results so that the possible importance of the deviations to the findings of the study can be assessed.

### – PROTOCOL VIOLATION

A significant departure from processes or procedures that were required by the protocol. Violations often result in data that are not deemed evaluable for a per protocol analysis, and may require that the subject(s) who violate the protocol be discontinued from the study.

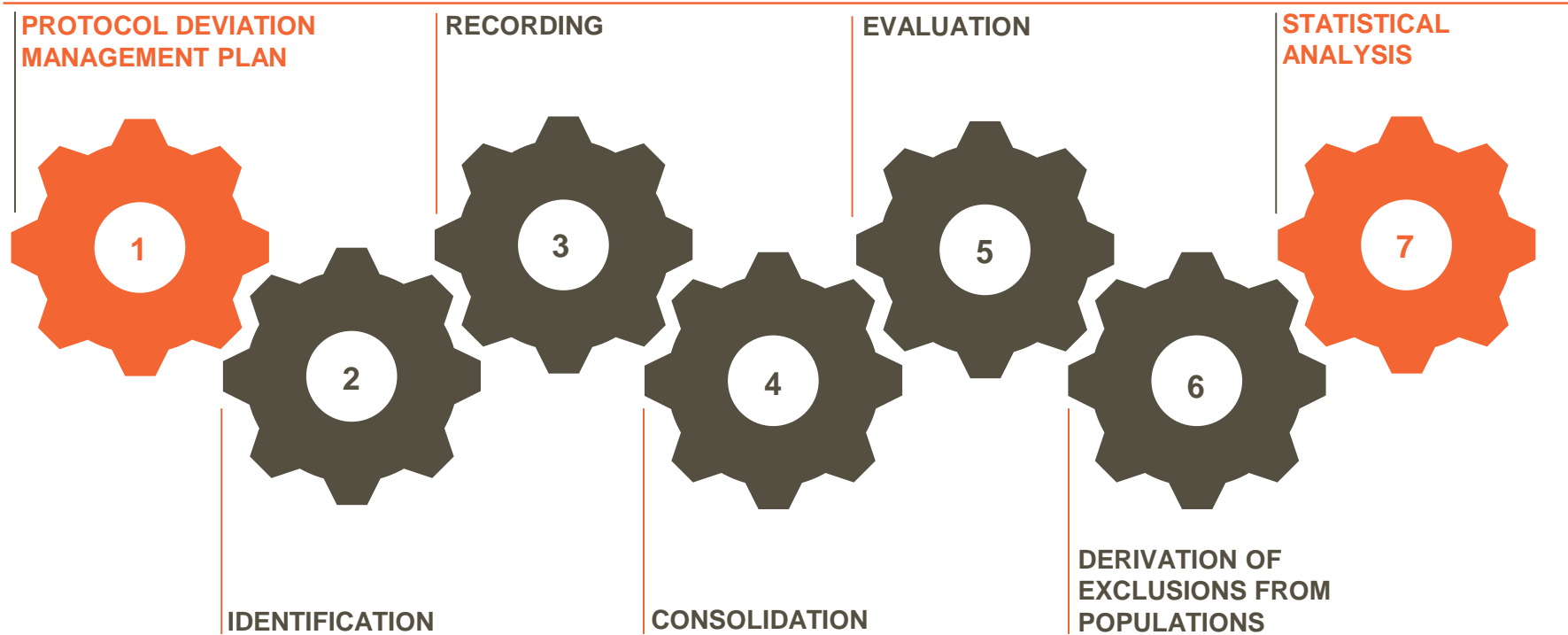
#### References:

<https://www.cdisc.org/standards/semantics/glossary/term/protocol-violation>

<https://www.cdisc.org/standards/semantics/glossary/term/protocol-deviation>

ICH E3 Q&A (R1) 06JUL2012: [https://database.ich.org/sites/default/files/E3\\_Guideline.pdf](https://database.ich.org/sites/default/files/E3_Guideline.pdf)

# PROCESS OVERVIEW



# 1) PROTOCOL DEVIATION MANAGEMENT PLAN

Defines which deviations have to be collected and groups them in **categories** and **subcategories**



	A	B	C	D	E	F	G
	DEVIATION CATEGORY	Subcategory	Select ed for Study	Detailed Description	Detection mode (SDR = Source Document Review, programmatic (pgm) , CLS, Central review)	May this event require elimination from Per Protocol Population or be defined as IMPORTANT? Yes, No	ELIM code
1							
3	Informed Consent	Signed informed consent not available on site	yes	Signed informed consent not available on site	SDR	yes	900
4	Informed Consent	Wrong informed consent version signed	yes	Wrong informed consent version signed	SDR	yes	900
5	Informed Consent	Informed consent not signed and/or dated by subject	yes	Informed consent not signed and/or dated by subject	SDR	yes	900
6							
7	Eligibility Criteria Not Met		yes	refer to the protocol	PGM, Central review, SDR	yes	2010
8							
9	Not withdrawn after developing withdrawal criteria	Not withdrawn after developing withdrawal criteria other than prohibited concomitant vaccination/medication	yes		central review, SDR	yes	2050
10							
11	Excluded medication, vaccine or device	Medication, excluded by the protocol, was administered	yes	refer to protocol section 11.5	central review done by CRDL, SDR	yes	2040
12	Excluded medication, vaccine or device	Vaccine, excluded by the protocol, was administered	yes	refer to protocol section 11.5	central review done by CRDL, SDR	yes	1040
13							
14	Assessment or time point completion	Missed assessment for Immunogenicity	yes	Immuno at visit x for all of the assays	PGM	yes	2100.a.x
15	Assessment or time point completion	Missed assessment for CMI	yes	Blood sampling for CMI at visit x	PGM	yes	2100.c.x
16							
17	Wrong study treatment/administration/dose	Study treatment not administered per protocol	yes	incomplete treatment course	PGM, SDR	yes	1030.2
18	Wrong study treatment/administration/dose	Study treatment not administered per protocol	yes	site of injection for vaccine (i.e.leg instead arm)	PGM, SDR	yes	1070

