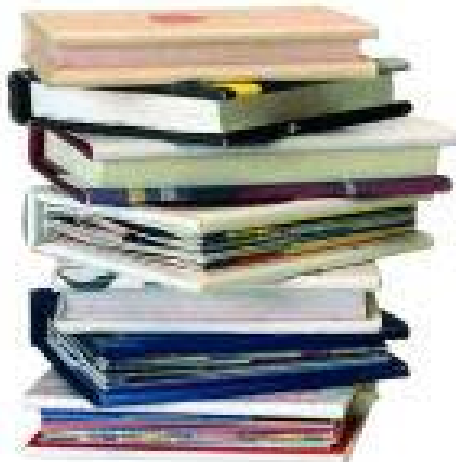
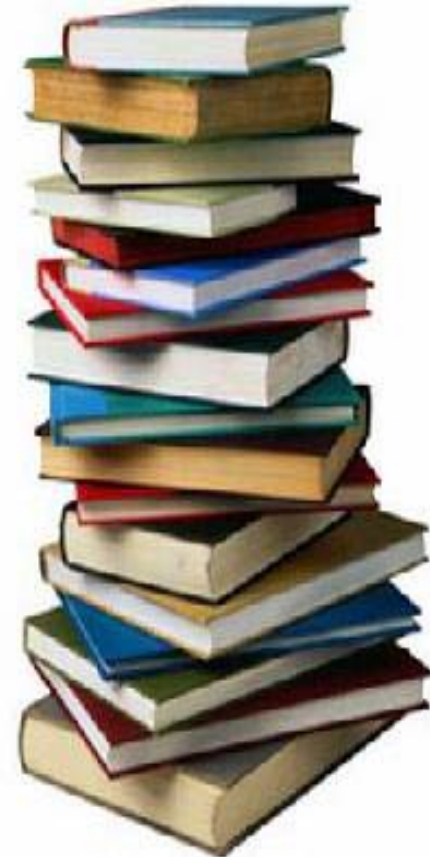


Facility Master Files



Adrian Gee
Baylor College of Medicine



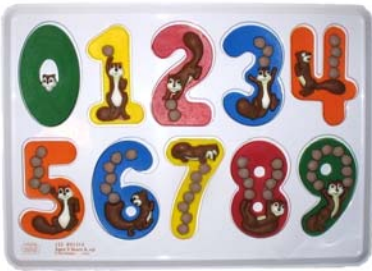
Production Assistance for Cellular Therapies



What are Master Files?

- ↳ Documents submitted to and held on file by the FDA
- ↳ Describe manufacturing processes, devices or facilities
- ↳ Are kept confidential from other parties
- ↳ May be cross-referenced by author and other parties (with written permission)





Types of Master Files

- ↪ **Type I:** Manufacturing Site, Facilities, Operating Procedures, and Personnel
- ↪ **Type II:** Drug Substance, Drug Substance Intermediate, and Material Used in Their Preparation, or Drug Product
- ↪ **Type III:** Packaging Material
- ↪ **Type IV:** Excipient, Colorant, Flavor, Essence, or Material Used in Their Preparation
- ↪ **Type V:** FDA Accepted Reference Information





Change of Categories

In the *Federal Register* of January 12, 2000 (65 FR 1776), FDA published the final rule “New Drug Applications; Drug Master Files.” The final rule amended 21 CFR 314.420 by removing the provision for Type I DMFs. FDA amended the regulation to eliminate submission of information that was not necessary either to conduct inspections of manufacturing facilities or to review the chemistry, manufacturing, and controls sections of INDs, NDAs, and abbreviated applications. The regulation became effective on July 10, 2000, and the agency will no longer accept Type I DMFs as of that date.

