

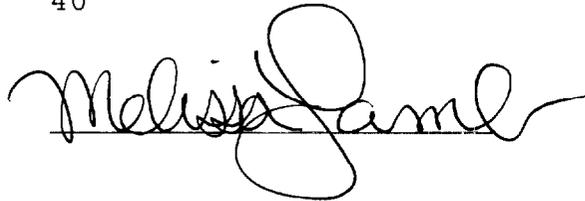
M E M O R A N D U M

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
FOOD AND DRUG ADMINISTRATION
CENTER FOR DRUG EVALUATION AND RESEARCH

Date: February 11, 2000
To: Dockets Management Branch (HFA-305)
From: Melissa Lamb
Office of Generic Drugs
Subject: Electronic Submissions

This memorandum forwards overheads of a presentation to the Dockets Management Branch for inclusion in Docket 90S-0308. The following is information on the presentation for the Docket records:

Title of Presentation: Electronic Submissions
Presented for: Barnett International
Date Presented: 11/17/99
Presented by: Richard Sponaugle
Number of Pages: 40



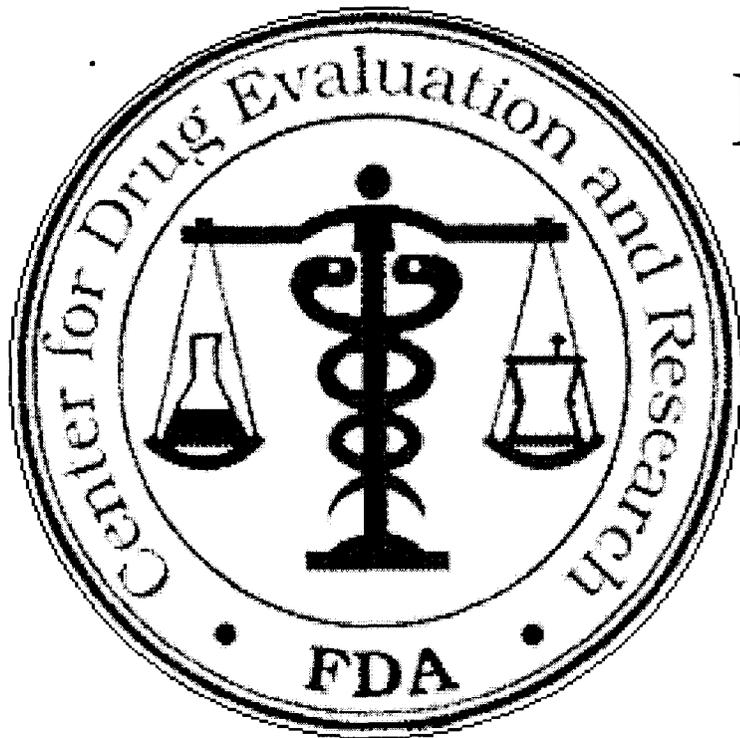
Attachment

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90S-0308

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Electronic Submissions

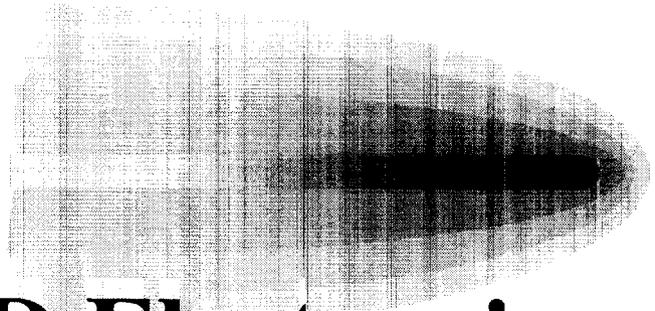


Richard Sponaugle

**Senior Systems Engineer,
OGD Electronic
Submission Project,
CDER - FDA**

November 17, 1999

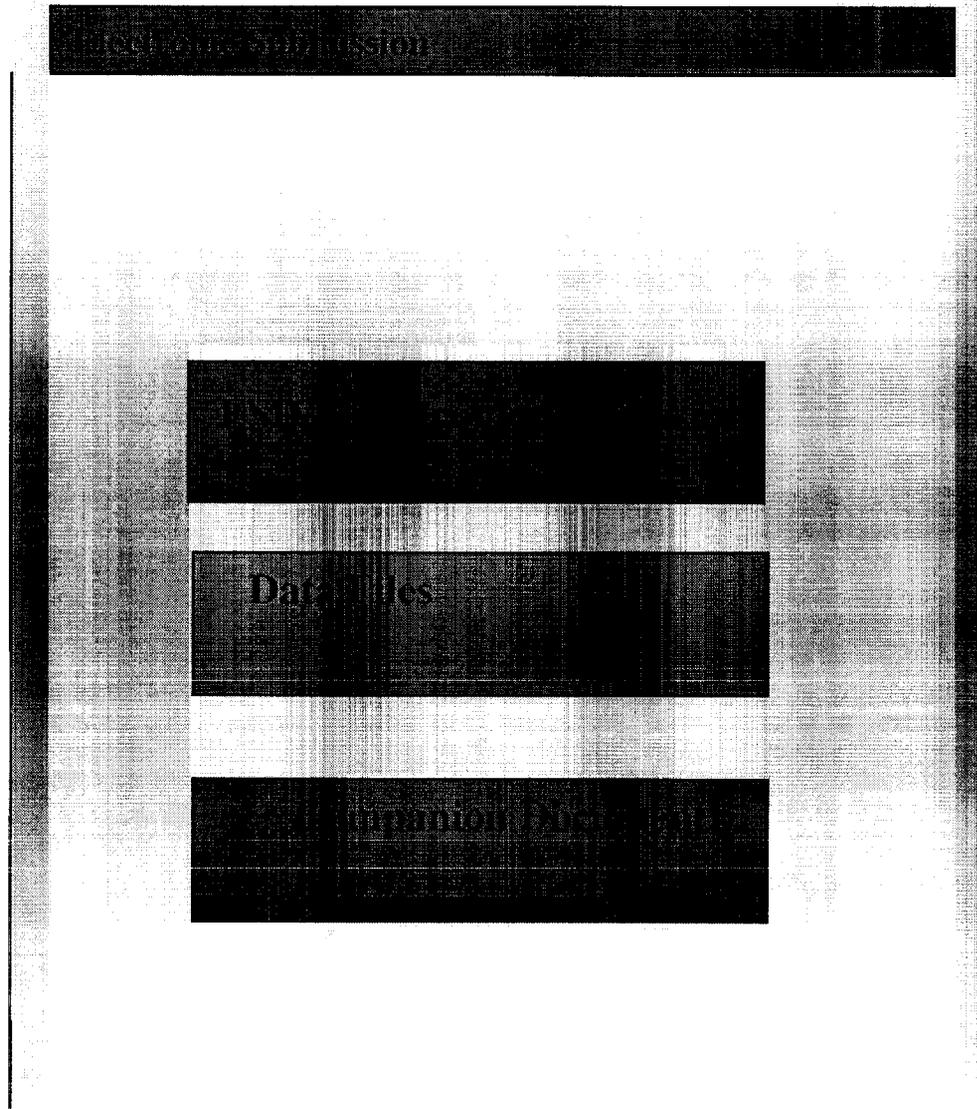
Electronic Submissions



- **Overview of the OGD Electronic Submission Program**
- **Participation**
- **Common Errors**
- **Future of Electronic Submissions in OGD**

Overview of the OGD Electronic Submission Program

GENERIC DRUG IMPLEMENTATION MODEL



Overview of the OGD Electronic Submission Program



What the heck is an ESD?

