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Center for Drug Evaluation and Research

Study Data Rejections in eCTD Submissions

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Agenda

- What's New in eCTD v3.2.2?
- Common Errors
- Common Questions
- eCTD v4.0



What's New in eCTD v3.2.2?



What's New in eCTD v3.2.2?

- File format spec
 - Updated .docx permissible uses
 - Updated .xml accepted locations and permissible uses
 - Removed “CDER Only” from permissible uses for
 - .cas, .csv, .dat, .r, .rmd
- Updated file format added
 - Modeling & Simulation file types
 - .datxplore, .jmd, .json, .mbp3, .mlxtran, .mlxproperties, .pkml, .pksim5, .pkx, .pkxproperties, .pumascp, .smlx, .smlxproperties, .syc, .qmd

Specifications for File Format Types Using eCTD Specifications					
File Type	File Format	Format Name	Accepted location in eCTD	Archive Format Copy	Permissible Uses
	.xml	Extensible Markup Language	M1.14, 1.16, M4 - M5		Labeling, REMS, Data
	.xsd	XML Schema Definition	M1, M4 - M5		
	.xsl	Extensible Stylesheet Language	M1, M4 - M5		\util\style folder, data
<i>Data</i>					
	.csv	Comma Separated Values file	M5.3.3.5		
	.svg	Scalable Vector Graphics	M3 – M5	TXT	
	.xpt	SAS Transport file	M3 – M5		
	.zip	Zip file	M5.3		For grouping large sets of aECG xml files CDER Only
<i>Modeling and Simulation</i>					
	.cmp, .cmpx, .cmpz	SimCYP drug model files	M5		CDER Only
	.wks, .wksx, .wksz	SimCYP workspace files	M5		CDER Only
	.lbr, .lbrx, .lbrz	SimCYP population files	M5		CDER Only
	.mdb	GastroPlus model compound file	M5		CDER Only
	.pbk	GastroPlus whole body physiology files	M5		CDER Only
	.opd	GastroPlus Tissue and/or plasma concentration vs time data file for other dosing forms	M5		CDER Only