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13							
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15	Assessment or time point completion	Missed assessment for CMI	yes	Blood sampling for CMI at visit x	PGM	yes	2100.c.x
16							
17	Wrong study treatment/administration/dose	Study treatment not administered per protocol	yes	incomplete treatment course	PGM, SDR	yes	1030.2
18	Wrong study treatment/administration/dose	Study treatment not administered per protocol	yes	site of injection for vaccine (i.e.leg instead arm)	PGM, SDR	yes	1070

CATEGORIZATION OF PROTOCOL DEVIATIONS

CODE TO EXCLUDE SUBJECT FROM SPECIFIC ANALYSIS POPULATIONS

## 2-3) IDENTIFICATION & RECORDING

How deviations are detected and collected

---

### CDASH implementation guide:

«**Sponsors must employ a robust and systematic method for recording protocol deviations**; this may include the use of a dedicated **CRF** for this purpose, or the intentional inclusion of data collection fields throughout the entire set of CRFs that will detect protocol deviations.

The DV domain metadata and example CRF were developed as a guide that sponsors could use for designing a Protocol Deviations CRF and associated database, should they choose to do so. »

«If a sponsor decides to use a DV CRF, the sponsor should not rely on this CRF as the only source of protocol deviation information for a study. Rather, **they should also utilize monitoring, data review, and programming tools** to assess whether there were protocol deviations in the study that may affect the usefulness of the datasets for analysis of efficacy and safety»

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**In this process PDs are not collected through CRF**



## 2-3) IDENTIFICATION & RECORDING

How deviations are detected and recorded



### MANUAL PDs



**At sites**, deviations are collected in **EXCEL spreadsheets** (one per country).

*For example a site can report that a 2 components vaccine has not been reconstituted correctly.*

**Centrally**, deviations are collected in **EXCEL spreadsheet.**

*For example while reviewing data listings the study Physician can spot deviations such as “administration of forbidden Concomitant Medication”.*

### PROGRAMMATIC PDs



**Statistical Analysts**, at specific timepoints (when study is ongoing and before analysis), perform checks with SAS on **SDTM** snapshot data.

*For example, check if vaccinations are out of the allowed window in SAP (from SDTM ex.EXDTC)*

## 2-3) IDENTIFICATION & RECORDING

Programmatic PDs, example 1



Study design

DAY 1 - VISIT 1  
VISITNUM = 10  
VACCINATION 1



DAY 31 - VISIT 2  
VISITNUM = 20

DAY 61 - VISIT 3  
VISITNUM = 30  
VACCINATION 2



DAY 91 - VISIT 4  
VISITNUM = 40

DAY 181 - VISIT 5  
VISITNUM = 50


```
1090 *****;
1091 *8.3 CATEGORY: WRONG STUDY TREATMENT/ADMINISTRATION/DOSE - SUBCATEGORY:study treatment not administered per protocol ;
1092 * CODE: 1030.2 - DESCRIPTION: missing second vaccination ;
1093 *****;
1094 *1. create source dataset ;
1095 PROC SORT DATA = sdtmgsk.ex (WHERE = (visitnum=10)) OUT = ex_v1 (KEEP = usubjid visitnum exstdtc); BY usubjid ; RUN;
1096 PROC SORT DATA = sdtmgsk.ex (WHERE = (visitnum=30)) OUT = ex_v2 (KEEP = usubjid visitnum exstdtc); BY usubjid ; RUN;
1097 PROC SORT DATA = sdtmgsk.dm OUT= dm (KEEP =siteid invnam country usubjid studyid); BY usubjid; RUN;
1098 DATA ex_v1v2 (DROP = ex1tmn ex2tmn);
1099 MERGE ex_v1 (IN = a RENAME = (exstdtc = exstdtc1)) ex_v2 (IN = b RENAME = (exstdtc = exstdtc2)) dm (IN = c);
1100 IF a ;
1101 BY usubjid;
1102 %date(dtc = exstdtc1 , dtcn = exstdtc1n , dtctmn = ex1tmn ) ;
1103 %date(dtc = exstdtc2 , dtcn = exstdtc2n , dtctmn = ex2tmn ) ;
1104 visitnum = 30; * needed for %lastvis ;
1105 RUN;
1106 *2 select observation with missing second vaccination;
1107 DATA protdev31_ (KEEP = studyid usubjid siteid invnam country protdev reason visitnum gskcode code2 code3 deviation_category deviation_subcategory ) ;
1108 &attrib;
1109 SET ex_v1v2;
1110 IF exstdtc2 = "" THEN protdev = "Second Vaccination not done" ;
1111 *3. Assigning the variables required in final protdev dataset;
1112 %convis( nvisnum = visitnum , cd = "1030.2.");
1113 reason = "Visit 30: Second Vaccination not done";
1114 gskcode = "1030";
1115 code2 = "2" ;
1116 code3 = SCAN(code,3,".");
1117 deviation_category = "Wrong study treatment/administration/dose";
1118 deviation_subcategory = "Study treatment not administered per protocol";
1119 IF protdev NE " " THEN OUTPUT protdev31_;
1120 RUN;
1121 *4 apply %lastvis to remove subjects who withdrew before Visit30 or not yet reached visit 30;
1122 %lastvis(inds= protdev31_ , visnum =visitnum , outds = protdev31) ;
1123
```

## 2-3) IDENTIFICATION & RECORDING


Programmatic PDs, example 1



Study design

DAY 1 - VISIT 1  
VISITNUM = 10  
VACCINATION 1 

DAY 31 - VISIT 2  
VISITNUM = 20

DAY 61 - VISIT 3  
VISITNUM = 30  
VACCINATION 2 

DAY 91 - VISIT 4  
VISITNUM = 40

DAY 181 - VISIT 5  
VISITNUM = 50

```
1090 *****;
1091 *8.3 CATEGORY: WRONG STUDY TREATMENT/ADMINISTRATION/DOSE - SUBCATEGORY:study treatment not administered per protocol ;
1092 * CODE: 1030.2 - DESCRIPTION: missing second vaccination ;
1093 *****;
1094 *1 create source dataset;
```

