



ClinicalTrials.gov: A Public Database of Clinical Research

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Background (<http://clinicaltrials.gov>)

- Largest public registry of clinical research studies
- Public access to “basic results” of certain interventional studies
- Reporting required by law— effective as of September 27, 2007 [1]
- Accepts wide range of interventional and observational studies
- Supports many registration and/or results reporting policies (e.g., WHO and medical journal editors [2])



FDA Amendments Act (FDAAA) Requirements

Which Trials are Involved?

- **Drugs and Biologics:** Controlled trials, other than Phase I, of a product regulated by the FDA
- **Devices:** Controlled trials with health outcomes of devices regulated by the FDA (not small feasibility studies) and pediatric postmarket surveillance device studies
- Trials initiated after September 27, 2007
- Trials initiated on or before September 27, 2007 and ongoing as of December 26, 2007

Who Needs to Submit Data?

- Publicly and privately funded trials
- Responsible for registration
 - Sponsor or
 - Principal investigator, if designated

Additional FDAAA Resources

<http://prsinfo.clinicaltrials.gov/fdaaa.html>

Registration at ClinicalTrials.gov

What Data Elements are Included?

- Protocol Description
- Recruitment Information
- Location and Contact Information
- Administrative Data

<http://prsinfo.clinicaltrials.gov/definitions.html>

When to Register?

- No later than 21 days after enrollment of the first participant
- [NOTE: Must be *prior to* enrollment of the first participant to fulfill journal editors registration policy]

“Basic Results” Reporting at ClinicalTrials.gov

Which Trials Must be Reported?

- Generally, trials of *FDA-approved* drugs, biologics, and devices that were required to be registered (*see above*)

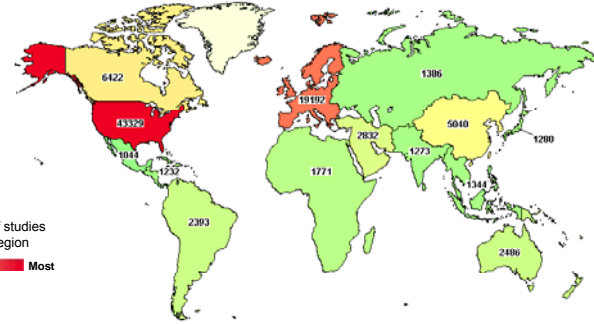
What Information Is Included?

- Participant Flow (# Started/Completed)
- Baseline Characteristics
- Outcome Measures
- Adverse Events (AEs)
- Results Point of Contact
- Restrictions on PI Publication
- Overall Limitations and Caveats

http://prsinfo.clinicaltrials.gov/results_definitions.html

Study Locations (all registered clinical studies; n = 80,513 as of 10/23/09)

170 Countries (as of 10/23/09)



Purposes of Registration and Results Reporting

- Promote fulfillment of ethical responsibility to human volunteers – use of research to contribute to medical knowledge
- Provide information to potential participants
- Identify relevant studies reporting harms and efficacy results
- Mitigate “publication” and “outcome measure reporting” bias
- Promote more efficient allocation of resources
- Assist ethical review boards and others in determining appropriateness of studies being reviewed
- Increase transparency in dissemination of clinical research information

Characteristics of Studies

	Number of Studies (Oct 23, 2009)
Total	80,513
Study Type*	
Observational	13,118
Interventional	67,063
Data Provider Category	
Federal (including NIH)	19,192
Industry	25,293
University/Foundation/Other	36,028
Phase (Interventional only)**	
N/A	13,906
I	12,542
II	22,285
III	15,055
IV	8,502
Intervention Type (Interventional)**	
Drug & Biologic	48,966
Device***	4,786
Medical Procedure	8,560
Behavioral, Gene Transfer, Other	8,355

*Additionally, 90 “expanded access” studies; 242 studies not specified
 **Not additive – trials may have more than one phase or intervention type
 ***Does not include 242 trials of devices “not previously cleared or approved” by the FDA, which have been submitted but are not posted (in the “lock box”)

Using ClinicalTrials.gov

Found 66 studies with search of: rotavirus

- 1 **Completed** **A Study of Safety, Reactogenicity and Immunogenicity of HRV Vaccine in HIV Infected Infants in South Africa**
 Conditions: Rotavirus Gastroenteritis
 Interventions: Biological: Rotavirus; Biological: Placebo; Biological: TrianrixTM-HB-Hib; Biological: SabroPoloTM vaccine
 Sponsor: GlaxoSmithKline
- 2 **Not yet recruiting** **Introduction of Oral Live Human Rotavirus (Rotarix) Vaccine in Malawi**
 Conditions: Rotavirus Gastroenteritis
 Interventions: Biological: Rotavirus Vaccine (ROTARIX)
 Sponsor: International Center for Diarrheal Disease Research, Bangladesh
- 3 **Recruiting** **Molecular Epidemiology of Rotavirus Diarrhea Among Young Children Attending Kuala Lumpur, Korea**
 Conditions: Rotavirus
 Interventions: Other: Oral rehydration therapy for diarrhea cases
 Sponsors: Institute of Primate Research
- 4 **Active, not recruiting** **Dose Escalation Study to Evaluate Oral Rotavirus Vaccine LIVE 116E After Attenuated in Healthy**
 Conditions: Diarrhea
 Interventions: Biological: Oral Rotavirus
 Sponsors: Bharat Biotech Pvt. Ltd.; National Inst of Health