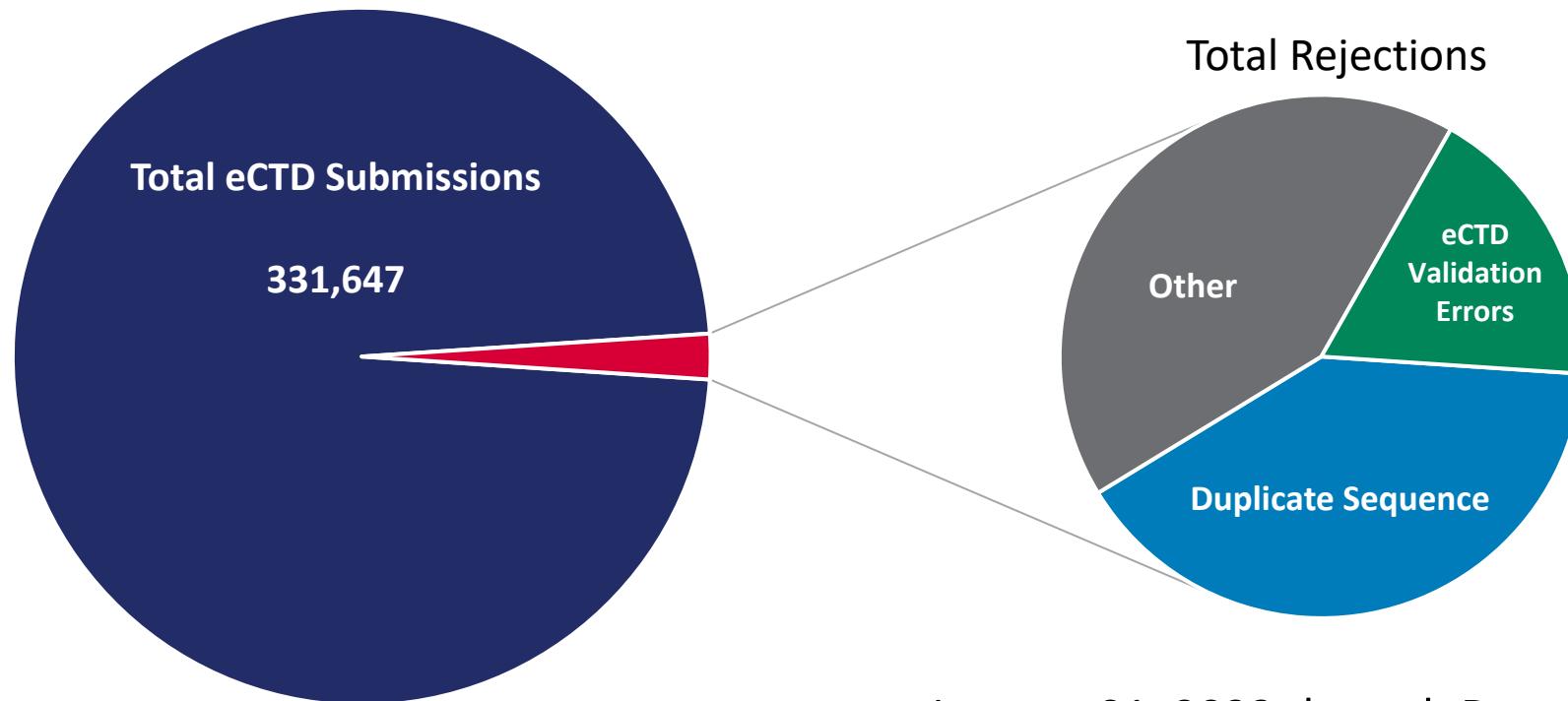
Common Errors for eCTD submissions



Total eCTD Submissions to CDER

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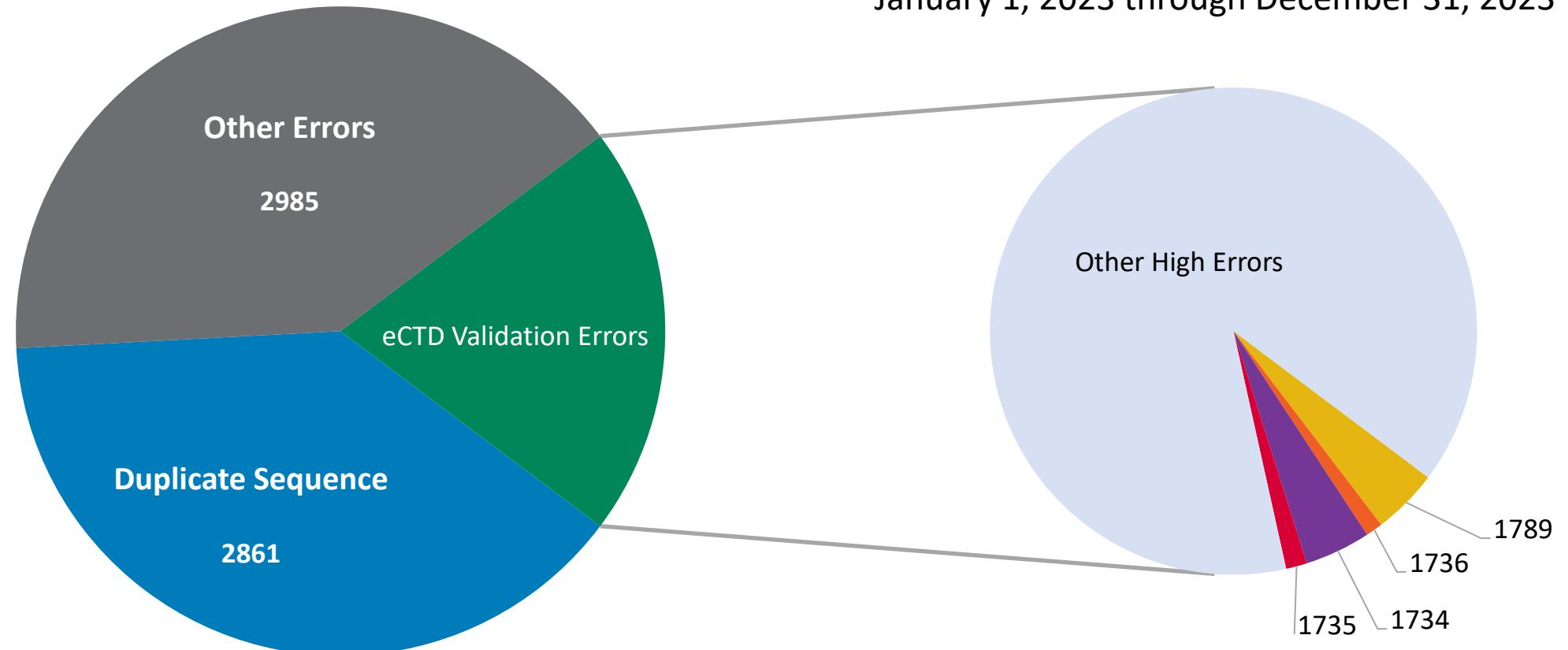
Roughly only 1% of eCTD submissions are rejected