Obs	STUDYID	CO...	CENTE...	INVESTIGATOR...	USUBJID	GSKCODE	CODE2	CODE3	CODE	ELIM_CODE	DEVIATION_CATEGORY	DEVIATION_SUBCATEGORY	REASONL
1	207489	BEL			207489-000130	1030	2	030	1030.2.030	1030.2	WRONG STUDY TREATMENT/ADMINISTRATION/DOSE	STUDY TREATMENT NOT ADMINIS...	Visit 30: Second Vaccination not d...
2	207489	BEL			207489-000096	1030	2	030	1030.2.030	1030.2	WRONG STUDY TREATMENT/ADMINISTRATION/DOSE	STUDY TREATMENT NOT ADMINIS...	Visit 30: Second Vaccination not d...
3	207489	DEU			207489-000361	1030	2	030	1030.2.030	1030.2	WRONG STUDY TREATMENT/ADMINISTRATION/DOSE	STUDY TREATMENT NOT ADMINIS...	Visit 30: Second Vaccination not d...
4	207489	DEU			207489-000201	1030	2	030	1030.2.030	1030.2	WRONG STUDY TREATMENT/ADMINISTRATION/DOSE	STUDY TREATMENT NOT ADMINIS...	Visit 30: Second Vaccination not d...
5	207489	DEU			207489-000355	1030	2	030	1030.2.030	1030.2	WRONG STUDY TREATMENT/ADMINISTRATION/DOSE	STUDY TREATMENT NOT ADMINIS...	Visit 30: Second Vaccination not d...
6	207489	DEU			207489-000362	1030	2	030	1030.2.030	1030.2	WRONG STUDY TREATMENT/ADMINISTRATION/DOSE	STUDY TREATMENT NOT ADMINIS...	Visit 30: Second Vaccination not d...
7	207489	DEU			207489-000327	1030	2	030	1030.2.030	1030.2	WRONG STUDY TREATMENT/ADMINISTRATION/DOSE	STUDY TREATMENT NOT ADMINIS...	Visit 30: Second Vaccination not d...

```
1106 *2 select observation with missing second vaccination;
1107 DATA protdev31_ (KEEP = studyid usubjid siteid invnam country protdev reason visitnum gskcode code2 code3 deviation_category deviation_subcategory ) ;
1108 &attrib;
1109 SET ex_v1v2;
1110 IF exstdtc2 = "" THEN protdev = "Second Vaccination not done" ;
1111 *3. Assigning the variables required in final protdev dataset;
1112 %convis( nvisum = visitnum , cd = "1030.2.");
1113 reason = "Visit 30: Second Vaccination not done";
1114 gskcode = "1030";
1115 code2 = "2" ;
1116 code3 = SCAN(code,3,".");
1117 deviation_category = "Wrong study treatment/administration/dose";
1118 deviation_subcategory = "Study treatment not administered per protocol";
1119 IF protdev NE " " THEN OUTPUT protdev31_;
1120 RUN;
1121 *4 apply %lastvis to remove subjects who withdrew before Visit30 or not yet reached visit 30;
1122 %lastvis(inds= protdev31_ , visnum =visitnum , outds = protdev31) ;
1123
```

## 2-3) IDENTIFICATION & RECORDING

### Programmatic PDs, example 2



```
1203 *****;
1204 * 8.4 CATEGORY: STUDY PROCEDURES - SUBCATEGORY: DIARY PROCEDURES ;
1205 * 8.4.3 CODE 1160 DESCRIPTION: missing post vaccination eDiary DAY1-DAY7 ;
1206 *****;
1207 *1. create source dataset from EX and CE;
1208 PROC SORT DATA = sdtmgsk.ex OUT= ex1 (KEEP = usubjid visitnum exstdy); BY usubjid visitnum ; RUN;
1209 PROC SORT DATA = sdtmgsk.ce (WHERE = (ceevintx NE "VACCINATION TO DAY 1, 60 MINUTES" AND ceterm NOT CONTAINS "AECOPD" ))
1210 OUT = ce2 (DROP = CESCAT CEGRPID CEHLT CELNKGRP CEMODIFY CEDECOD CESPID CEPTCD CEBODSYS CEBDSYCD CESTDY) NODUPKEY;
1211 BY usubjid visitnum cedy;
1212 RUN;
1213 DATA ce_ex;
1214 MERGE ex1 (IN = a ) ce2 (IN = b) ;
1215 BY usubjid visitnum;
1216 IF b OR a;
1217 RUN;
1218 *2 select observation within 7 days post vaccination;
1219 DATA ce_ex2 (WHERE = ( STDY LT 7));
1220 SET ce_ex;
1221 stdy = cedy - exstdy;
1222 IF cedy = . THEN protdev= "Missing solicited safety data";
1223 RUN;
1224 DATA protdev43 (KEEP =usubjid reason1 protdev code gskcode code2 code3 deviation_category deviation_subcategory);
1225 SET ce_ex2;
1226 WHERE protdev NE "";
1227 %convis(nvisum = visitnum, cd = "1160.");
1228 reason1 = "Visit " || STRIP(visitnum) || " : missing solicited data all days after vaccination (DAY1 - DAY7) " ;
1229 code2 = " " ;
1230 IF visitnum GE 100 THEN code3 = STRIP(PUT(visitnum,BEST.)) ;
1231 ELSE IF visitnum LT 100 then code3 = "0" ||STRIP(PUT(visitnum,BEST.)) ;
1232 gskcode = "1160";
1233 deviation_Category = "Study procedures";
1234 deviation_subcategory = "Diary procedures";
1235 RUN;
1236
```

## 2-3) IDENTIFICATION & RECORDING

### Programmatic PDs, example 2



```

1203 *****;
1204 * 8.4 CATEGORY: STUDY PROCEDURES - SUBCATEGORY: DIARY PROCEDURES;
1205 * 8.4.3 CODE 1160 DESCRIPTION: missing post vaccination eDiary DAY1-DAY7;
1206 *****;
    
```

