

# **Study Data Technical Rejection Criteria, Validation, and Self-Check Worksheet**

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## FDA Disclaimer

The views and opinions presented here represent those of the speakers and should not be considered to represent advice or guidance on behalf of the U.S. Food and Drug Administration.



## Agenda

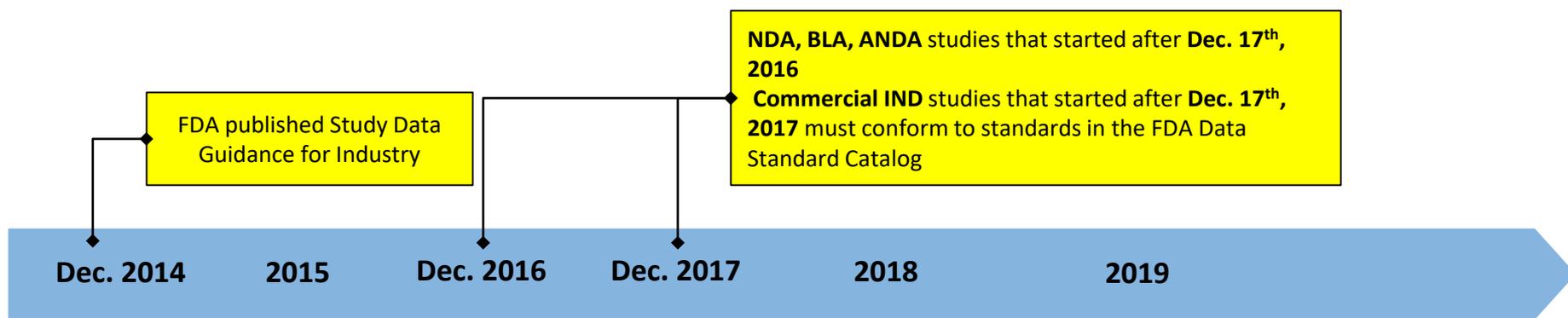
- FDA Guidance and Data Standards Catalog
- Revised Technical Rejection Criteria for Study Data
- Study Data Technical Rejection Criteria Conformance Trend
- Technical Rejection Criteria Validation Process
- Typical Error Examples and Demo of the Self-Check Worksheet
- Implementation Timeline



## Purpose of eCTD and Study Data Requirements

## FDA Guidance and Data Standards Catalog

- ❖ Per FD&C Act Section 745A(a), drug application sponsors must use the standards defined in the FDA Data Standards Catalog starting 24 months after final guidance for a specific submission type.
- ❖ FDA issued “Providing Regulatory Submissions in Electronic Format - Standardized Study Data: Guidance for Industry” in December 2014.
- ❖ Sponsors must conform to standards in the FDA Data Standards Catalog:
  - NDA, BLA, ANDA studies that started after December 17th, 2016
  - Commercial IND studies started after December 17th, 2017



# Revised Technical Rejection Criteria for Study Data

# Study Data Technical Rejection Criteria (SDTRC) Revision (Jan. 2019)

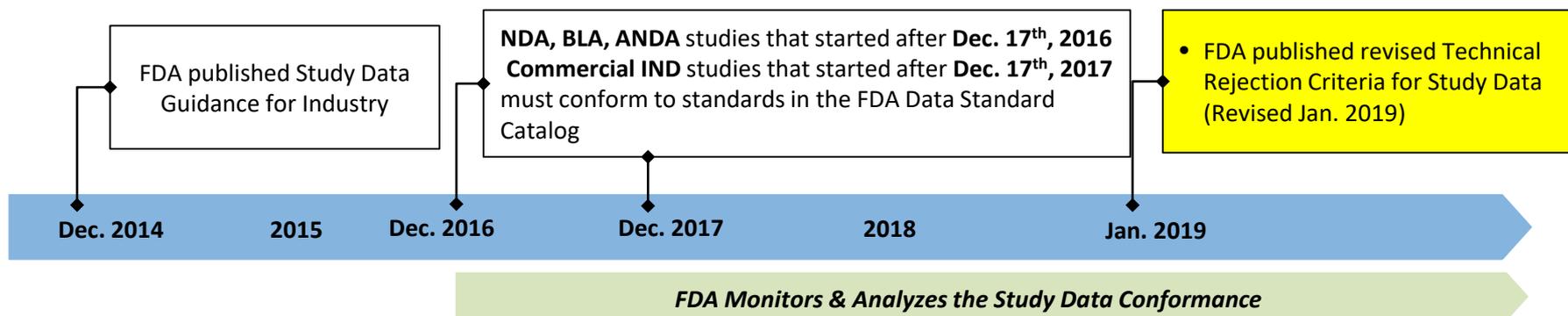
## Technical Rejection Criteria for Study Data (Revised 05/01/2018)

**The FDA may refuse to file (RTF) for NDAs and BLAs, or refuse to receive (RTR) for ANDAs**, an electronic submission that does not have study data in conformance to the required standards specified in the FDA Data Standards Catalog



## Technical Rejection Criteria for Study Data (Revised 01/22/2019)

**FDA will not accept** an electronic submission that does not have study data in compliance with the required standards specified in the FDA Data Standards Catalog



### References:

FDA Study Data Technical Rejection Criteria (Revised May 2018); FDA Study Data Technical Rejection Criteria (Revised Jan. 2019)

# Update to SDTRC List of High Errors (Revised Jan. 2019)

Error	Description (Reference to FDA Study Data Technical Rejection Criteria <u>May 2018 version</u> )	Severity Level
<b>1734</b>	Trial Summary (TS) dataset must be present for each study in eCTD section 4.2 and 5.3	High
<b>1736</b>	Demographic dataset (DM) and the define.xml must be submitted in Module 4 for nonclinical data; DM dataset, the subject-level analysis dataset (ADSL) and define.xml must be submitted in Module 5 for clinical data	High



Error	Description (Reference to FDA Study Data Technical Rejection Criteria <u>Jan. 2019 version</u> )	Severity Level
<b>1734</b>	Trial Summary (TS) dataset (ts.xpt) with information on study start date must be present for required sections*	High
<b>1735</b>	Correct STF file-tags must be used for all standardized datasets and corresponding define.xml files in required sections*	High
<b>1736</b>	For SEND data, a DM dataset and define xml must be submitted in required sections* For SDTM data, a DM dataset and define.xml must be submitted in required sections* For ADaM data, an ADSL dataset and define.xml must be submitted in required sections*	High
<b>1789**</b>	Study files must be referenced in a Study Tagging File (STF)	High

