

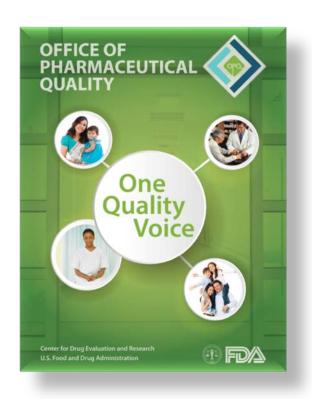
Clinical Relevance

Context, Connections and Collaboration

FDA/PQRI Conference March 22, 2017

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CDER's Office of Pharmaceutical Quality (OPQ)

January 11, 2015

Advances FDA's Quality Initiative to the next level





















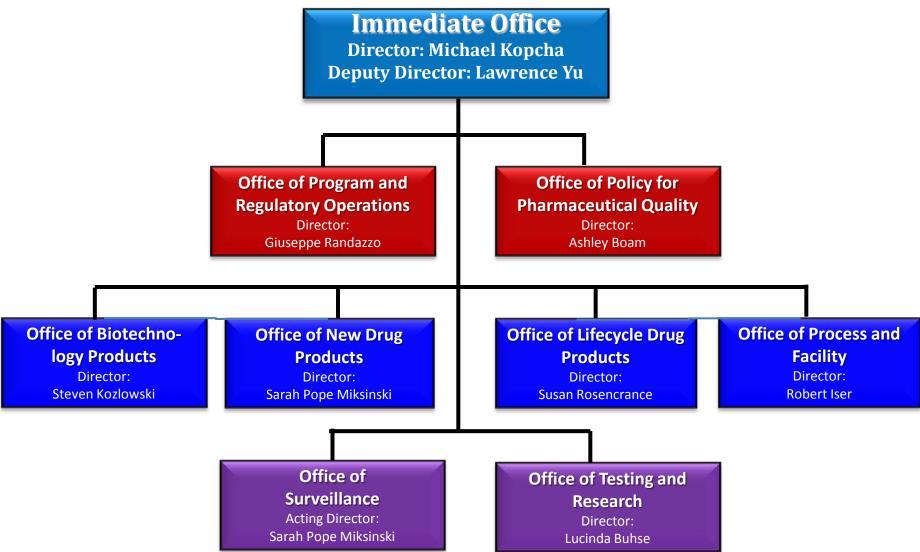








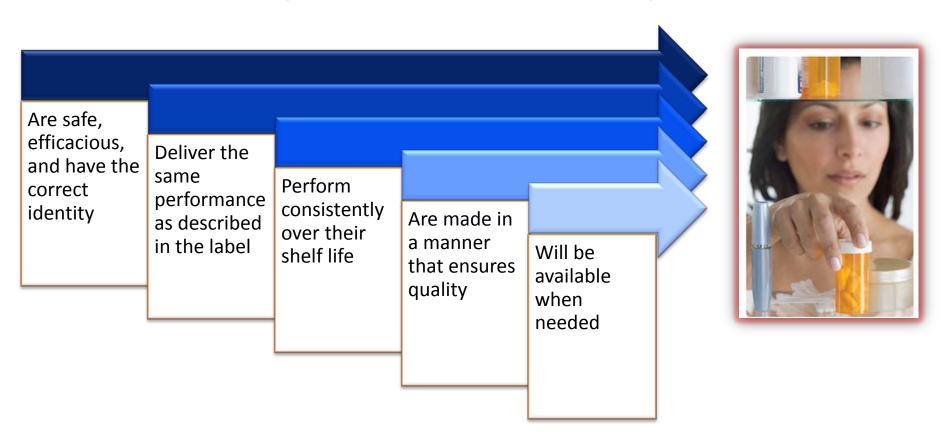
Office of Pharmaceutical Quality





Expectations for Quality

Patients and caregivers assume that their drugs:





