Session 3 – GMP and Market Control:

Control of the market place

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5th Global Animal Health Conference and Workshop 2016

Improved Market Access for Authorised Veterinary Medicines – The Asian Perspective

Organising Committee:

BILL & MELINDA GATES foundation · EUROPEAN MEDICINES AGENCY SCIENCE MEDICINES HEALTH · FDA · OIE WORLD ORGANISATION FOR ANIMAL HEALTH · GALVmed Protecting Livestock – Improving Human Lives · INFAH · Health for Animals global animal medicines association · DIA DEVELOP INNOVATE ADVANCE

Control of the market place

- Importance of a regulatory system that enforces control of the market place for veterinary products:
  - Protects consumers, animal health, farmers, public health, food supply
  - Provides level of consumer confidence
    - Promotes consumer trust
    - Encourages/supports economic growth

Control of the market place

- Many ways a regulatory authority can implement market control
  - Import/export controls
  - Finding and acting on counterfeit products
  - Pharmacovigilance

Post-authorization monitoring is just as important as pre-market review!

Keys to success

- Implementing a set of **reliable, robust, predictable, transparent** regulatory systems
- Communication is vital so everyone knows what to expect
  - Unpredictability and inconsistencies hinder cooperation; locally, nationally, and internationally
- Can be organized through:
  - Local laws/regulations
  - International guidance/agreements
  - Industry pharmaceutical organizations

Imports

- Import control:
  - Provides awareness of the imported products
  - Provides awareness of the national regulations which apply to those imported products

Main benefit:
Minimal delay at the port of entry

Imports

- Imports aren't just final marketed products. Also could include
  - Bulk API
    - Vast majority of bulk API for national pharmaceutical manufacturers may be from international imports

For bulk API imports, consider:

- Is approval of the imported drug in progress?
- Is the API manufacturer an approved source under an approved application?
- Is the local manufacturer an approved company under an approved application?

Understanding the supply chain is key

Imports

- Control at the port of entry – might be through different regulatory sectors (may involve tariffs, fees, bonds, etc).
- Consistent training of investigators at ports is crucial for success
- Aspects to consider:
  - What training is required?
  - What are consequences of illegal importation?
  - What happens to the import itself if deemed illegal?
  - Communicate clearly to stakeholders any new requirements/changes in process

Exports

- What is the purpose of export certificates?
  - Official assurance that products meet specific regulations (like cGMP)

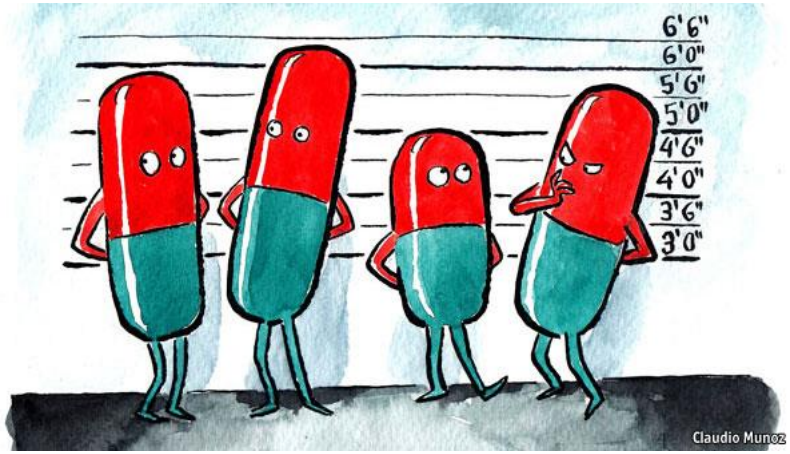
- When to refuse to issue an export certificate?
  - When products don't meet applicable requirements
  - When enforcement action has occurred
  - Non-compliance with cGMP
  - Manufacturing facilities aren't registered

Exports

- Export certificates—many types, depending on what is being exported.
- Examples:
  - For approved new animal drugs and medicated feed or food additives—certificates to foreign government
  - For unapproved new animal drugs and feed products not approved—certificates of exportability
  - For approved new animal drug products—certificates of a pharmaceutical product

Counterfeits

- A definition: an API or finished drug product that bears a label or other representation declaring that it was manufactured, processed, distributed or packed by a company which did not in fact manufacture, process, distribute or pack it.



