



Your Generics & Biosimilars Industry

Demonstrating Sameness Between U.S. Reference Standard
and Foreign Reference Standard

May 1, 2019

Agenda

Research Request



Global Regulator Perspectives



Recommendations



Benefits of the Research Outcome



Summary



What is the Research Request?

Conduct research to establish criteria that could be used as a basis to demonstrate sameness between the U.S. Reference product to the Foreign Reference product.

Review of Global Regulators Perspective on Demonstrating Sameness

Both Health Canada and Therapeutic Goods Administration (TGA-Australia) allow the use of Foreign Reference standards for products that meet the general criteria.

Registered in a country with a comparable regulatory system

Marketed in the country of origin by the same innovator, company, or corporate entity which markets same product in their country

Should not be a narrow therapeutic index drug or require careful patient monitoring

Criteria for Demonstrating Sameness by TGA-Australia

Demonstrating sameness by:

- Assessment/comparison of labeling and product information
- C of As for both reference products
- Comparative dissolution profiles in at least 3 media
- Same nominal quantity of drug substance
- Same size, weight and type of coating
- Physicochemical evidence products are quantitatively identical

Criteria for Demonstrating Sameness by Health Canada

Demonstrating sameness for solid oral, immediate-release dosage form:

- Assessment/comparison of labeling
- Identical amount of the identical medicinal ingredient
- C of As for both reference products
- Medicinal ingredient is considered to have high solubility
- Same color, shape, size, weight, type of coating and scoring configuration
- Non-medicinal ingredients qualitatively the same
- Comparative dissolution profiles in 3 media

Criteria for Demonstrating Sameness by Health Canada

Demonstrating sameness in Canada's immediate-release orally inhaled dry powders:

- Assessment/comparison of labeling
- Identical amount the identical of medicinal ingredient
- C of As for both refence products
- Formulation: non-medicinal ingredients are qualitatively and quantitatively the same ($\pm 5\%$ of each excipient)
- Physicochemical properties and in-vitro performance essentially the same ($\pm 10\%$)
- Device Attributes: qualitative and quantitative analysis of physical and operating characteristics of the devices

Recommendations

Conduct research to establish criteria that could be used as a basis to demonstrate sameness between the U.S. Reference product to the Foreign Reference product for following dosage forms:

Solid Oral Immediate-release

Solid Oral Modified-release

Complex Drug Products :

- Complex APIs
- Complex formulations
- Complex routes of delivery
- Complex dosage forms

Benefits of the Research Outcome

Public Safety

Timely Development & Approval of Generics

Increased Access to Affordable Medications

Support Global Development

Summary

In order to improve patient access to high quality affordable generic drugs:

- This research outcome can provide industry with guidance on how to demonstrate sameness between U.S. Reference standard and Foreign Reference standard.
- Revision of regulations could be envisioned based on the outcome of the research to allow for the use of Foreign Reference standards to conduct a bioequivalence studies to support generic drug approval in the U.S.

THANK YOU

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Apotex