Top Reasons for eCTD Rejection

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January 1, 2023 through December 31, 2023

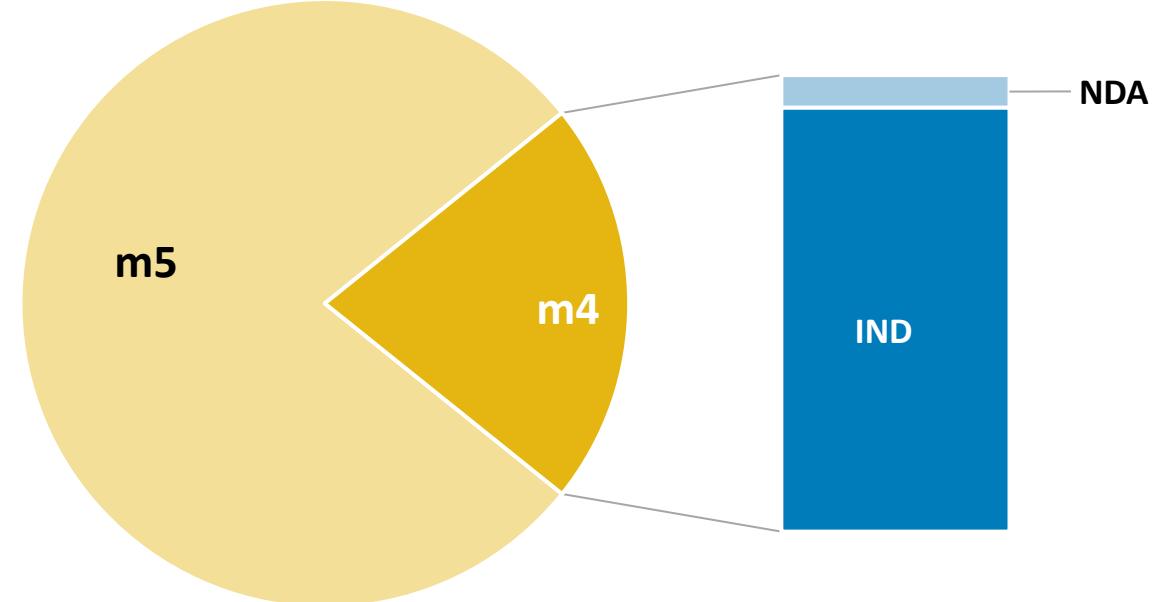


A file has been submitted in a study section without providing an STF file

- **65 Submissions** failed for error 1789

- 22% of these submissions were for SEND data (m4)
- **Majority** of errors in **IND** nonclinical sections (m4)

1789 Errors by Module



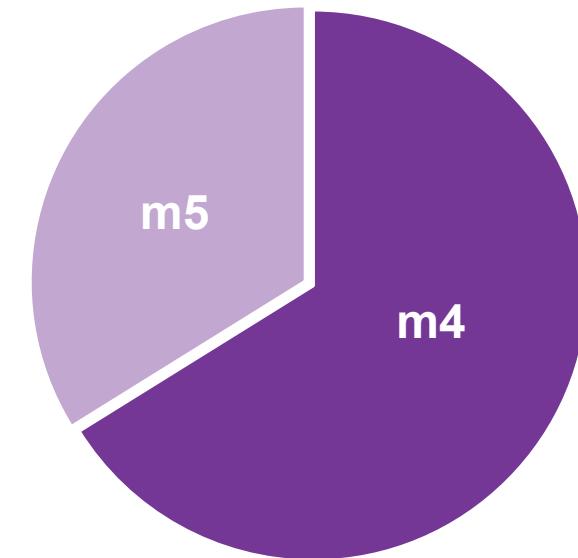
January 1, 2023 through December 31, 2023

A dataset named ts.xpt with information on study start date must be present for each study in a TRC-applicable section

