

## Track 1: Novel Approaches to Improve Treatment Outcomes and Patient Safety

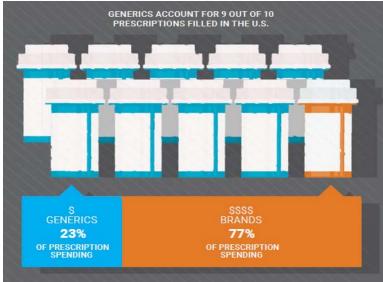
# Session 1: Complex Generics-Challenges and Opportunities

4<sup>th</sup> FDA/PQRI Conference on Advancing Product Quality Apr 9-11<sup>th</sup>, 2019

Moderator: Wenlei Jiang, FDA

## **Generic Drugs in the United States**

#### **Overall Drug Products**



#### However,

Topical drug products with generics available < 40% Ophthalmic products with generics available < 50%

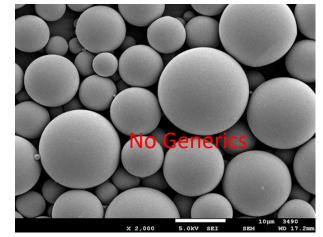
#### Orally inhaled drug products





1 Generic

#### Poly-(lactic-co-glycolic acid) (PLGA) microspheres



https://accessiblemeds.org/sites/default/files/2018\_aam\_generic\_drug\_access\_and\_savings\_report.pdf





## **Complex Drug Products**

## According to the **GDUFA II commitment letter**, complex drug products generally include products with

1) complex active pharmaceutical ingredients (APIs);

- 2) complex formulations;
- 3) complex routes of delivery;
- 4) complex dosage forms;
- 5) complex drug-device combination;

6) other products where there is complexity or uncertainty concerning the approval pathway or possible alternative approach would benefit from early scientific engagement.

#### GDUFA: Generic Drug User Fee Amendments

https://www.fda.gov/downloads/forindustry/userfees/genericdruguserfees/ucm525234.pdf





## Today's Agenda

Moderator Introduction:

Wenlei Jiang, U.S. FDA

Presentations:

1. Considerations for Biologics and Non-biological Complex Drugs

Daan Crommelin, Utrecht University

2. An Overview of Complex Drug Substances and Complex Formulations – A Quality Perspective

Katherine Tyner, FDA

3. Overview of Complex Generics – Regulatory Perspective

Jeff Jiang, FDA

#### Panel Discussion:

Daan Crommelin, Utrecht University Katherine Tyner, FDA Jeff Jiang, FDA