Obs	STUDYID	CO...	CENTE...	INVESTIGATOR...	USUBJID	GSKCODE	CODE2	CODE3	CODE	ELIM_CODE	DEVIATION_CATEGORY	DEVIATION_SUBCATEGORY	REASONL
1	207489	BEL			207489-000066	1160		030	1160.030	1160	STUDY PROCEDURES	DIARY PROCEDURES	Visit 30 : missing solicited data all days after vaccination (DAY1 - DAY7)
2	207489	BEL			207489-000156	1160		030	1160.030	1160	STUDY PROCEDURES	DIARY PROCEDURES	Visit 30 : missing solicited data all days after vaccination (DAY1 - DAY7)
3	207489	BEL			207489-000061	1160		030	1160.030	1160	STUDY PROCEDURES	DIARY PROCEDURES	Visit 30 : missing solicited data all days after vaccination (DAY1 - DAY7)
4	207489	BEL			207489-000063	1160		030	1160.030	1160	STUDY PROCEDURES	DIARY PROCEDURES	Visit 30 : missing solicited data all days after vaccination (DAY1 - DAY7)
5	207489	BEL			207489-000062	1160		030	1160.030	1160	STUDY PROCEDURES	DIARY PROCEDURES	Visit 30 : missing solicited data all days after vaccination (DAY1 - DAY7)
6	207489	BEL			207489-000064	1160		030	1160.030	1160	STUDY PROCEDURES	DIARY PROCEDURES	Visit 30 : missing solicited data all days after vaccination (DAY1 - DAY7)
7	207489	BEL			207489-000065	1160		030	1160.030	1160	STUDY PROCEDURES	DIARY PROCEDURES	Visit 30 : missing solicited data all days after vaccination (DAY1 - DAY7)

```

1218 *2 select observation within 7 days post vaccination;
1219 DATA ce_ex2 (WHERE = ( STDY LT 7));
1220 SET ce_ex;
1221 stdy = cedy - exstdy;
1222 IF cedy = . THEN protdev= "Missing solicited safety data";
1223 RUN;
1224 DATA protdev43 (KEEP =usubjid reasonl protdev code gskcode code2 code3 deviation_category deviation_subcategory);
1225 SET ce_ex2;
1226 WHERE protdev NE "";
1227 %convis(nvisnum = visitnum, cd = "1160.");
1228 reasonL = "Visit " || STRIP(visitnum) || " : missing solicited data all days after vaccination (DAY1 - DAY7) " ;
1229 code2 = " " ;
1230 IF visitnum GE 100 THEN code3 = STRIP(PUT(visitnum,BEST.) ) ;
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1232 gskcode = "1160";
1233 deviation_Category = "Study procedures";
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```

## 2-3) IDENTIFICATION & RECORDING

Manual PDs, example



	A	B	C	D	E	F	G	H	I	J	K	L
1	Country	Investigator Name	Center Number	Subject Number	Visit	Date of Deviation	Deviation Category	Deviation Subcategory	Deviation Description	PD Important per PD	PD Equivalent	ELIM_code
817	GERMANY			207489-000255	Visit 4	13NOV2018	EXCLUDED MEDICATION, VACCINE OR DEVICE*	MEDICATION, EXCLUDED BY THE PROTOCOL, WAS ADMINISTERED	Influenza vaccination has been administered on 13/Nov/2018.			
914	GERMANY			207489-000357	AECOPD 1	14APR2018	EXCLUDED MEDICATION, VACCINE OR DEVICE*	MEDICATION, EXCLUDED BY THE PROTOCOL, WAS ADMINISTERED	Subject has taken Prednisolon (40mg/Every morning, Oral) For duration (14Apr2018 - 09May2018)			

	A	B	C	D	E	F	G	H	I	J	K	L
1	Country	Investigator Name	Center Number	Subject Number	Visit	Date of Deviation	Deviation Category	Deviation Subcategory	Deviation Description	PD Important per PD	PD Equivalent	ELIM_code