- **65 Submissions** failed for error 1734

- 66% of these submissions were for SEND data (m4)
- **Only IND applications** had errors in nonclinical sections (m4)

1734 Errors by Module

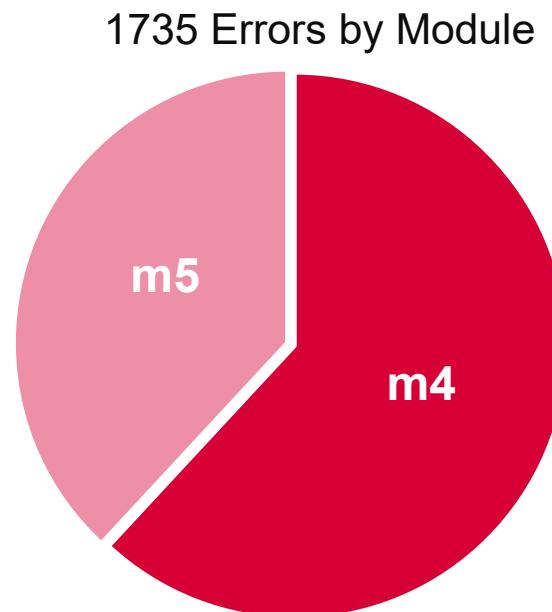


January 1, 2023 through December 31, 2023

The correct STF file-tags must be used for all standardized datasets and corresponding define.xml files in a TRC-applicable section

- **21 Submissions** failed for error 1735

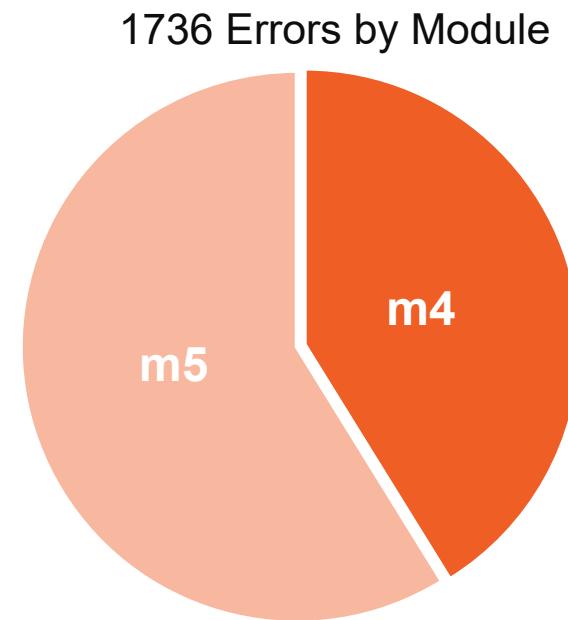
- 62% of these submissions were for SEND data (m4)
- **Only IND applications** had errors in nonclinical sections (m4)



January 1, 2023 through December 31, 2023

For SEND data, a Demographic (DM) dataset and define.xml must be submitted for studies in TRC-applicable Module 4 sections

- **17 Submissions** failed for error 1736
 - 41% of these submissions were for SEND data (m4)
 - **Only IND applications** had errors in nonclinical sections (m4)



January 1, 2023 through December 31, 2023

STF Study ID should match STUDYID or SPREFID listed in the referenced Trial Summary (ts.xpt) file

