A US Regulator's View on Abuse Deterrent Formulations of Opioids

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Disclosure Statement

I have no financial relationships with proprietary entities that produce health care goods and services

The opinions and information in this presentation are my own and do not necessarily reflect the views and policies of the FDA

Over-Arching Public Health Goals of FDA Work on Opioids

- Provide appropriate access to pain treatments for patients, including opioids drugs
- Reduce the misuse and abuse of prescription opioids

FDA Work To Support Goals*

- **Improving drugs used to treat pain**
  - **Abuse-deterrent formulations of opioids**
  - New classes of pain drugs that lack abuse risk
- **Improving safe use of opioids**
  - Education of prescribers & patients to reduce risk of abuse through the ER-LA Opioid REMS
    - Part of larger work in post-marketing surveillance to understand use of opioids
  - Supporting research into best approaches to pain treatments, including opioids
- **Improving drug treatments for opioid abuse**
- **Improving treatment of opioid overdose**
  - Naloxone autoinjector approval

* http://www.fda.gov/Drugs/DrugSafety/InformationbyDrugClass/ucm338566.htm

Twin Goals for Abuse Deterrent (AD) Formulations of Opioids

- Incentivize the development of opioid medications with progressively better abuse-deterrent properties and support their widespread use
- Assure appropriate development and availability of generics, reflecting their importance in US healthcare

FDA Tools to Support AD Formulation Development

- **Scientific Research**
- **Regulatory Activities**
  - Decisions on applications
  - Sponsor discussions as a part of development
- **Guidances**
  - Draft Guidance on developing AD formulations of opioids issued January, 2013
  - Pending Guidance on generics development and testing
- **Public Discussion and Comment**
  - Public meetings, including meeting held October 30, 31, 2014
  - Comments on draft Guidance
  - Citizen Petitions

Work to Support Development of Abuse Deterrent Opioids

ABUSE DETERRENT OPIOIDS GUIDANCES AND MEETING

Focus of Meeting Oct 30, 31, 2014: Public Input

- **FDA sought input in areas relevant to AD formulation development:**
  - Comments from open public hearing
  - Presentations and comments from industry, academics, government reps, and patient advocates
  - Panel discussions
  - Docket submissions
  - **"…(S)upport the development of opioid medications with progressively better abuse-deterrent properties"**

Day One: Development and Evaluation of Abuse-Deterrent Opioid Formulations

- **Manufacturing and formulation science related to abuse-deterrent formulations**
  - FDA manufacturing experience with AD formulations
- **Questions about potential approaches to assessing the *in vitro* performance of AD formulations of opioids, both generic and brand-name**

Day Two: FDA Approach to the Overall Assessment and Regulation of AD Opioids

- **Discussion of potential FDA activities to support incremental AD formulation development and broad use**
  - Giving a labeling claim for specific product
  - Also blocking the approval of other drugs that lack the same (or better) abuse-deterrent properties
  - Also, taking action against existing products with the same opioid
  - Also, taking action against existing products, including those with different opioids

Important Outcome from Meeting: Continued Input to Inform AD Guidances

- **Guidance for Industry: Abuse-Deterrent Opioids** – Evaluation and Labeling
  - Draft released Jan 2013
  - Final Guidance imminent
- **Draft guidance to support development of AD generics**
  - Work ongoing

Work to Support Development of Abuse Deterrent Opioids

EMBEDA AND HYSINGLA

New Products with Abuse-Deterrent Features: Embeda

- Morphine sulfate and naltrexone hydrochloride
- Embeda has properties that are expected to reduce, but not totally prevent, abuse of the drug when crushed and taken orally or snorted

New Products with Abuse-Deterrent Features: Hysingla ER

- Hydrocodone bitartrate
- Hysingla ER has properties that are expected to reduce, but not totally prevent, abuse of the drug when chewed and then taken orally, or crushed and snorted or injected

Points About Recent Approvals

- Utilized principles discussed publically and in the draft Guidance where appropriate
- Participating in ER-LA Opioid REMS
- Required post-marketing work to assess impact of new formulation on abuse being studied

Points About Recent Approvals

- Reflects important new work developing new AD formulations of opioids
  - Around 30 products under IND, most extended-release, long-acting opioid formulations
  - Work to date has often focused on use of crush/extraction-resistant and aversion technologies but many new approaches being explored
- Similar levels of interest in generics development
  - Reinforces importance of guidance in this area

Summary

- FDA is working across many areas to
  - Improve the use of opioids
  - Preserve appropriate access to pain treatment
  - Encourage the development of new products in the area of pain treatment that will offer improved safety and efficacy
- Within this broadened range of activities, our regulatory mission remains at the heart of FDA role in opioids
  - FDA will act within its authorities, based on science, in support of our public health mission