



Zarin et al. *N Engl J Med.* 2011. Mar 3;364(9):852-60.

## Trust but Verify: Trial Registration and Determining Fidelity to the Protocol

Clinical trials, like all scientific experiments, are guided by protocols that outline the study design, conduct, and analysis. Deviations from the protocol that cannot be scientifically justified are worrisome because they could undermine the validity of the study or analysis. One type of protocol deviation that generates a great deal of concern involves unacknowledged changes to the primary outcome measure. Assumptions about this measure and its distribution underlie the analyses of power and statistical significance. These assumptions depend on prespecification and could be invalidated if the measure were in fact chosen after examination of trial data.

Before 2005, it was taken on trust that a published “primary outcome measure” referred to the measure specified in the protocol, unless otherwise stated. However, after disclosure of several cases in which published measures represented as “prespecified” were actually established “post hoc,” it became clear that readers of the literature

foster analysis and discussion of best practices for reporting outcome measures, we developed a descriptive framework (7). To illustrate the use of this framework, consider a depression study. One possible measure is the Hamilton Depression Rating Scale, which might seem like an informative registry entry. However, a specific metric for each participant (for example, final score vs. change from baseline) and method of aggregation within each group (for example, mean value vs. percentage with change  $>20\%$ ) would need to be specified before an actual analysis could be done.

Although some believe that each level of specification must be set before trial initiation, others consider it acceptable to wait until data are collected (but before unmasking). To accommodate these varying viewpoints, ClinicalTrials.gov requires only the registration of specific measurements and time frames for outcome measures (such as Hamilton Depression Rating Scale at 12 weeks),



## NCT00136318 - Initial and Updated Entries for Primary Outcome Measures

Level of Specification	Initial ClinicalTrials.gov Entry	Updated ClinicalTrials.gov Entry
<b>Domain</b> (e.g., “anxiety”)	Depression	Depression
<b>Specific measurement</b> (e.g., “Hamilton Anxiety Rating Scale”)	HAM-D (Hamilton Depression Rating Scale)	MADRS (Montgomery–Asberg Depression Rating Scale)
<b>Specific metric</b> (e.g., “change from baseline”)	N/A	MADRS score $\geq 13$ during time frame
<b>Method of aggregation</b> (e.g., “proportion of participants with decrease 50%”)	N/A	Percentage of participants with specific metric
<b>Time frame</b> (e.g., “12 weeks”)	24 weeks	<ul style="list-style-type: none"> <li>• 50 weeks after receiving intervention for participants with HCV genotype 1 or 4 OR</li> <li>• 26 weeks after receiving intervention for patients with HCV genotype 2 or 3</li> </ul>

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Zarin DA, Tse T. *Ann Intern Med.* 2013 Jul 2;159(1):65-7.

**Helps Funders and Others Track  
Their Research Portfolio  
and Specific Trials**



# Two Ways to Track NIH-Funded Clinical Studies

1. Searching ClinicalTrials.gov directly
  - Query: "US NIH Grant Number" [SECONDARY-ID-TYPES]
  - Search retrieves 7,867 records (as of Dec 18, 2013)
2. Automatic linking from the NIH Research Portfolio Online Reporting Tools Database (RePORTER)
  - Using the ClinicalTrials.gov Identifier (NCT Number)

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The screenshot shows the NIH RePORTER website interface. At the top, there is a navigation bar with the NIH logo and the text "Research Portfolio Online Reporting Tools (RePORTER)". A search bar is located on the right. Below the navigation bar, there are tabs for "QUICK LINKS", "RESEARCH", "ORGANIZATIONS", "WORKFORCE", "FUNDING", "REPORTS", and "LINKS & DATA". The main content area displays "Project Information" for the project ID 5R01DK054681-08. A "Project 1 of 8" indicator is visible. A "Please note" section explains that the listed clinical studies are related to the project. Below this, there are tabs for "DESCRIPTION", "DETAILS", "RESULTS", "HISTORY", "SUBPROJECTS", "CLINICAL STUDIES", "SIMILAR PROJECTS", "NEARBY PROJECTS", "LINKS", and "NEWS AND MORE". The "CLINICAL STUDIES" tab is selected, showing a table of three clinical trial studies. A red box highlights the "ClinicalTrials.gov ID" column, and a red arrow points to the first study's ID, NCT00912301.