Counterfeits

- However…
  - Definitions of counterfeit drugs vary from country to country
  - These differences give rise to discrepancies in enforcement

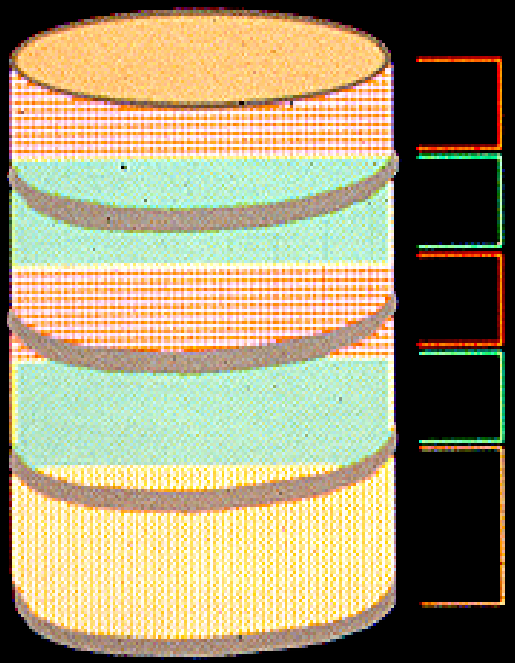
Counterfeits

- Counterfeit sales estimated at $75 billion globally (2011)
- Weak local drug regulation, enforcement and even corruption in some countries
- Serious public health significance:
  - Harmful impurities
  - May be ineffective
  - Undermines integrity of drug authorization process