An ESD or Electronic Submission Document is a special ASCII text document which incorporates a proprietary markup system. This document is used by the computer system to move the applicant's data to OGD's Oracle database.

Overview of the OGD Electronic Submission Program

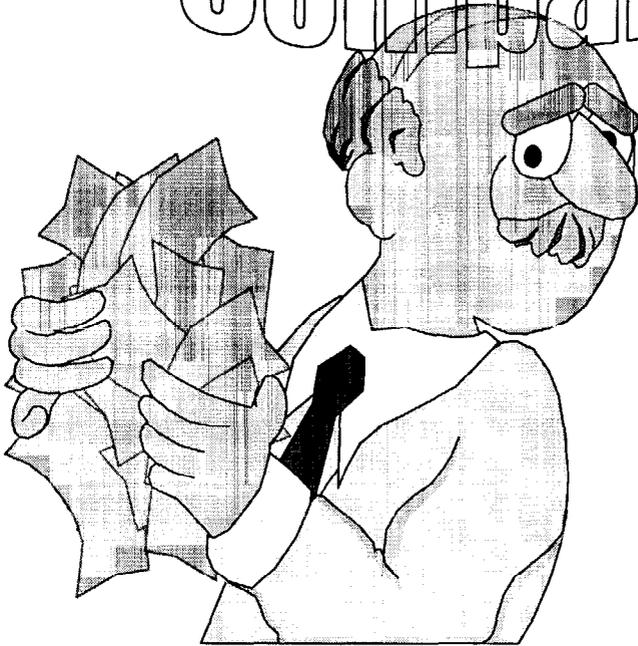
What Are Data Files?



The data files provide standard formats for the sponsor companies to present various types of data that should be submitted for review. The data from these files is integral to the system's Excel based reviewer tool which can be used to analyze the data provided. In addition, these files can be analyzed by the reviewers using SAS or other statistical packages.

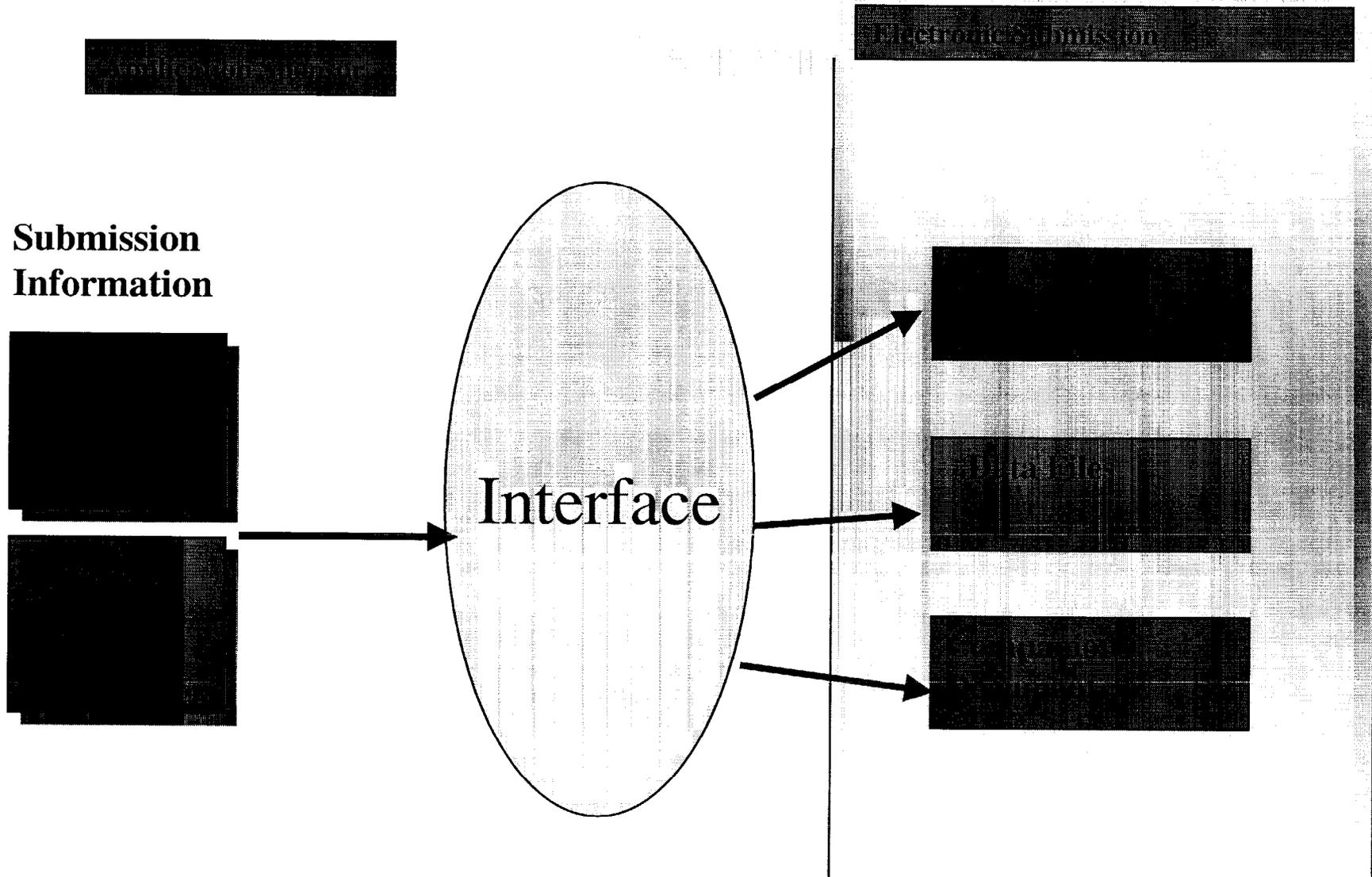
Overview of the OGD Electronic Submission Program

What is the purpose of the Companion Document?