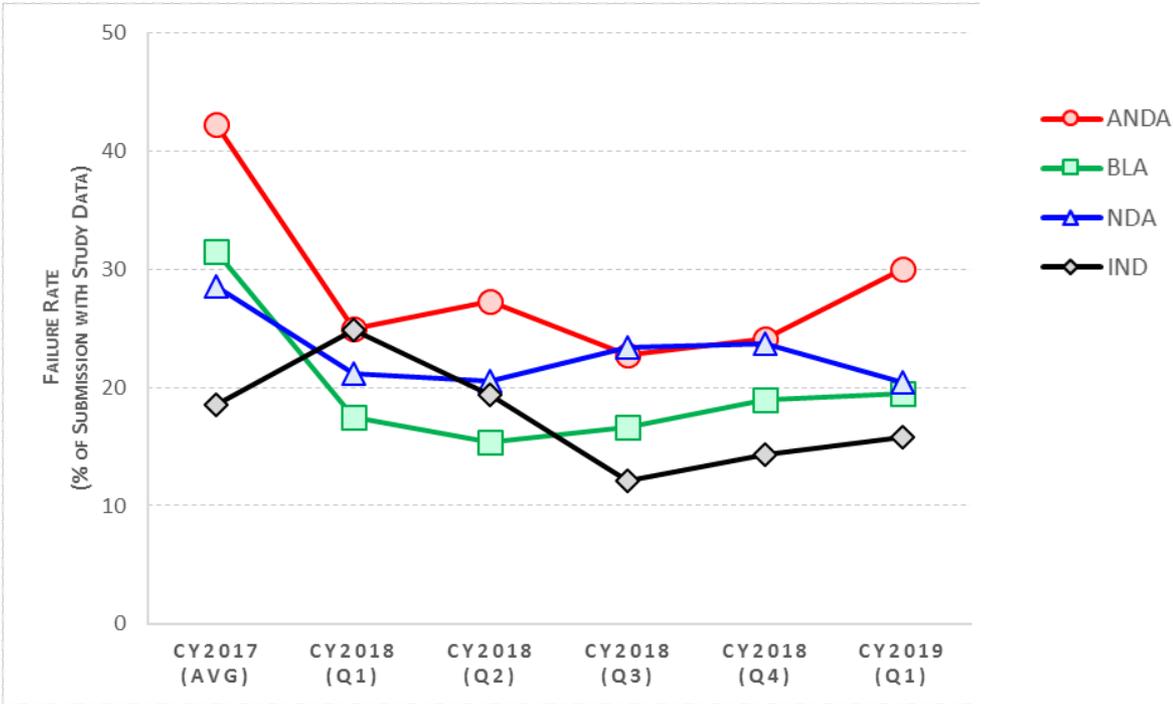
\* Refer to the latest Technical Rejection Criteria for Study Data

\*\* From Providing Regulatory Submissions in Electronic Format – Certain Human Pharmaceutical Product Applications and Related Submissions Using the eCTD Specification, Section J: Datasets must only be provided in modules 3, 4, or 5 and not in modules 1 or 2

## Study Data Technical Rejection Criteria Conformance Trend

# Overall Conformance Trend for Validation Errors 1734 & 1736

- ❖ Submissions with study data shows overall decreases in Validation Error 1734 and 1736 in all application types
- ❖ NDAs and INDs are showing the greatest improvements in conformance



**Notes:**

- 1) CY2017 analysis is conducted according to TRC (Revised May 2018)
- 2) CY2018 & CY2019 (Q1) analysis are conducted according to the TRC (Revised Jan. 2019)

# CDER Conformance: Validation Error 1789

- ❖ ANDA, NDA, BLA, and Commercial IND Submissions were assessed for conformance to high-level error, 1789, as defined in the Technical Rejection Criteria for Study Data (Revised Jan. 2019)

	NDA		ANDA		BLA		Comm. IND		All	
	CY2018	CY2019 (Q1)	CY2018	CY2019 (Q1)	CY2018	CY2019 (Q1)	CY2018	CY2019 (Q1)	CY2018	CY2019 (Q1)
<b>Total Number of Submissions</b>	41,077	11,011	62,695	14,776	11,042	2997	79,473	22,226	194,287	51,010
<b>Error 1789</b>	43	11	225	53	1	0	193	62	462	126
<b>Failure Rate (% among submissions with Study Data)</b>	0.10%	0.10%	0.36%	0.36%	<0.01%	0.00%	0.24%	0.28%	0.24%	0.20%

**Notes:**

- 1) One drug application could contain multiple submissions throughout its review life-cycle, such as original, supplements, and amendments
- 2) Each submission may contain more than one study
- 3) Analysis includes NDA, BLA, ANDA and Commercial IND submissions received by CDER between 1/1/2018 to 3/31/2019
- 4) Analysis is conducted according to the revised TRC

**Reference:** FDA Study Data Technical Rejection Criteria (Revised Jan. 2019)

# CDER Conformance: Validation Errors 1734, 1735 & 1736

- ❖ ANDA, NDA, BLA, and Commercial IND Submissions were assessed for conformance to three high-level error, 1734, 1735, & 1736, as defined in the Technical Rejection Criteria for Study Data (Revised Jan. 2019)
- ❖ Failure Rate for all applications increased 2.3% (average) between 2018 and 2019

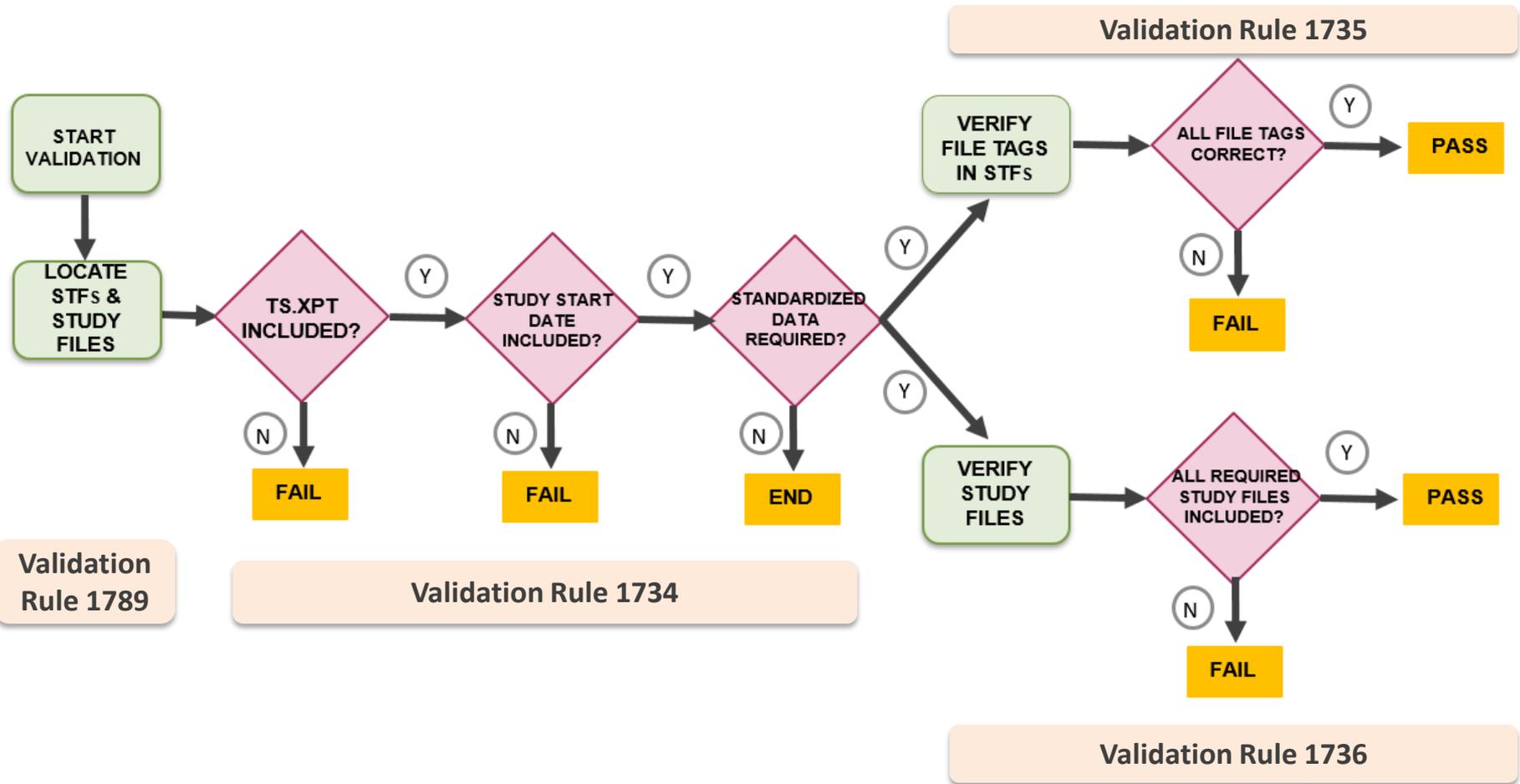
	NDA		ANDA		BLA		Comm. IND		All	
	CY2018	CY2019 (Q1)	CY2018	CY2019 (Q1)	CY2018	CY2019 (Q1)	CY2018	CY2019 (Q1)	CY2018	CY2019 (Q1)
Total Number of Submissions with Study Data	877	270	1078	243	291	77	649	183	2895	773
Total Number of Submissions with Study Data in TRC Applicable Sections		204		226		57		172		659
Total Number Submissions with Critical Errors	215	71	689	181	54	15	134	42	1092	309
Error 1734	185	52	186	53	48	15	96	24	515	144
Error 1735	34	23	497	130	5	0	26	15	562	168
Error 1736	16	3	88	21	2	0	18	5	124	29
Failure Rate (% among submissions with Study Data)	24.50%	26.30%	63.90%	73.70%	18.60%	19.50%	20.60%	23.00%	37.70%	40.00%
Failure Rate (% among submissions with Study Data in TRC Applicable Sections)		34.80%		80.10%		26.30%		24.40%		46.90%