Adulterated Sulfamethoxazole

Detected by the

Australian Therapeutic Goods Administration



Good SMZ

Sugar milled to same particle size as SMZ

Good SMZ

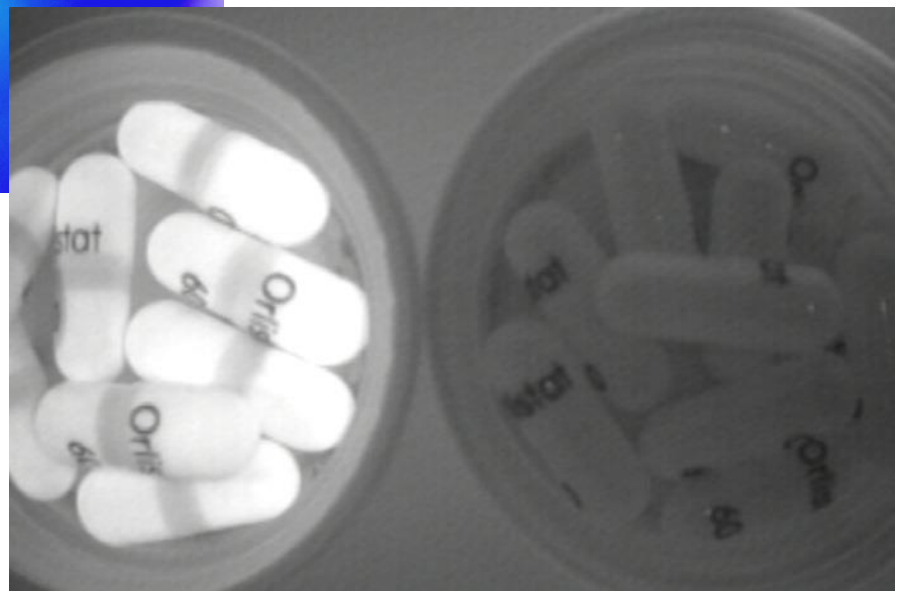
Sugar

Poor Quality SMZ

Infrastructure needed for counterfeit detection

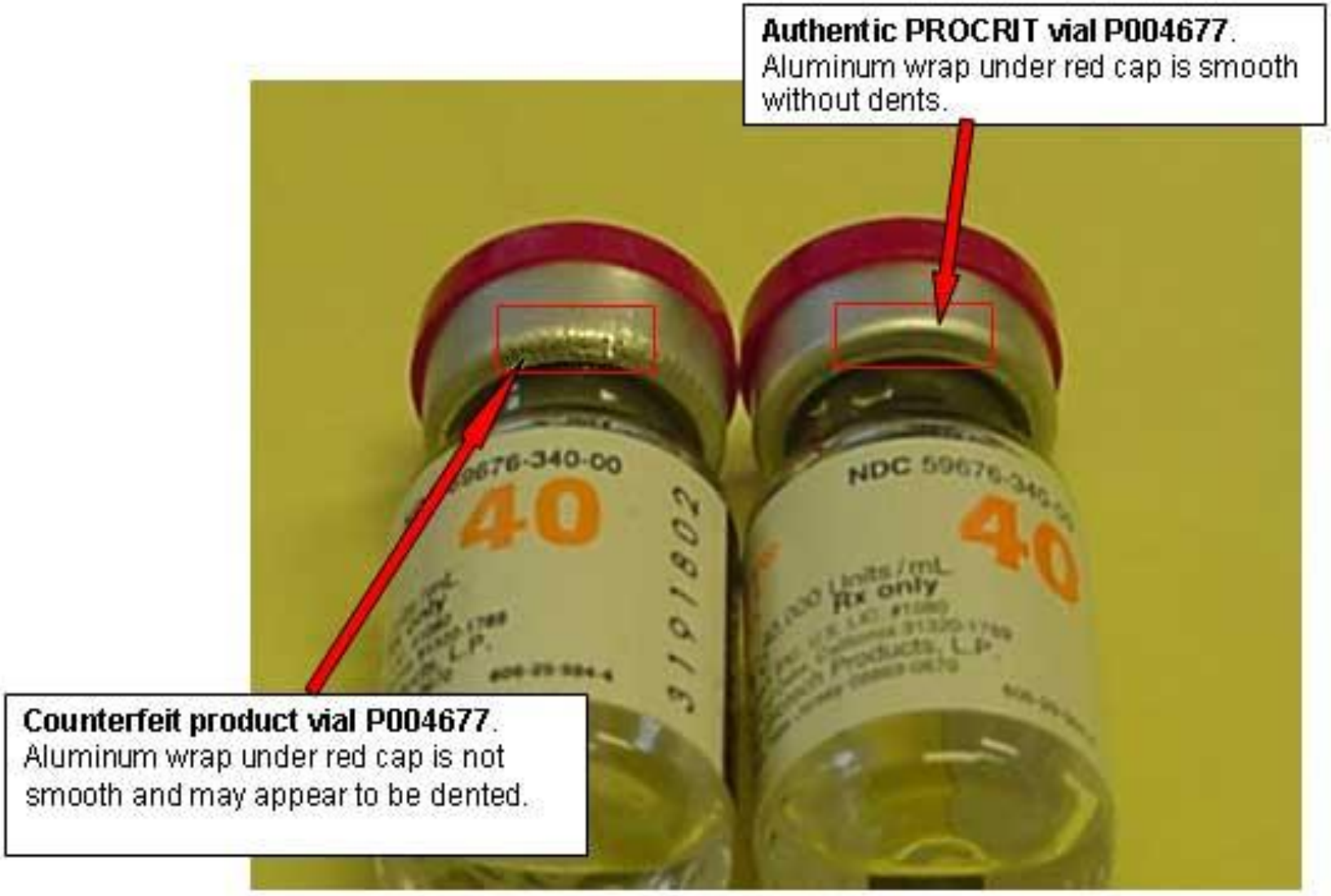
- Forensic chemistry center
  - Provides analytical techniques for government agencies
    - Atomic/molecular spectroscopy
    - Microscopy
    - Chromatography/mass spectrometry
- Creating a database
- Examining Certificates of Analysis, packaging, labels