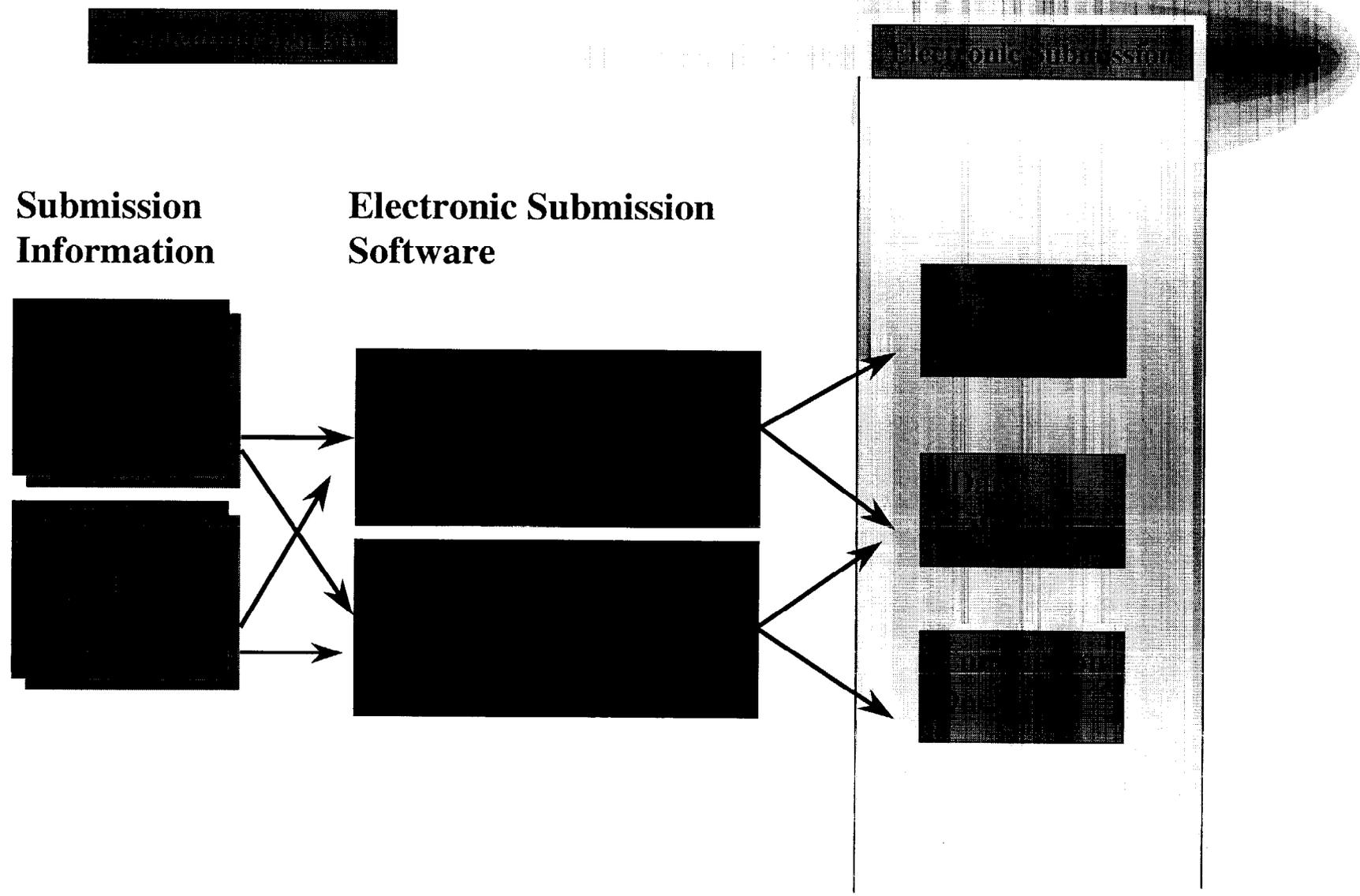


The Companion Document provides a standard template for the sponsor to provide textual information and tabular data that does not easily fit into the other components of the Electronic Submission.

Overview of the OGD Electronic Submission Program
GENERIC DRUG IMPLEMENTATION MODEL

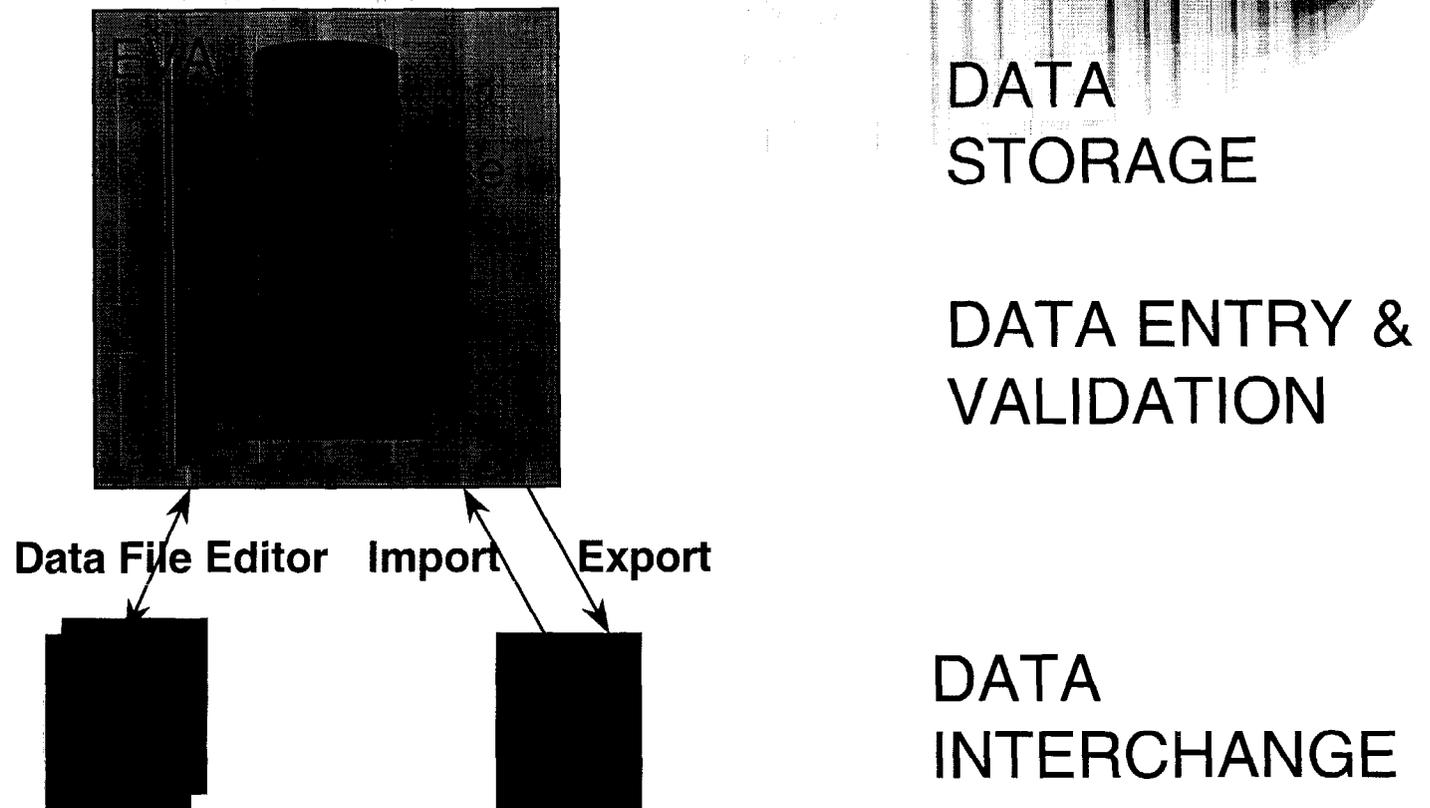


Overview of the OGD Electronic Submission Program
GENERIC DRUG IMPLEMENTATION MODEL



Overview of the OGD Electronic Submission Program

Entry and Validation Application



Overview of the OGD Electronic Submission Program

Entry and Validation Application

BA/BE EVA [Submission: SAMPLE2]

File View Help

- Submission Info
 - Waiver Info
 - Product Info
 - Ingredient Info
 - Dissolution Info
 - Pre-Study Bioanalytical Validation Info
 - Bio Study Info
 - Facility
 - Design
 - Dosing
 - Subjects
 - Treatment Info
 - Sequence Definition
 - DropOut Info
 - Adverse Reactions
 - PD Effect
 - Demographic Info
 - Parameter Calculations
 - Active Ingredient Info
 - Compound Measured Info
 - Current Study Bioanalytical Validation Info
 - Plasma Info
 - Urine Info
 - Statistics Info

CMC Submission Info

Submission ID: ...

Submission Date: Submission Number:

Submission Type:

Applicant: ...

ANDA Number: ...

Generic Drug Product Name:

US Agent: ...

Responsible Official: ...