**Notes:**

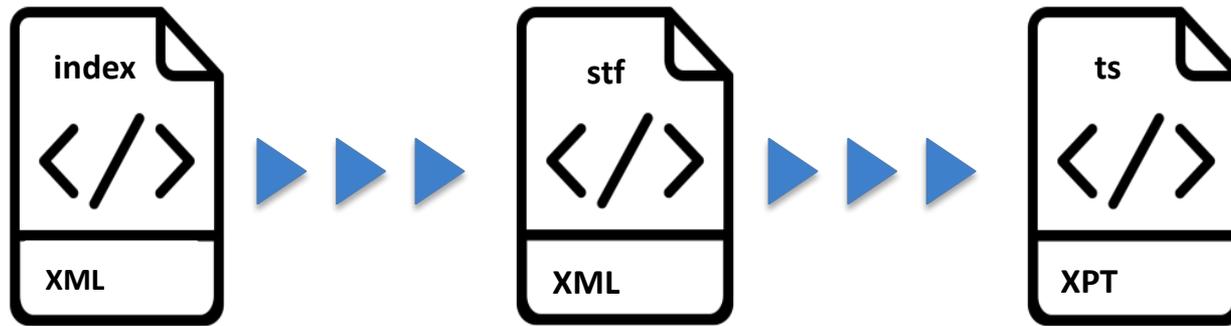
- 1) One drug application could contain multiple submissions throughout its review life-cycle, such as original, supplements, and amendments
- 2) Analysis includes NDA, BLA, ANDA and Commercial IND submissions received by CDER between 1/1/2018 to 3/31/2019
- 3) Submission with multiple studies can report both Errors 1734, 1735 and 1736
- 4) Validation of errors 1735 and 1736 are not performed if a study has Error 1734
- 5) Analysis is conducted according to the revised TRC

# Technical Rejection Criteria Validation Process

# SDTRC High Level Validation Process (Revised Jan. 2019)



# eCTD Backbone Files

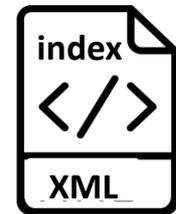


- Leaf ID
- File Path
- File Name

- Leaf ID
- STF Study ID
- File-Tag

- TS Study ID
- Study Start Date

# eCTD Backbone Files (index.xml)



```

<m5-3-5-1-study-reports-of-controlled-clinical-studies-pertinent-to-the-claimed-indication>
<leaf checksum-type="MD5"
  xlink:type="simple"
  checksum="98723f7594b5500a861509547c384e46" operation="new"
  xlink:href="m5/53-clin-stud-rep/535-rep-effic-safety-stud/nausea/5351-stud-repcontr/study-s107/ts.xpt"
  application-version="PDF 1.4"
  ID="a103">
  <title>S107 ts.xpt</title>
</leaf>
<leaf checksum-type="MD5"
  xlink:type="simple"
  checksum="25d3b246313a9dbf688a48da2295260e" operation="new"
  xlink:href=" m5/53-clin-stud-rep/535-rep-effic-safety-stud/nausea/5351-stud-repcontr/study-s107/stf-s107.xml"
  version="stf version 2.2"
  ID="a104">
  <title>Study Tagging File for S107</title>
</leaf>
</m5-3-5-1-study-reports-of-controlled-clinical-studies-pertinent-to-the-claimed-indication>

```

ID="a103">

**INDEX LEAF ID**

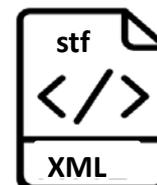
**FILE PATH FROM INDEX**

**FILE NAME FROM INDEX**

# eCTD Backbone File (stf.xml)

## ❖ From Index.xml

- Leaf ID
- File Path
- File Name



```

<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="../../../util/style/ich-stf-stylesheet.xsl"?>
<!DOCTYPE ectd:study SYSTEM "../../../util/dtd/ich-stf-v2-2.dtd">
<ectd:study xmlns:ectd="http://www.ich.org/ectd" xml:lang="en" dtd-version="2.2"
xmlns:xlink="http://www.w3.org/1999/xlink">
  <study-identifier>
    <title>Wonderdrug Study S107</title>
    <study-id>S107</study-id>
    <category name="type-of-control" info-type="ich">no-treatment</category>
  </study-identifier>
  <study-document>
    <doc-content xlink:href="../../../index.xml#a103">
      <file-tag name="data-tabulation-dataset-sdtm" info-type="ich"/>
    </doc-content>
  </study-document>
</ectd:study>

```

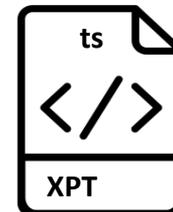
**STF STUDY ID** (points to <study-id>S107</study-id>)

**Index.xml LEAF ID** (points to <doc-content xlink:href="../../../index.xml#a103">)

**FILE TAG ASSOCIATED TO STUDY DOCUMENT** (points to <file-tag name="data-tabulation-dataset-sdtm" info-type="ich"/>)

# eCTD Backbone Files (ts.xpt)

- ❖ From Index.xml
  - Leaf ID
  - File Path
  - File Name
- ❖ From STF.xml
  - Leaf ID
  - STF Study ID
  - File-Tag



Library Properties ts.xpt

Freeze Hide Show... Format Filter... Font... Find

Table View

	STUDYID	TSPARMCD	TSVAL	TSVALNF
▶ 1	S107	SSTDTC	2019-01-01	

TS Study ID

Study Start Date



## Typical Error Examples and Demo of the Self-Check Worksheet

# Self-Check Worksheet

Section	Contents
1	<b>Application &amp; Submission Information</b> <ul style="list-style-type: none"> <li>Provides high level information about the application and submission</li> </ul>
2	<b>Study Information</b> <ul style="list-style-type: none"> <li>Provides more detailed information about the specific study</li> </ul>
3	<b>STF File Information (1789 Validation Error)</b> <ul style="list-style-type: none"> <li>Provide information about STF file</li> </ul>

**Reference:**

“Technical Rejection Criteria Self-Check Worksheet”

<https://www.fda.gov/media/123098/download>

“Technical Rejection Criteria Self-Check Worksheet

Instructions” <https://www.fda.gov/media/123099/download>

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Food and Drug Administration

**SELF-CHECK WORKSHEET FOR STUDY DATA PREPARATION**

**Note:** This self-check Worksheet is not required for submissions of study data and is designed to help prepare newly submitted study data to FDA, i.e. studies for which no files have been previously submitted.

