

**Food and Drug Administration (FDA)**  
**Center for Drug Evaluation and Research (CDER)**  
**Public Virtual Scientific Workshop**  
**Morphine Milligram Equivalents: Current Applications and**  
**Knowledge Gaps, Research Opportunities, and Future Directions**  
**June 7-8, 2021**

**Questions for Discussion**

- 1) Discuss any potential knowledge gaps in the science underlying MMEs across various applications.
  - a. Drug Considerations
  - b. Patient-Level
    - i. analgesia/opioid rotation/conversion
    - ii. risk predictor
    - iii. other
  - c. Population-Level/Public Health
    - i. risk predictor
    - ii. research
    - iii. other
- 2) Discuss types of studies and designs that may be helpful to address knowledge gaps in the science across various applications.
- 3) Discuss additional factors that should be considered to inform/supplement the use of MMEs, at a patient-level and/or population-level across the various applications.
- 4) Given the availability and variability of multiple MME conversion tables, analytical files, online calculators, references, and tools, discuss the benefits and limitations of a common MME reference table(s) (gold-standard) vs. multiple reference tables.
  - a. Discuss if a gold-standard reference table(s) is necessary
  - b. Discuss for what purpose(s) is it possible/feasible
- 5) Discuss calculation of MMEs (MME per day, etc.).
  - a. What are the challenges and knowledge gaps in the calculation of MMEs for patient care decisions?
  - b. Discuss whether different MME conversion factors or algorithm definitions are needed for certain patient populations (e.g., opioid-naïve patients, patients with current opioid use), for use at the patient-level or aggregate/population level.
- 6) What are other gaps in the science that haven't been discussed; where and how can research enhance/refine/develop knowledge about MMEs to support the varying applications and uses?
  - a. How should novel opioids and/or analgesics be considered in this paradigm?
- 7) Based on previous discussions, prioritize the research to fill the identified gaps.