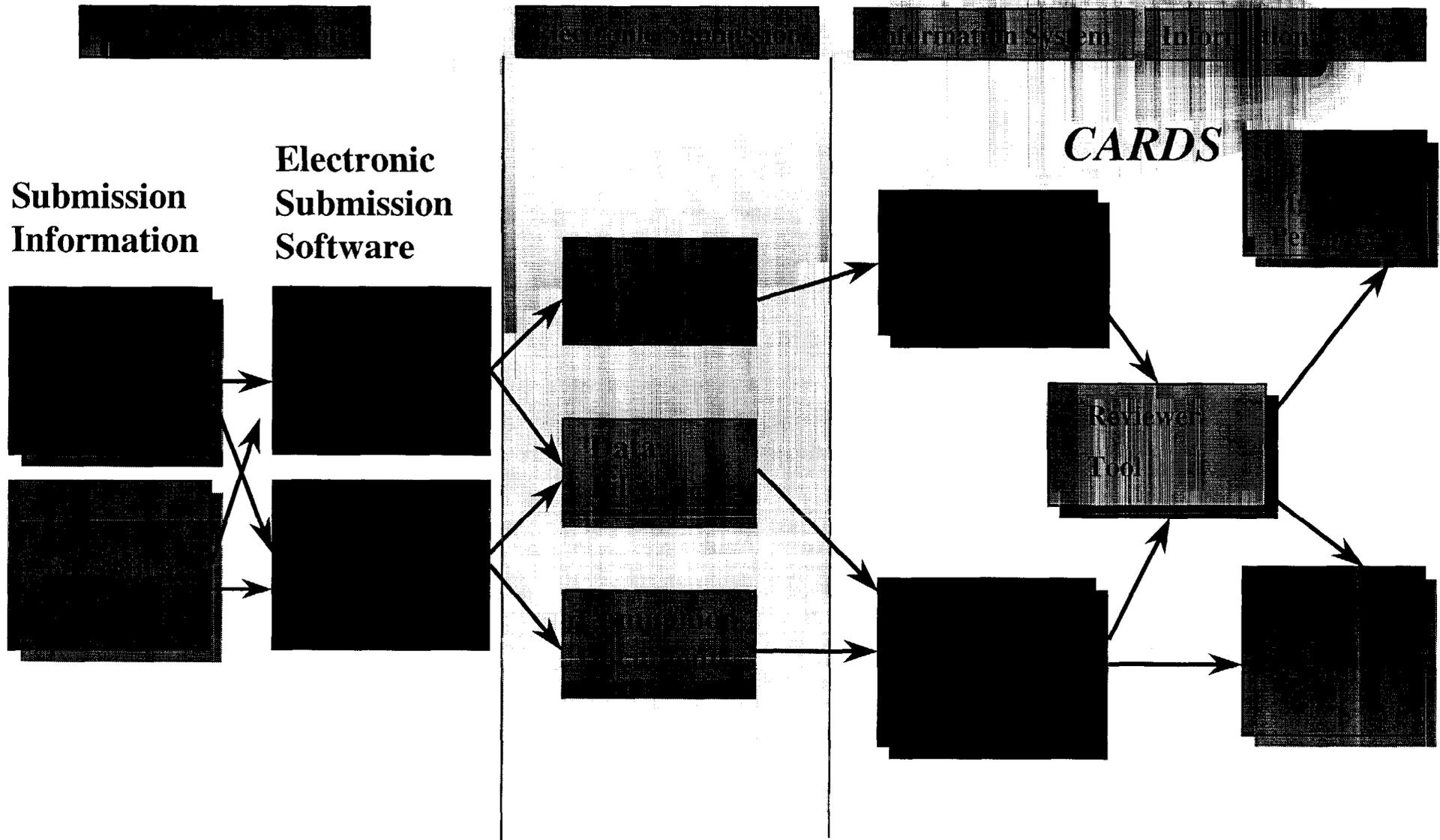
Batch Size Definition:

Manufacture Date Definition:

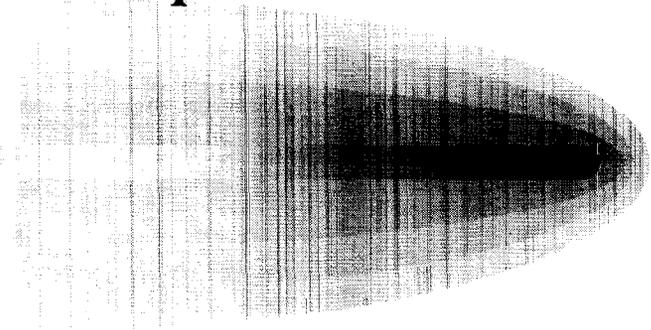
Next Previous Ok Cancel Delete New

Typical EVA Screens

Overview of the OGD Electronic Submission Program
GENERIC DRUG IMPLEMENTATION MODEL



Electronic Submission -Participation Statistics

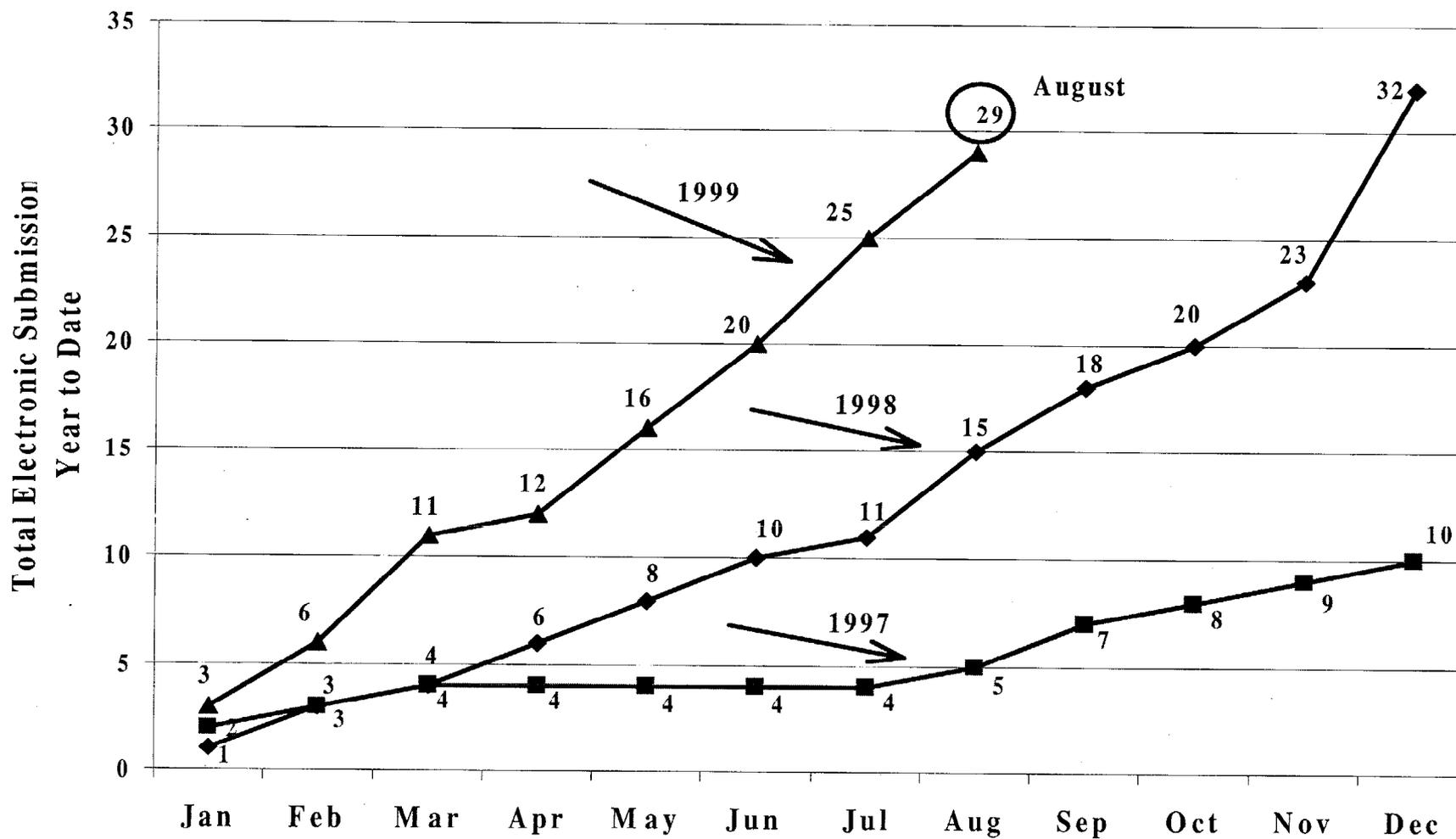


Participation in the OGD Electronic
Submission Program is Growing at an
Explosive Rate!