A Study of Safety, Reactogenicity and Immunogenicity of HRV Vaccine in HIV Infected Infants in South Africa
 This study has been completed

Sponsored by: GlaxoSmithKline
 Information provided by: GlaxoSmithKline
 ClinicalTrials.gov Identifier: NCT00263666

Condition	Intervention	Phase
Rotavirus	Biological: Rotavirus; Biological: Placebo; Biological: TrianrixTM-HB-Hib; Biological: SabroPoloTM vaccine	Phase II

Study Type: Interventional
 Study Design: Prevention, Randomized, Double Blind (Subject, Caregiver, Investigator, Outcome Assessor), Parallel Assignment, Safety Study

Official Title: Assess the Safety, Reactogenicity and Immunogenicity of 3 Doses of GSK Biologicals' HRV Vaccine Administered to HIV Infected Infants at 6, 10, and 14 Weeks of Age in South Africa

Resource links provided by NLM: MedlinePlus, related topics: AIDS, Gastroenteritis, U.S. FDA Resources

Further study details as provided by GlaxoSmithKline:
 Primary Outcome Measures:
 • Number of Subjects Reporting Grade "2" or Grade "3" Fever, Vomiting or Diarrhea [Time Frame: Within the 15-day solicited follow-up period after any dose] [Designated as safety issue: No]
 Secondary Outcome Measures:
 • Number of Subjects Reporting Any Unsolicited Symptoms [Time Frame: Within 30 days after each dose] [Designated as safety issue: No]
 • Number of Subjects Reporting Any Serious Adverse Events... (continued)

Enrollment: 100
 Study Start Date: March 2006
 Study Completion Date: February 2008 (final data collection for primary outcome measure)

PubMed: The efficacy and safety of an attenuated (116E) human rotavirus (HRV) vaccine were assessed in a randomized, double-blind, phase II trial.

U.S. FDA Resources: **ROTARIX**
 Proper Name: Rotavirus Vaccine, Live, Oral
 Tradename: ROTARIX
 Manufacturer: GlaxoSmithKline Biologicals, License # 3417
 Indications:
 • Prevention of rotavirus gastroenteritis caused by G1 and non-G1 and children when administered as a two-dose series between 6 and 24 weeks of age.

Basic Results

A Study of Safety, Reactogenicity and Immunogenicity of HRV Vaccine in HIV Infected Infants in South Africa
 This study has been completed.
 Study NCT00263666. Information provided by GlaxoSmithKline
 First Received: December 8, 2006; Last Updated: June 16, 2009. [History of Changes](#)

Study Type:	Interventional
Study Design:	Prevention, Randomized, Double Blind, Parallel Assignment
Condition:	Rotavirus Gastroenteritis
Interventions:	Biological: Rotavirus; Biological: Placebo; Biological: TrianrixTM-HB-Hib; Biological: SabroPoloTM vaccine

Participant Flow
 Recruitment Details – Key information relevant to the recruitment process for the overall study, such as dates of the recruitment.

Pro-Assignment Details
 Significant events and approaches for the overall study following enrollment, but prior to assignment

In case of discrepancy between the HRV results (DNA PCR positive, viral load negative), performed at the Screening Visit one week prior to first vaccination the infants were not enrolled in the study.

Reporting Groups

Reporting Group	Description
Rotarix Group	Subjects received 3 doses of Rotarix vaccine co-administered with routine Trianrix™ HepB Hib and Polio Sabin™ vaccines.
Placebo Group	Subjects received 3 doses of placebo co-administered with routine Trianrix™ HepB Hib and Polio Sabin™ vaccines.

Participant Flow: Overall Study

Period: First Intervention	Rotarix Group	Placebo Group
STARTED	50	50
COMPLETED	43	39
NOT COMPLETED	7	11
Adverse Event	6	8
Lost to Follow-up	1	2
Withdrawal by Subject	0	1

Practical Applications for Researchers

- Identify ongoing and completed studies for particular diseases
- Supplement current literature reviews in a research area
- Scan the horizon for the current research in areas of interest
- Review other research approaches and opportunities for collaboration

[1] FDA Amendments Act of 2007 (FDAAA), Section 801 (Pub L No. 110-85); FDA Modernization Act of 1997 (FDAMA), Section 113 (Pub L No. 105-115)
 [2] Laine C, Horton R, DeAngelis CD, Drazen JM, Frizelle FA, et al. Clinical trial registration—looking back and moving ahead. *N Engl J Med*. 2007 Jun 28;356(26):2734-6.
 [3] Zarin DA, Tse T. Medicine. Moving toward transparency of clinical trials. *Science*. 2008 Mar 7;319(5868):1340-2