ICH Q3D Expert Working Group: Update on Cutaneous and Transdermal Routes

Tim McGovern
EWG Rapporteur
FDA, US

November 2, 2017

International Council for Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use

Background Information

- **Original Q3D Guideline finalized December, 2014**
- **Established PDEs for 24 EIs for oral, parenteral and inhalation routes of administration**
- **Topical/dermal products not specifically included**
  - Not in original business plan
  - Topic introduced during original discussions (but not pursued)
- **General guidance provided on how to develop PDEs for "other routes of administration"**

Maintenance Process

- **A Maintenance Procedure applies to revision of the Q3D Guideline for Elemental Impurities.**
- **These changes include the incorporation of Permitted Daily Exposure (PDE) for new elemental impurities(EI)/routes of administration and revising the PDE for EI already listed in Q3D as new toxicological data for EI becomes available.**
- **Products administered on skin and its appendages (e.g., hair, nails) remain the largest area where PDEs for EIs have not been established.**

From ICH website: http://www.ich.org/products/guidelines/quality/article/quality-guidelines.html

New concept paper

- **Concept paper developed to address cutaneous and transdermal route of administration**
- **Products could include both prescription and over-the-counter products**
- **Concern that different levels of EIs could be deemed acceptable by regulators depending on information submitted**
- **Beneficial to develop PDEs for this route to continue harmonization process**

Maintenance Process

- **In September 2016, the ICH Management Committee approved the revision of the ICH Q3D Concept Paper to include PDEs for the cutaneous and transdermal Route of Administration to continue the process of harmonisation, where necessary.**
- **This leads to the establishment of an Expert Working Group (EWG) to develop PDEs levels for all 24 EI included in the Q3D Guideline for products administered by the cutaneous and transdermal routes of administration.**

From ICH website: http://www.ich.org/products/guidelines/quality/article/quality-guidelines.html

Issues to be resolved

- **Determine which EIs will need to have a safety based PDE**
  - Possible that not all EIs will need to have a cutaneous and transdermal PDE
- **Use methodology in current ICH Q3D guideline to develop the new PDEs as appropriate**
- **Anticipated to primarily involve safety assessors of the EWG**

EWG Work Plan (August, 2017)

- **Schedule teleconferences began Spring, 2017**
  - Initiate discussions on best approaches for PDE development
- **Meet in Geneva November, 2017**
  - Review progress to date and continue discussions
- **Finalize Step 2 document in May, 2018**
  - Publish for public comment
- **Step 3 signoff/Step 4 in May, 2019**

Key challenges

- **Dealing with lack of data for dermal absorption of EI**
- **Addressing absorption through non-intact skin**
- **Addressing products that aim to enhance dermal absorption**
- **Identifying appropriate point of departure (oral vs parenteral vs inhalation)**
- **Addressing drug products intended for transdermal delivery**

ICH
harmonisation for better health

Thank You!

International Council for Harmonisation of Technical Requirements
for Registration of Pharmaceuticals for Human Use