How Consensus Standards Will Save You Work

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Learning Objectives

- Know what a “consensus standard” is
- Understand the relation of standards to regulations
- Appreciate how external consensus standards can help streamline regulatory compliance

Challenge Question #1

How many amino acids are there in the enkephalin pentapeptide?:

A. 60

B. 9

C. 5

D. 7

What's a "Standard" ?

"Common and repeated use of rules, conditions, guidelines, or characteristics for products or related processes and production methods, and related management systems practices"

U.S. National Technology Transfer and Advancement Act of 1995, Public Law 104-113

https://www.nist.gov/standardsgov/national-technology-transfer-and-advancement-act-1995

Regulations vs. Standards

Regulations

- Developed by U.S. regulatory agencies (FDA) to implement and/or enforce legislation enacted by Congress
- Mandatory, force and effect of law
- Specific requirements that regulated entities *must* meet

Standards

- Developed by Standards Development Organizations (SDOs)
- Government, academia, private sector input
- Voluntary
- Describe how manufacturers *might* meet regulatory requirements

SDO Examples

International Organization for Standardization

American Society for Testing and Materials

"Voluntary Consensus Standards Body" —Essential Requirements

- Due process
- Consensus
- Appeals
- Openness
- Lack of dominance/balance

ANSI
American National Standards Institute

https://www.ansi.org/american-national-standards/ans-introduction/essential-requirements

“Regulatory Standards”

- Requirements defined in regulation
- 21CFR610—”General Biological Products Standards”

Subpart	Section	Requirement
A Release Requirements	610.1	Release testing
B General Provisions	610.10	Potency
D Mycoplasma	610.30	Tests for mycoplasma
G Labeling Standards	610.60	Container label

Why use consensus standards?

- OMB says so—Circular A-119, January 2016
- The 21st Century Cures Act (12/13/2016) says so
- They're kept up to date
- They can save you work

21st Century Cures Act Section 3036

Directs FDA to work with NIST* and FDA stakeholders to "facilitate an effort to coordinate and prioritize the development of standards and consensus definition of terms, through a public process, to support, through regulatory predictability, the development, evaluation, and review of regenerative medicine therapies…with respect to manufacturing processes and controls of such products".

*NIST: National Institute for Standards and Technology

FDA/OTAT & NIST Collaborate Already —Examples

Laboratory Collaborations	• Cell counting, cell viability, flow cytometry
Co-Hosting Workshops	• Cell counting, cell characterization, flow cytometry, genome editing, systems biology
Standards Development Committees	• ISO TC 276 Biotechnology • ASTM F04 Tissue Engineered Medical Products

FDA will have provided input

Standards Development Committees

- ISO TC 276 Biotechnology
- ASTM F04 Tissue Engineered Medical Products

Types of Standards:

- Physical
- Written or Documentary

Physical Standards

"Material, sufficiently homogeneous and stable with respect to one or more specified properties, which has been established to be fit for its intended use in a measurement process."

—ISO REMCO Committee on Reference Materials

Types of Reference Materials/Physical Standards

Reference Materials/Physical Standards:

- In-house reference material
- NIST* Standard Reference Material (SRM)
- Certified Reference Material (CRM)

*NIST: National Institute for Standards and Technology

Using Standards in Submissions —the Basics

- Are *voluntary—using them or developing them*
- Can help avoid ‘reinventing the wheel’
- Developed by a *consensus process*
- Eminence driven

Documentary standards—examples

- Terminology/definitions
- General overview of a subject area—Standard Guides, Standard Practices
- Explicit, detailed procedures—Test Methods
- Explicit characteristics or performance standards—Specifications

Standards can be used for:

- Exploratory/preclinical work
  - i.e., not necessarily for regulatory compliance
- Regulatory submissions
  - In-process or release testing
  - To specify explicit physico-chemical or performance characteristics

Using Standards to Meet Regulatory Requirements

- Any type of standard appropriate to the context
- Justify use “as written” or with modification
  - Adequacy of justification will be a review issue

CBER Guidance Document on Standards

- "Standards Development and the Use of Standards in Regulatory Submissions Reviewed in the Center for Biologics Evaluation and Research" March 2019
  - Policy for staff participation in standards development
  - Use of standards by sponsors/applicants of INDs, BLAs, NDAs
  - Documentation of standards use in a regulatory submission
  - Use of standards for CBER-regulated devices IDEs, 510(k), HDEs, PMAs

- https://www.fda.gov/media/124694/download

Consensus standards

- Developed by SDOs
- Can apply to exploratory/preclinical research
- Can also streamline regulatory compliance
- Open, well-defined due process

An open, voluntary consensus-driven process means:

Anyone can take a seat at the table, or

End up on the menu...

Challenge Question #2

Which of the following statements is NOT true?

A. The indicated standard must always be used exactly as written.

B. Use of external consensus standards is voluntary.

C. Standards must be re-approved every 5 years, but can be revised sooner if needed.

D. External consensus standards may be useful during research/preclinical development, not just regulatory filings.

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Questions?

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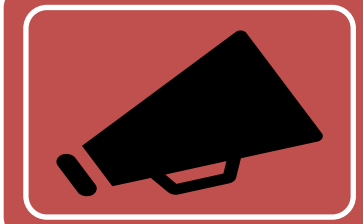
Contact Information



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