Key guidelines, Tricks and Experiences for PMDA and comparison with FDA and CDE submission

- PharmaSUG 2025 Paper SS-254
- By Ramesh Potluri

Agenda





- Comparison of PMDA with FDA and CDE,NMPA.
- > Standard Review timeline for PMDA.
- Best practices and tips for efficient PMDA submission.
- > Q&A

PMDA CDE

Validation rules for CDISC e-data packages

Pinnacle 21 Enterprise community version

Pinnacle 21 Enterprise and P21 community version

Pinnacle 21 Enterprise, P21 Community version, NMPA engine

PMDA

FDA

CDE

Validation rules for CDISC e-data packages

Pinnacle 21 Enterprise

Pinnacle 21 Enterprise and P21 community version

Pinnacle 21 Enterprise, P21 Community version, NMPA engine

CDISC requirement

Staring from 01APRIL2020, CDISC implementation is mandatory

FDA from DEC 16(NDA & BLA) and DEC2017 for commercial IND

CDE highly recommends now, only global standard moving forward.

PMDA

FDA

CDE

Validation rules for CDISC e-data packages

Pinnacle 21 Enterprise

Pinnacle 21 Enterprise and P21 community version

Pinnacle 21 Enterprise, P21 Community version, NMPA engine

CDISC requirement

Staring from 01APRIL2020, CDISC implementation is mandatory

FDA from DEC 16(NDA & BLA) and DEC2017 for commercial IND

CDE highly recommends now, only global standard moving forward.

Analysis Results Metadata (ARM)

Highly preferable for primary efficacy and safety endpoints

ARM creation is optional

CDE does not require but could assist reviewers.

PMDA

FDA

CDE

Validation rules for CDISC e-data packages

Pinnacle 21 Enterprise

Pinnacle 21 Enterprise and P21 community version

Pinnacle 21 Enterprise, P21 Community version, NMPA engine

CDISC requirement

Staring from 01APRIL2020, CDISC implementation is mandatory

FDA from DEC 16(NDA & BLA) and DEC2017 for commercial IND

CDE highly recommends now, only global standard moving forward.

Analysis Results Metadata (ARM)

Highly preferable for primary efficacy and safety endpoints

ARM creation is optional

CDE does not require but could assist reviewers.

Translation Requirements

Translation is not required for e-data package but required for queries.

Translation is not required

Translation required for e-data packages

PMDA

FDA

CDE

Validation rules for CDISC e-data packages

Pinnacle 21 Enterprise

Pinnacle 21 Enterprise and P21 community version

Pinnacle 21 Enterprise, P21 Community version, NMPA engine

CDISC requirement

Staring from 01APRIL2020, CDISC implementation is mandatory

FDA from DEC 16(NDA & BLA) and DEC2017 for commercial IND

CDE highly recommends now, only global standard moving forward.

Analysis Results Metadata (ARM)

Highly preferable for primary efficacy and safety endpoints

ARM creation is optional

CDE does not require but could assist reviewers.

Translation Requirements

Translation is not required for e-data package but required for queries.

Translation is not required

Translation required for e-data packages

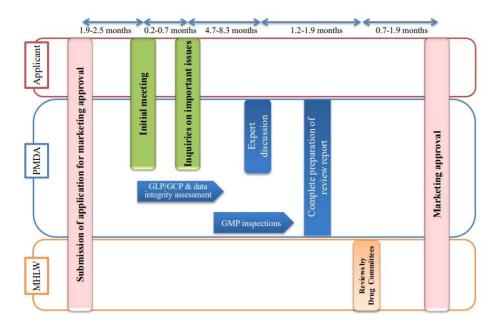
Causality/
Relationship
Definitions

Causality categories may include related/not related, probable/possible/unlikely/unrelated.
Only 'unlikely' is considered 'not related

Considering 'Unlikely related' as 'not related' is accepted by FDA.

Follows Causality/relationship definitions as FDA

STANDARD REVIEW TIMELINE FOR NEW DRUG APPLICATION FOR PMDA SUBMISSION



MHLW- The Ministry of Health, Labour and Welfare (MHLW) is a government ministry in Japan responsible for overseeing health, labor, and welfare policies.



Best practices and tips for efficient PMDA submission





DATA VALIDATION RULES

The PMDA website (New Drug Review with Electronic Data | Pharmaceuticals and Medical Devices Agency)

PMDA performs **independent validation** on submitted e-data

A **unified set of validation rules** must be applied for PMDA submissions across all e-data packages that comply with CDISC standards (SDTM/ADaM)

Data packages submitted to the FDA must be **revalidated against PMDA rules**.