*\*Required Field*

**Section 1: Application & Submission Information**

1a. FDA Center* <input type="checkbox"/> CDER <input type="checkbox"/> CBER	1b. Application Type* <input type="checkbox"/> NDA <input type="checkbox"/> BLA <input type="checkbox"/> ANDA <input type="checkbox"/> Commercial IND	1c. Application Number*
1d. eCTD Sequence Number	1e. eCTD Submission Type	1f. eCTD Submission Sub Type

**Note:** Repeat Sections 2 through 5 for each study included in the submission.

**Section 2: Study Information**

2a. Study ID\*  
\_\_\_\_\_

(Study ID is the unique identifier across application documents. Therefore, the study ID must be consistent across all the files being submitted for the same study, i.e. STF File, ts.xml, dm.xml, etc.)

2b. Is This the First Time Study Data is Being Submitted for This Study as Part of This Application?  
 Yes  No

If you answered "No" in Field 2b, do not proceed. This self-check worksheet is designed for newly submitted study data.

2c. Title of the Study _____	2d. Study Section - eCTD Heading (Example: m4-2-1-1)* _____
2e. Module* <input type="checkbox"/> Nonclinical (m4) <input type="checkbox"/> Clinical (m5)	2f. Study Dataset Type(s)* Tabulation    Analysis    Other

**Section 3: Study Information**

3a. Are Files Included in a Study Section? (Not Applicable to Sections 4.3, 5.2, 5.3.6, and 5.4)\*  
 Yes  No

If you answered "No" in Field 3a, and no files are included in a study section, excluding sections 4.3, 5.2, 5.3.6, and 5.4, then Validation Rules 1734, 1735, 1736, and 1789 do not apply. Do not proceed.

3b. Is STF File Included?*	3c. Does STF File Reference all Associated Study Files?*
<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

Referenced Validation Error Number 1789

If you answered "No" in Fields 3b or 3c, Validation Rule 1789 FAILS. Do not proceed.

3d. Study ID in STF File*	3e. Does the Study ID in the STF File Match Field 2a?
_____	<input type="checkbox"/> Yes <input type="checkbox"/> No

If you answered "No" in Field 3e, ensure the study ID is consistent across all the files being submitted for the same study.

**Fillable Self-Check Worksheet**

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# Self-Check Worksheet (1734 Validation Error)

Section	Contents
4	<b>TS File Information (1734 Validation Error)</b> <ul style="list-style-type: none"> <li>Provide information about ts.xpt file with study start date</li> </ul>



**Section 4: TS File Information**

4a. What Type of TS File is Required?\* (Refer to guidelines in chart below.)  
 Full TS     Simplified TS     Not Required

Study Start Date	Application Type	Data Type	Study Section	Required TS File Type (by Center) CDER	Required TS File Type (by Center) CBER
Prior to or on 17-Dec-16	NDA, BLA, or ANDA	Nonclinical	4.2.3.1, 4.2.3.2, 4.2.3.4	Simplified TS	Not Required
Prior to or on 17-Dec-16	NDA, BLA, or ANDA	Clinical	5.3.1.1, 5.3.1.2, 5.3.3.1, 5.3.3.2, 5.3.3.3, 5.3.3.4, 5.3.4, 5.3.5.1, 5.3.5.2	Simplified TS	Simplified TS
Prior to or on 17-Dec-17	Commercial IND	Nonclinical	4.2.3.1, 4.2.3.2, 4.2.3.4	Simplified TS	Not Required
Prior to or on 17-Dec-17	Commercial IND	Clinical	5.3.1.1, 5.3.1.2, 5.3.3.1, 5.3.3.2, 5.3.3.3, 5.3.3.4, 5.3.4, 5.3.5.1, 5.3.5.2	Not Required	Not Required
After 17-Dec-16	NDA, BLA, or ANDA	Nonclinical	4.2.3.1, 4.2.3.2, 4.2.3.4	Full TS	Not Required
After 17-Dec-16	NDA, BLA, or ANDA	Clinical	5.3.1.1, 5.3.1.2, 5.3.3.1, 5.3.3.2, 5.3.3.3, 5.3.3.4, 5.3.4, 5.3.5.1, 5.3.5.2	Full TS	Full TS
After 17-Dec-17	Commercial IND	Nonclinical	4.2.3.1, 4.2.3.2, 4.2.3.4	Full TS	Not Required
After 17-Dec-17	Commercial IND	Clinical	5.3.1.1, 5.3.1.2, 5.3.3.1, 5.3.3.2, 5.3.3.3, 5.3.3.4, 5.3.4, 5.3.5.1, 5.3.5.2	Not Required	Not Required

*If you answered "Not Required" in Field 4a, then Validation Rules 1734, 1735, and 1736 do not apply. Do not proceed.*

4b. Is TS File Included?\* Referenced Validation Error Number 1734  
 Yes     No

*If you answered "No" in Field 4b, Validation Rule 1734 FAILS. Do not proceed.*

4c. Study ID in TS File\*

4d. Does Study ID in STF (Field 3d) & TS Files Match? Referenced Validation Error Number 1734  
 Yes     No

*If you answered "No" in Field 4d, Validation Rule 1734 FAILS. Do not proceed.*

4e. Study Start Date in TS File <input style="width: 90%;" type="text"/>	4f. If Study Start Date Exists, Is it Valid? <input type="checkbox"/> Yes <input type="checkbox"/> No
--	---

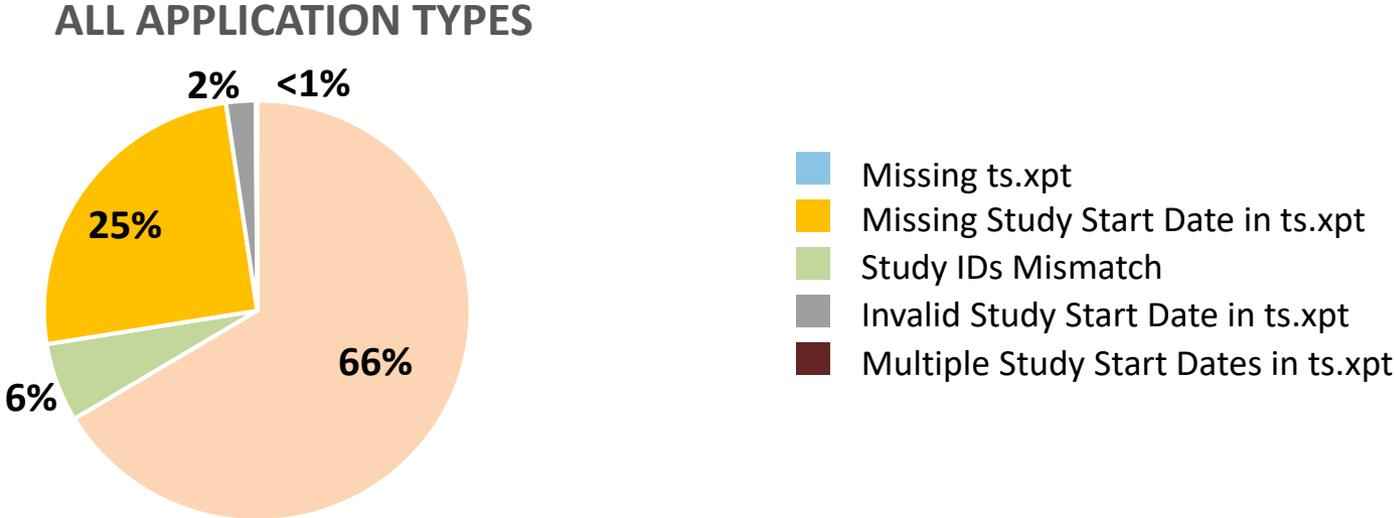
4g. If Study Start Date does not Exist, What is the Stated Exception Code?