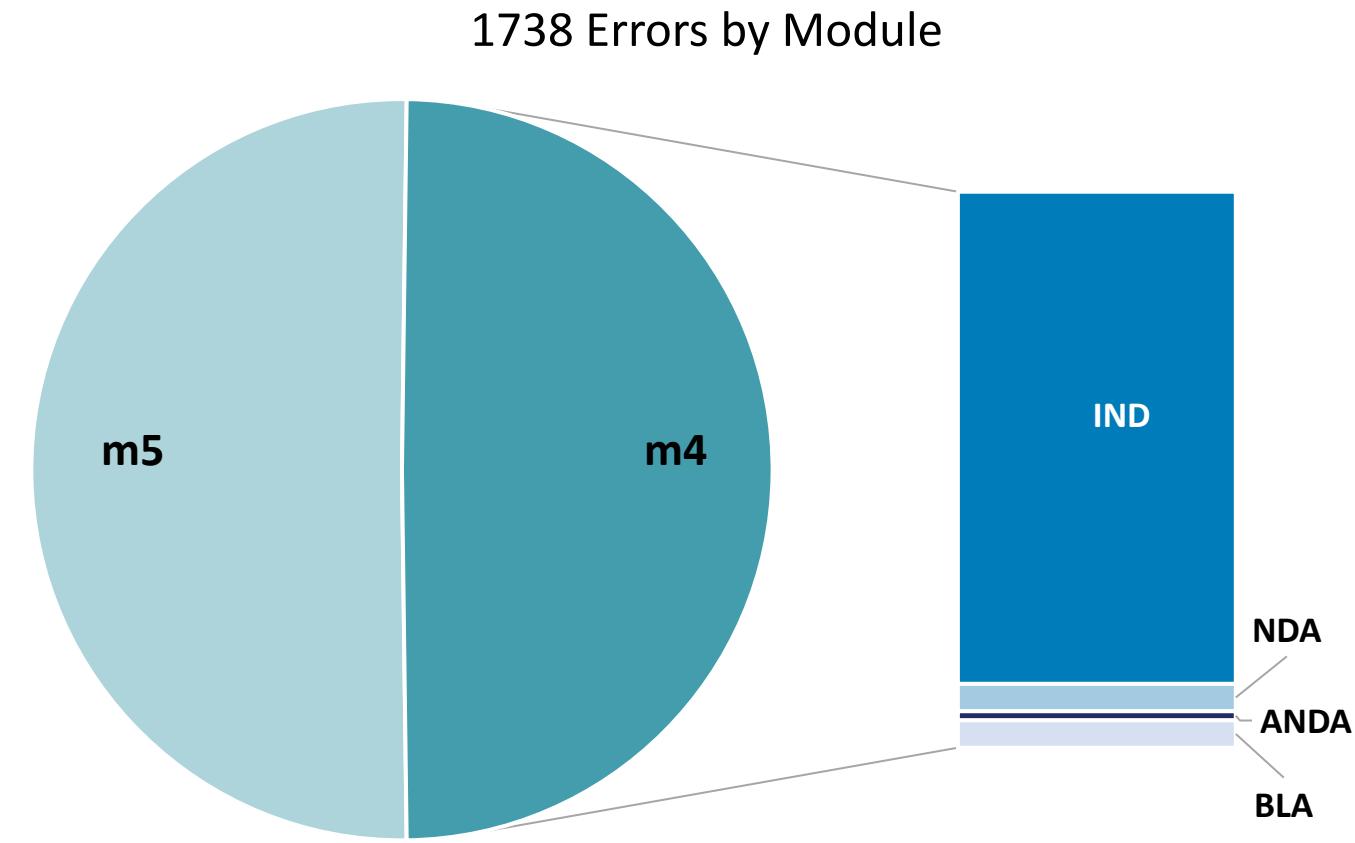
- **123 Submissions** received a 1738 error

- 61 of these submissions were for nonclinical data (m4)

- **Majority** of errors in **IND** nonclinical sections (m4)

- Top m4 sub-sections:

- 4.2.1.3 Safety pharmacology
 - 4.2.3.1 Single dose toxicity
 - 4.2.3.2 Repeat dose toxicity



Common Questions for eSub



What file types can I submit?

Specifications for File Format Types Using eCTD Specifications

Resources:

- ✓ [Specifications for File Format Types Using eCTD Specifications](#)
- ✓ [eCTD Technical Conformance Guide](#)
- ✓ [FDA Regulatory Project Manager](#)
- ✓ esub@fda.hhs.gov

Specifications for File Format Types Using eCTD Specifications

This document provides specifications for submitting file format types using eCTD specifications. It is a list of accepted file types and the eCTD locations in which those file types should be provided.

I. General Information

Documents should be provided in PDF searchable format. Images and other document types should be rendered into PDF format and retain searchable text whenever possible. Additional information related to PDF documents is available in the FDA technical specification FDA Portable Document Format (PDF) Specifications.

II. Acceptable File Formats for Use in eCTD

In most cases, files submitted in formats below should also be provided in PDF format for archival purposes, please reference the "Archive Format Copy" column to see if an alternative version of the document should also be provided.

