What's New with Impurities in Pharmaceuticals?

Southern California Pharmaceutical Discussion G

January 15, 2015

Bernard A. Olsen, Ph.D

Olsen Pharmaceutical Consulting, LLC
bolsen@comcast.net

ICH Q3 Impurities

Q3A Drug Substances– 1995 (step 4), R1 (2002), R2 (200

Q3B Drug Products– 1996 (step 4), R1 (2003), R2 (2006)

Q3C Residual Solvents– 1997, R1-5 (2002, 2005, 2009, 2

- Most ICH guidelines on impurities in drug substances an drug products are >15 years old

- What else is there to say?

Filling the Gaps

- M7 – Genotoxic Impurities – Step 4 (June 2014)
  - changes from EMA and FDA guidance
- Q3D Elemental Impurities – Step 4 (Dec. 2014)
  - USP <232>, <233>
- Other gaps?
- Revisions needed?

ICH M7 – Genotoxic Impurities

Filling the ICH Q3 A/B gap for “impurities that are expected to be unusually potent, producing toxic or pharmacological effects at a level not more than (≤) the identification threshold.”

- Identification of "unusually potent" impurities not described
- No threshold of concern given

EMA* guideline and FDA** draft guidance:

Threshold of Toxicological Concern (TTC), 1.5 μg/day

*http://www.ema.europa.eu/docs/en_GB/document_library/Scientific_guideline/2009/09/W
903.pdf

**http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guida

Assessing Impurities – ICH M7

All impurities (actual and potential), where the structu
are known, should be evaluated for mutagenic potent

.

DOCKET ALARM

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts

Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research

With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips

Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS
Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS
Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS
Sync your system to PACER to automate legal marketing.