



Global BioPharmaceutical Resources, Inc.

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Quality and Compatibility Issues with Glass Containers for Pharmaceutical Packaging
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Wednesday February 8, 2012

7:30am-8:30am **Continental Breakfast & Registration**

- 8:30am-10:30am
- 1. Overview of Glass Packaging**
 - 2. Composition, Structure, Advantages/Disadvantages of Glass**

Description: An overview and high-level view of glass as a material and glass packaging components such as vials, syringe barrels, cartridges, ampoules, and bottles.

10:30am-11:00am **Refreshment Break**

- 11:00am-12:30pm
- 1. Glass Manufacturing and Handling**
 - 2. Glass – Drug Interactions: Extractables**

Description: A description of the glass & glass component manufacturing processes and a discussion of the interactions of glass with drug product solutions.

12:30pm-1:30pm **Lunch Break**

- 1:30pm-3:00pm
- 1. Glass – Drug Interactions: Delamination**
 - 2. Glass Standards and Compendial Tests**

Description: An update on the recent rash of reported occurrences of glass delamination. The causes of delamination and impact on packaging will be reviewed. Glass standards & tests that impact specifications will also be outlined.

3:00pm-3:30pm **Refreshment Break**

- 3:30pm-5:00pm
- 1. Glass Strength & Fracture Analysis**
 - 2. Standards, Dimensions, and Defects**

Description: Glass vial defects, using PDA TR 43, will be reviewed; glass strength and fracture analysis will be introduced and international standards will be discussed.

5:00pm-5:30pm **Panel discussion including Q & A**