**Fillable Self-Check Worksheet**

Reference:  
 "Technical Rejection Criteria Self-Check Worksheet"  
<https://www.fda.gov/media/123098/download>  
 "Technical Rejection Criteria Self-Check Worksheet Instructions"  
<https://www.fda.gov/media/123099/download>

# CY2018 CDER Error Reasons for Validation Rule 1734

- ❖ A dataset named ts.xpt with information on Study Start Date (SSD) must be present for each study
  
- ❖ Common error reason across all application types:
  - a missing ts.xpt file (66% of studies with error 1734)
  - a missing study start date in the ts.xpt (25% of studies with error 1734)



# Applicable Study Sections (Section 4a)

- ❖ Technical Rejection Criteria is only applicable to Study Sections as specified in **Table 1 eCTD Technical Rejection Criteria for Study Data Expectation**

## Example

1. Study Files and/or datasets submitted in **m5-3-5-3 (TRC not applicable study section)**

**TRC Requirement: No ts.xpt is needed**

- 5.3.3. Reports of Human Pharmacokinetic (PK) Studies
- 5.3.5. Reports of Efficacy and Safety Studies [Indication]
  - 5.3.5. Treatment chronic iron overload due to blood transfusion
    - 5.3.5.1. Study Reports of Controlled Clinical Studies Pertinent to the Claimed Indication [Type of Control]
    - 5.3.5.2. Study Reports of Uncontrolled Clinical Studies [Study ID - Study Title]
    - 5.3.5.3. Reports of Analyses of Data from More than One Study [Study ID - Study Title]



**Pass**  
**No Further Validation Needed**

## Self-Check Worksheet

### Section 4: TS File Information

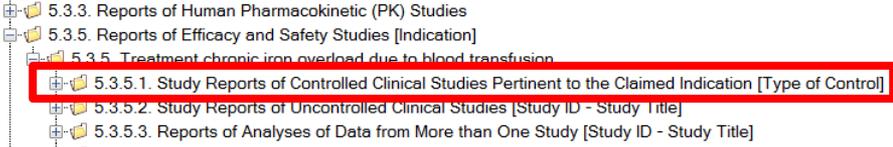
4a. What Type of TS File is Required? (Refer to guidelines in chart below.)

Full TS     Simplified TS     Not Required

Study Start Date	Application Type	Data Type	Study Section	Required TS File Type (by Center) CDLR	Required TS File Type (by Center) CBLR
Prior to or on 17-Dec-16	NDA, BLA, or ANDA	Nonclinical	4.2.3.1, 4.2.3.2, 4.2.3.4	Simplified TS	Not Required
Prior to or on 17-Dec-16	NDA, BLA, or ANDA	Clinical	5.3.1.1, 5.3.1.2, 5.3.3.1, 5.3.3.2, 5.3.3.3, 5.3.3.4, 5.3.4, 5.3.5.1, 5.3.5.2	Simplified TS	Simplified TS
Prior to or on 17-Dec-17	Commercial IND	Nonclinical	4.2.3.1, 4.2.3.2, 4.2.3.4	Simplified TS	Not Required
Prior to or on 17-Dec-17	Commercial IND	Clinical	5.3.1.1, 5.3.1.2, 5.3.3.1, 5.3.3.2, 5.3.3.3, 5.3.3.4, 5.3.4, 5.3.5.1, 5.3.5.2	Not Required	Not Required
After 17-Dec-16	NDA, BLA, or ANDA	Nonclinical	4.2.3.1, 4.2.3.2, 4.2.3.4	Full TS	Not Required
After 17-Dec-16	NDA, BLA, or ANDA	Clinical	5.3.1.1, 5.3.1.2, 5.3.3.1, 5.3.3.2, 5.3.3.3, 5.3.3.4, 5.3.4, 5.3.5.1, 5.3.5.2	Full TS	Full TS
After 17-Dec-17	Commercial IND	Nonclinical	4.2.3.1, 4.2.3.2, 4.2.3.4	Full TS	Not Required
After 17-Dec-17	Commercial IND	Clinical	5.3.1.1, 5.3.1.2, 5.3.3.1, 5.3.3.2, 5.3.3.3, 5.3.3.4, 5.3.4, 5.3.5.1, 5.3.5.2	Not Required	Not Required

# TRC Validation Rule 1734 (Section 4c)

- ❖ Trial Summary (TS) dataset (ts.xpt) with information on study start date must be present for required sections

Example	Self-Check Worksheet
<p>2. Study Files and/or datasets submitted in <b>m5-3-5-1 (TRC applicable study section)</b>  <b>Study Start Date:</b> 2018-01-01  <b>TRC Requirement:</b> <u>Full TS is needed</u></p>  <p>[Study IDs Match Requirement]</p>  <p> <b>Pass Rule 1734</b></p>	<p><b>Section 4: TS File Information</b></p> <p>4a. What Type of TS File is Required? (Refer to guidelines in chart below.)  <input type="checkbox"/> Full TS    <input type="checkbox"/> Sim</p> <p>4b. Is TS File Included?*</p> <p><input type="checkbox"/> Yes    <input type="checkbox"/> No</p> <p>If you answered "No" in Field 4b, Validation Rule 1734 FAILS. Do not proceed.</p> <p>4c. Study ID in TS File*  <input type="text" value="Study ABC"/></p> <p>4d. Does Study ID in STF (Field 3d) &amp; TS Files Match?  <input checked="" type="checkbox"/> Yes    <input type="checkbox"/> No</p> <p>If you answered "No" in Field 4d, Validation Rule 1734 FAILS. Do not proceed.</p> <p>4e. Study Start Date in TS File  <input type="text"/></p> <p>4f. If Study Start Date Exists, Is it Valid?  <input type="checkbox"/> Yes    <input type="checkbox"/> No</p> <p>4g. If Study Start Date does not Exist, What is the Stated Exception Code?  <input type="text"/></p>

# Top Error for Rule 1734: Incorrect Study Start Date Format

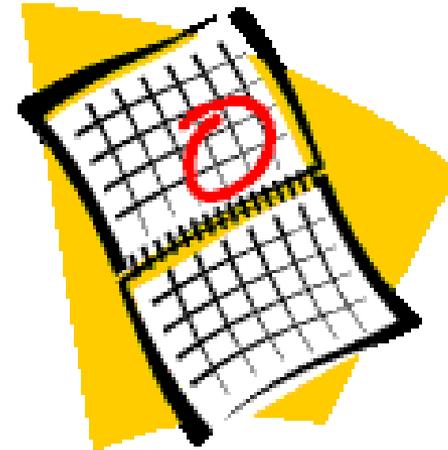
- ❖ A missing study start date (TSVAL) in the ts.xpt (25% of studies with error 1734)