Facility information is now submitted as a Type V Master File – and specific reference is made to Facilities for Production of Gene or Cell Based Therapies





Guidance Document

August 2001

Guidance for Industry

Submitting Type V Drug Master Files to the Center for Biologics Evaluation and Research

DRAFT GUIDANCE

<http://www.fda.gov/cber/gdlns/dmfv.pdf>

No letter of Intent Required for this Type of File



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Type V Master File

Include information to assess the safety of the products used in clinical trials of gene or cell-based therapies

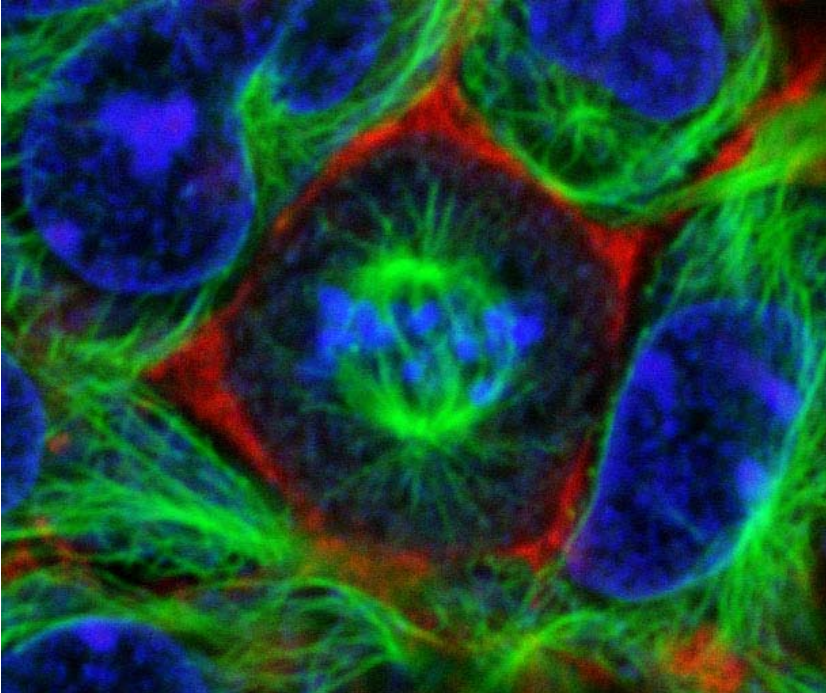
- ↪ Floor diagrams showing manufacturing areas
- ↪ List of products manufactured
- ↪ Equipment areas dedicated or shared
- ↪ Overview of production steps for all products manufactured

Type V Master File



- ↳ Description of containment features and contamination precautions
 - ↳ Specialized equipment
 - ↳ Air quality classification
 - ↳ Description of air handling units
 - ↳ Pressure differentials

Type V Master File



- Screening & acceptance procedures for all cell lines brought into the Facility



Advantages

- Since facilities are used to generate vectors or to transduce or manipulate cells used in a number of trials under IND, a Type V DMF eliminates the need to submit **the same information numerous times** & facilitates IND review
- Attractive to investigators wishing to use Facility





Disadvantages

- ↪ Lot of up-front work to assemble
- ↪ Must be kept updated (yearly)
- ↪ If unacceptable to FDA then **all related INDs can be put on hold**



Current Cell Processing Facility Master Files



- NIH Cell Processing Facility
- PACT Centers
 - University of Pittsburgh
 - University of Minnesota
 - Baylor College of Medicine
- ??



Table of Contents

Baylor Master File



1. General Introduction
2. Other Manufacturing Activities within the CPF
3. Name and Address of Site, Contact Information
4. Types of Products Manufactured
5. Short Description of the Site
 - a. Figure 1: Floor plan of Cell Processing Facility
 - b. Figure 2: Traffic Patterns within the CPF
 - c. Figure 3: Air Pressure Relationships in CPF
6. Employees
 - Quality Assurance
 - Quality Control
 - Production
 - Materials Handling
 - Technical & Support Service
 - Total Staff



Table of Contents

Baylor Master File



7. Outside Scientific, Analytical and Technical Assistance
8. Quality Management System
 - Quality Policy
 - Quality Assurance Function
 - Elements of the Quality Assurance System
 - Process Validation
 - Documentation of Training
 - Tracking of Variances from SOPs and other Procedures
 - Accessioning of Cells and Tissues
 - Supply Release & Supply Release Specifications
 - Tracking of Supplies & Equipment during Manufacturing
 - Monitoring of the Facility, Equipment, Alarm System
 - Performance of QC Tests