Testing options – CD-3
(FDA counterfeit detection device)

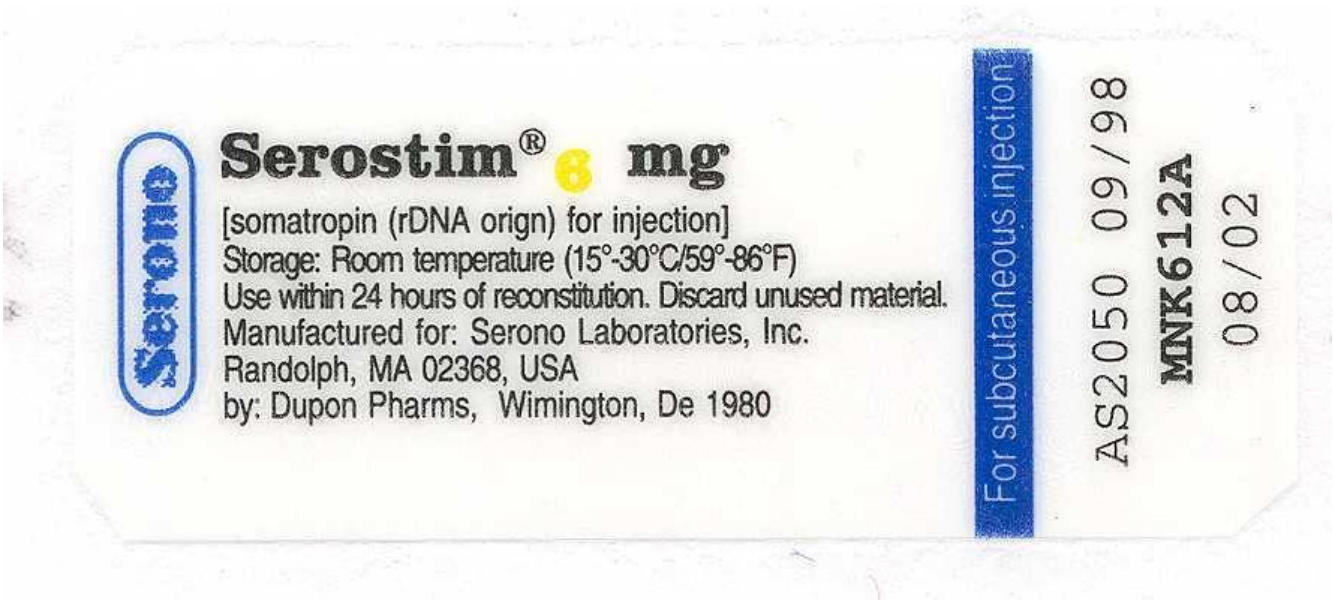


Counterfeit

Comparison of Features of Authentic PROCRIT and Counterfeit Product Bearing Lot Number P004677, expiration 02/2004.



Counterfeit



Counterfeits

- General considerations:
  - Understand the supply chain
  - Test incoming raw materials
  - Adequate sampling plan

Pharmacovigilance

- Defined by the World Health Organization as the science and activities related to the detection, assessment, understanding and prevention of adverse drug effects or any other possible drug-related problems.

Pharmacovigilance

- Monitor reports of adverse drug events and product defects
  - Reports are received from:
    - Marketing Authorization Holders
    - Veterinarians
    - Animal owners
- Can result in changes in product labeling or other regulatory action
  - Better communication for drug safety information
- How to implement?
  - Require reporting by law/regulation
  - Voluntary reporting from public
  - Refer to VICH guidance documents on collecting information

Pharmacovigilance

- Periodic summary reports are supplied by Marketing Authorization Holders for continued marketing
- Requires infrastructure – flow of information
  - How to report?
  - Who will review reports (both adverse event reports and periodic summary reports)
  - What action will be taken?
  - By whom?

Conclusions

- Market control is a vital aspect of the regulatory process
  - Protecting human and animal health
- Requires training, budget, resources
- Leverage international resources

Thank you!