This growth is evident when we look at either the
number of firms participation or the number of ANDAs
that have been submitted electronically.

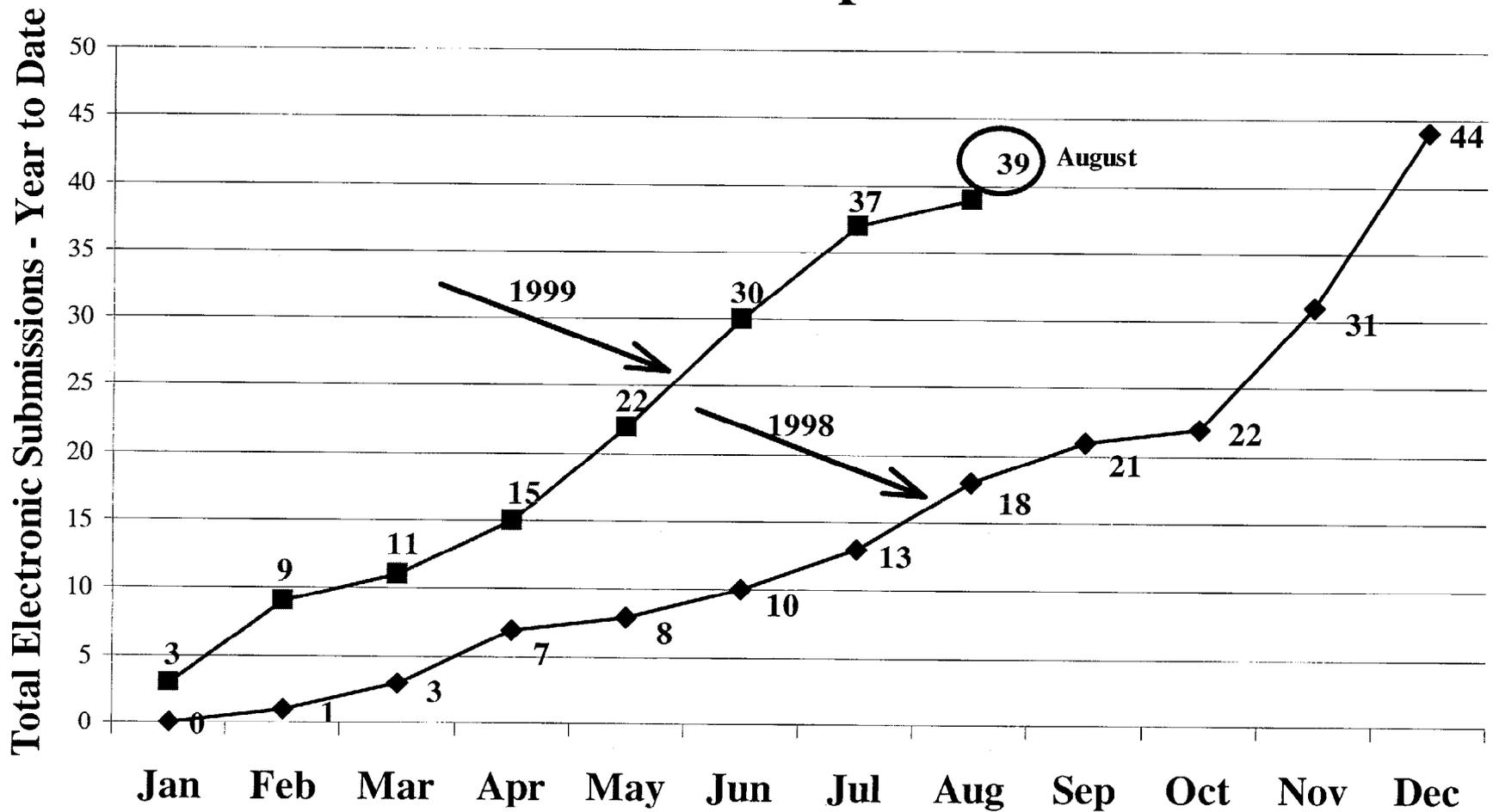
Electronic Submission - Participation Statistics

Electronic Submissions Year to Date Receipts - Bioequivalence



Electronic Submission - Participation Statistics

Electronic Submissions Year to Date Receipts - CMC



Electronic Submission -Participation Statistics

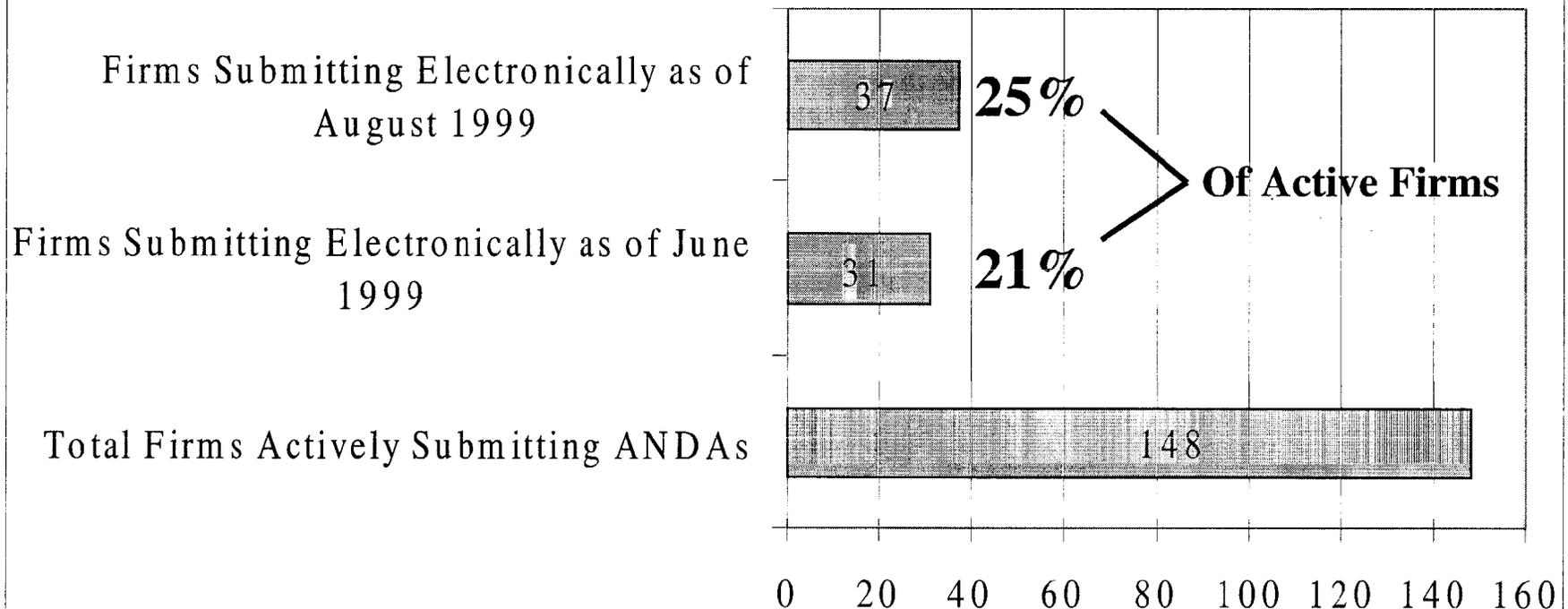
Total Projected Receipts

	Bioequivalence		
	<u>1999</u>	<u>1998</u>	<u>1997</u>
Total Receipts For Year	61*	32	10
	CMC		
	<u>1999</u>	<u>1998</u>	<u>1997</u>
Total Receipts For Year	93*	44	0
	*Projected		