## Correct Study Start Date Format

yyyy-mm-dd

## Incorrect Study Start Date Format

yyyy-mm	dd-mmm-yyyy
SAS Date Format	dd-mm-yyyy
mm/dd/yyyy	ddmmmyyyy
dd-mmm-yy	dd.mm.yyyy
yyyy	month-yyyy
mm/dd/yy	



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# TRC Validation Rule 1734 (Section 4c)

- ❖ Trial Summary (TS) dataset (ts.xpt) with information on study start date must be present for required sections

## Example

2. Study Files and/or datasets submitted in **m5-3-5-1 (TRC applicable study section)**

**Study Start Date:** 2018-01-01

**TRC Requirement:** Full TS is needed

### [Study Date Format Requirement]

- yyyy-mm-dd

TS.XPT		
SSTDTC	Study Start Date	2018-01-01



**Pass Rule 1734**

## Self-Check Worksheet

### Section 4: TS File Information

4a. What Type of TS File is Required?\* (Refer to guidelines in chart below.)

Full TS     Simplified TS     Not Required

4b. Is TS File Included?\*

Yes     No

[Referenced Validation Error Number 1734](#)

If you answered "No" in **Field 4b**, Validation Rule 1734 FAILS. Do not proceed.

4c. Study ID in TS File\*

Study ABC

4d. Does Study ID in STF (Field 3d) & TS Files Match?

Yes     No

[Referenced Validation Error Number 1734](#)

If you answered "No" in **Field 4d**, Validation Rule 1734 FAILS. Do not proceed.

4e. Study Start Date in TS File

2018-01-01

4f. If Study Start Date Exists, Is it Valid?

Yes     No

[Referenced Validation Error Number 1734](#)

4g. If Study Start Date does not Exist, what is the Stated Exception Code?

# Self-Check Worksheet (1735 & 1736 Validation Error)

Section	Contents
5	<p><b>Standardized Dataset Information</b> (1735 &amp; 1736 Validation Error)</p> <ul style="list-style-type: none"> <li>• Provide information about SEND or STDM and/or ADaM dataset and define.xml</li> <li>• Provide information about STF File-tags</li> </ul>

**Section 5: Standardized Datasets (SEND, SDTM, ADaM)**

5a. Are Standardized Datasets Required?\*

Yes  No

Study Start Date	Application Type	Standardized Datasets Required?
Prior to or on 17-Dec-16	NDA, BLA, or ANDA	Not Required
After 17-Dec-16	NDA, BLA, or ANDA	Required
Prior to or on 17-Dec-17	Commercial IND	Not Required
After 17-Dec-17	Commercial IND	Required

*If you answered "No" in Field 5a, standardized datasets are not required and Validation Rules 1735 and 1736 do not apply. Do not proceed.*

*Fields 5b-5e are applicable to nonclinical tabulation datasets (SEND), Fields 5f-5i are applicable to clinical tabulation datasets (SDTM), and Fields 5j-5m are applicable to clinical analysis datasets (ADaM).*

*Note: For clinical data in Commercial INDs standardized datasets are required if the study start data is after the date stated, however, study data technical rejection criteria will not be applicable until further notice.*

**Clinical (m5)**

*Tabulation (SDTM datasets)*

5f. Is DM File Included?\*

Yes  No

5g. Is Define File Included?\*

Yes  No

[Referenced Validation Error Number 1736](#)

*If you answered "No" in Fields 5f or 5g, Validation Rule 1736 FAILS. Proceed to Fields 5h and 5i for Validation Rule 1735.*

5h. Are the STF File-Tags for the SDTM Datasets "data-tabulation-dataset-sdtm"?

Yes  No

5i. Is the STF File-Tag for the Define File "data-tabulation-data-definition"?

Yes  No

[Referenced Validation Error Number 1735](#)

*If you answered "No" in Fields 5h or 5i, Validation Rule 1735 FAILS.*

*Analysis (ADaM datasets)*

5j. Is ADSL File Included?\*

Yes  No

5k. Is Define File Included?\*

Yes  No

[Referenced Validation Error Number 1736](#)

*If you answered "No" in Fields 5j or 5k, Validation Rule 1736 FAILS. Proceed to Fields 5l and 5m for Validation Rule 1735.*

5l. Are the STF File-Tags for the ADaM Datasets "analysis-dataset-adam"?

Yes  No

5m. Is the STF File-tag for the Define File "analysis-data-definition"?

Yes  No

[Referenced Validation Error Number 1735](#)

**Reference:**  
**"Technical Rejection Criteria Self-Check Worksheet"**  
<https://www.fda.gov/media/123098/download>  
**"Technical Rejection Criteria Self-Check Worksheet Instructions"**  
<https://www.fda.gov/media/123099/download>

**Fillable Self-Check Worksheet - Coming Soon!**

## CY2018 CDER Error Reasons for Validation Rule 1735

- ❖ The correct STF file tags must be used for all standardized datasets and corresponding define.xml files
- ❖ Common error reason for ANDAs:
  - **an incorrect file tag for a define.xml file (42% of ANDA studies with error 1735)**
- ❖ Common error reason for NDAs:
  - **a dataset tagged as legacy when standardized datasets are required (80% of NDA studies with error 1735)**

ALL APPLICATION TYPES



## CY2018 CDER Error Reasons for Validation Rule 1736

- ❖ For SEND data, a DM dataset and define.xml must be submitted
- ❖ For SDTM data, a DM dataset and define.xml must be submitted
- ❖ For ADaM data, an ADSL dataset and define.xml must be submitted
- ❖ Common reason across all application types:
  - **a missing define.xml file (39% of studies)**
  - **a missing define.xml, dm.xpt, and adsl.xpt files (31% of studies)**
- ❖ Common error reason for NDAs:
  - **missing define.xml and adsl.xpt files**

ALL APPLICATION TYPES



# TRC Validation Rule 1735 and 1736 (Section 5f-5g)

- ❖ Rule 1735: Correct STF file-tags must be used for all standardized datasets and corresponding define.xml files in required sections
- ❖ Rule 1736: For SEND data, a DM dataset and define xml must be submitted in required sections
  - For SDTM data, a DM dataset and define.xml must be submitted in required sections
  - For ADaM data, an ADSL dataset and define.xml must be submitted in required sections

