

Investigational New Drug Applications: two cases

April 15, 2009

Carine M. Lenders, M.D., M.S.

Medical Director, NFL program

Director, Pediatric Nutrition Support Services

Research Staff, General Pediatrics

Assistant Professor of Pediatrics





Objectives

- Describe several types of Investigational New Drug Applications and the process for working with the FDA for each
- Describe the process for determining whether your investigation may meet the criteria for IND exemption
- Provide examples of how communication with the FDA can be facilitated



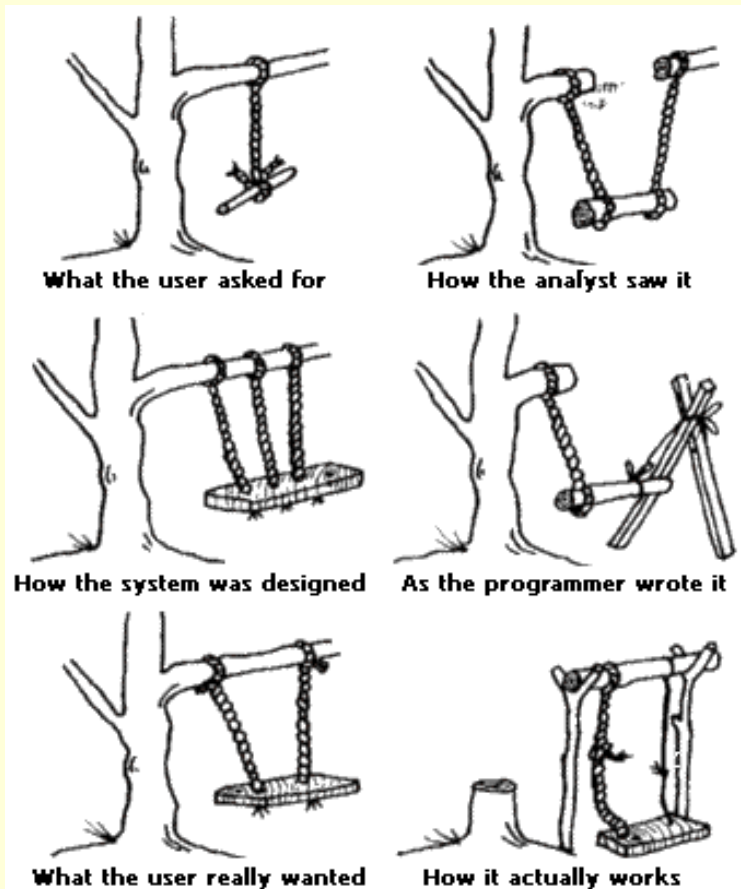
Outline

- Components of a new application
- Form 1571 and 1572
- Contrast two cases
 - New application for an IND
 - Application for an IND Exemption
- Communication with the FDA
- How to use FDA web site
- Conclusions

IND content requirements [21 CFR 312.23]

For sponsors and sponsor-investigators

Cover Sheet (& Form FDA 1571)



- Table of Contents
- Introductory Statement and General Investigational Plan
- Investigator's Brochure
- Clinical Protocol
- Chemistry, Manufacturing and Control (CMC) Information
- Pharmacology and Toxicology Information
- Previous Human Experience
- Additional Information

Application content (example)

New IND Application. PDF

1. Cover letter (2-pager)

- Brief background
- Faculty strength and experience (PI & co-PIs)
- Proposed treatment plan
- Drug supply
- Informed consent/assent & approval status
- List of attachments

Application content (example)

2. Attachments

- Cover sheet: Form FDA-1571
- Protocol (Summary, Specific Aims, Proposed plan, References, Study schedule)
- Investigator's Brochure
- Support letter from drug company or organization providing product data
- **Conditional approval** from the Boston Medical Center IRB – pending IND status
- Updated Curriculum Vitae

Form 1571 and 1572

- FDA Forms Distribution Page for CDER

<http://www.fda.gov/opacom/morechoices/fdaforms/cder.html>

Edition: March 26, 2009



Should I write a new application for an IND or write an application for an IND exemption for use in adolescents?

New IND Application: Fish Oil to reduce fatty liver in obese adolescents

Dr. Dave does the hard work for you



- New condition: NAFLD
- Population: new=adolescents
- Dosage: 4g/d (FDA approved in adults with high triglycerides)
- Potential risks: bleeding (unclear)
- Commercial distribution/labeling:
 - high triglycerides in adults
 - current INDs for other studies
 - may support change in labeling

More than one item makes this application unsuited for an IND exemption

IND Exemption: glutamine to reduce HOMA-IR in obese adolescents



- New condition: T2DM risk
- Population: used before in newborn up to adulthood
- Dosage: 0.2-0.4g/kg (FDA approved in adults with short gut syndrome - SGS)
- Potential risks: low at this dosage
- Commercial distribution/labeling:
 - SGS in adults
 - current INDs for other studies
 - not well controlled and thus will not support change in labeling

All the items acceptable to submit this application for an IND exemption



Communication with the FDA

- Identify and know your FDA contact
 - Emails
 - Call
- Use 1571 for all your communications

IND Safety Reports

- Sponsor promptly reviews all information relevant to the safety of the drug received from any source
- Notification varies with the type of AEs
 - Unexpected, likely related SAEs (life-threatening/death)
 - 7-day (calendar) report
 - Notify FDA via phone or fax
 - Unexpected, likely related SAEs (not life threatening) & Information from non-IND studies, or finding in laboratory animals suggesting increased risk
 - 15-day (calendar) report
 - Notify FDA & all investigators in writing
 - All other information relevant to the safety of the drug
 - At annual report



[Adverse Events.doc](#)



IND & the role of the FDA

COUNTERTHINK



- The FDA assures the safety and rights of subjects regardless of the phase of a study
- The FDA does not approve INDs, but assigns an IND to a study
- The IND is “in effect” 30 d after submission of the application (except if there is a clinical hold)

How to get the information you need on FDA web site

- FDA Home page (e.g. is it a drug or else?)

<http://www.fda.gov/>

- Approved drugs

<http://www.accessdata.fda.gov/scripts/cder/drugsatfda/>

- Specific searches (e.g. FDA and omega 3)

<http://www.google.com/>

- FDA regulations

<http://www.fda.gov/oc/gcp/regulations.html>

- CDER contact information

<http://www.fda.gov/cder/office.htm>

- CDER division information

<http://www.fda.gov/cder/biologics/default.htm>

Conclusions

- Before you start a IND application, try to identify a PI who previously submitted an IND application
- Identify the division at the FDA that best fit your study outcomes
- Contacts with your project manager/officer will vary based on personal styles and rules of the product management division
- Evaluate the criteria for an exemption status prior to submitting a new application