Electronic Submission - Participation Statistics

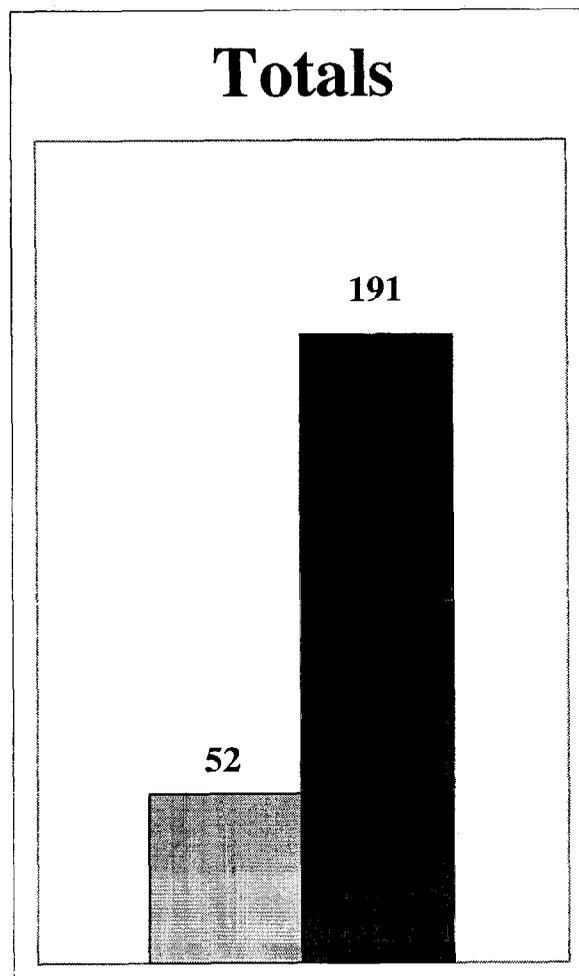
Who is Participating?

Number of Firms Participating in the OGD Electronic Submission Program

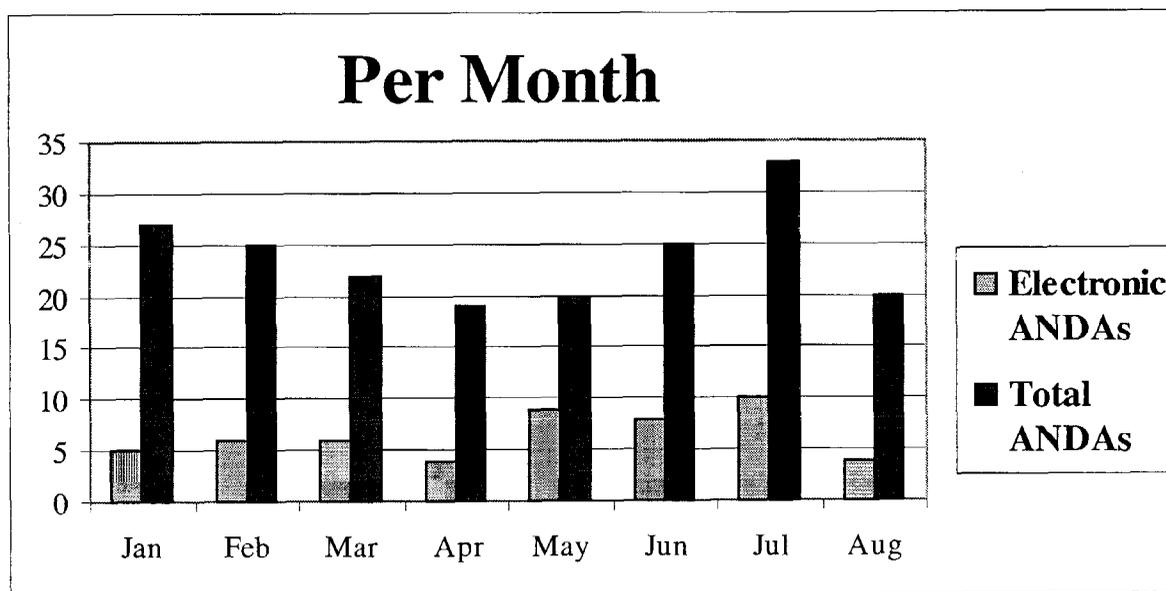


Electronic Submission - Participation Statistics

ANDA Receipts January to August 1999



Twenty-seven percent of all ANDAs received by OGD in 1999 included some portion in an electronic format



Electronic Submission - Common Errors



Can They Be Prevented?

Electronic Submission - Common Errors

The Top 10 Most Common Errors Found in Electronic Submissions to OGD

(with apologies to David Letterman)

10. Data Files saved in word processor format instead of ASCII.
9. Exceeding the grace period.
8. Data Files listed in the ESD, but not submitted.
7. Files incorrectly named.
6. Dissolution, Waiver and Ingredient information not provided in Bioequivalence submission.

Electronic Submission - Common Errors

The Top 10 Most Common Errors Found in Electronic Submissions to OGD

(with apologies to David Letterman)

5. Companion Document incorrectly formatted.
4. Entering N/A in quantity fields.
3. Metabolite names spelled differently between pre-study and in-study sections.
2. Typographical errors.
1. Spaces instead of blank lines in data files.

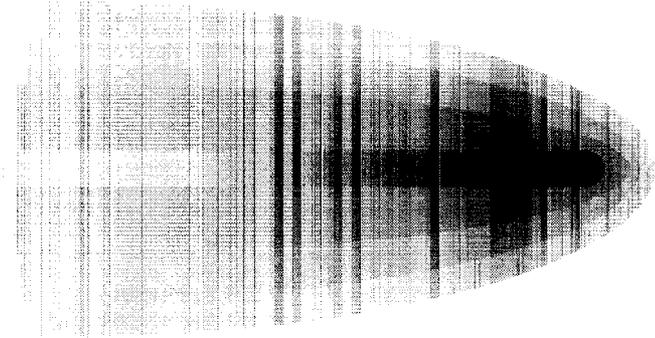
Electronic Submission - Common Errors

10. Data Files saved in word processor format instead of ASCII.

Only the Companion Document should be in a word processor format. The Data Files and the ESD must be in ASCII (American Standard Code for Information Interchange) to be processed correctly.

Electronic Submission - Common Errors

9. Exceeding the grace period.



Currently OGD allows a maximum of 30
days between the receipt of the paper ANDA
and the associated electronic submission.