Clinical Relevance

- Product quality is the foundation upon which the clinical safety and efficacy assessment rests
- A product is "fit for use" if it meets the established quality attributes
 - purity, potency/strength, identity, bioavailability/delivery,
 labeling/packaging, performance, etc.
- Strive to establish appropriate correlations between quality attributes and clinical performance



Applying Clinical Relevance to Quality

 A high quality drug product is a product that reproducibly delivers the therapeutic benefit to the patient/consumer as stated in the label, is free of defects, and presents no undeclared risk (e.g., is not contaminated)

Attributes

- Beginning with the end in mind designing the product to meet patients' needs and the intended product performance
- Developing the Quality Target Product Profile (QTPP)
 - A prospective summary of the quality characteristics of a drug product that ideally will be achieved to ensure the desired quality, taking into account safety and efficacy of the drug product (ICH Q8 (R2))
- Identifying "clinically relevant" CQAs those characteristics having an impact on product quality

• **Specifications**, such as:

Dissolution, Impurities, Size/Shape/Delivery/Design



Clinical Relevance - The Continuing Dialog

- How much is enough?
- Need to know vs want to know
- Risk communication
- Uncertainty/Risk-Informed
- Multidisciplinary interactions
- Efficiency of interactions/discussions
- Stakeholder feedback
- Timeframes (including expedited)
- Seeing the "big picture"



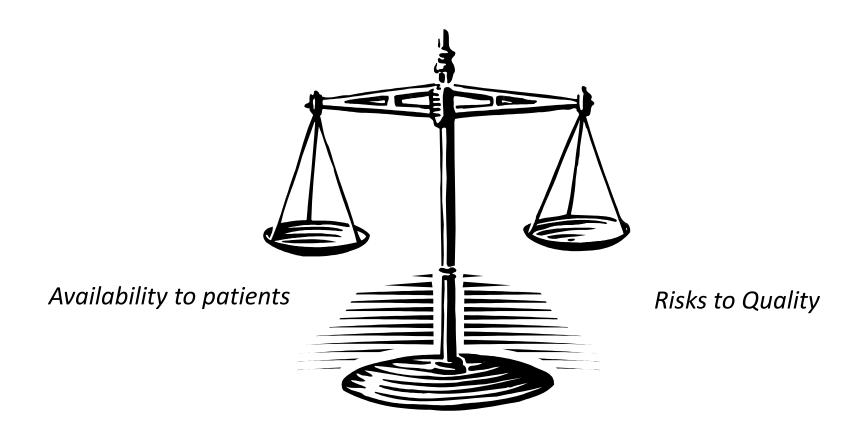
Clinical Relevance – Specific Discussions

- Clinically relevant specifications
 - Impurities
 - Dissolution, IVRT
 - **—** ...
- Emerging technologies
- Effective risk communication
- Policy/guidance development
- Benefit-Risk
- Breakthrough Therapies

• ...



The Risk/Benefit Balance...





Clinical Relevance – Context

- Clinical relevance is not only about clinical data
 - Patient/consumer-focused
 - Links quality to clinical performance
 - Involves pertinent multidisciplinary data/dialog
 - Helps to ensure that drug products will perform as indicated in the label
- Clinical relevance is more than specifications
 - More than dissolution or IVIVC
 - CRS are just part of clinical relevance
 - Clinical relevance is not owned by a single discipline
 - Not a "cookie-cutter" approach