U.S. Department of Health & Human Services

NIH Research Portfolio Online Reporting Tools (RePORTER)

Search

HOME | ABOUT RePORT | FAQs | GLOSSARY | CONTACT US

QUICK LINKS RESEARCH ORGANIZATIONS WORKFORCE FUNDING REPORTS LINKS & DATA

Home > RePORTER > Project Information

RePORTER Login | Register System Health: GREEN

Project Information

5R01DK054681-08

Project 1 of 8 NEXT

Please note: that these are Clinical Studies that have cited one of the projects in the RePORTER search results. You may find some of these studies to be only loosely related to your topic of interest. Large multi-project center grants can conduct studies of treatments for a wide array of different conditions. For example, if you performed a search for grants related to breast cancer, there will be grants in the RePORTER hit list supporting research on treatments for breast cancer, but these same grants may be supporting Clinical Studies of treatments for other types of cancer too. Similarly, a search for grants related to depression may retrieve a clinical study for a treatment in, say, Huntington's Disease or ovarian cancer where mental health status is simply one of the measures used in the study. For a more complete and accurate search of all Clinical Studies (including those that don't cite NIH-funded projects), please visit [clinicaltrials.gov](http://clinicaltrials.gov)

DESCRIPTION DETAILS RESULTS HISTORY SUBPROJECTS **CLINICAL STUDIES** SIMILAR PROJECTS NEARBY PROJECTS BETA LINKS NEWS AND MORE

Project Number: 5R01DK054681-08 Contact PI / Project Leader: CAMILLERI, MICHAEL L  
 Title: ALPHA-2 ADRENERGIC CONTROL OF COLONIC FUNCTION IN IBS Awardee Organization: MAYO CLINIC ROCHESTER

There are 3 clinical trial studies for projects matching your search criteria.

Click on the column header to sort the results Page 1 of 1

Core Project Number	ClinicalTrials.gov ID	Study	Study Status
R01DK054681	NCT00912301	Cheno Effect on Transit in Health and IBS-C	COMPLETED
R01DK054681	NCT00911612	Does Welchol (Colestevlam Hydrochloride) Improve Colonic Transit in Diarrhea-predominant Irritable Bowel Syndrome (D-IBS)?	COMPLETED
R01DK054681	NCT00953043	Lubiprostone, Colonic Motility and Sensation	COMPLETED

Download Readers:

Cheno Effect on Transit in Health and IBS-C (Chenotransit)

This study has been completed.

Sponsor:  
Mayo Clinic

Collaborators:  
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)  
National Center for Research Resources (NCRR)

Information provided by:  
Mayo Clinic

ClinicalTrials.gov Identifier:  
NCT00912301

First received: May 29, 2009  
Last updated: May 29, 2012  
Last verified: May 2012  
History of Changes

Full Text View Tabular View Study Results Disclaimer How to Read a Study Record

Purpose

The study hypothesis is that the naturally occurring bile acid, chenodeoxycholic acid, induces acceleration of colonic transit in health and in patients with constipation-predominant Irritable Bowel Syndrome (IBS-C).

Condition	Intervention	Phase
Constipation-predominant Irritable Bowel Syndrome	Drug: Sodium chenodeoxycholate (NaCDC) Other: Placebo	Phase 2

Study Type: Interventional  
Study Design: Allocation: Randomized  
Endpoint Classification: Pharmacodynamics Study  
Intervention Model: Parallel Assignment  
Masking: Double Blind (Subject, Caregiver, Investigator, Outcomes Assessor)  
Primary Purpose: Treatment

Official Title: Effect of Chenodeoxycholic Acid on Gastrointestinal Transit and Colonic Functions in Health and Constipation-predominant Irritable Bowel Syndrome (IBS-C)

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Congressional Committee Letter to Schering-Plough and Merck While Investigating the ENHANCE Trial (NCT00552097)

ONE HUNDRED TENTH CONGRESS

U.S. House of Representatives

Committee on Energy and Commerce  
Washington, DC 20515-6115

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December 11, 2007

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"...it appears that the study itself was not registered with ClinicalTrials.gov until October 31, 2007, a full 18 months after completion of the study. In addition, the endpoint indicated in the ClinicalTrials.gov web site<sup>1</sup> appears to differ from the endpoint described in the initial study design."<sup>2</sup>

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## 参考資料 2

Clinicaltrials.gov におけるデータ登録書式



# ClinicalTrials.gov Protocol Data Element Definitions (DRAFT)

December 2015

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\* Required by ClinicalTrials.gov

**FDAAA** Required to comply with Food and Drug Administration Amendments Act (FDAAA), Section 801

**(FDAAA)** May be required to comply with FDAAA, Section 801

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## ▼ 1. Study Identification

### **Organization's Unique Protocol ID** \* **FDAAA**

Definition: Unique identification assigned to the protocol by the sponsoring organization, usually an accession number or a variation of a grant number. Multiple studies conducted under the same grant must each have a unique number. (Limit: 30 characters)

Examples:

ABT-1233-RV

Merck-023

ACTG 021

### **Brief Title** \* **FDAAA**

Definition: Protocol title intended for the lay public. (Limit: 300 characters)

Example: Safety Study of Recombinant Vaccinia Virus Vaccine to Treat Prostate Cancer

### **Acronym**

Definition: Acronym or initials used to identify this study, if applicable. Enter only the acronym. If supplied, the acronym is automatically displayed in parentheses following the brief title. (Limit: 14 characters)

Example:

Brief Title: Women's Health Initiative

Acronym: WHI

Displayed on ClinicalTrials.gov as: Women's Health Initiative (WHI)

### **Official Title**

Definition: Official name of the protocol provided by the study principal investigator or sponsor.

