

# CDISC Italian User Network TC

<https://wiki.cdisc.org/display/ITAUG/Italian+User+Network+Home>



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# Agenda

1. CDISC and Data Submission News
2. CDISC and Data Submission topics from CDISC-EU 2020
3. CDISC for COVID-19
4. Other Topics

<https://wiki.cdisc.org/display/ITAUG/Italian+User+Network+Home>



## **CDISC and Data Submission News**

Upcoming Webinars, Trainings, Events and Released Guidance



## Upcoming webinars

- Controlled Terminology Updates for Q3, TUE, 7 JUL 2020
- QRS Updates: Logically Skipped Items, EVAL and More - TUE, 14 JUL 2020
- Introducing the CDASH eCRF Project + CDISC Standards for Animal Rule Studies - TUE, 21 JUL 2020
- Leveraging Clinical Research Data Standards in Academia: What's in it for Me? – TUE, 28 JUL 2020

<https://www.cdisc.org/education/webinars>



# Public Trainings

- **Virtual, CDISC for Newcomers, 5 Aug 2020**
- **Paris, FRA, 14-18 Sep 2020**
  - ADaM Primer, ADaM Theory and Application, CDASH Implementation , SDTM Changes and Updates, SDTM Theory and Application

<https://www.cdisc.org/education/public-training>



## Events / Interchange (Virtual)

- **China**, 5-7 Aug 2020
- **US**, 7-8 Oct 2020

# CDISC Events Italy - Virtual

- define-xml e CDISC Submission Ready Documents
  - 9 Sep 2020 - 9.30 - 13.00
  - 16 Sep 2020 - 9.30 - 13.00
  - **Iscrizioni aperte**  
[https://www.simef.it/index.php?option=com\\_eventbooking&view=event&id=519&catid=7&Itemid=386&lang=it](https://www.simef.it/index.php?option=com_eventbooking&view=event&id=519&catid=7&Itemid=386&lang=it)
- Italian UN
  - 7 Oct 2020 – To be confirmed
  - Agenda from cancelled February F2F meeting (90% confirmed)



# CDISC Update

- Standards Released

## **SDTM**

<https://www.cdisc.org/standards/foundational/adam>

- Conformance Rules v1.1 for SDTMIG v3.2 and v3.3 (May 2020)
- SDTM Ig 3.3 PDF Version

## **COVID-19 (April 2020)**

<https://www.cdisc.org/standards/therapeutic-areas/covid-19/interim-user-guide-covid-19>

- Interim User Guide for COVID-19
- Guidance for Ongoing Studies Disrupted by COVID-19
- Resources for Public Health Researchers



# CDISC Update

- Prossime pubblicazioni:

<https://www.cdisc.org/standards/in-development>

## Standard

Standard	Release Notes	Projected Publication
ADaM Geriatric Depression Scale (GDS) Short Form Questionnaire Supplement	Resolving Public Comments.	2020
ADaM Non-compartmental Analysis IG v1.0	In Development.	2021
ADaM OCCDS v1.1	Resolving Public Comments.	2021
ADaM Oncology	In Development.	2021
ADaM Traceability Examples	In Development.	2021
ADaMIG Conformance Rules v3.0	<a href="#">Public Review runs through 17 Jul.</a>	2020
ADaMIG Medical Devices v1.0	In Development.	2021
CDASH SAE Supplement v2.0	<a href="#">In Development.</a>	2021
Conformance Rules v1.1 for SENDIG v3.1		2020
Conformance Rules v1.2 for SDTM v2.0 and SDTMIG v3.4	<b>Resolving Public Comments.</b>	2020
SDTM Metadata Submission Guidelines v2.0	In Development.	2020
SDTM v2.0	Resolving Public Comments.	2020
SDTM Variable Definitions	Resolving Public Comments.	2020
SDTMIG v3.4	Resolving Public Comments.	2020
SENDIG v3.1.1	Preparing for Publication.	2020
SENDIG-Genotoxicity v1.0	In Development.	2023



# CDISC Update

- Prossime pubblicazioni:

<https://www.cdisc.org/standards/in-development>

## Data Exchange

Standard	Release Notes	Projected Publication
Define-XML v2.1 Conformance Rules	In Development.	2021
ODM v2.0	In Development.	2021

# CDISC Update

- Prossime pubblicazioni:

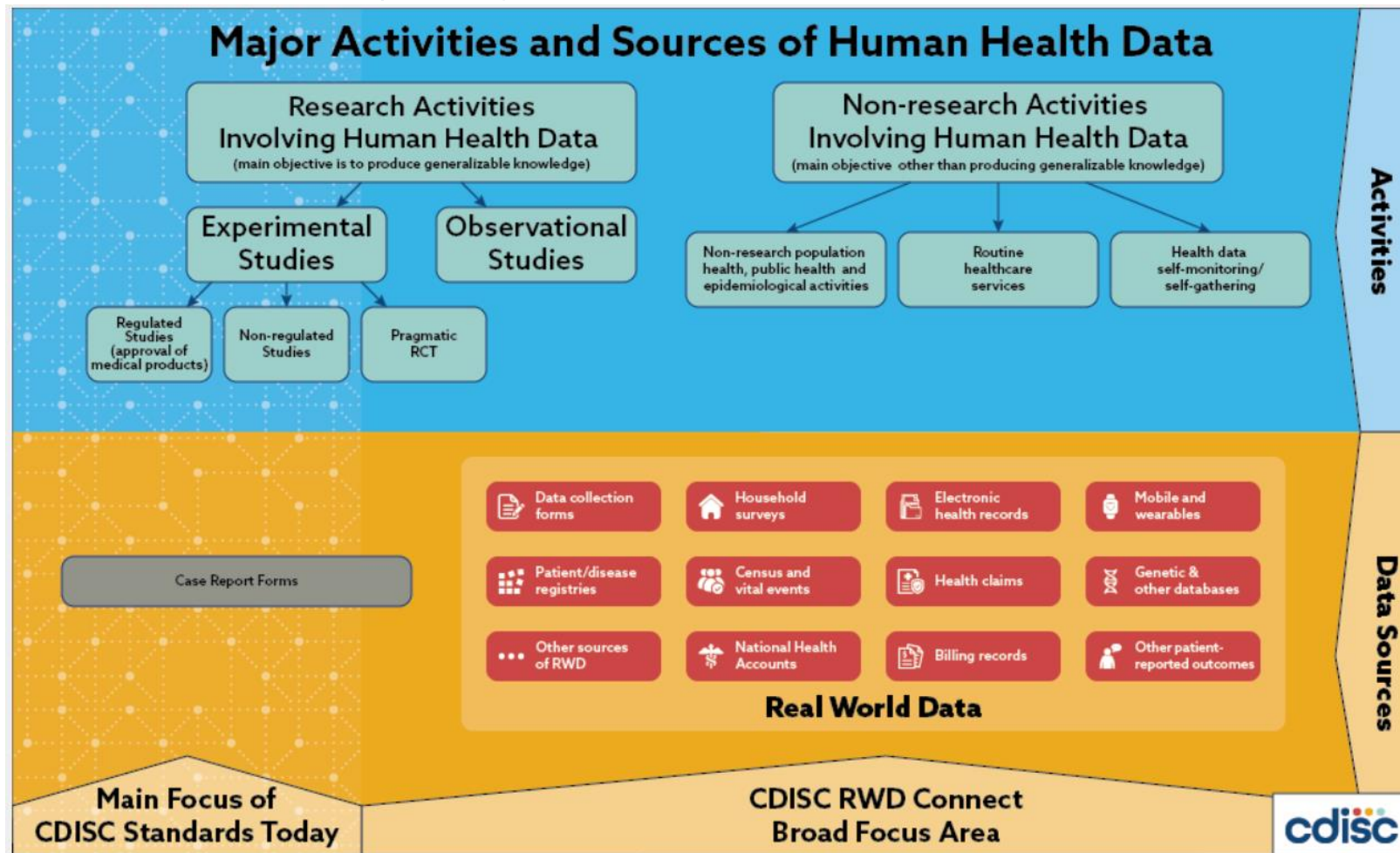
<https://www.cdisc.org/standards/in-development>

