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Generic + Biosimilar Medicines Conference

Emerging Technologies: How Can the Generic Industry Participate and Benefit?

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Background & Context

- US FDA : PAT and Pharmaceutical Quality for 21st Century
- Sandoz: Biosimilars and Complex Generics
- Advisor to several generic companies, Apotex, Dr. Reddy's,.....
- First Generic Scientific Dispute Resolution: Emerging Technology
- Advisor and shareholder Continuous Pharmaceuticals
- NIPTE's "New Prior Knowledge" Efforts



Statement of the Problem

- How can generics participate and benefit?
 - Very few generics can participate and benefit as brands do
 - Most will need support
 - Contract Research, Development & Manufacturing
 - Public-private partnerships
 - Certain academic consortia such as NIPTE
 - What type of support
 - Technology applications for product & process development
 - Regulatory applications
 - Education, training and certification
 - What FDA can do?
 - Address legacy issues and opportunities for pre ANDA meetings
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Making Progress

- We cannot keep ignoring the legacy challenges
 - Initial conditions and Attractors
 - Underestimating complexity
 - Pivotal “Bio” vs Therapeutic Equivalence as a system
 - Outdated regulations and definitions
- We can establish public-private partnerships
 - NIPTE has initiated discussion with policymakers



Summary

- Few, if any, generic companies are well equipped to benefit from ET
- ET can come home only if we build target partnerships to overcome legacy hurdles and reduce complexity
- NIPTE – 17 collaborating American Universities is part of the solution



Thank You

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