Table of Contents

Baylor Master File



8. Quality Management System

Coordination of Testing by External Laboratories

Maintaining the QA/QC Database

Label Control

Product Release

Audits – Internal & External

Quality Meetings

Patient Monitoring/Complaints File

9. Personnel

Responsibilities of Key Staff

Training of Manufacturing Staff

Health & Hygiene Requirements



Table of Contents

Baylor Master File

10. Facilities

Construction and Finishes

HVAC System

Emergency Power System

Structural Repairs & Facility Maintenance

Cleaning

Equipment handling

11. Documentation

Standard Operating Procedures

Manufacturing Records

Batch Record & Worksheets

Testing & QA/QC Documentation

Error Detection

13. Production – generic major steps



Table of Contents

Baylor Master File

13. Materials Management

Starting Materials

Storage Area

Final Products

Rejected Materials

Process Validation

14. Quality Control

15. Distribution, Complaints & Product Recall

Storage & Distribution

Complaints File

Quality Indicators and Audits

Appendix A: CPF Organizational Chart and CVs of Key Personnel

Appendix B: Facility Air Balance Report

Appendix C:

C1: Listing of Relevant SOPs, Copies of Cited SOPs

C2: Full Table of Contents from SOP Manual

Appendix D: Initial Validation of Barcode Scanners

Appendix E: Validation of Cleaning Procedures




Submission of Master File

No electronic submissions

Must submit in special binders (1 original & 2 archive)

U.S. Food and Drug Administration • Center for Drug Evaluation and Research



Center for Drug Evaluation and Research

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FDA IND, NDA, ANDA, or Drug Master File Binders

Effective, Wednesday, April 1, 1998, all interested parties can call the following number to order FDA IND, NDA, ANDA and Drug Master File binders:

U.S. Government Printing Office (GPO)
Washington, DC 20404-0001
(202) 512-1800

Program #B511-S

Quantity of binders that can be order at any one time is to be determined by GPO.

<http://www.fda.gov/cder/ddms/binders.htm>

**Center for Biologics Evaluation and Research
Document Control Center, HFM-99, Suite 200N
1401 Rockville Pike
Attn: OCTGT/RMS**



Production Assistance for Cellular Therapies



Review

- ↳ Review took about one year
- ↳ Minor comments related to
 - ↳ Vendor audits
 - ↳ Air handling
 - ↳ Qualification of Facility
 - ↳ Microbial species detected
 - ↳ Cleaning Validation



September 30, 2005

FDA/CBER
Attn: Office of Compliance & Biologics Quality
HFM99 Room 200N
1401 Rockville Pike
Rockville, Maryland 20852

Dear Mr. Obiri:

This is to authorize Dr. Helen Heslop, Center for Cell and Gene Therapy, Baylor College of Medicine, to cross-reference our Drug Master File (BBMF 11232) for the Cell Processing Facility at the Baylor College of Medicine Center for Cell and Gene Therapy, in connection with their study, "Administration Of TGF-b Resistant LMP2a-Specific Cytotoxic T-Lymphocytes To Patients With Relapsed EBV-Positive Lymphoma."

Should you require any additional information, please do not hesitate to contact me.

Sincerely,

Adrian P. Gee, M.I.Biol, PhD.
Director, Clinical Applications Laboratory
Center for Cell and Gene Therapy
Professor, Department of Pediatrics and Medicine

cc: Bambi Grilley, RPH, CCRA, CCRP, CIP, Director Regulatory Affairs, CAGT.
Malcolm Brenner, MB, PhD, FRCP, FRCPath, Director, Center for Cell and Gene Therapy.

Cross-Reference Letters



Production Assistance for Cellular Therapies

Take Home Messages

- **Master Files eliminate the need for repetitive submission of facility information to the FDA**
- **Preparation and updating are tedious and time-consuming**
- **Rejection by FDA places related INDs on hold**