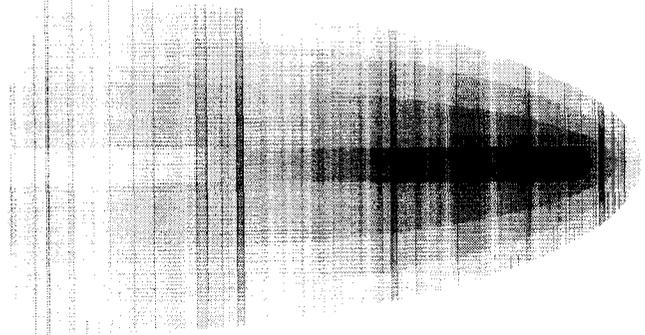
Electronic Submission - Common Errors

8. Data Files listed in the ESD, but not submitted.

All data files referred to in the ESD must be included on the electronic media submitted.

Electronic Submission - Common Errors

7. Files incorrectly named.



All files must be named according to the established naming convention. Each file type has a designated extension. The prefix is determined by the sponsor abbreviation, year of submission and submission number.

Electronic Submission - Common Errors

6. Dissolution, Waiver and Ingredient information not provided in Bioequivalence submission.

This commonly occurs when the ESD is prepared by a CRO. If this information is not shared with the CRO, the sponsor company must add it before submitting to OGD.

Electronic Submission - Common Errors

5. Companion Document incorrectly formatted.

The Companion Document template should be followed so that the maximum utility is gained for the review. For CMC section headers must match exactly.

SECTION VII \neq Section VII.

Electronic Submission - Common Errors

4. Entering N/A in quantity fields.

All quantity fields in the ESD require an entry. Because N/A is automatically converted to a non-entry this is not an acceptable choice. This most often occurs when the entry can not be quantified.

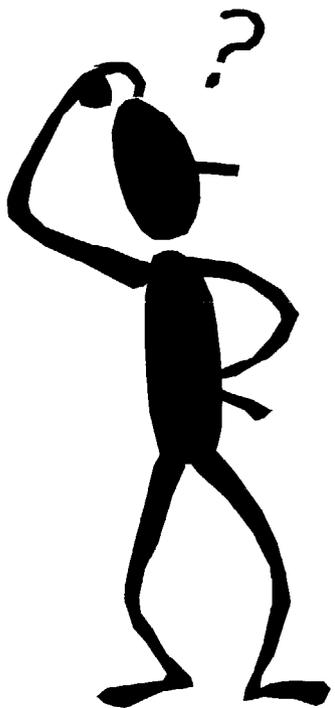
Electronic Submission - Common Errors

3. Metabolite names spelled differently between pre-study and in-study sections.

Even small differences in spelling will cause processing problems. Abbreviations will not match full spellings.

Etholwhatsamacallit Trisomething ≠

Etholwhatsamacallit 3S



Electronic Submission - Common Errors

2. Typographical errors.

Databases only match exact duplicates!

ABC_DRUG \neq ABCDRUG

ABCDRUG \neq abcdrug

NA \neq N/A

Purified Water, USP \neq Purified Water USP

2..5 is not a number, 2.5 is a number

Electronic Submission - Common Errors

1. Spaces instead of blank lines in data files.

Computers consider a blank space (generated by pressing the spacebar) to one of the set of characters.

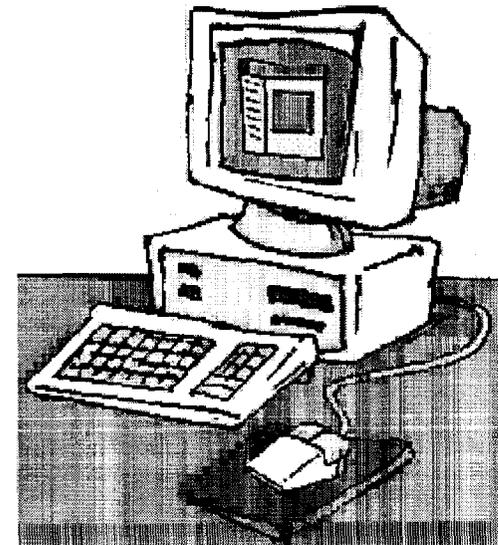
Blank Space \neq Blank Line

Electronic Submission - Common Errors

So, What's the Answer?

Quality Control

Quality Control



The Future of Electronic Submissions in OGD

Crystal Ball Time?



The Future of Electronic Submissions in OGD

What We Have Now, Only Better!!

- Continued refinement of the structured data elements.
- The addition of a PDF component
- Paperless Archive
- Web site will be migrated to CDER
- Training will continue to be available from the University of Maryland

The Future of Electronic Submissions in OGD

Continued refinement of the structured data elements.

**A little fine tuning here and there
NOT AN OVERHAUL**

As we continue to gain experience with the electronic submission system we discover some elements we would like to add to the structured submission and some that we would like to remove.

The Future of Electronic Submissions in OGD

The addition of a PDF component - Paperless Archive



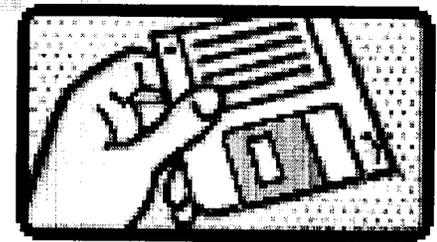
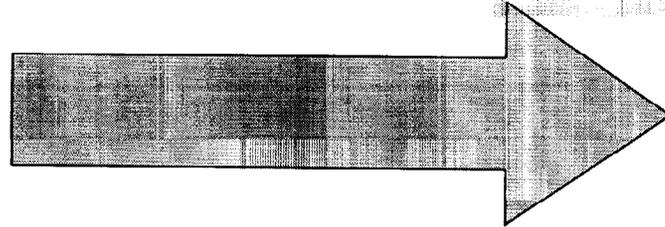
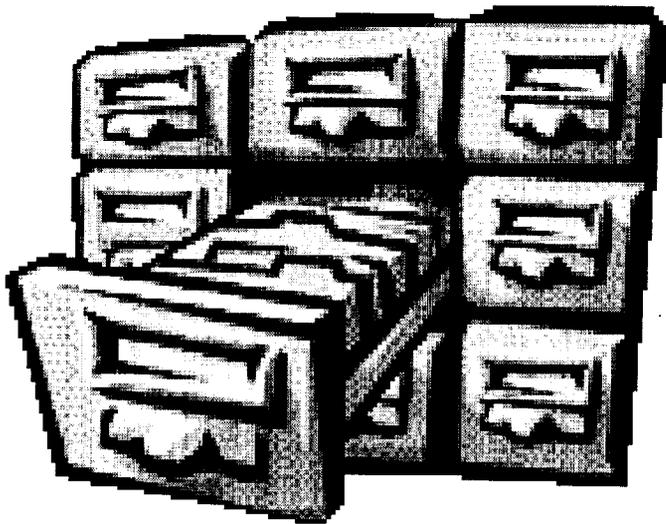
What is PDF?

An acronym for Portable Document Format, PDF is a file type created by Adobe Systems, Inc. that allows fully formatted, high-resolution, PostScript documents to be easily transmitted

across the Internet and viewed on any computer that has Adobe Acrobat Reader software (a proprietary viewer is available for free at the Adobe site).

The Future of Electronic Submissions in OGD

Why Paperless Archive?