Example: Phase 1 Study of Recombinant Vaccinia Virus That Expresses Prostate Specific Antigen in Metastatic Adenocarcinoma of the Prostate (Limit: 600 characters)

### **Secondary IDs** **FDAAA**

Definition: Other identification numbers assigned to the protocol, including unique

identifiers from other registries and NIH grant numbers, if applicable. (Limit: 30 characters)

**ID Type** Select one. Provide additional information, depending upon selected ID Type, as noted below. (Limit: 119 characters)

- US NIH Grant/Contract Award Number - in the Secondary ID field, include activity code, institute code and 6-digit serial number. Other components of the full award number (type code, support year and suffix, if applicable) are optional.  
Examples: R01DA013131, U01HL066582, 5R01HL123451-01A2
- Other Grant/Funding Number - also provide name of grantor.
- Registry Identifier - also provide name of clinical trials registry.
- EudraCT Number - from European Union Drug Regulatory Authorities Clinical Trial System.
- Other Identifier - also provide brief description (i.e., what organization issued the ID).

### **Study Type \* FDAAA**

Definition: Nature of the investigation. Select one.

- **Interventional:** studies in human beings in which individuals are assigned by an investigator based on a protocol to receive specific interventions. Subjects may receive diagnostic, therapeutic or other types of interventions. The assignment of the intervention may or may not be random. The individuals are then followed and biomedical and/or health outcomes are assessed.
- **Observational:** studies in human beings in which biomedical and/or health outcomes are assessed in pre-defined groups of individuals. Subjects in the study may receive diagnostic, therapeutic, or other interventions, but the investigator does not assign specific interventions to the subjects of the study.
  - **Patient Registry**  
Definition: For observational studies only, check the Patient Registry box if this record describes a study that is also considered to be a Patient Registry. This type of study should only be registered once in the PRS, by the sponsor responsible for the primary data collection and analysis.

The [Agency for Healthcare Research and Quality \(AHRQ\)](#) defines a [Patient Registry](#) as including an organized system that uses observational methods to collect uniform data (clinical and other) prospectively for a population defined by a particular disorder/disease, condition (including susceptibility to a disorder), or exposure (including products, health care services, and/or procedures) and that serves a predetermined scientific, clinical, or policy purpose. Patient registries may be single purpose or on-going data collection programs that address one or more questions.

- **Expanded Access:** records describing the procedure for obtaining an experimental drug or device for patients who are not adequately treated by existing therapy, who do not meet the eligibility criteria for enrollment, or

who are otherwise unable to participate in a controlled clinical study. Expanded Access records are used to register all types of non-protocol access to experimental treatments, including protocol exception, single-patient IND, treatment IND, compassionate use, emergency use, continued access and parallel track.

## ▼ 2. Study Status

### **Record Verification Date** \* FDAAA

Definition: Date the protocol information was last verified. Verification date is shown along with organization name on ClinicalTrials.gov to indicate to the public whether the information is being kept current, particularly recruiting status and contact information. **Update verification date when reviewing the record for accuracy and completeness, even if no other changes are made.**

### **Overall Recruitment Status** \* FDAAA [Required when Study Type is "Interventional" or "Observational".]

Definition: Overall accrual activity for the protocol. Select one.

- Not yet recruiting: participants are not yet being recruited
- Recruiting: participants are currently being recruited
- Enrolling by invitation: participants are being (or will be) selected from a predetermined population
- Active, not recruiting: study is ongoing (i.e., patients are being treated or examined), but participants are not currently being recruited or enrolled
- Completed: the study has concluded normally; participants are no longer being examined or treated (i.e., last patient's last visit has occurred)
- Suspended: recruiting or enrolling participants has halted prematurely but potentially will resume
- Terminated: recruiting or enrolling participants has halted prematurely and will not resume; participants are no longer being examined or treated
- Withdrawn: study halted prematurely, prior to enrollment of first participant

NOTE: Contact information is shown on ClinicalTrials.gov only when overall status is "Recruiting" or "Not yet recruiting".

### **Why Study Stopped?**

Definition: For suspended, terminated or withdrawn studies, provide a *brief* explanation of why the study has been halted or terminated. If desired, use brief summary or detailed description to provide additional information. (Limit: 160 characters)

### **Study Start Date** FDAAA

Definition: Date that enrollment to the protocol begins.

