

Regulatory Tools to Support Early Access

Andrew Byrnes, Ph.D.

Chief, Gene Transfer and Immunogenicity Branch

Division of Cellular and Gene Therapies
Office of Tissues and Advanced Therapies
CBER, FDA

Overview



Mechanisms for Communication with FDA about CMC (quality) topics

Communicate throughout all stages of product development

Opportunities for enhanced communication after Breakthrough or RMAT designation

Communication after licensure

CMC approaches during expedited development

Opportunities for communication throughout development



Novel products & rapid timelines → **Increased need for feedback from regulators during CMC development**

Engage FDA CMC team throughout the product lifecycle

Communication is especially important for:

Topics that lack published guidance

Special circumstances

Outline of the next few slides

General enquiries

Meetings with FDA before and during IND

Breakthrough or RMAT → more interaction

Communication via amendments to IND, BLA or NDA

General advice



CDER – Manufacturers Assistance and Technical Training Branch

<https://www.fda.gov/BiologicsBloodVaccines/ResourcesforYou/Industry/ucm620156.htm>

CDER – Small Business and Industry Assistance

<https://www.fda.gov/Drugs/DevelopmentApprovalProcess/SmallBusinessAssistance/ucm053133.htm>

When to use these channels

If unsure who to contact

To request that FDA hold a liaison meeting with industry

Finding webinars and guidance documents

Meetings with FDA



*Meetings may be face to face, teleconference, or written response
FDA generates official non-binding meeting minutes*

- Type A** Stalled development or dispute
- Type B** Pre-IND, pre-NDA, pre-BLA, Breakthrough/RMAT
- Type B(EOP)** End of phase meeting
- Type C** All other meetings

Meeting Type	Meeting Scheduling or Written Response Time
A	30 calendar days from receipt of meeting request
B	60 calendar days from receipt of meeting request
B(EOP)	70 calendar days from receipt of meeting request
C	75 calendar days from receipt of meeting request

Interactions before an IND



INTERACT meeting (new program, CBER only)

Early advice for pre-clinical studies or CMC issues that need to be planned well in advance

Informal, non-binding, no written meeting minutes

Will try to schedule teleconference within 90 days

<https://www.fda.gov/BiologicsBloodVaccines/ResourcesforYou/Industry/ucm611501.htm>

Pre-IND meeting

Type B meeting

Written meeting minutes issued

Communication during investigational phase



Meetings for major topics and major developmental milestones

Benefits of Breakthrough and RMAT designation:

Intensive guidance on efficient drug development

Involvement of senior managers

Routine amendments to the IND

May be faster than a formal meeting in many cases

... may be slower in other cases (workload priorities)

In some situations, FDA may prefer a formal meeting

Communication via amendments allows plans and protocols to be revised through several iterations, if needed

For example: comparability protocols, potency assay, stability protocols

Parallel scientific advice (EMA/FDA)

Meeting scheduled around 60 days after request

Either full joint meeting or “consultative advice”

Communication during and after review of a license application



During application review

Applicant orientation meeting (optional)

Mid-cycle communication / late-cycle meeting

Ad hoc teleconferences, if needed

Submit amendments in response to FDA requests

Continued communication after licensure

Supplement and amendment submission

License holder can request meetings

Ad hoc teleconferences may be an option

CMC approaches during expedited development



Essential goal: Ensure the availability of a quality product at time of approval

FDA may exercise some flexibility on the type and extent of manufacturing information that is expected at the time of submission and approval for certain components. Case by case, dependent on:

- Product characteristics
- Seriousness of condition and medical need
- Manufacturing processes
- Robustness of quality system
- Strength of the risk-based quality assessment

Examples of potential flexibilities

- Stability updates
- Validation strategies
- Inspection planning
- Manufacturing scale up
- Use of post marketing commitments

Examples of flexible CMC approach



Stability

Special protocol assessment (rarely used)

Note: ATMPs are out of scope for ICH Q5C

Prior knowledge / supporting data may be relevant (example: frozen products)

Concurrent release of PPQ batches for distribution before completion of process validation

Might be applicable in rare cases, such as:

Limited demand / limited manufacturing

To alleviate short supply

Priority review

8 month review, instead of 12 months

Rolling NDA or BLA

Submission of portions of application

Note: Module 3 must be complete at the time of NDA/BLA submission

Examples of flexible CMC approach:

Post-licensure



Comparability protocol (equivalent to PACMP)

Formal plan to implement specific future manufacturing changes and analyze impact on product

May lower the reporting category for post-approval change and allow faster implementation of the change

Can be submitted in NDA/BLA, or after licensure as a PAS

For licensed autologous cell therapies:

In EU, OOS batches may be released and administered under certain circumstances

In US, OOS batches **cannot** be distributed commercially

May still be possible to use as investigational drug under IND

Summary

Communicate early and often about CMC

Milestone meetings

Breakthrough and RMAT meetings

Amendments

Flexible CMC approaches may be applicable to expedited development programs

A licensed product must still be high quality

Applying flexibilities requires significant discussion with FDA

Relevant FDA guidances



1. **Formal meetings between the FDA and sponsors or applicants of PDUFA products (Draft, 2017)**
2. **IND meetings for human drugs and biologics: Chemistry, manufacturing, and controls information (2001)**
3. **Expedited programs for serious conditions – drugs and biologics (2014)**
4. **Expedited programs for regenerative medicine therapies for serious conditions (Draft, 2017)**
5. **General principles: EMA-FDA parallel scientific advice (human medicinal products) (2017)**
6. **Comparability protocols for human drugs and biologics: Chemistry, manufacturing, and controls information (Draft, 2016)**
7. **Process validation: General principles and practices (2011)**
8. **Chemistry, manufacturing, and controls changes to an approved application: Certain biological products (Draft, 2017)**
9. **Special protocol assessment (2018)**

CBER Contact Information

- ❑ **Andrew Byrnes, Ph.D.**

240-402-9417

Andrew.Byrnes@fda.hhs.gov

- ❑ **Regulatory Questions:**

Regulatory Management Staff in OTAT

240-402-8190

OTATRPMS@fda.hhs.gov or

Lori.Tull@fda.hhs.gov

- ❑ **References for the regulatory process for OTAT**

<http://www.fda.gov/BiologicsBloodVaccines/GuidanceComplianceRegulatoryInformation/OtherRecommendationsforManufacturers/ucm094338.htm>

- ❑ **OTAT Learn Webinar Series:**

<http://www.fda.gov/BiologicsBloodVaccines/NewsEvents/ucm232821.htm>



CBER Contact Information



- **CBER website:**
www.fda.gov/BiologicsBloodVaccines/default.htm
- **Phone:** 1-800-835-4709 or 240-402-8010
- **Consumer Affairs Branch:** ocod@fda.hhs.gov
- **Manufacturers Assistance and Technical Training Branch:**
industry.biologics@fda.gov
- **Follow us on Twitter:** <https://www.twitter.com/fdacer>