## Therapeutic Area

Therapeutic Area	Release Notes	Projected Publication
Acute Kidney Injury Therapeutic Area User Guide v1.0	Resolving Public Comments.	2020
Crohn's Disease Therapeutic Area User Guide v1.0	<a href="#">In Development.</a>	2021
Diabetes - Type 1 Therapeutic Area User Guide v1.0	<a href="#">Resolving Public Comments.</a>	2020
Heart Failure Therapeutic Area User Guide v1.0	Resolving public comments.	2020
Pancreatic Cancer Therapeutic Area User Guide v1.0	In Development.	2021
Psoriasis Therapeutic Area User Guide v1.0	Resolving Public Comments.	2020
Traditional Chinese Medicine - Acupuncture	In Development.	2021

# CDISC Update

## Real World Data (RWD)



# CDISC Update

## Knowledge Based

<https://www.cdisc.org/kb>

- useful articles
- annotated CRFs and metadata examples
- examples for common clinical concepts

### Meal Tolerance Testing aCRF

Tags

#### Content

Indicate whether or not the meal tolerance testing procedure was performed.

Was the meal tolerance testing procedure performed?

**MITYN** Not submitted

Yes  No

Indicate whether or not the meal for meal tolerance testing was administered.

Was the meal for meal tolerance testing administered?

**AGOCUR**

Yes  No

What was the planned time point (numeric) of the meal?

Not collected **AGTPTNUM**

Record the planned time point of meal. Can be pre-printed.

Planned time point of the meal

**AGTPT**

Record the meal date using this format (DD-MMM-YYYY).

Meal Date

**AGSTDAT** AGSTDTC

Record the meal start time.

Start Time

**AGSTTIM** AGSTDTC LBRFTDTC



# Regulatory Update

## **FDA Study Data Technical Conformance Guide v.4.5 March 2020**

<https://www.fda.gov/industry/fda-resources-data-standards/study-data-standards-resources>

- No major Update

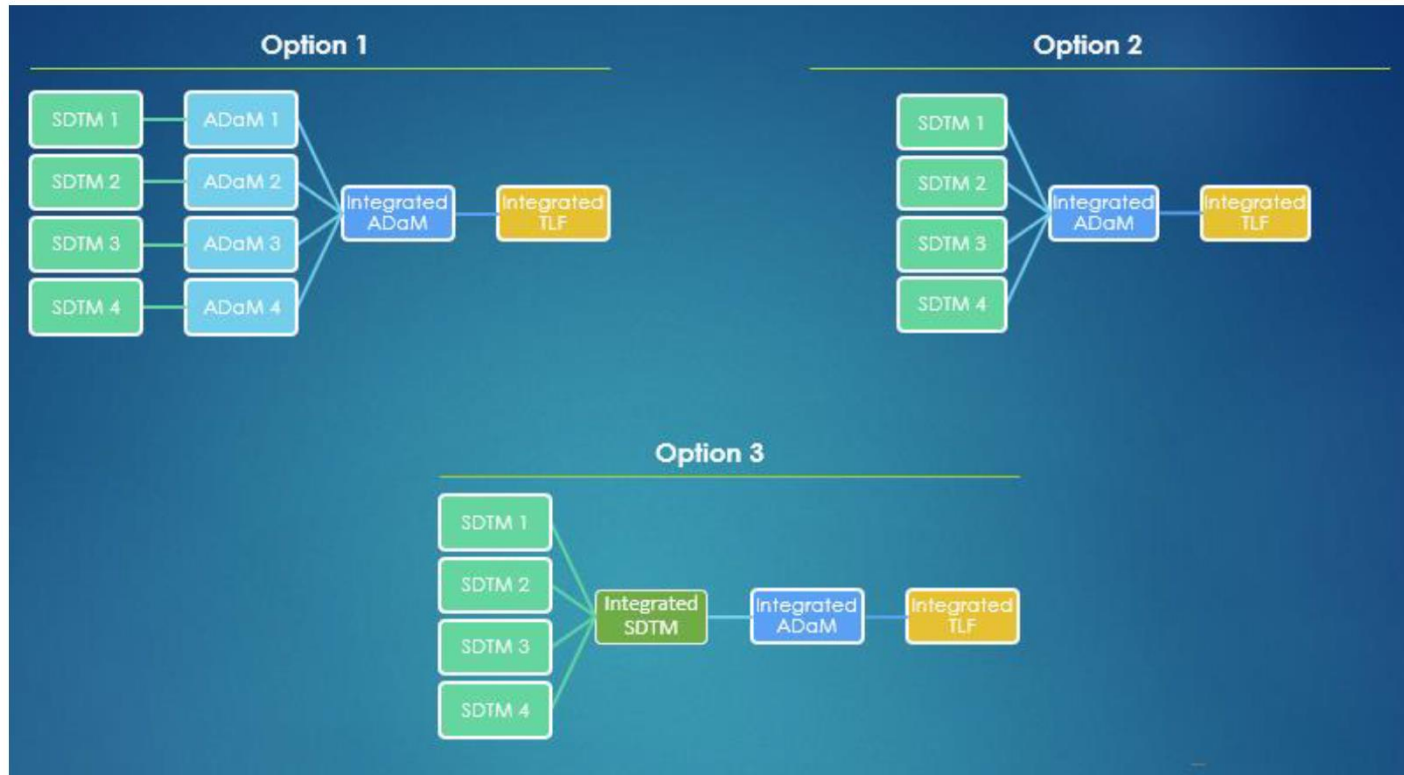
**China NMPA going towards similar FDA/PMDA data submission / data standards requirements**