Example	Self-Check Worksheet															
<p>Study Files and/or datasets submitted in <b>m5-3-5-1 (clinical)</b>  <b>Study Start Date: 2018-01-01</b>  <b>Dataset Type: Tabulation (SDTM)</b></p> <div style="border: 1px solid #ccc; padding: 5px; margin: 5px 0;"> <p style="text-align: center; margin: 0;">Files Referenced in stf.xml</p> <div style="display: flex; flex-wrap: wrap; gap: 5px;"> <div style="border: 1px solid #ccc; padding: 2px;">acrf.pdf</div> <div style="border: 1px solid #ccc; padding: 2px;">ds.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">mh.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">suppda.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">suppmh.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">tv.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">ae.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">dv.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">pe.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">suppdm.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">sv.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">vs.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">cm.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">eg.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">sc.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">suppds.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">ta.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">co.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">ex.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">se.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">suppeg.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">te.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">csdrq.pdf</div> <div style="border: 1px solid #ccc; padding: 2px;">ie.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">suppae.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">suppex.xpt</div> <div style="border: 1px solid #ccc; padding: 2px;">ti.xpt</div> </div> </div> <p style="color: red; font-weight: bold; text-align: center; margin: 5px 0;">dm.xpt and define.xml are missing</p> <div style="text-align: center; margin-top: 20px;"> <h2 style="color: red; margin: 0;">Fail Rule 1736</h2> </div>	<div style="border: 1px solid #ccc; padding: 5px;"> <p><b>Section 5: Standardized Datasets (SEND, SDTM, ADaM)</b></p> <hr/> <p>5a. Are Standardized Datasets Required?*</p> <input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No <table border="1" style="width: 100%; border-collapse: collapse; margin: 5px 0;"> <thead> <tr> <th style="width: 30%;">Study Start Date</th> <th style="width: 30%;">Application Type</th> <th style="width: 40%;">Standardized Datasets Required?</th> </tr> </thead> <tbody> <tr> <td>Prior to or on 17-Dec-16</td> <td>NDA, BLA, or ANDA</td> <td>Not Required</td> </tr> <tr> <td>After 17-Dec-16</td> <td>NDA, BLA, or ANDA</td> <td>Required</td> </tr> <tr> <td>Prior to or on 17-Dec-17</td> <td>Commercial IND</td> <td>Not Required</td> </tr> <tr> <td>After 17-Dec-17</td> <td>Commercial IND</td> <td>Required</td> </tr> </tbody> </table> <hr/> <p><b>Clinical (m5)</b></p> <div style="border: 2px solid red; padding: 5px; margin: 5px 0;"> <p><b>Tabulation (SDTM datasets)</b></p> <p>5f. Is DM File Included?*      5g. Is Define File Included?*</p> <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No                 </div> <div> <input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No                 </div> <div style="text-align: right; color: blue; font-size: small;"> <a href="#">Referenced Validation Error Number 1736</a> </div> </div> <p style="color: red; font-size: small; margin-top: 5px;">If you answered "No" in Fields 5f or 5g, Validation Rule 1736 FAILS. Proceed to Fields 5h and 5i for Validation Rule 1735.</p> </div> <hr/> <p>5h. Are the STF File-Tags for the SDTM Datasets "data-tabulation-dataset-sdtm"?</p> <input type="checkbox"/> Yes   <input type="checkbox"/> No             <div style="text-align: right; color: blue; font-size: small; margin-top: 5px;"> <a href="#">Referenced Validation Error Number 1735</a> </div> <hr/> <p>5i. Is the STF File-Tag for the Define File "data-tabulation-data-definition"?</p> <input type="checkbox"/> Yes   <input type="checkbox"/> No             <div style="text-align: right; color: blue; font-size: small; margin-top: 5px;"> <a href="#">Referenced Validation Error Number 1735</a> </div> <hr/> <p style="color: red; font-size: small;">If you answered "No" in Fields 5h or 5i, Validation Rule 1735 FAILS.</p> </div>	Study Start Date	Application Type	Standardized Datasets Required?	Prior to or on 17-Dec-16	NDA, BLA, or ANDA	Not Required	After 17-Dec-16	NDA, BLA, or ANDA	Required	Prior to or on 17-Dec-17	Commercial IND	Not Required	After 17-Dec-17	Commercial IND	Required
Study Start Date	Application Type	Standardized Datasets Required?														
Prior to or on 17-Dec-16	NDA, BLA, or ANDA	Not Required														
After 17-Dec-16	NDA, BLA, or ANDA	Required														
Prior to or on 17-Dec-17	Commercial IND	Not Required														
After 17-Dec-17	Commercial IND	Required														

# TRC Validation Rule 1735 and 1736 (Section 5h-5i)

- ❖ Rule 1735: Correct STF file-tags must be used for all standardized datasets and corresponding define.xml files in required sections
- ❖ Rule 1736: For SEND data, a DM dataset and define xml must be submitted in required sections
  - For SDTM data, a DM dataset and define.xml must be submitted in required sections
  - For ADaM data, an ADSL dataset and define.xml must be submitted in required sections

## Example

Study Files and/or datasets submitted in **m5-3-5-1 (clinical)**

Study Start Date: 2018-01-01

Dataset Type: Tabulation (SDTM)

### Files Referenced in stf.xml



### stf.xml

```
<doc-content xlink:href="../../../../../../../../0001/index.xml#0003"><file-tag name="data-tabulation-dataset-sdtm" info-type="us" />
<doc-content xlink:href="../../../../../../../../0001/index.xml#0004"><file-tag name="data-tabulation-data-definition" info-type="us" /></doc-content>
```

define.xml is tagged as "data-tabulation-data-definition"



# Pass Rule 1735

## Self-Check Worksheet

### Section 5: Standardized Datasets (SEND, SDTM, ADaM)

5a. Are Standardized Datasets Required?\*

Yes  No

Study Start Date	Application Type	Standardized Datasets Required?
Prior to or on 17-Dec-16	NDA, BLA, or ANDA	Not Required
After 17-Dec-16	NDA, BLA, or ANDA	Required
Prior to or on 17-Dec-17	Commercial IND	Not Required
After 17-Dec-17	Commercial IND	Required

### Clinical (m5)

Tabulation (SDTM datasets)

5f. Is DM File Included?\*

Yes  No

5g. Is Define File Included?\*

Yes  No

[Referenced Validation Error Number 1736](#)

If you answered "No" in Fields 5f or 5g, Validation Rule 1736 FAILS. Proceed to Fields 5h and 5i for Validation Rule 1735.

5h. Are the STF File-Tags for the SDTM Datasets "data-tabulation-dataset-sdtm"?

Yes  No

[Referenced Validation Error Number 1735](#)

5i. Is the STF File-Tag for the Define File "data-tabulation-data-definition"?

Yes  No

If you answered "No" in Fields 5h or 5i, Validation Rule 1735 FAILS.

# Published SDTRC and Self-Check Worksheet

**Study Data for Submission to CDER and CBER**

U.S. FOOD & DRUG ADMINISTRATION

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**Study Data Standards Resources**

- Study Data for Submission to CDER and CBER
- Study Data Research and Collaborations
- Janus Data Repository
- Study Design Standard
- Study Participation Standard
- Subject Data Standard

**Stay Connected**

If you have study data questions for CDER, please contact the CDER eDATA Team at [cdere-data@fda.hhs.gov](mailto:cdere-data@fda.hhs.gov).

For electronic submissions, contact the CDER Electronic Submission (ESUB) Support Team at [esub@fda.hhs.gov](mailto:esub@fda.hhs.gov).

If you have study data questions for CBER, please contact [CDER eDATA](mailto:cdere-edata@fda.hhs.gov).

For electronic submissions, contact [CBER ESUB](mailto:esubprep@fda.hhs.gov) at [esubprep@fda.hhs.gov](mailto:esubprep@fda.hhs.gov).

FDA is instituting new requirements for data standards that will apply to most study data submitted to FDA's Center for Drug Evaluation and Research (CDER) and Center for Biologics Evaluation and Research (CBER).