File Type	File Format	Format Name	Accepted location in eCTD	Archive Format Copy	Permissible Uses
<i>Documents</i>					
	.pdf	Portable Document Format	M1 – M5		
	.doc	Microsoft Word document	M1.14, 1.16 M2.3, M2.7	PDF	ANDA
	.docx	Microsoft Word Open XML document	M1.14, 1.16 M2.3 M2.7	PDF	ANDA ANDA, BLA, NDA
	.txt	Text file	M3 - M5		
	.xls	Microsoft Excel document	M3 – M5	PDF	
	.xlsx	Microsoft Excel Open XML document	M3 – M5	PDF	
<i>Images</i>					
	.bmp	Bitmap Graphics	M1.15		
	.gif	Graphics Interchange Format	M1 - M5		Package Insert in draft labeling

I received a 1734 error. How can I make sure I pass validation?



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Resources:

- ✓ [Study Data Technical Conformance Guide](#)
- ✓ [Technical Rejection Criteria Self-Check Worksheet](#)
- ✓ [eCTD Technical Conformance Guide](#)
- ✓ esub@fda.hhs.gov

Contains Nonbinding Recommendations

Table 6: eCTD Technical Rejection Criteria for Study Data Expectations⁹²

Data Type	Modules & Submodules	Center	Application Type	Study Start Date	Requirement		
Non-clinical	4.2.3.1, 4.2.3.2, 4.2.3.4	CDER	NDA, BLA, ANDA	On/Prior to December 17, 2016	Submit simplified ts.xpt*		
				After December 17, 2016	Comply with CDISC standards		
		CBER	Commercial IND	On/Prior to December 17, 2017	Submit simplified ts.xpt*		
				After December 17, 2017	Comply with CDISC standards		
	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	CBER & CDER	NDA, BLA, ANDA, Commercial IND	On/Prior to March 15, 2023	Submit simplified ts.xpt*		
				After March 15, 2023	Comply with CDISC standards		
			Commercial IND	On/Prior to December 17, 2016	Submit simplified ts.xpt if study contains an xpt dataset (other than ts.xpt)		
				After December 17, 2016	Comply with CDISC standards		
Rejection criteria not applied							

⁹²Rejection criteria will be applied if a study report with one of the three file tags, 'pre-clinical-study-report', 'legacy-clinical-study-report', or 'study-report-body' is included, and/or an xpt file (other than the ts.xpt) is submitted.

⁹² This table only applies to eCTD validation 1734, 1735, and 1736. An STF must be provided for all applications and data types for both CDER and CBER (eCTD validation 1789). For more information, see the *Specifications for eCTD Validation Criteria* found here: <https://www.fda.gov/drugs/electronic-regulatory-submission-and-review/electronic-common-technical-document-etc>

What file-tag should I use?

Resources:

✓ [Valid-Values.xml](#)

✓ [The eCTD Backbone File Specification for Study Tagging Files](#)

✓ [Study Data Technical Conformance Guide](#)

✓ [eCTD Technical Conformance Guide](#)