UNDERSTANDING THE SCOPE OF STUDIES FOR SUBMISSION



- The regulatory team must collaborate with PMDA to define the required study electronic data packages.
- Categorize the Pivotal studies of the PMDA submission.
- Identifying the core focus of the e-data packages.
- Include integrated safety and efficacy analysis when applicable. Clear focus and scope aid in task assignment and management.

Step1

Handling NON-

CDISC STUDIES

Categorize electronic data packages based on their compliance with CDISC standards.

Step2

Sponsors are advised to seek consultation with the PMDA regarding non-CDISC data packages

Step3

The "Explanation of Electronic study Data(Form B)" should be utilized during consultation to clearly articulate exemption requests

Step4

For Clinical study data submissions that do not adhere to CDISC standards, sponsors are required to provide case report form(CRFs), analysis datasets, analysis programs and comprehensive dataset definition documentation.

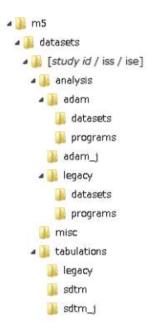
Step5

Archive non-CDISC complaint clinical study data within the legacy folder in accordance with section 3.5 of the technical conformance guide.

IDENTIFYING CDISC AND NON-CDISC STUDIES



M5 folder structure





ARM (Analysis results metadata)

Traceability

• Arm includes metadata for key analysis results, ensuring traceability to data and methods. It is typically in the define.xml file for ADaM datasets.

Pivotal analysis

 ARM is highly preferred for pivotal studies and for non-pivotal analyses, ARM is not required. Providing the relevant ADaM datasets and corresponding analysis programs is sufficient

Primary efficacy and critical safety

• The FDA views ARM as optional, While PMDA highly prefers it for Primary safety and critical efficacy of pivotal analysis.

Replication

• ARM helps PMDA reviewers understand the derivation of each results and facilitate analysis replication if needed.

INSPECTION READINESS



 Inspection preparation should be coordinated with the quality function and focus on the documentation based on Good Clinical Practice (GCP) BIMO list. Mock interviews are highly recommended to prepare for the real inspection.

CONCLUSION

A thorough understanding of PMDA regulatory requirements, early and meticulous planning, proper identification of CDISC compliance, clear documentation of analysis datasets and programs, and detailed preparation of Analysis Results Metadata (ARM) are essential elements for an efficient submission. By following these best practices and proactively preparing for potential inquiries, regulatory and programming teams can significantly streamline the PMDA submission process, facilitating timely approvals and enhancing overall submission quality.







REFERENCES

- > [1] Clinical Data Interchange Standards Consortium. "CDISC website." 2020. Available at https://www.cdisc.org/
- [2] FDA Study Data Technical Conformance Guide, 2024. https://www.fda.gov/industry/fda-resources-data-standards/study-data-standards-resources
- [3] PMDA Technical Conformance Guide: PMDA Technical Conformance Guide
- ➤ [4] Procedures for Preparation of Explanation of Electronic Study Data (Form B) https://www.pmda.go.jp/files/000247164.pdf
- [5] Question and Answer Guide Regarding. https://www.pmda.go.jp/files/000267939
- > [6] CDE Technical Guidelines: CDE Technical Guidelines
- ▶ [7] China's Center for Drug Evaluation of the National Medical Products Administration Commits to CDISC Standards China's Center for Drug Evaluation of the National Medical Products Administration Commits to CDISC Standards | CDISC



- ➤ [8] e-Submissions key differences of FDA and PMDA. https://pharmasug.org/proceedings/2021/EP/PharmaSUG-2021-EP-146.pdf
- ➤ [9] Challenges and solutions for e-data submission to PMDA even after submission to FDA. https://pharmasug.org/proceedings/2020/SS/PharmaSUG-2020-SS-150.pdf[10] Best Practices for the Submission of Data in Japan https://phuse.s3.eu-central-1.amazonaws.com/Deliverables/Optimizing+the+Use+of+Data+Standards/WP-071.pdf
- ➤ [11] International Conference On Harmonisation Of Technical Requirements For Registration Of Pharmaceuticals For Human Use https://www.pmda.go.jp/files/000156499.pdf
- ➤ [12] SA03 Demystifying Submissions To NMPA China https://phuse.s3.eu-central-1.amazonaws.com/Archive/2024/Connect/US/Bethesda/PRE_SA03.pdf
- ➤ [13] On the Standard Review Timeline for New Drug Applications https://www.pmda.go.jp/files/000153667.pdf
- > [14] Revision of Notification on Handling of Submission of Electronic Study Data for New Drug Applications https://www.pmda.go.jp/files/000267942.pdf



CONTACT INFORMATION

Your comments and questions are valued and encouraged. Contact the authors at:

Ramesh Potluri, Servier Pharmaceuticals

LinkedIn: www.linkedin.com/in/ramesh-potluri-a81bb6197

Work Email: ramesh.potluri@servier.com



THANK YOU