**Other agency requesting datasets: Canada with CDISC format recommended but no formal guidance**

# PhUSE - Optimizing the Use of Data Standards

[https://www.phusewiki.org/wiki/index.php?title=Optimizing\\_the\\_Use\\_of\\_Data\\_Standards](https://www.phusewiki.org/wiki/index.php?title=Optimizing_the_Use_of_Data_Standards)

## Industry Experiences Submitting Standardised Study Data to Regulatory Authorities



“Navigating FDA requirement: ISS/ISE build strategies” PhUSE 2019

# CDISC and Data Submission topics from CDISC-EU 2020





# CDISC Italian UN in the news

## Italian User Network Members Join Europe Interchange Virtually

Silvia

Principal Statistical Programmer, LivaNova



We were delighted to see that a good number of Italian Users participated to the 2020 Virtual EU CDISC Interchange in April. The number of Italian CDISC Users attending EU CDISC Interchanges is increasing year-after-year.

Due to COVID-19 irruption in Lombardy, the VII Italian CDISC User Group conference was cancelled in February; we are now ready to go virtual with the same agenda; the CDISC Italian User Network conference will take place 7 October 2020. Any update can be found on the [CDISC Italian UN wiki page](#).





## Presentations worth to mention

- **“Deconstructing SDTM - Finding the Hidden Gems”** from Johannes Ulander from S-cubed an inspiring presentation to start changing our “tabular” mind-set ... he will present a similar topic at our CDISC ITA Virtual Meeting
- **“SDTM: Let's read outside the Bible”** from Sandra Latorre from Business & Decision Life Science, where Sandra did show how you can find answers and good SDTM implementation examples, not only from the available individual CDISC Therapeutic Area User Guidance, but also for example from CDASH where you can find area not covered by SDTM that could be applied to SDTM as well, such as naming conventions for supplemental qualifiers.



# Presentations worth to mention

- **A flavor of what it looks like submitting to the NMPA**, the Chinese authority, from my E3C colleague Sujit Khune and his working colleague Marianne Caramés both from Novo Nordisk
- We had for the first time a stream dedicated to **devices**. This was an opportunity for devices companies to share their experience (Livanova with Silvia Faini and Roxane Debrus, Terumo Europe NV) and also to bring constructive criticisms to the SDTM standards when it's time handle big data from wearable devices (Martin Gram and Gianluca Mortari, Novo Nordisk)
- The continuing evolving **Real World Data**, with presentations from Janssen and Zifo Rnd Solutions
- **LOINC and UCUM** presentations from Jozef Aerts from XML4Pharma, the two systems, respectively for coding lab tests and representing units, are now mandated by the FDA. The two systems will for sure improve the way we could collect and exchange central lab data.
- **CDISC 360: The Journey so Far and the Road Ahead** (April, 28<sup>th</sup>)

# A vision of the invisible: a new SDTM Validation Tool (A. Calai)

## Mapping Validation →

- check final SDTM dataset versus raw dataset to ensure traceability
  - Check variables and values
  - Ensure everything is mapped
  - Address special requests

## Use

- PROC FREQ
- PROC CONTENTS to verify and standardise Variables Names
- PROC FORMAT to standardise Variable Value

## Create

- ad-hoc programs to compare SDTM vs RAW datasets

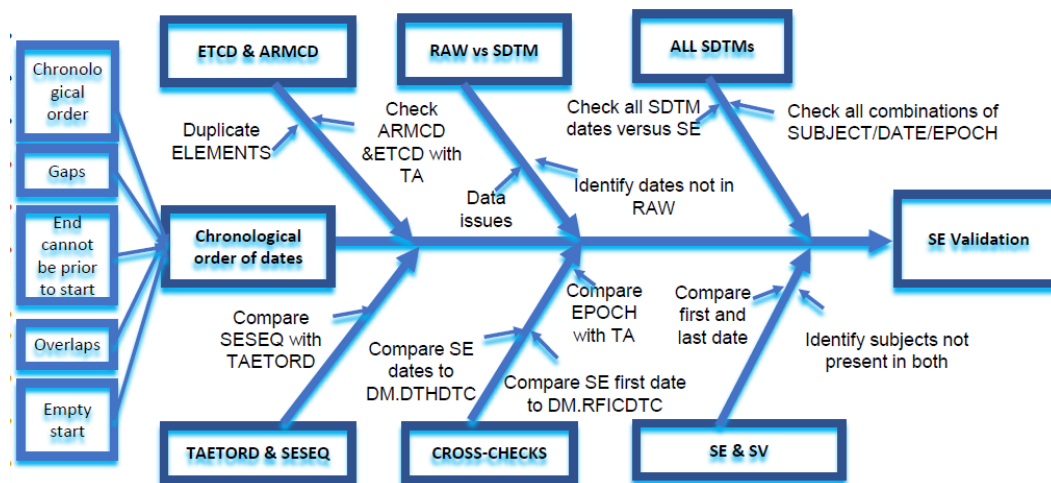
VARIABLE	VALUE	FLAG	RAW FREQUENCY	SDTM FREQUENCY
AETERM	NEUTROPHIL COUNT DECREASED	Value is in RAW, but not in SDTM	5	
AETERM	NEUTROPHIL COUNT DE	Value is in SDTM, but not in RAW		5

# A vision of the invisible: a new SDTM Validation Tool (A. Calai) (cont)

## Timing variables Validation →

- Check SDTM.SV and SDTM.SE
  - check chronology, duplicates, overlaps and gaps;
  - cross-check with other domain

SE checks (examples) :