186	BELGIUM			207489-000059	Visit 1	15MAR2018	STUDY PROCEDURES*	STUDY BLINDING/UNBLINDING PROCEDURES	An unblinded SC vaccinated the first 5 patients, but also took the temperature pre-vaccination of the first vaccine dose. Taking of the pre-vaccination temperature is a task for blinded staff as per the SPM.			
187	BELGIUM			207489-000059	Visit 1	20MAR2018	STUDY PROCEDURES*	BIOLOGICAL SAMPLE SPECIMEN PROCEDURES	Plasma sample was not frozen with 2 hours of collection as requested per protocol. 15MAR2018: Time between collection (8h42) and freeze (12h00) is 3h18.			

## 2-3) IDENTIFICATION & RECORDING

How deviations are detected and recorded



### MANUAL PDs



**At sites**, deviations are collected in **EXCEL spreadsheets** (one per country).

*For example a site can report that a 2 components vaccine has not been reconstituted correctly.*

**Centrally**, deviations are collected in **EXCEL spreadsheet.**

*For example while reviewing data listings the study Physician can spot deviations such as “administration of forbidden Concomitant Medication”.*

excel



### PROGRAMMATIC PDs



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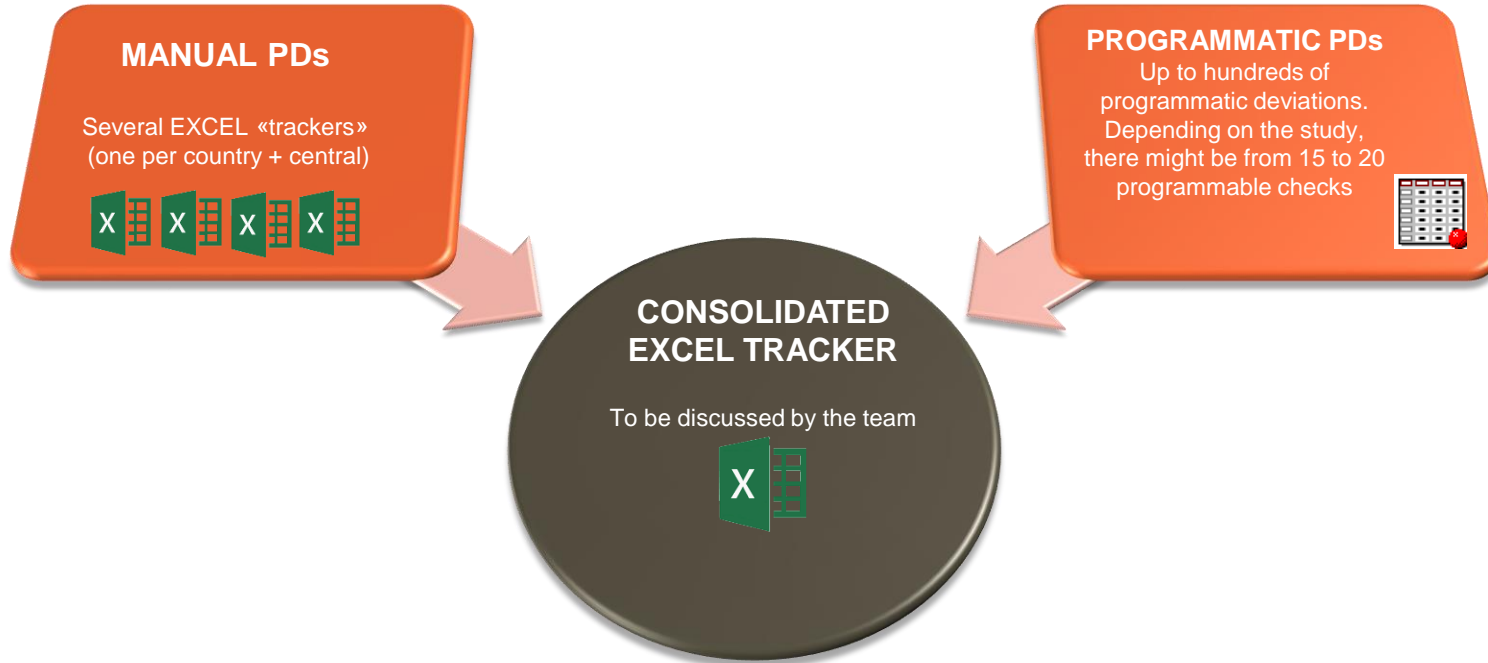
*For example, check if vaccinations are out of the allowed window in SAP (from SDTM ex.EXDTC)*

sas7  
bdat



## 4) CONSOLIDATION

Combination of different sources into one unique document





# 4) CONSOLIDATION



Combination of different sources into one unique document



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P
1	Country	Investigator Name	Center Num	Subject Number	Visit	Date of Deviation	Deviation Category	Deviation Subcategory	Deviation Description	PD Important?	require elimination?	ELIM code	Comments	Date of Review	Source
1098	FRANCE			207489-000452	AECOPD 2 Phone Contact	10DEC2018	VISIT COMPLETION*	OTHER VISIT WINDOW DEVIATION*	AECOPD VISIT 2: More than 96 hours from AECOPD alert to visit						CENTRAL
1104	FRANCE			207489-000453	Contact 2	18MAR2019	VISIT COMPLETION*	OUT OF WINDOW VISIT/PHONE CONTACT*	the visit was done to earlier than the required window						FRA
1109	FRANCE			207489-000453	Visit 5		ASSESSMENT OR TIME POINT COMPLETION	MISSED ASSESSMENT FOR EFFICACY AND CULTURE	Visit50: Sputum samples are not available. Reported reason: UNSUCCESSFUL ATTEMPT			2100.b			Program mable

# 4) CONSOLIDATION

Combination of different sources into one unique document



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P
	Country	Investigator Name	Center Num	Subject Number	Visit	Date of Deviation	Deviation Category	Deviation Subcategory	Deviation Description	PD Important?	require elimination?	ELIM code	Comments	Date of Review	Source
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1104	FRANCE			207489-000453	Contact 2	18MAR2019	VISIT COMPLETION*	OUT OF WINDOW VISIT/PHONE CONTACT*	the visit was done to earlier than the required window						FRA
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SOURCE

# 5) EVALUATION

Assessing if PDs are important or lead to elimination of the subject from any population



## PRE protocol deviation review meeting

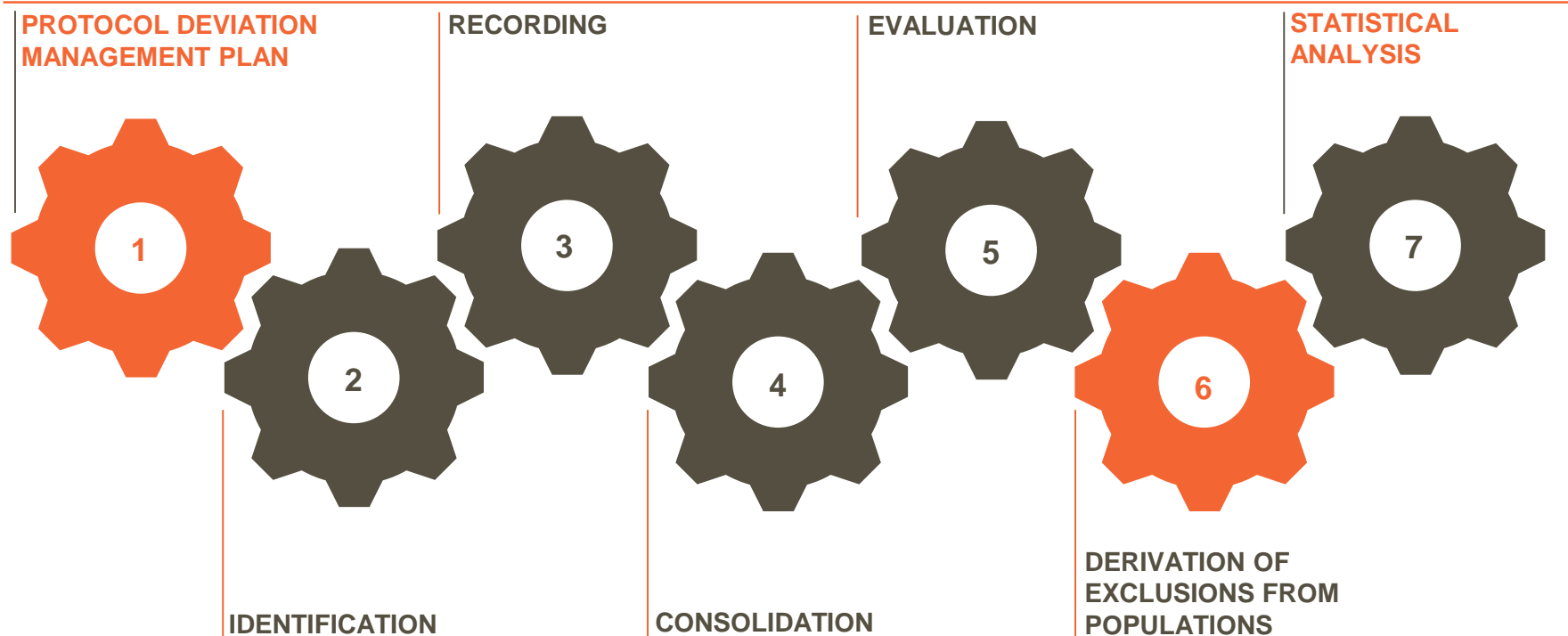
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P