✓ esub@fda.hhs.gov

ICH M2 EWG

The eCTD Backbone File Specification for Study Tag

This specification has been developed by the ICH M2 Expert Group and maintained by the eCTD Implementation Working Group in accordance with the ICH Process as pertains to the M2 EWG. Change control as it pertains to the eCTD IWG

```
<ectd:study-values xmlns:ectd="http://www.ich.org/ectd" dtd-version="2.2">
  <!-- valid-values v3.0 - November 10, 2016 -->
  <category name="species">
    <valid-value realm="ich" value="mouse"/>
    <valid-value realm="ich" value="rat"/>
    <valid-value realm="ich" value="hamster"/>
    <valid-value realm="ich" value="other-rodent"/>
    <valid-value realm="ich" value="rabbit"/>
    <valid-value realm="ich" value="dog"/>
    <valid-value realm="ich" value="non-human-primate"/>
    <valid-value realm="ich" value="other-non-rodent-mammal"/>
    <valid-value realm="ich" value="non-mammals"/>
  </category>
  <category name="route-of-admin">
    <valid-value realm="ich" value="oral"/>
    <valid-value realm="ich" value="intravenous"/>
    <valid-value realm="ich" value="intramuscular"/>
    <valid-value realm="ich" value="intraperitoneal"/>
    <valid-value realm="ich" value="subcutaneous"/>
    <valid-value realm="ich" value="inhalation"/>
    <valid-value realm="ich" value="topical"/>
    <valid-value realm="ich" value="other"/>
  </category>
  <category name="duration">
    <valid-value realm="us" value="short"/>
    <valid-value realm="us" value="medium"/>
    <valid-value realm="us" value="long"/>
  </category>
  <category name="type-of-control">
    <valid-value realm="ich" value="placebo"/>
    <valid-value realm="ich" value="no-treatment"/>
    <valid-value realm="ich" value="dose-response-without-placebo"/>
    <valid-value realm="ich" value="active-control-without-placebo"/>
    <valid-value realm="ich" value="external"/>
  </category>
  <property>
    <valid-value realm="us" value="site-identifier"/>
  </property>
  <file-tag>
    <valid-value realm="ich" value="pre-clinical-study-report"/>
    <valid-value realm="ich" value="legacy-clinical-study-report"/>
    <valid-value realm="ich" value="synopsis"/>
    <valid-value realm="ich" value="study-report-body"/>
    <valid-value realm="ich" value="protocol-or-amendment"/>
    <valid-value realm="ich" value="sample-case-report-form"/>
    <valid-value realm="ich" value="iec-irb-consent-form-list"/>
    <valid-value realm="ich" value="list-description-investigator-site"/>
    <valid-value realm="ich" value="signatures-investigators"/>
    <valid-value realm="ich" value="list-patients-with-batches"/>
    <valid-value realm="ich" value="randomisation-scheme"/>
    <valid-value realm="ich" value="audit-certificates-report"/>
    <valid-value realm="ich" value="statistical-methods-interim-analysis-plan"/>
    <valid-value realm="ich" value="inter-laboratory-standardisation-methods-quality-assurance"/>
    <valid-value realm="ich" value="publications-based-on-study"/>
    <valid-value realm="ich" value="publications-referenced-in-report"/>
  </file-tag>
</study-values>
```

eCTD v4.0



FDA Implementation Strategy



- Initial release/acceptance for new applications in eCTD v4.0
 - Begin accepting new applications in eCTD v4.0 this Summer
 - When FDA is ready to accept, the agency will update the FDA Data Standards Catalog to reflect the date support begins
 - Provide feedback on sample eCTD v4 submissions
 - [Exists today for eCTD v3.2.2](#)
 - Plans to expand to include v4.0 when FDA begins accepting voluntary eCTD v4.0 submissions
- Future phases
 - Transition of current v3.2.2 applications (Forward Compatibility)
 - Two-way communication

Region	Technical Pilot ¹	Implementation Dates ²	Implementation Documents
FDA, United States	2022 - 2Q 2023 (Completed)	2024 (Voluntary) 2029 (Mandatory)	FDA, United States regional implementation page

This information will be updated biannually based on the progress of ongoing implementation activities.

[\[Updated in January 2024\]](#)

v3.2.2 versus v4.0 validation

Specifications for eCTD Validation Criteria

Number:	1734
Group:	General
Description:	A dataset named ts.xpt with information on study start date must be present for each study in Module 4, sections 4.2.3.1, 4.2.3.2, 4.2.3.4, and in Module 5, sections 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
Severity Description:	High

Number:	1735
Group:	STF
Description:	The correct STF file-tags must be used for all standardized datasets and corresponding define.xml files in Module 4, sections 4.2.3.1, 4.2.3.2, 4.2.3.4, and in Module 5, sections 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
Severity Description:	High

Specifications for eCTD v4.0 Validation Criteria

Number:	US-eCTD4-516
Group:	Study Data
Category:	Business Rule
Validation Criteria/Description:	A dataset named ts.xpt with information on study start date must be present for each study in Module 4, sections 4.2.3.1, 4.2.3.2, 4.2.3.4, and in Module 5, sections 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
Severity Description:	High Error

Number:	US-eCTD4-517
Group:	Study Data
Category:	Business Rule
Validation Criteria/Description:	The correct document type must be used for all standardized datasets and corresponding define.xml files in Module 4, sections 4.2.3.1, 4.2.3.2, 4.2.3.4, and in Module 5, sections 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
Severity Description:	High Error

Resources

- eCTD v3.2.2
 - [Web page for latest version of eCTD guidance, specifications, and validations](#)
 - [eCTD Submission Standards for eCTD v3.2.2 and Regional M1](#)
 - [eCTD Sample Submissions](#)
- Study Data Standards
 - [Study Data Standards Resources](#)
- eCTD 4
 - [FDA's eCTD v4 implementation page](#)