Beginning after the dates specified below, FDA may refuse to file for New Drug Applications (NDAs) and Biologics License Applications (BLAs) or refuse to receive for Abbreviated NDAs (ANDAs) any electronic submission whose study data do not conform to the required standards specified in the [FDA Data Standards Catalog](#). See the [Technical Rejection Criteria for Study Data \(PDF\)](#) for more information. FDA conducted an analysis of study data conformance on submissions received during a specified time period and developed a presentation on the overall conformance results. [Study Data Conformance \(PDF\)](#) To assist sponsors when submitting study data, FDA has created the [Technical Rejection Criteria Self-Check Worksheet \(PDF\)](#) and [Worksheet Instructions \(PDF\)](#).

**“Technical Rejection Criteria for Study Data”**

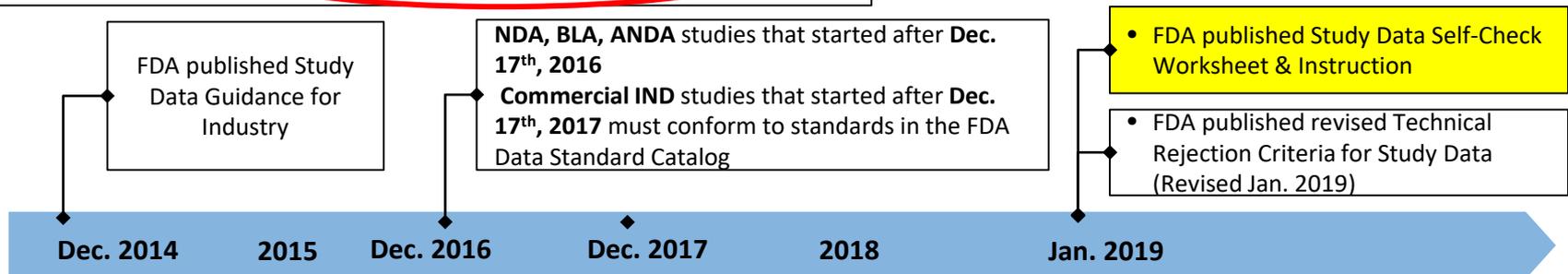
<https://www.fda.gov/media/100743/download>

**“Technical Rejection Criteria Self-Check Worksheet”**

<https://www.fda.gov/media/123098/download>

**“Technical Rejection Criteria Self-Check Worksheet Instructions”**

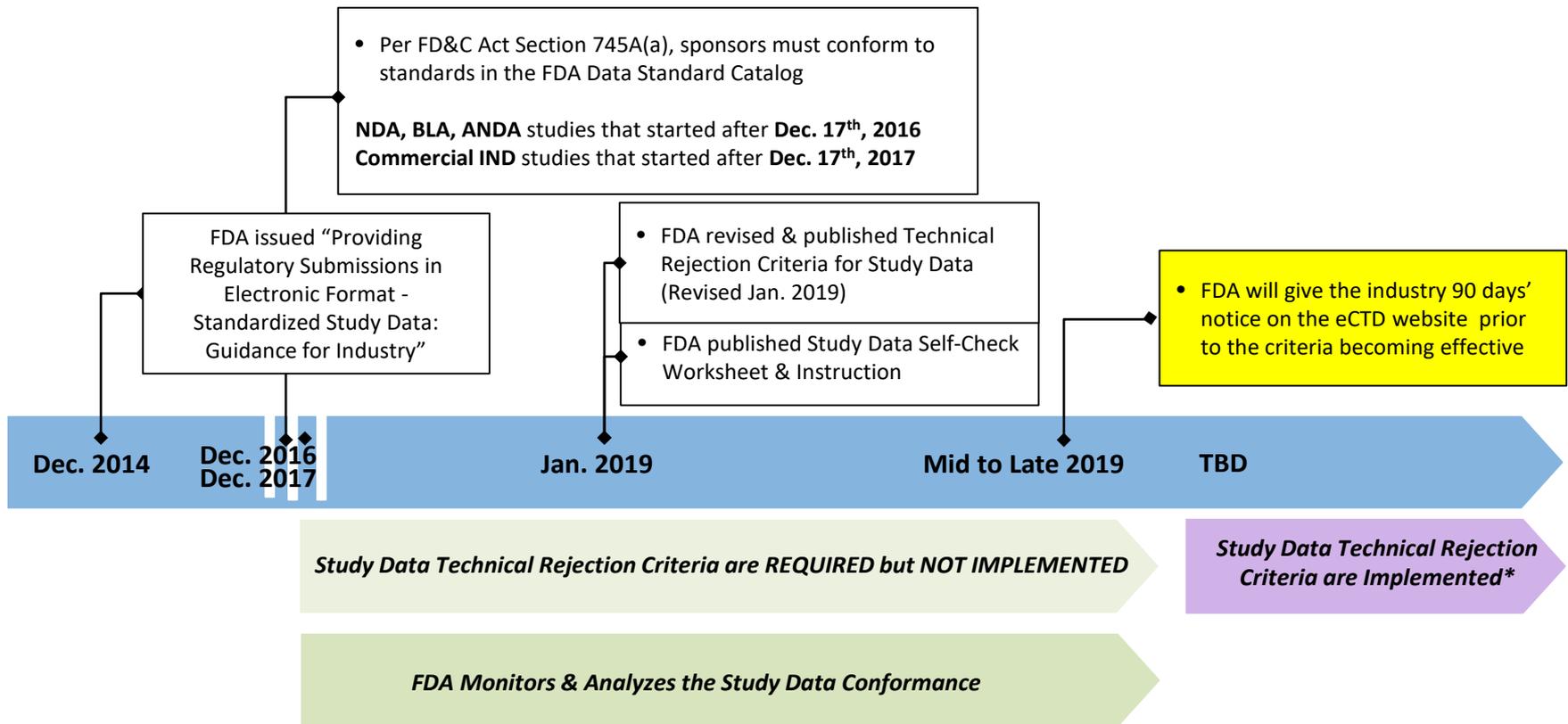
<https://www.fda.gov/media/123099/download>



# Implementation Timeline

# Implementation Timeline

- ❖ FDA published Revised Study Data Technical Rejection Criteria (Revised Jan. 2019) and Study Data Self-Check Worksheet to assist sponsors with the TRC Conformance



\* Note: When a submission is technically-rejected, the submission sequence is not transferred into the FDA electronic document rooms

## Reference

- ❖ “Providing Regulatory Submissions In Electronic Format - Standardized Study Data: Guidance For Industry”  
<https://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM292334.pdf>
- ❖ “Providing Regulatory Submissions In Electronic Format - Submissions Under Section 745a(a) Of The FD&C Act: Guidance For Industry”  
<https://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM384686.pdf>
- ❖ “Technical Rejection Criteria For Study Data” <https://www.fda.gov/media/100743/download>
- ❖ “Study Data Technical Conformance Guide” <https://www.fda.gov/media/88173/download>
- ❖ “FDA Data Standards Catalog”  
<https://www.fda.gov/ForIndustry/DataStandards/StudyDataStandards/default.htm>
- ❖ “Technical Denunciation Criteria Self-Check Worksheet” <https://www.fda.gov/media/123098/download>
- ❖ “Technical Rejection Criteria Self-Check Worksheet Instructions”  
<https://www.fda.gov/downloads/ForIndustry/DataStandards/StudyDataStandards/UCM630733.pdf>
- ❖ For FDA instruction of Study Data submission, see the FDA “Study Data for Submission to CDER and CBER”  
<https://www.fda.gov/industry/study-data-standards-resources/study-data-submission-cder-and-cber>
- ❖ For the full list of Study Data standards, see the FDA “Study Data Standards Resources”  
<http://www.fda.gov/ForIndustry/DataStandards/StudyDataStandards>

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*Thank  
You*