	Country	Investigator Name	Center Number	Subject Number	Visit	Date of Deviation	Deviation Category	Deviation Subcategory	Deviation Description	PD_Important?	require_elimination?	ELIM_code	Comments	Date of Review	Source
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1104	FRANCE			207489-000453	Phone Contact 2	18MAR2019	VISIT COMPLETION*	OUT OF WINDOW VISIT/PHONE CONTACT*	the visit was done to earlier than the required window						FRA
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Is the deviation important? Does it require elimination?

## POST protocol deviation review meeting

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P
	Country	Investigator Name	Center Number	Subject Number	Visit	Date of Deviation	Deviation Category	Deviation Subcategory	Deviation Description	PD_Important?	require_elimination?	ELIM_code	Comments	Date of Review	Source
1098	FRANCE			207489-000452	AECOPD 2	10DEC2018	VISIT COMPLETION*	OTHER VISIT WINDOW DEVIATION*	AECOPD VISIT 2: More than 96 hours from AECOPD alert to visit	NO	NO			09MAY2019	CENTRAL
1104	FRANCE			207489-000453	Phone Contact 2	18MAR2019	VISIT COMPLETION*	OUT OF WINDOW VISIT/PHONE CONTACT*	the visit was done to earlier than the required window	NO	NO			09MAY2019	FRA
1109	FRANCE			207489-000453	Visit 5		ASSESSMENT OR TIME POINT COMPLETION	MISSED ASSESSMENT FOR EFFICACY AND CULTURE	Visit50: Sputum samples are not available. Reported reason: UNSUCCESSFUL ATTEMPT	YES	YES	2100.b		09MAY2019	Program mable

# PROCESS OVERVIEW



# 6) From EXCEL to analysis

DERIVATION OF EXCLUSIONS FROM POPULATIONS

# UPLOAD in Analysis Folder and ADaM creation

Old process



EXCEL CONSOLIDATED TRACKER (finalized)



SAS program to apply to each deviation a code for exclusion from specific population.

The program creates one line for each population from which the subject is excluded

ADaM creation:

- 01.ADPDEV
- 02.ADSL
- 03.ADPDEV

Obs	studyid	USUBJID	Code	Code1	reason	apopcd	pdcat1	pdcat2	pdcat3	pdcat4
1	204913	201281-000040	2100.020	2100	Visit2: not done...	ES_IMMV2	NPD	Assessment or time point completion	Missed assessment	VISIT 2
2	204913	201281-000040	2100.020	2100	Visit2: not done...	PPS_V2	NPD	Assessment or time point completion	Missed assessment	VISIT 2

# UPLOAD in Analysis Folder and ADaM creation

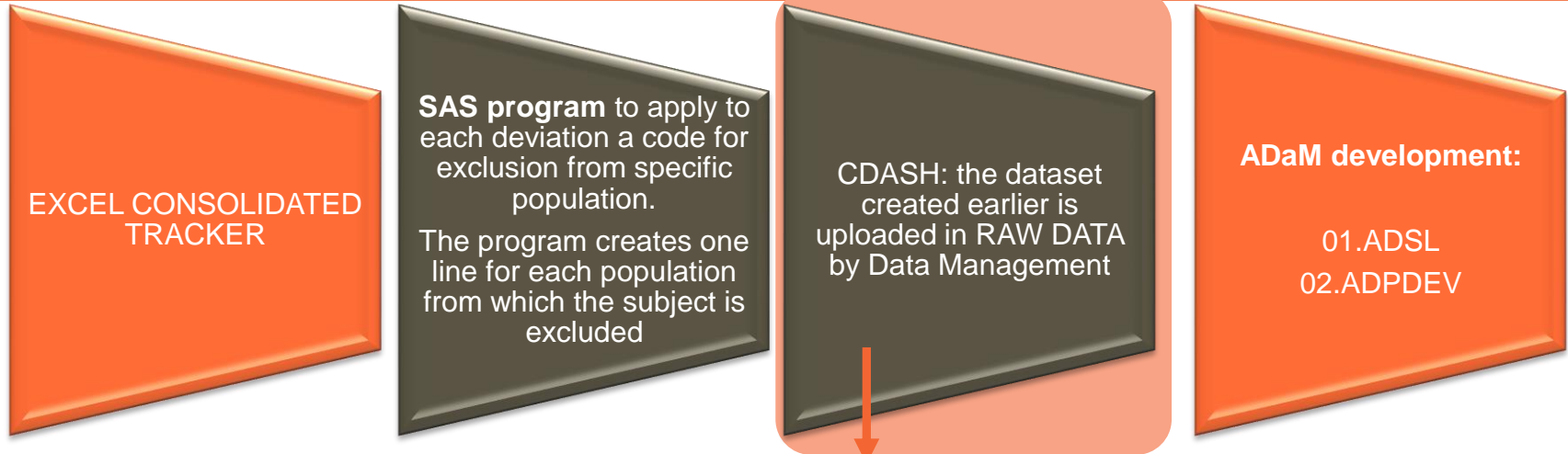
Old process



						CATEGORY		SUBCATEGORY		
Obs	studyid	USUBJID	Code	Code1	reason	apopcd	pdcat1	pdcat2	pdcat3	pdcat4
1	204913	201281-000040	2100.020	2100	Visit2: not done...	ES_IMMV2	NPD	Assessment or time point completion	Missed assessment	VISIT 2
2	204913	201281-000040	2100.020	2100	Visit2: not done...	PPS_V2	NPD	Assessment or time point completion	Missed assessment	VISIT 2

# UPLOAD IN CLINICAL DATABASE

New process



.../RAW DATA/PROTDEV.SAS7BDAT

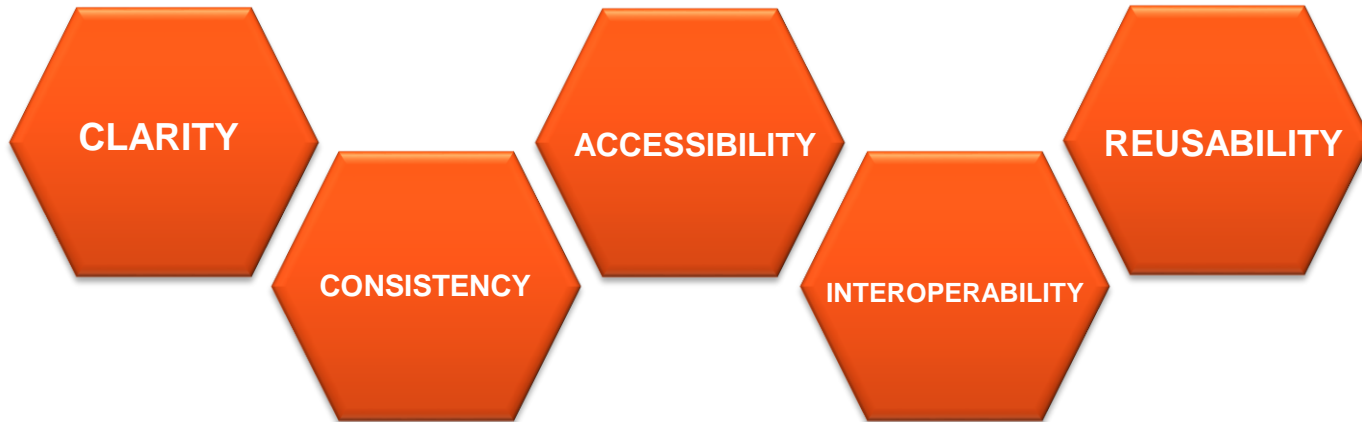
CATEGORY

SUBCATEGORY

Obs	STUDYID	USUBJID	CODE	CODE1	REASONL	APOPCD	PDCAT1	PDCAT2	PDCAT3	PDCAT4	DVDATE
1	205626	205626-000087	2100	2100	Visit50: Visit not done(inpatient stay)	PPSIO5FL	PD	ASSESSMENT OR TIME POINT COM...	MISSED ASSESSMENT		
2	205626	205626-000087	2100.060	2100	Visit60: not done (subject early terminate...	FASIV6FL	PD	ASSESSMENT OR TIME POINT COM...	MISSED ASSESSMENT	60	