### **Primary Completion Date** FDAAA [\* Required by ClinicalTrials.gov for records first released on or after December 1, 2012]

Definition: As specified in US Public Law 110-85, Title VIII, Section 801, with respect to an applicable clinical trial, the date that the final subject was examined or received an intervention for the purposes of final collection of data for the primary outcome, whether the clinical trial concluded according to the prespecified protocol



or was terminated. A "Type" menu is also included, with options Anticipated and Actual. For active studies, set Type to Anticipated and specify the expected completion date, updating the date as needed over the course of the study. Upon study completion, change Type to Actual and update the date if necessary.

### **Study Completion Date**

Definition: Final date on which data was (or is expected to be) collected. Use the Type menu (Anticipated/Actual) as described above.

### **Expanded Access Status \***

Definition: Status indicating availability of an experimental drug or device outside any clinical trial protocol. This data element is only applicable for Expanded Access records (see Expanded Access under Study Type). Select one.

- Available: expanded access is currently available for this treatment.
- No longer available: expanded access was available for this treatment previously but is not currently available and will not be available in the future.
- Temporarily not available: expanded access is not currently available for this treatment, but is expected to be available in the future.
- Approved for marketing: this treatment has been approved for sale to the public.

## ▼ 3. Sponsor/Collaborators

### **Sponsor \* FDAAA**

Definition: Name of primary organization that oversees implementation of study and is responsible for data analysis. For applicable clinical trials, sponsor is defined in 21 CFR 50.3. (Limit: 160 characters)

Examples: National Institute of Allergy and Infectious Diseases, Bristol-Myers Squibb

**Responsible Party** <sup>FDAAA</sup> [\* Required by ClinicalTrials.gov for records first released on or after December 1, 2012]

Definition: As defined in US Public Law 110-85, Title VIII, Section 801, the term "responsible party," with respect to a clinical trial, means

1. the sponsor of the clinical trial (as defined in 21 CFR 50.3) or
2. the principal investigator of such clinical trial if so designated by a sponsor, grantee, contractor, or awardee, so long as the principal investigator is responsible for conducting the trial, has access to and control over the data from the clinical trial, has the right to publish the results of the trial, and has the ability to meet all of the requirements for the submission of clinical trial information.

Select one:

- Sponsor: the entity (e.g., corporation or agency) that initiates the study
- Principal Investigator: the individual who serves as the principal investigator and is designated as responsible party, consistent with the conditions described in the statute

- **Sponsor-Investigator:** the individual who both initiates and conducts the study

### **Investigator Information**

If either **Principal Investigator** or **Sponsor-Investigator** is selected, the following is required:

- **Investigator Name:** select from the list of PRS users/administrators; if the investigator does not have an account, one must be created. The Full Name for the selected PRS account must be the name of a person and include first and last name, and may include any relevant degrees.
- **Investigator Official Title:** title of the investigator, at the primary organizational affiliation (Limit: 254 characters)
- **Investigator Affiliation:** primary organizational affiliation of the investigator; typically will be the same as sponsor's full name, as recorded in the PRS (Limit: 160 characters)

### **Collaborators**

Definition: Other organizations (if any) providing support, including funding, design, implementation, data analysis and reporting. The data provider is responsible for confirming all collaborators before listing them. Provide up to 10 full names of collaborating organizations. (Limit: 160 characters per name)

## ▼ **4. Oversight**

### **FDA Regulated Intervention? (FDAAA)**

Definition: Indicate whether this trial includes an intervention subject to US Food and Drug Administration regulation under section 351 of the Public Health Service Act or any of the following sections of the Federal Food, Drug and Cosmetic Act: 505, 510(k), 515, 520(m), and 522. Select Yes/No.

### **Section 801 Clinical Trial? (FDAAA)**

Definition: If this trial includes an FDA regulated intervention, indicate whether this is an "applicable clinical trial" as defined in US Public Law 110-85, Title VIII, Section 801. Briefly, applicable drug trials include controlled clinical investigations, other than Phase I investigations, of a drug or biologic subject to US FDA regulation. Applicable device clinical trials are controlled trials with health outcomes of devices subject to FDA regulation, other than small feasibility studies, and pediatric postmarket surveillance. Select Yes/No.

### **Delayed Posting? (FDAAA)**

Definition: If this is a Section 801 applicable clinical trial, indicate whether this trial includes a **device** NOT previously approved or cleared by the US FDA for any use, as specified in US Public Law 110-85, Title VIII, Section 801. Select Yes/No. If "Yes" is selected, full posting of the trial information on ClinicalTrials.gov will be delayed until after the device has been approved or cleared. **At that time, it is the registrant's responsibility to change this selection to "No" and release the record for full publication.**