USUBJID	CODE
STUDY_1001008	CHECK01
STUDY_1001008	CHECK05

CHECK01: Start date of an element cannot be empty. ETCD=SCR

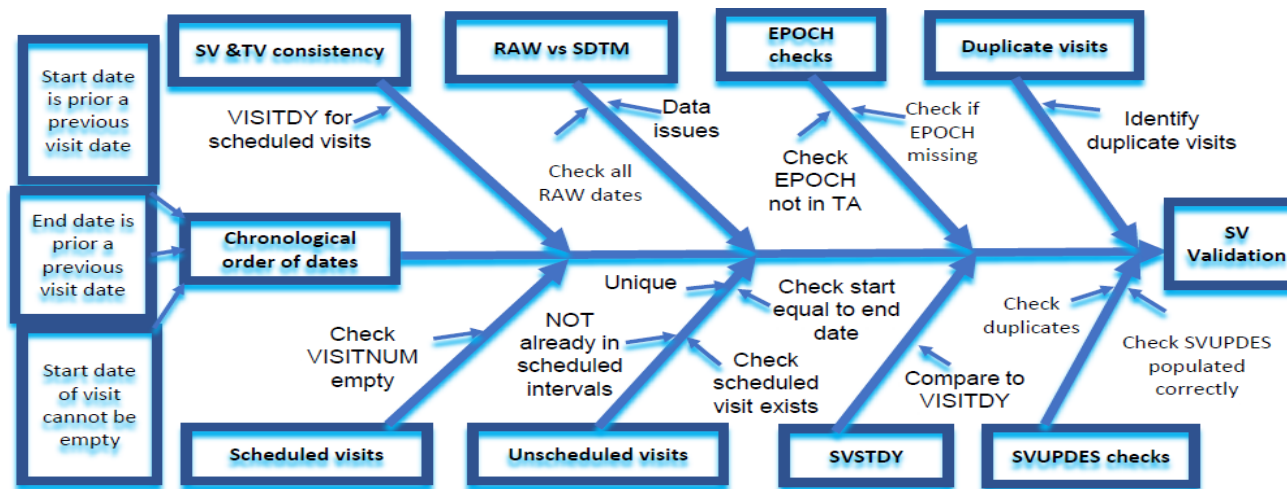
CHECK05: the end of element: BAS cannot be missing if start of next element: ABCIVD1 is populated

# A vision of the invisible: a new SDTM Validation Tool (A. Calai) (cont)

## Timing variables Validation →

- Check SDTM.SV and SDTM.SE
  - check chronology, duplicates, overlaps and gaps;
  - cross-check with other domain

SV checks  
(examples):



USUBJID	CODE
STUDY_1001008	CHECK01
STUDY_1001008	CHECK05

CHECK01: Start date of an element cannot be empty. ETCD=SCR  
 CHECK05: the end of element: BAS cannot be missing if start of next element: ABCIVD1 is populated



# Regulatory Presentations

## Dr. Yuki Ando, **PMDA**

- The presentation from Dr. Yuki Ando from PMDA was coincident with the entry into force of their clinical data submission requirements “***for all submissions after March 31, 2020, clinical studies should be submitted in a format confirming to the CDISC standards***”.
- Dr. Yuki also clarified PMDA position on the use of specific software **for datasets CDISC conformance validation**, clarifying that **they do not expect, or impose, sponsors to use any specific software or version**, providing that they are able to make validation of their data package applying the PMDA validation rules.



# Regulatory Presentations

## Dr. Matilde Kam, **FDA**

FDA biostatisticians expectation when they receive data submission package:

- **define-xml** sufficiently detailed
- clear **identifications of datasets containing the primary endpoints** and analysis datasets sufficiently structured and defined to permit the analysis and re-production of the primary endpoints ***“is the analysis datasets review ready?”***
- are the safety data organized to permit analysis across the different trials within a given NDA submission? ***“are the data accessible, sufficiently documented and of sufficient quality?”***
- Traceability ***“is the analysis datasets traceable back to raw/SDTM data”*** and with that ***“are we able to reproduce sponsor results?”*** or ***“did the sponsor use the correct analysis? Were the assumptions correct”***





# Regulatory Presentations

## Dr. Matilde Kam, **FDA**

FDA biostatisticians expectation when they receive data submission package:

- Dr. Kam speech reported some results of an FDA internal **survey project to identify easy vs difficult to review NDA/BLA data submissions**, where they reported area where sponsors could improve their submission data packages; Overall, among the 42 reviewed submissions, submissions received between 2015 and 2019, *“40% of them were classified as Difficult to Review”*. What was making those submissions difficult to review was mainly the **lack of documentation and details provided in the submitted analysis data reviewer guide (ADRG) and define-xml** and the submission of analysis programs *“94% of difficult submission received an inform request for programs and 60% of difficult submissions provided any programs”*.

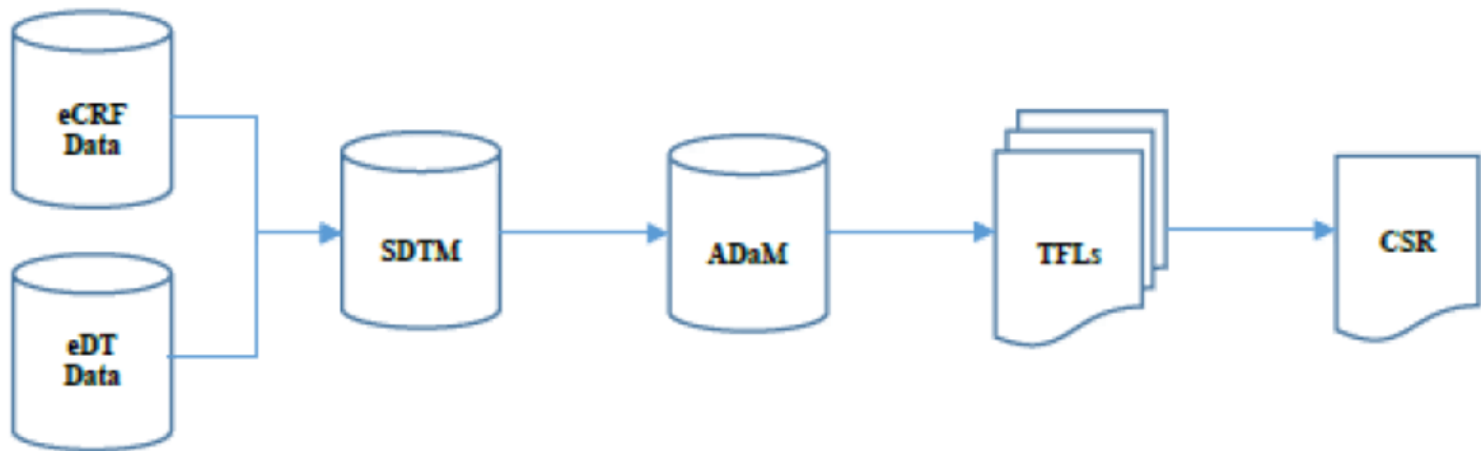
# Regulatory Presentations

## Dr. Matilde Kam, **FDA** (cont.)

Other recommendations:

