USP General Chapters and Their Impact on Industry

Industry Perspective

Introduction

- General Chapters' benefits to Industry
- Aspects unique to animal drugs
- Recent industry concerns
- Future topics of interest to the industry

Benefits to Industry

- Provides recognized standards for use in the domestic and international markets
- Recognized by FDA
- Agreement with FDA Guidance Documents
- Pre-publication review and public comments
- Applied uniformly to industry
  - Human vs. non-human
  - Branded vs. generic

Animal Drugs Are Unique

- Multiple species
- Variety of Indications
- Dosages
- Production classes

Some Recent Examples

INDUSTRY CONCERNS

USP <467> Residual Solvents

a case study

- Initial confusion over application of the standard to compendial items only vs. all animal drugs
- “Uniqueness” of animal drugs
- Differences in data requirements between FDA divisions
- Supply chain / vendor issues
- Implementation costs

General Chapters vs. Monograph

- Discussion between Industry and USP during revision process
- Industry preference for General Chapter
- Although generally applicable, industry thought the standard would be applied to compendial items only
- Also applied to existing, previously approved products

Unique Aspects of Animal Drugs

- Multiple species
- Multiple production classes
- Dosage forms
- May not have set dosages
- May use non-standard, non-compendial ingredients in manufacture and formulation

Differences Between FDA Divisions

- Demonstration of compliance differences
  - CVM and human generic drug review groups required submission of data
  - Human branded drug review groups used an inspectional approach
- Made for internal difficulties in industry

Vendor/Supply Chain Issues

- Sponsors requested data from suppliers regarding solvents used and COAs indicating solvent levels or <467> compliance
- Reluctance from vendors
  - IP issues
  - Small part of vendor's business
  - cGMP or document modification issues

Implementation Costs

- An example – one product, in 2 presentations
  - First year cost $100,000
    - Indirect costs – regulatory submissions, vendor contacts, process engineering assessments, locating and contracting with outside laboratory
    - Method development/validation/verification
    - Testing
  - Ongoing cost $25,000 annually
    - Surveillance testing

The Bottom Line

- Multiple rounds of submissions
- Additional cost
- No resolution of quality issues in the eyes of the industry or our customers
- Industry was prepared to repeat the process for Elemental Impurities and Particulate Matter, but FDA's petition for exemption rendered this unnecessary

Additional Areas of Concern

- Method validation vs. verification, <1225> and <1226>
  - Not always clear what the differences are or when one is acceptable vs. the other
- Proving that dissolution methods are discriminating
  - FDA recommendations seem to be more proscriptive than <1092>

Summary

- USP General Chapters benefit industry most when unique aspects of animal drugs are taken into account, FDA is in agreement on data required to demonstrate compliance, and industry is able to realize efficiencies or resolve questions
- Industry is hindered when requirements in the General Chapters are not clear, do not account for unique aspects of treating animals, or when FDA's interpretation differs from industry's understanding