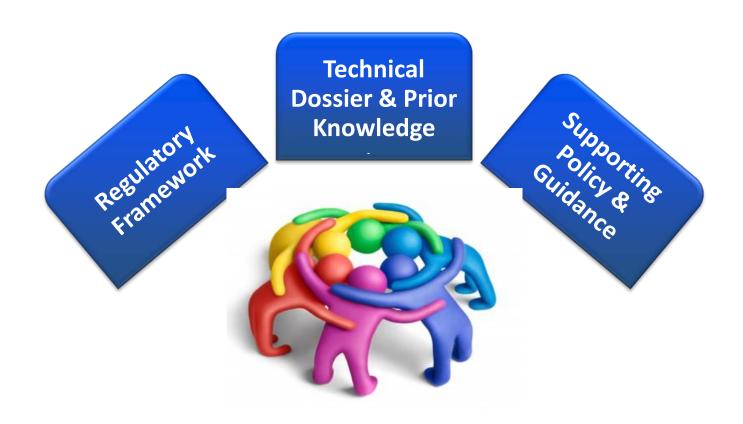


Clinical Relevance – Connections

- Clinical relevance is just as much about what we don't know vs what we do know
 - Risk involves uncertainty
 - Need to know vs want to know in our communication to stakeholders
 - Timely engagement of internal and external stakeholders
- Clinical relevance is a balanced conversation
 - Not a "magic bullet"
 - Balanced within quality, multidisciplinary, and/or Agency/industry



A Balanced Conversation





Clinical Relevance – Collaboration

- Clinical relevance is just as much about HOW we work vs WHAT we do
 - More than a single discipline/not owned by any single discipline
 - Based on robust internal/external discussions and solid collaboration
 - Based on concept of building mutual understanding and benefit/risk-based decision making
 - Striving to identify potential efficiencies and continuous improvement



Clinical Relevance – Selected Initiatives

- Breakthrough Therapies lessons learned
- Quality Overall Summary
 - Risk communication
 - Review efficiency
- Review process innovations
- Product Quality Benefit Risk Framework
 - Started in 2014
 - Developed framework for consideration of quality deficiencies within clinical context of proposed product



Risk Communication



Excerpts from ICH Q9

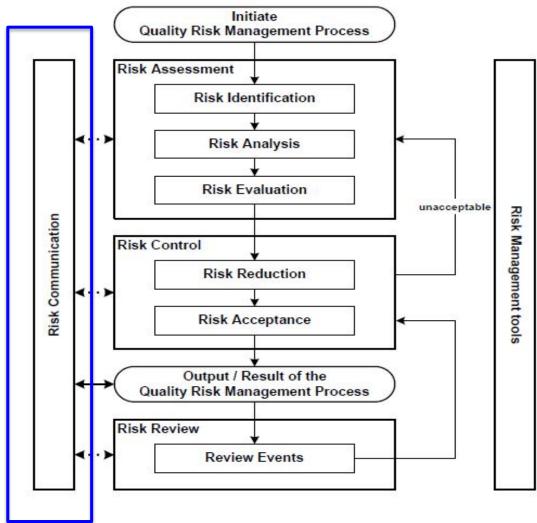
"...risk is defined as the combination of the probability of occurrence of harm and the severity of that harm.

However, achieving a shared understanding of the application of risk management among diverse stakeholders is difficult because each stakeholder might perceive different potential harms, place a different probability on each harm occurring and attribute different severities to each harm.

...there are a <u>variety of stakeholders...the protection of the</u>
<u>patient</u> by managing the risk to quality should be
considered of prime importance."



Risk Communication (ICH Q9)





Risk Communication/General

- Frequent interfaces of risk communication in all stages of quality risk management
- Similarly true for various stages of review and assessment
- Various types of risk communication
 - Dossier
 - Dialog
 - Information available on site
- From a practical standpoint (e.g.)
 - Risk identification and assessment
 - Risk <u>communication</u>



Effective Risk Communication

- Confirms high-level alignment first
- Builds common understanding
- Considers the needs of parties in discussion
 - What happens after the discussion?
- Balances technical debates with overall goals
- Timeframes "Right conversation, right time"
- Allows time for idea generation and/or information digestion
- Considers the intended output of the dialog

Clinical Relevance - A Lifecycle Approach



Patient-Centric Assessment

Patient (QTPP) expectations

Regulatory Outcome (approval if sufficient)



Post approval experience





Moving Forward...

- Our primary stakeholder the patient/consumer
- Supporting OPQ organizational constructs and initiatives
- Various objectives in 2017 heavily support clinical relevance, effective risk communication, and enhanced collaboration/integration
- Additional opportunities may exist to align objectives with meaningful outcomes for industry
- Appropriate context, robust connections, and effective collaboration are crucial to progress



Thank You!