- For ADRG:
  - it should be **clear and concise**
  - it should **include graphics** to show **data dependencies** to facilitate **traceability understanding**

### 4.5 Data Flow



# Regulatory Presentations

## Dr. Matilde Kam, **FDA** (cont.)

Other recommendations:

- For ADRG (cont)

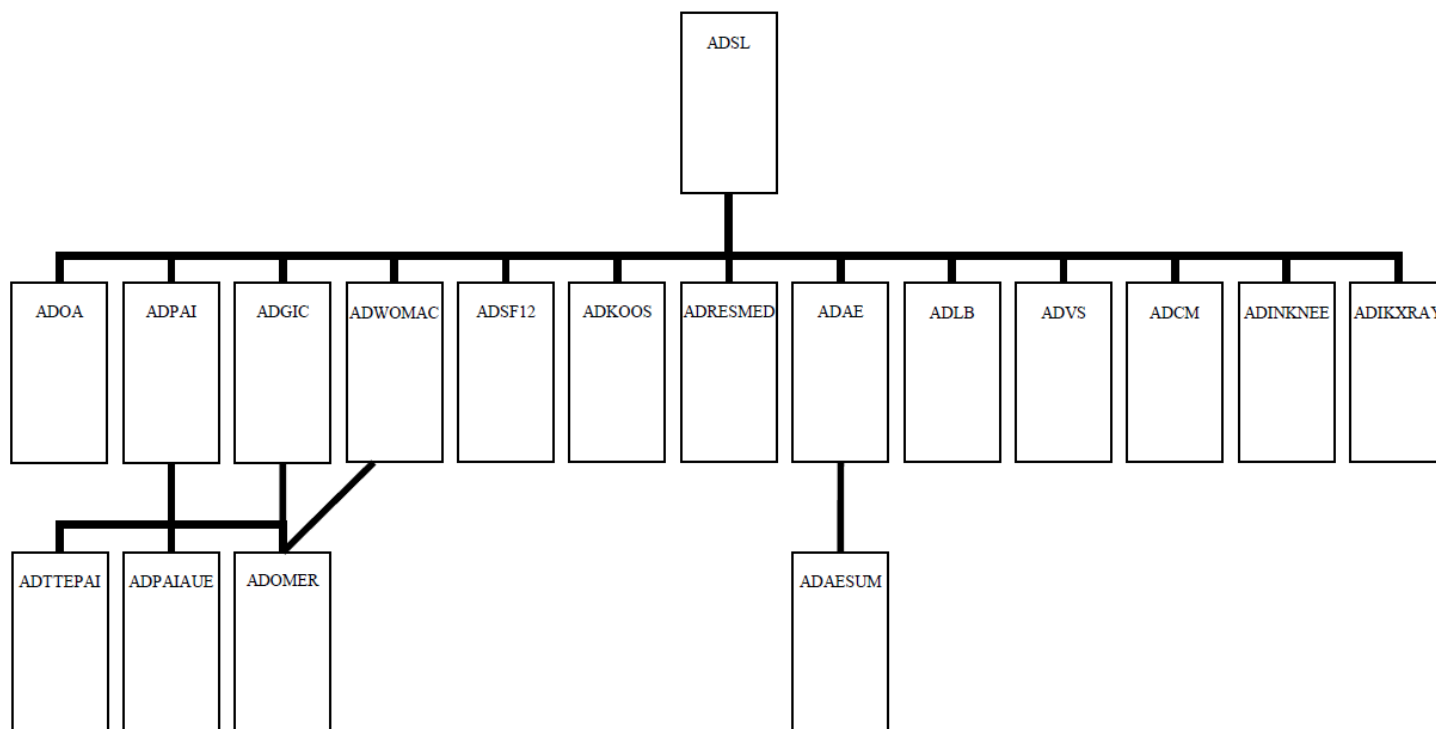


Figure 1: Data dependencies



# Regulatory Presentations

## Dr. Matilde Kam, **FDA** (cont.)

### Other recommendations:

- For define-xml:
  - use **English and pseudo Code**, complete logic, details about input datasets and parameters
  - it is **preferable to have derivations described in define-xml rather than in the ADRG**, with few exceptions when derivations are for example too complex and require several steps to be described, in these cases the derivations provided in then define-xml can be supported by additional details in the ADRG
- Submitted Analysis Programs:
  - they are sometime **too complex to understand**
  - you should **avoid extensive use of macros and provide macros used for analysis**
  - you should **comment more the involved steps**
  - **avoid extensive data manipulation in analysis programs**, this should be covered in the ADaM datasets
- For ADaM datasets:
  - make use of **intermediate datasets**
  - **keep SDTM variables** to improve traceability e.g. --SEQ
  - **use flags** to indicate records or subjects to select
  - use of **DTYPE** when imputations are performed
  - **all datasets used for analysis should be provided**



# Regulatory Presentations

## Dr. Matilde Kam, **FDA** (cont.)

All these recommendations are coincident with the CDISC standard implementation, in particular ADaM and the official CDISC trainings we do provide as authorized CDISC ADaM Instructors.