Being able to submit and receive information in electronic format in an ANDA is expected to yield many benefits to industry and FDA, including a more consistent submission, a more consistent and rapid review, and a **reduction in archiving and storage space.**

The Future of Electronic Submissions in OGD

Updates to Existing Guidances

Guidance for Industry

Preparing Data for Electronic Submission in ANDAs

U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)
OGD
July 1999

Level Two Guidance:

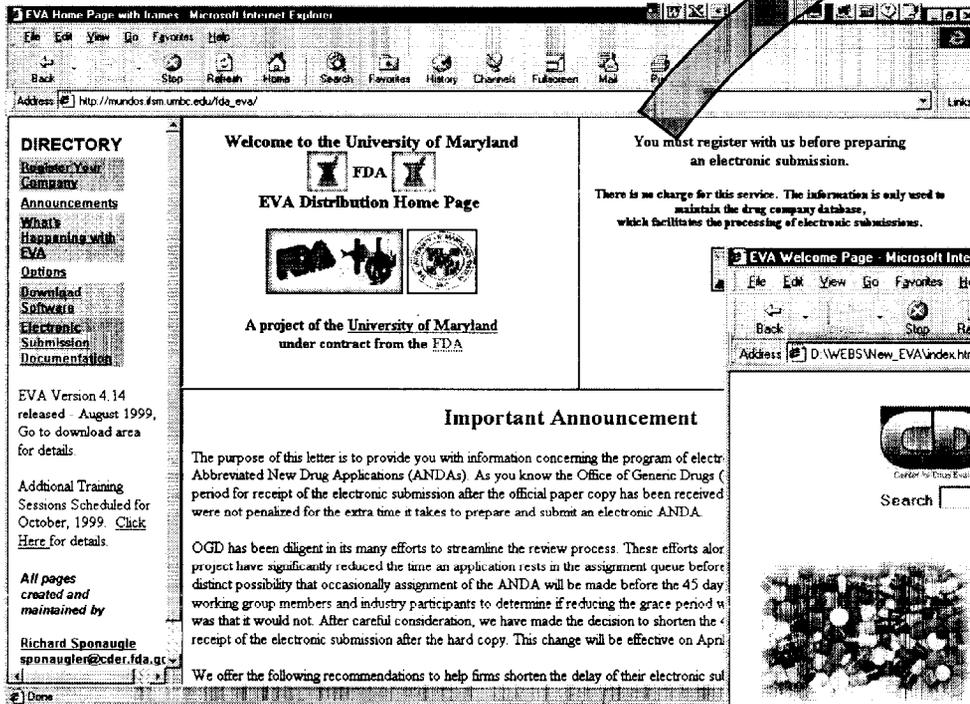
- Addresses both CMC and bioequivalence
- Covers the program as it now exists
- Will be updated as we move to paperless submissions

Available at:

<http://www.fda.gov/cder/guidance/index.htm>

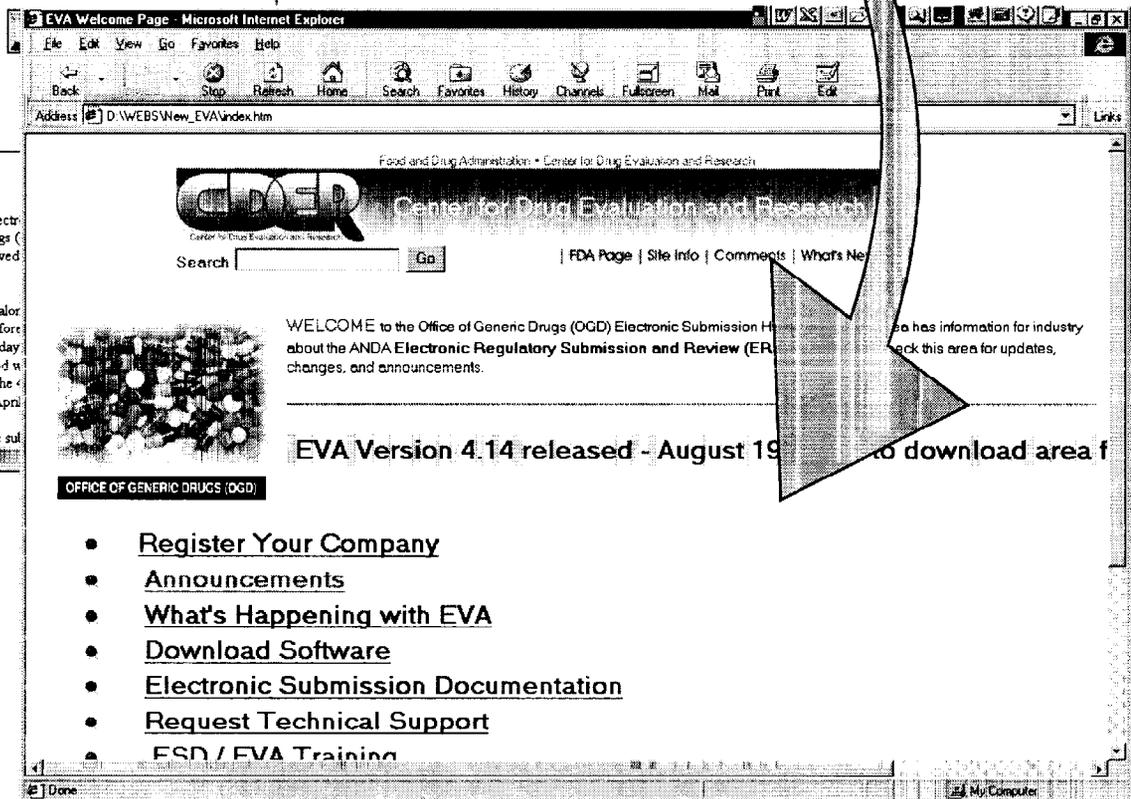
The Future of Electronic Submissions in OGD

Web site will be migrated to CDER



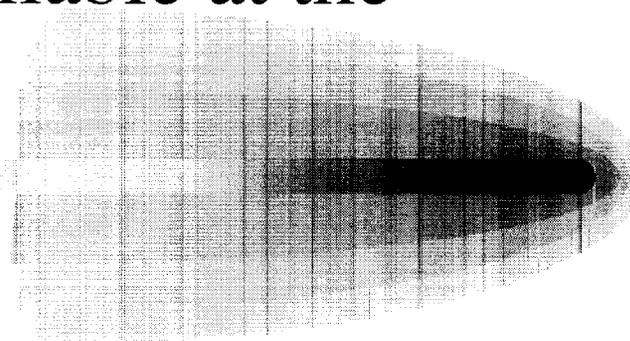
mundos.ifsm.umbc.edu

www.fda.gov/cder



The Future of Electronic Submissions in OGD

Training will continue to be available at the
University of Maryland



ESD/EVA Training

ENTRY VALIDATION APPLICATION

Presented By
The Laboratory for Healthcare Informatics
The University of Maryland,
Baltimore County
and
The Office of Generic Drugs
Food & Drug Administration

Instructors
Michelle Ritondo, Ph.D.
Industry Consultant
Formerly Lead Developer OGD-UM
Electronic Submission Project

Richard Sponaugle, MS
Senior Systems Engineer,
Elec. Submissions OGD - FDA

Gerald "Kip" Canfield, Ph.D.
Director, Laboratory for Healthcare Informatics
Associate Professor
Information Systems, UMBC

Featuring Additional Speakers from OGD

Under a cooperative agreement with the FDA, UMBC will continue to offer periodic training sessions covering the preparation of electronic ANDAs.

Additional information available at:
<http://lhi5.umbc.edu/fda/>

The Future of Electronic Submissions in OGD

Thank you for your support!

Continued support and feedback from industry is critical to the success of electronic submissions!