Assessing Drug Safety

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Agenda

- Introduction/Overview - Seligman
- Pre-market assessment - Jenkins
  - Office of New Drugs
- Post-market assessment - Trontell
  - Office of Drug Safety
- Future Directions - Seligman

Goals

- How CDER is organized, staffed, "resourced" to assess safety
  - Clinical
  - Compliance & product quality
  - Risk communication
- How information flows within CDER
- Roles and responsibilities
- Key recent guidance documents

CDER Organization

- Key operational units
  - Office of New Drugs
  - Office of Pharmaceutical Sciences
  - Office of Pharmacoepidemiology & Statistical Science
  - Office of Compliance
  - Others (Office of Training and Communications, Regulatory Policy, etc.)

CDER Organization

- Office of New Drugs
  - 17 review divisions, plus OTC Office
  - 700 staff
  - review function
    - investigational drug applications
    - new drug applications

CDER Organization

- Office of Pharmaceutical Science
  - Generic drugs
  - Chemistry
  - Biotechnology products
  - Office of testing and Research
- 331 staff

CDER Organization

- Office of Pharmacoepidemiology & Statistical Science
- Post-marketing risk assessment
  - Office of Drug Safety
  - 109 staff
- Biostatistics

CDER Organization

- Office of Compliance
  - New drug/labeling compliance
  - Manufacturing/product quality
  - 117 staff

CDER Organization

- Others
  - Communication/training
  - Regulatory policy
  - Medical policy

Recent Accomplishments

- Risk Guidance Documents
  - "Premarketing Risk Assessment"
  - "Good Pharmacovigilance Practices and Pharmacoepidemiologic Assessment"
  - "Development and Use of Risk Minimization Action Plans"
- Best practices for industry

Recent Accomplishments

- Good Review Practices
  - "Conducting a Clinical Safety Review of a New Product Application and Preparing a Report on the Review"
  - Reviewer guidance

New Initiatives

- Drug Safety Oversight Board
- “Drug Watch”
  – previously discussed by Dr. Galson

Breadth of Safety Activities

- Drug safety involves more than watching for problems a drug is approved
- Important areas where evaluation of drug safety occurs include:
  - Oversight of clinical trials
  - Evaluation of safety and efficacy of new therapies, and new or expanded uses for existing therapies
  - Regulation of manufacturing, distribution and promotional activities.
  - Prevention of medication errors through the evaluation of proposed proprietary names, labeling, and packaging
  - Development of proactive risk management strategies before (and after) approval

Future Directions

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Develop Science of Safety

- Scientific basis for risk assessment
  - mechanistic understanding of drug injury processes
  - physiologic, metabolic, genetic bases for AEs
  - who is at risk
    - individual basis, population variability
  - markers for drug-induced injury
    - assessment “circumstantial”

Develop Science of Safety

- Enhanced clinical assessment methods
  - pre- and post-market
  - improved trial design
    - enrichment, adaptive designs
    - better utilization of existing data
  - robust Phase IV program

Better Surveillance Tools

- Improving quality & quantity of data
  - easier, interactive case reporting
    - electronic, web-accessible/fillable
  - “active” surveillance
    - linkage of datasets
    - electronic medical record
    - public and private sector
  - population-based data
    - regular, robust program of observation studies
  - analytic tools (e.g., data mining)

Strengthening CDER

- Staffing for enlarging mandate
  - review and evaluation of risk minimization action plans
- Improve internal processes
  - work processes, roles/responsibilities
    - communication
    - information flow
    - tracking and accountability

Strengthening Partnerships

- Federal agencies
  - CMS, AHRQ, CDC, NIH, HRSA
- Academia
  - CERTs
- Healthcare institutions
  - payers, providers
- Sponsors
  - pre- and post-marketing responsibilities

Effective Communication

- Improve therapeutics
  - realizing benefits
  - minimizing risks
- Enhance patient safety
- Reduce medication errors
- Healthcare system issue

Questions

- Site visit??