→ **“Re-mastering the define.xml and its brother the reviewer guide”**,  
Italian CDISC UN Feb 2020→Oct 2020



## CDISC for COVID-19

<https://www.cdisc.org/standards/therapeutic-areas/covid-19/interim-user-guide-covid-19>



# CDISC Guidance to Support COVID-19 Pandemic

- Released on 21 April 2020 [www.cdisc.org/standards/therapeutic-areas/covid-19](http://www.cdisc.org/standards/therapeutic-areas/covid-19)
- CDISC Task Force (Industry, Regulatory, Academia, CDISC staff)
- **“Interim User Guide for COVID-19”**
- **“Guidance for Ongoing Studies Disrupted by the COVID-19 Pandemic”**
- “Resources For Public Health – WHO Annotated Forms and Mapping Spreadsheet”
- “QRS Supplement for National Early Warning Scale 2 (NEWS2)”  
Under development
- “Controlled Terminology COVID-19 Package released 8 May 2020”
  - New terms e.g. new lab test, new lab unit
  - New code-lists e.g. new classifications scales/scores



# Guidance for Ongoing Studies Disrupted by the COVID-19 Pandemic

- How COVID-19 is going to **impact sponsor study that are currently ongoing** (*how to document this into the data*)
- Based on “FDA Guidance on Conduct of Clinical Trials of Medical Products during COVID-19 Public Health Emergency”, March 2020
- **Type of issues** are assessed such as missed visits, end of study, changes in exposure, etc. caused or related to COVID-19
- **Changes to Adverse Event Data Collection** based on
  - MedDRA COVID-19 webinar
  - Provisional MedDRA terms
- **Multiple Approaches proposed** e.g. alternatives to update CRF such as way of tracking or “flagging” COVID-19 relevant information e.g. comment “COVID-19”



# Guidance for Ongoing Studies Disrupted by the COVID-19 Pandemic

- **Multiple Approaches proposed** e.g. alternatives to update CRF such as way of tracking or “flagging” COVID-19 relevant information e.g. comment “COVID-19”

*ds.xpt*

Row	STUDYID	DOMAIN	USUBJID	DSSEQ	DSTERM	DSDEC
1	ABC123	DS	101	1	Died due to <u>COVID-19</u>	DEATH
2	ABC123	DS	102	1	Treatment withdrawn due to <u>COVID-19</u>	ADVER
3	ABC123	DS	103	1	Subject withdrew due to fears related to <u>COVID-19</u>	WITHD
4	ABC123	DS	104	1	Subject unable to participate due to <u>COVID-19</u> quarantine	WITHD

# Guidance for Ongoing Studies Disrupted by the COVID-19 Pandemic

- New custom SDTM domains proposed
  - VE (Visit Events – Occurred and non occurred visits as opposite to SV that contains only occurred visits)
  - Other option is to track missed or impacted planned visits as protocol violations (DV)

## VE = Visit Events

Version 5\_PROD\_13MAY2020: PDF Book  
 Project Name: ██████████-3000-305  
 Folder: WEEK 14  
 Form: COVID-19 Visit Impact  
 Generated On: 14 May 2020 20:56:19

Was this visit impacted by COVID-19 related issues? VETERM = "ONSITE VISIT" VEDECOD = "PLANNED VISIT" Yes   
VEOCCUR = "Y" No

---

If yes, what was the impact? (Indicate ONE) VETERM VEOCCUR = "N" Missed Visit - No Assessments Done   
QVAL = "Y" where QNAM=VEEPCHGI VEOCCUR = "Y" In-Person Visit at Site   
VEOCCUR = "Y" Remote Visit (Virtual or Telephone)

---

If Missed visit, date visit planned to occur: (DD MMM YYYY) QNAM=XXXXDTC

---

If In-person visit at site: (Mark all that apply)

•Not all assessments completed: VEDECOD="INCOMPLETE PLANNED VISIT"

---

•Scheduled visit occurring earlier or delayed relative to protocol specified schedule: QVAL="Y" where QNAM=XXXXXXX

---

If Remote visit, indicate nature of contact with subject: (Indicate ONE)

•Virtual Visit (Video/Telemedicine): QVAL="REMOTE AUDIO VIDEO" where QNAM=XVECNTMOD

---

•Telephone Contact: QVAL="REMOTE AUDIO" where QNAM=XVECNTMOD

# Guidance for Ongoing Studies Disrupted by the COVID-19 Pandemic

- New custom SDTM domains proposed
  - ST (Subject Transfers – when under the circumstances a site is closed an enrolled subject can be transferred to another site)

*st.xpt*

Row	STUDYID	DOMAIN	USUBJID	STSEQ	STTERM	STMODIFY	STDECOD	STPARTY	STPRTYID	STSTDTC
1	ABC-234	ST	1001	1	Subject moved and was transferred to a site in Florida	Subject transferred	TRANSFERRED	SITE	21	2020-02-03
2	ABC-234	ST	1301	1	Subject transferred when original site closed due to COVID-19	Subject transferred	TRANSFERRED	SITE	16	2020-04-06
3	ABC-234	ST	1304	1	Subject transferred when original site closed due to COVID-19	Subject transferred	TRANSFERRED	SITE	16	2020-04-06
4	ABC-234	ST	1308	1	Subject transferred when original site closed due to COVID-19	Subject transferred	TRANSFERRED	SITE	16	2020-04-06
5	ABC-234	ST	1309	1	Subject transferred when original site closed due to COVID-19	Subject transferred	TRANSFERRED	SITE	16	2020-04-06
6	ABC-234	ST	1310	1	Subject transferred when original site closed due to COVID-19	Subject	TRANSFERRED	SITE	16	2020-04-06
7	ABC-234	ST	1312					TE	16	2020-04-06

*dm.xpt*

Row	STUDYID	DOMAIN	USUBJID	SITEID	SITEID1
1	ABC-234	DM	1001	18	21
2	ABC-234	DM	1301	10	16
3	ABC-234	DM	1304	10	16
4	ABC-234	DM	1308	10	16
5	ABC-234	DM	1309	10	16
6	ABC-234	DM	1310	10	16
7	ABC-234	DM	1312	10	16

# Guidance for Ongoing Studies Disrupted by the COVID-19 Pandemic

- Propose standard NSV indicator variables to identify anything that is related to the pandemic

Name	Label	Used In
--EPRELI	Epi/Pandemic Related Indicator	Events domains to indicate that the --TERM was pandemic related Events may include those in AE, DV, DS, or a custom events domain.
--EPNDI	Epi/Pandemic Related Not Done Indicator	Any class to indicate that --REASND was pandemic related
--EPNTI	Epi/Pandemic Related Not Treated Ind	Interventions domains to indicate that --REASOC was pandemic related
--EPCHGI	Epi/Pandemic Related Change Indicator	The DA domain to indicate that --REASND or --CNTMOD was pandemic related The custom VE domain to indicate that --REASOC or --CNTMOD was pandemic related
--EPADJI	Epi/Pandemic Related Adjustment Reas Ind	Interventions domains to indicate that --ADJ was pandemic related
--EPINTI	Epi/Pandemic Related Interrupt Reas Ind	Interventions domains to indicate that --RSINT was pandemic related
--EPDSCI	Epi/Pandemic Related Discontin Reas Ind	Interventions domains to indicate that --RSDISC was pandemic related

# Guidance for Ongoing Studies Disrupted by the COVID-19 Pandemic

- Propose standard NSV indicator variables to identify anything that is related to the pandemic (cont.)