Why it is important to have PDs in raw data:



**All advantages of working with a standard apply to this new process**



**WHAT'S NEXT?**

# Next step

Collection of PDs through eCRF



BIO_MENB REC 2ND GEN-023 (205239): PROTOCOL DEVIATIONS (Protocol deviations) - Repeating Form [frmPROTOCOLDEVIATIONS]						
#	Monitoring Report number	Protocol deviation category	Sample RefId	Protocol deviation description	VisitNumber	Other subjects
1.	Protocol deviation identifier [hidden] [Protocol Deviation ID]	[DVSPID : DV.DVSPID] N10				
2.	Monitoring Report number [read-only]	[DVREFID : DV.DVREFID] A10				
3.*	What is the category of the protocol deviation? [read-only] [Protocol deviation category]	[DVCAT : DV.DVCAT] [ ] [cdDVCAT] [ ]	<b>Category-subcategory</b>			
4.	If deviation is related to a sample, what is the sample? [read-only] [Sample RefId]	[DVSREFID : DV.DVSREFID] [A:SERUM SAMPLE - VISIT 4] Serum sample - Visit 4 [A:SERUM SAMPLE - VISIT 5] Serum sample - Visit 5 [A:SERUM SAMPLE - VISIT 6] Serum sample - Visit 6				
5.	What is the protocol deviation description? [read-only] [Protocol deviation description]	[DVTERM : DV.DVTERM] A200	<b>Deviation description</b>			
6.	At what visit did the protocol deviation occur? [read-only] [VisitNumber]	[VISITNUM : DV.DVVISNUM] [A:10] <input type="checkbox"/> Visit 1 [A:20] <input type="checkbox"/> Safety Phone Call 1 [A:30] <input type="checkbox"/> Safety Phone Call 2 [A:40] <input type="checkbox"/> Visit 2 [A:50] <input type="checkbox"/> Safety Phone Call 3 [A:60] <input type="checkbox"/> Safety Phone Call 4 [A:70] <input type="checkbox"/> Visit 3 [A:80] <input type="checkbox"/> Safety Phone Call 5 [A:90] <input type="checkbox"/> Visit 4 [A:100] <input type="checkbox"/> Safety Phone Call 6 [A:110] <input type="checkbox"/> Safety Phone Call 7 [A:120] <input type="checkbox"/> Visit 5 [A:130] <input type="checkbox"/> Safety Phone Call 8 [A:140] <input type="checkbox"/> Visit 6 [A:150] <input type="checkbox"/> Safety Phone Call 9 [A:160] <input type="checkbox"/> Safety Phone Call 10 [A:170] <input type="checkbox"/> Safety Phone Call 11 [A:180] <input type="checkbox"/> Safety Phone Call 12 [A:190] <input type="checkbox"/> Safety Phone Call 13 [A:200] <input type="checkbox"/> Visit 7 [A:NA] <input type="checkbox"/> [DVSTDAT : DV.DVSTDAT] Not applicable -> If visit is not applicable, what is the protocol deviation start date? <input type="checkbox"/> Req/Unk <input type="checkbox"/> / <input type="checkbox"/> Req/Unk <input type="checkbox"/> / <input type="checkbox"/> Req/Unk <input type="checkbox"/> (2015-2025)	<b>Visit number</b>			

- No more excel manual trackers, PDs collected via eCRF and directly available in clinical database
- Managed as normal data through Data Management

in this case the set-up phase of eCRF and SDTM mapping according to PDMP and CDASHIG is important

# Next step

All deviations directly in SDTM



**BIO\_MENB REC 2ND GEN-023 (205239): PROTOCOL DEVIATIONS (Protocol deviations) - Repeating Form** [frmPROTOCOLDEVIATIONS]

#	Monitoring Report number	Protocol deviation category	Sample RefId	Protocol deviation description	VisitNumber	Other subjects
1.	Protocol deviation identifier [hidden] [Protocol Deviation ID]		[DVSPID : DV.DVSPID] N10			
