Pharmacopoeial Discussion Group Meeting

Meeting Highlights

3–4 October 2023 Hyderabad, India Hosted by the USP

1. Future of the PDG

The PDG has been working on three areas considered as key to ensuring the future of the Group.

1.1. Pilot phase for opening up to other pharmacopoeias

The PDG welcomed the Indian Pharmacopoeia Commission (IPC) as a member during the meeting (link). The addition of the IPC, a first in the 34-year history of the PDG, facilitates the reach and enhances the impact of pharmacopoeial standards harmonisation. The PDG commenced discussions on the lessons learned from the one-year pilot for expansion (link), including what went well, items that need attention and challenges from the IPC perspective. It also initiated a review of the operational impact of adding an additional pharmacopoeia and discussed options for the future strategy, structure, and organisation of the PDG. This was necessary to ensure the PDG continues to perform efficiently and effectively in the future. Plans for the next steps in the PDG's expansion would be shared in the future.

1.2. Regulatory engagement

The PDG continued discussions on how to improve the engagement of regulators, and the EP, IPC, JP and USP reported on the current interactions with their respective regulators and the important topics of the moment. As the host of the meeting, the USP gave a detailed explanation of interactions with its own regulator, the US FDA, to allow the other members to deepen their understanding of the unique regulations in the US. This included an overview of FDA-USP interactions and discussions on the government liaison program, the FDA review process for the USP Pharmacopeial Forum and the role of industry. It was agreed to continue the open dialogue within the PDG to further global understanding of the challenges to pharmacopoeial harmonisation resulting from differences in each member's regulatory environment. As the host of the next PDG meeting, the EP would provide a detailed explanation of the European regulatory landscape for the first time as part of this engagement topic at the next annual meeting.

2. ICH Q4B maintenance

One of the primary outcomes of the meeting was the follow-up on the maintenance work of the ICH Q4B annexes on pharmacopoeial harmonisation (link). The PDG reviewed and updated the ICH Q4B Guideline and Annex 5 for the ICH SOP at the meeting. These documents would be presented at the 2023 Fall ICH meeting in Prague. PDG would also present a timeline of the next steps for the work on the Q4B annexes based on the results of the proof-of-concept study.

3. Harmonisation topics signed off

Individual work programme sign-offs were handled by correspondence before or soon after the 2023 annual meeting. As ever committed to transparency, each PDG member would publish the full signed off texts on its own website (links: <u>general</u> chapters, <u>monographs</u>).

3.1. General chapters

3.1.1. Corrected

3.1.1.1. Q-05b Microbial contamination (EP)

The PDG signed-off on the correction of this text to clarify the reading procedure to be performed when verifying the suitability of the membrane filtration method and adding the 's' to reflect the plural of the word 'moulds' in 'Interpretation of the results'.

3.1.1.2. G-02 Bulk density and Tapped density (EP)

The PDG signed-off on the correction of this text to modify the dimensions given in Figure 3 from " $3 \text{ mm} \pm 0.2 \text{ mm}$ " to 14 mm $\pm 2 \text{ mm}$ ".

3.1.1.3. G-20 Chromatography (EP)

The PDG signed-off on the correction of this text to clarify the internal diameter for the adjustments of chromatographic conditions (isocratic and gradient elution).

3.1.1.4. G-21 Dynamic light scattering (JP)

The PDG signed-off on the correction of this text to correct the units in the Stokes-Einstein equation in Section 2: Principle, and in Section 7: Glossary (i) and (v).

3.2. Other texts

3.2.1. PDG Statement of Harmonisation Policy and PDG Working Procedure

PDG signed off on a revised PDG Statement of Harmonisation Policy and PDG Working Procedure to add IPC to the PDG member description.

3.2.2. PDG Confidentiality Commitment

On joining the PDG, the IPC signed the PDG confidentiality commitment for members that supported the PDG's effort to harmonise excipient monographs and general chapters in a confidential manner. The commitment for members had previously been signed by the three other participating pharmacopoeias.

3.2.3. PDG information sharing

The PDG launched a new internal online collaboration tool that met the current document storage, collaboration, information sharing and discussion needs of the involved pharmacopoeias.

4. Hot topics for consideration by the PDG

4.1. Discussion on how the PDG can collaborate on topics of high interest

4.1.1. Nitrosamines

The PDG discussed the challenges related to nitrosamines impurities and possible approaches to the issue, with each pharmacopoeia sharing its status and current thinking on the topic. This also included a shared journey on how nitrosamine-related regulations and risk assessment measures were evolving. The PDG agreed to form a subteam to identify the scope of collaboration and possible alignment for the future.

5. PDG work programme

5.1. Discussion/decision on the way forward for topics requiring specific emphasis

5.1.1. General chapters

5.1.1.1. Bacterial endotoxin test (BET) / recombinant Factor C (rFC) (EP) Due to the high importance for pharmacopeias to provide sciencebased non-animal derived alternatives to the use of the Limulus Amebocyte Lysate (LAL) reagent in the harmonised test for bacterial endotoxins, the PDG discussed each member's approach of using recombinant reagents (both rFC and rCascade Reagent) as alternative methods for endotoxin testing with the aim of aligning on methods used.

5.1.2. Technical teleconferences

Held to resolve technical challenges that require further discussion, and/or expedite decisions on how to push forward difficult topics.

5.1.2.1. G-07 Elemental impurities (USP)

The USP, as co-ordinating pharmacopoeia (CP), reviewed the technical teleconference that took place on 13 April 2023 and discussed the next steps. The goal of this meeting was to reach alignment on the approach for the Precision criteria. All the major issues had been addressed in the Stage 3 draft with only residual comments remaining.

5.1.2.2. E-32 Povidone and E-54 Copovidone (USP)

The USP, as CP, updated the PDG on the technical teleconference that took place on 31 August 2023. The aim of the meeting was to reach agreement on the major revision to the Assay from the current Kjeldahl test. Additional testing would be performed on the proposed GPC-UV test for the Assay to determine viability and specifications would be set based on the available data. The general goal remained to remove the Kjeldahl test.

5.1.2.3. E-62 SWFI (USP)

The USP, as CP, provided an update on the timelines and path forward on this revision for the technical teleconference that took place on 26 September 2023. The proposal to replace the Oxidizable Substances test with Total Organic Carbon (TOC), establish TOC limits and align on the TOC method was discussed.

6. Any other business

6.1. Improving the pharma environmental footprint

The PDG provided updates on how each of its members were striving to create more sustainable test methods and address environmental concerns through modernisation. Examples and case studies of reducing the use of toxic / hazardous solvents and reagents and increasing efficiencies with technologies were shared. Possible ways of extending these efforts beyond the pharmacopoeias to enhance their environmental impact were discussed, including an alignment on a joint way ahead supporting environmental stewardship through pharmacopeial standards. Pharmacopoeias outside the PDG would be contacted regarding the PDG's aligned stance on the need to facilitate environmental stewardship and sustainability, and to support improvements in the pharma environmental footprint, moving forward.

7. Next Meeting

The next annual meeting will be hosted by the EP, on 1–2 October 2024 in Strasbourg. The PDG will hold an open stakeholder meeting on 3 October 2024.