DVSTDTC	DVENDTC	DVREAS	DVEPRELI
2020-03-30	2020-03-30	PATIENT LACKED TRANSPORTATION	
2020-04-06	2020-04-06	PATIENT FEAR DUE TO EPIDEMIC	Y
2020-04-13	2020-04-13	EPIDEMIC MOVEMENT RESTRICTIONS	Y
2020-04-20	2020-04-20	EPIDEMIC MOVEMENT RESTRICTIONS	Y
2020-04-27	2020-04-27	EPIDEMIC MOVEMENT RESTRICTIONS	Y

Available in updated MedDRA 23.0 version

AETERM	AELLT	AEDECOD	AESTDTC	AEENDTC	AESTDY	AEENDY	AEEPRLI
COVID-19	COVID-19	COVID-19	2020-03-31	2020-04-26	23	49	Y
COVID-19 pneumonia	Pneumonia viral	Pneumonia viral	2020-04-05	2020-04-26	28	49	Y

VETERM	VEDECOD	VEPRES	VEOCCUR	VISITNUM	VISIT	VISTDY	VEDTC	VESTDTC	VEDY	VESTDY	VEREASOC	VEEPCHG	VEREASOC	VEEPCHG
ONSITE VISIT	PLANNED VISIT	Y	Y	1	BASELINE	1	2020-03-04	2020-03-04	1	1				
ONSITE VISIT	PLANNED VISIT	Y	Y	2	WEEK 1	8	2020-03-11	2020-03-11	8	8				
REPEAT VISIT FOR ABNORMAL LAB	UNSCHEDULED VISIT			2.5			2020-03-13	2020-03-13	10	10				
ONSITE VISIT	PLANNED VISIT	Y	Y	3	WEEK 2	15	2020-03-19	2020-03-19	16	16				
ONSITE VISIT	PLANNED VISIT	Y	N	4	WEEK 3	22	2020-03-25		22		Subject lacked transportation			
ONSITE VISIT	PLANNED VISIT	Y	N	5	WEEK 4	29	2020-04-01		29		Subject refused due to fear of epidemic	Y		
ONSITE VISIT	PLANNED VISIT	Y	N	6	WEEK 5	26	2020-04-08		36		Hospital restricted access to clinic	Y		
VIRTUAL VISIT	PLANNED VISIT	Y	Y	7	WEEK 6	43	2020-04-13	2020-04-13	43	43		Y		IRI



# Guidance for Ongoing Studies Disrupted by the COVID-19 Pandemic (TOCs)

- Listing of COVID-19 Related Impacts as Part of CSR
- Relationships to COVID-19
- Protocol Deviations
- Disposition
- Missed Visits
- Missed Assessments
- Changes to Drug Accountability
- Changes to Adverse Event Data Collection
- Changes in Exposure
- Transfer to Another Site
- Trial Summary to Provide Pandemic Relationship



# CDISC Interim User Guide for COVID-19

- Guidance and example to **support new studies of any COVID-19 related indication**
- Reused existing approved modeling approaches when available, leveraging e.g. Influenza, Ebola, Vaccines, Virology, Tuberculosis, Malaria, HIV, Asthma, etc. TAUGs
- Special topics covered for **Diagnostic** and **Virology** (MB SDTM domain and not LB)
  - **Virus Identification** testing for SARS-CoV-2 presence
  - **Antibody Testing** detection of IgG and IgM
  - **Virus Load Testing** for quantification of SARS-CoV-2 RNA by quantitative PCR and Threshold Cycle Value

# CDISC Interim User Guide for COVID-19

- New custom SDTM domains proposed
  - ER (Environmental and Social Factors - Used to represent data on travel, contacts, personal protective equipment and exposure to animals)

*er.xpt*

Row	STUDYID	DOMAIN	USUBJID	ERSEQ	ERGRPID	ERTERM	ERCAT	ERSCAT	ERPRESP	EROCCUR	ERDTC	ERSTDTC	ERENDTC	EVINTX	ERCNTRY	ERREGION
1	COV-7	ER	100	1	1	TRAVEL	COVID-19 RISK FACTOR	TRAVEL	Y	Y	2020-02-23			14 DAYS PRIOR TO SYMPTOM ONSET		
2	COV-7	ER	100	2	1	TRAVEL	COVID-19 RISK FACTOR	TRAVEL			2020-02-23	2020-02-11	2020-02-14	14 DAYS PRIOR TO SYMPTOM ONSET	USA	US-MA
3	COV-7	ER	100	3	1	TRAVEL	COVID-19 RISK FACTOR	TRAVEL			2020-02-23	2020-02-14	2020-02-16	14 DAYS PRIOR TO SYMPTOM ONSET	USA	US-NY
4	COV-7	ER	101	1	2	TRAVEL	COVID-19 RISK FACTOR	TRAVEL	Y	Y				14 DAYS PRIOR TO SYMPTOM ONSET		
5	COV-7	ER	101	2	2	TRAVEL	COVID-19 RISK FACTOR	TRAVEL			2020-02-23	2020-02-10	2020-02-13	14 DAYS PRIOR TO SYMPTOM ONSET	ITA	IT-25
6	COV-7	ER	101	3	2	TRAVEL	COVID-19 RISK FACTOR	TRAVEL			2020-02-23	2020-02-13	2020-02-19	14 DAYS PRIOR TO SYMPTOM ONSET	ESP	ES-M
7	COV-7	ER	102	1		TRAVEL	COVID-19 RISK FACTOR	TRAVEL	Y	N	2020-02-23			14 DAYS PRIOR TO SYMPTOM ONSET		

*er.xpt*

Row	STUDYID	DOMAIN	USUBJID	ERLNKID	ERSEQ	ERTERM	ERCAT	ERPRESP	EROCCUR	ERSTDTC	EREVLINT
1	COVID-3	ER	100	1	1	Close contact with a confirmed or probable case of COVID-19, while that case was symptomatic	COVID-19 RISK FACTOR	Y	Y	2020-02-25	-P14D
2	COVID-3	ER	100		2	Presence in a healthcare facility where COVID-19 infections have been managed	COVID-19 RISK FACTOR	Y	N		-P14D
3	COVID-3	ER	100		3	Presence in a laboratory handling suspected or confirmed COVID-19 samples	COVID-19 RISK FACTOR	Y	N		-P14D