2.	Monitoring Report number [read-only]		[DVREFID : DV.DVREFID] A10			
3.*	What is the category of the protocol deviation? [read-only] [Protocol deviation category]		[DVCAT : DV.DVCAT] [cdDVCAT]		Category-subcategory	
4.	If deviation is related to a sample, what is the sample? [read-only] [Sample RefId]		[DVSREFID : DV.DVSREFID] [A:SERUM SAMPLE - VISIT 4] Serum sample - Visit 4 [A:SERUM SAMPLE - VISIT 5] Serum sample - Visit 5 [A:SERUM SAMPLE - VISIT 6] Serum sample - Visit 6			
5.	What is the protocol deviation description? [read-only] [Protocol deviation description]		[DVTERM : DV.DVTERM] A200		Deviation description	
6.	At what visit did the protocol deviation occur? [read-only] [VisitNumber]		[VISITNUM : DV.DVVISNUM] [A:10] Visit 1 [A:20] Safety Phone Call 1 [A:30] Safety Phone Call 2 [A:40] Visit 2 [A:50] Safety Phone Call 3 [A:60] Safety Phone Call 4 [A:70] Visit 3 [A:80] Safety Phone Call 5 [A:90] Visit 4 [A:100] Safety Phone Call 6 [A:110] Safety Phone Call 7 [A:120] Visit 5 [A:130] Safety Phone Call 8 [A:140] Visit 6 [A:150] Safety Phone Call 9 [A:160] Safety Phone Call 10 [A:170] Safety Phone Call 11 [A:180] Safety Phone Call 12		Visit number	

SDTM.DV

Obs	STUDYID	DOMAIN	USUBJID	DVSEQ	DVSPID	DVDECOD	DVTERM
1	209538	DV	209538-000123	1	123	INFORMED CONSENT - OTHER INFORMED CONSENT/ASSENT DEVIATIONS	SUBJECT NUMBER IS INCORRECT ON PAGE 6/6 OF ICF.
2	209538	DV	209538-000136	1	136	INFORMED CONSENT - OTHER INFORMED CONSENT/ASSENT DEVIATIONS	SUBJECT'S FULL FIRST NAME IS MISSING ON ICF, IT HAS BEEN ABBREVIATED WITH AN INITIAL ONLY.
3	209538	DV	209538-000158	1	158	INFORMED CONSENT - OTHER INFORMED CONSENT/ASSENT DEVIATIONS	SUBJECT'S FULL FIRST NAME IS MISSING ON ICF, IT HAS BEEN ABBREVIATED WITH AN INITIAL ONLY.
4	209538	DV	209538-000213	1	213	INFORMED CONSENT - OTHER INFORMED CONSENT/ASSENT DEVIATIONS	SUBJECT'S FULL FIRST NAME IS MISSING ON ICF, IT HAS ONLY BEEN ABBREVIATED BY FIRST INITIAL.
5	209538	DV	209538-000217	1	217	EXCLUDED MEDICATION, VACCINE OR DEVICE - VACCINE, EXCLUDED BY T...	SUBJECT HAS TAKEN TICOVAC VACCINATION BETWEEN VISIT 1 AND VISIT 2.

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- Managed as normal data through Data Management

in this case the set-up phase of eCRF and SDTM mapping according to PDMP and CDASHIG is important

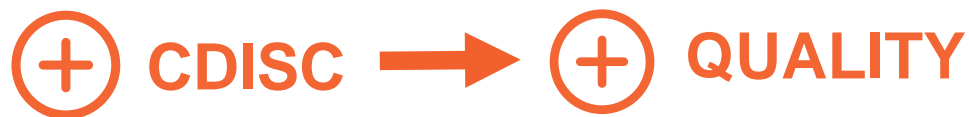
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This process allows us to :

- profit of the advantages of working with **CDISC standard**
  - clarity, consistency, accessibility, interoperability, reusability
- better collect data through **eCRF** (new process)
- **reduce mistakes** due to excel and several tools used by several people
- perform **data cleaning** throughout the study
- have protocol deviations available in **Clinical Database** updated frequently (and in future daily)

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# Thank you!

Conflict of Interest: Angela Gambioli is an employee of GSK group of companies.