# CDISC Interim User Guide for COVID-19

- New questionnaires, ratings and scales supported (to be released)
  - NEWS2 - Determines the degree of illness of a patient and prompts critical care intervention

Full Name and Abbreviation	Copyright Permission Status	Supplement Status	RSCAT	RSTESTCD/RSTEST
National Early Warning Score 2 (NEWS2)	Granted	Supplement in progress	NEWS2	NEWS109/NEWS1-NEWS Total (see supplement for additional RSTESTCD/RSTEST terminology)
Richmond Agitation-Sedation Scale (RASS)	To be requested		RASS	RASS0101/RASS01-Score
Riker Sedation-Agitation Scale (SAS)	To be requested		SAS	SAS0101/SAS01-Score

# CDISC Interim User Guide for COVID-19 (TOCs)

- Risk Factors
  - Pre-existing Medical Conditions
  - Personal Protective Equipment (PPE)
  - Travel
  - Contacts
  - Substance Use
  - Exposure to Animals
- Onset of Disease
- Signs and Symptoms
- Laboratory Test Results
- Diagnostics and Virology
  - Virus Identification
  - Antibody Testing
  - SARS-CoV-2 Viral Load
- Vital Signs and Urine Output
- Concomitant Medications
- Respiratory Findings
  - Imaging
  - Pulmonary Function Tests
- Cardiac Events/Findings
- Hospitalization
- Procedures
  - Assisted Ventilation and Oxygen Treatments
  - Renal Treatment
- Vaccines
- Questionnaires, Ratings, and Scales

# CDISC Interim User Guide for COVID-19

## Reactogenicity in Vaccines Studies

*mh.xpt*

Row	STUDYID	DOMAIN	USUBJID	MHSEQ	MHLNKID	MHTERM	MHEVDYTP	MHDTTC	MHSTDTTC	MHENDTTC	MHDY	MHSTDY	MHENDY
1	COVID-6	MH	103	1		COVID-19	SYMPTOM ONSET	2020-04-05	2020-03-31		1	-5	
2	COVID-6	MH	103	2	1	COVID-19	DIAGNOSIS	2020-04-05	2020-04-04		1	-1	

## Common Lab Tests

The following table shows common lab test names and test codes.

LB Test Name - LBTEST	LB Test Code - LBTESTCD
Activated partial thromboplastin time	APTT
Alanine aminotransferase	AST
Aspartate aminotransferase	ALT
Bilirubin	BILI
C reactive protein	CRP
Creatinine	CREAT
Glucose	GLUC
Hemoglobin	HGB
Hematocrit	HCT
Lactic acid	LACTICAC
Leukocytes	WBC
Lymphocytes	LYM
Neutrophils	NEUT
Platelets	PLAT
Potassium	K
Procalcitonin	PCT
Prothrombin time	PT
Prothrombin international normalized ratio	INR
Sodium	SODIUM
Urea Nitrogen	UREAN

## Virus Identification

*mb.xpt*

Row	STUDYID	DOMAIN	USUBJID	MBSEQ	MBREFID	MBGPRID	MBTESTCD	MBTEST	MBTSTDTL	MBORRES	MBSTRESC	MBSPEC
1	ABC	MB	ABC-01-601	1	60101	1	SARSCOV2	Severe Acute Resp Syndrome Coronavirus 2	DETECTION	POSITIVE	POSITIVE	ENDOTR FLUID
2	ABC	MB	ABC-01-722	2	72201	1	SARSCOV2	Severe Acute Resp Syndrome Coronavirus 2	DETECTION	NEGATIVE	NEGATIVE	SWABBE MATERI

# CDISC Interim User Guide for COVID-19

## Reactogenicity in Vaccines Studies

*ce.xpt*

Row	STUDYID	DOMAIN	USUBJID	CESEQ	CETERM	CEDECOD	CECAT	CESCAT	CEPRES	CEOCCUR	CESTAT	CEREASND	CESEV	CESTDTC	CEEND
1	ABC123	CE	101	1	VOMITING	Vomiting	REACTOGENICITY	SYSTEMIC	Y	Y			MILD	2020-04-01	2020-0



# Q&A

- *What if we are using SDTM Ig 3.2*
  - New domains can be treated as custom domains
  - New variables can be treated as NSV in Supplemental Qualifiers
  - Most of other recommendations are not violating SDTM Ig 3.2
- *Are any CRF Examples provided?*
  - No?
- *VE (Visit Events)*
  - Occurred and Missed visits as opposite to SV only occurred visits

# References

- US FDA guidance on conduct of clinical trials of medical products during COVID-19 pandemic <https://www.fda.gov/media/136238/download>
- EMA Guidance on the Management of Clinical Trials During the COVID-19 Pandemic [https://ec.europa.eu/health/sites/health/files/files/eudralex/vol-10/guidanceclinicaltrials\\_covid19\\_en.pdf](https://ec.europa.eu/health/sites/health/files/files/eudralex/vol-10/guidanceclinicaltrials_covid19_en.pdf)
- CDISC COVID-19 Pandemic Guidance, April 2020 <https://www.cdisc.org/standards/therapeutic-areas/covid-19/interim-user-guide-covid-19>
- MedDRA COVID-19 terms webinar, April 2020 <https://www.meddra.org/COVID-19-terms-and-MedDRA>
- CDISC COVID-19 User Guide Project Review Webinar, <https://www.cdisc.org/events/webinar/covid-19-user-guide-project-review>
- PhUSE “Impact of the COVID-19 Pandemic and Collection/Analysis of Laboratory Data in Ongoing Clinical Trials” (<https://www.phuse.eu/blog/impact-of-the-covid-19-pandemic-and-collection-of-laboratory-data-in-ongoing-clinical-trials>).
- CDISC COVID-19 User Guide Project Review Webinar, <https://www.cdisc.org/events/webinar/covid-19-user-guide-project-review>
- Cytel blog: <https://www.cytel.com/blog/cdisc-for-covid-19>



# Thank You!

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The logo for CDISC, featuring the word "cdisc" in a bold, blue, sans-serif font. Above the letters "i", "s", and "c" are three small colored dots: a red dot above the "i", a yellow dot above the "s", and a light blue dot above the "c".