

## Objective

To characterize the types of sponsor-principal investigator (PI) results disclosure restrictions reported to ClinicalTrials.gov (as required by law) to improve the existing categorization scheme.

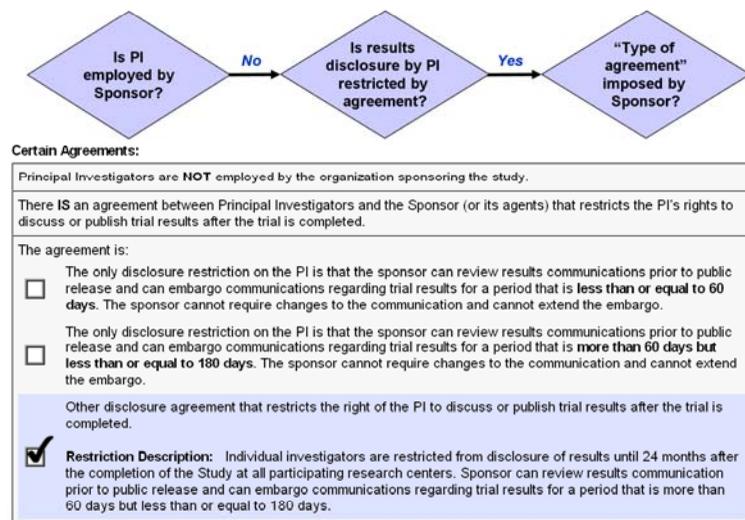
## Introduction

Concern about undisclosed conflicts of interest and associated withholding of trial data is growing. An FDA Amendments Act (FDAAA)<sup>[1]</sup> provision mandating public disclosure of agreements that restrict the PI's ability to disclose results became effective on September 27, 2008.

As part of its implementation of this provision of FDAAA, ClinicalTrials.gov (<http://ClinicalTrials.gov>) includes categories regarding sponsor review and embargoes (see Figure), which are based on published results of surveys of trial sponsors and organizations that conduct trials<sup>[2]</sup>. These "default" embargo categories address agreements where sponsors can only review results communications during the embargo period but cannot require any changes or extensions.

If the categories do not apply, "Other" can be selected and an optional 500-character text field may be used to describe the agreement, such as provisions allowing the sponsor to require changes, ban the communication, or extend an embargo.

Figure. Algorithm for Characterizing Restrictions and Sample Display at ClinicalTrials.gov



## Design

We evaluated the sponsor-imposed restriction data elements reported for 594 registered clinical studies with results posted at ClinicalTrials.gov on August 17, 2009. All full-text descriptions provided for the "Other" category were assessed, coded, and reviewed by two authors.

## Results

Overall, of the 513 studies for which PIs were not employees of the sponsor, 415 (81%) indicated a restriction (see Table 1):

- 35 (8%) impose embargoes ≤60 days,
- 72 (17%) impose embargoes >60 days and ≤180 days, and
- 308 (74%) described "Other" restrictions.

Across all restricted studies, the majority (405/415) were sponsored by Industry. Of the 396 "interventional" studies reporting restrictions, there were 150 (38%) phase 1-2 trials and 237 (60%) phase 3-4 trials.

Of the unrestricted studies, the majority (67/98) were non-Industry sponsored. Among the 89 "interventional" studies, there were 24 (27%) phase 1-2 trials and 42 (47%) phase 3-4 trials.

Table 1. Schematic of Restrictions by Funder and Study Phase (8/17/09)

|                        | PI Employed by Sponsor | PI Not Employed by Sponsor |                              |                 |                       | Total |
|------------------------|------------------------|----------------------------|------------------------------|-----------------|-----------------------|-------|
|                        |                        | No Disclosure Restrictions | Type of Disclosure Agreement |                 |                       |       |
|                        |                        |                            | ≤60 Days                     | >60 & ≤180 Days | "Other" <sup>**</sup> |       |
| <b>All Results</b>     | 81                     | 98                         | 35                           | 72              | 308                   | 594   |
| <b>Primary Sponsor</b> |                        |                            |                              |                 |                       |       |
| Industry               | 52                     | 31                         | 27                           | 72              | 306                   | 488   |
| Non-Industry           | 29                     | 67                         | 8                            | 0               | 2                     | 106   |
| <b>Study Type</b>      |                        |                            |                              |                 |                       |       |
| Observational          | 1                      | 9                          | 6                            | 0               | 13                    | 29    |
| Interventional         | 80                     | 89                         | 29                           | 72              | 295                   | 565   |
| Phase 1 – 2            | 16                     | 24                         | 12                           | 28              | 110                   | 190   |
| Phase 3 – 4            | 47                     | 42                         | 16                           | 44              | 177                   | 326   |
| N/A                    | 17                     | 23                         | 1                            | 0               | 8                     | 49    |

\* No descriptive text was provided for 9 "Other" Disclosure Agreement Types

Within the "Other" category, the following were addressed (see Table 2):

- (1) **After Multi-Site Results Disclosure** – Sponsor-prohibited disclosure of study results until the multi-site study results are disclosed (153/308), including those permitting disclosure by the PI if no publication occurs within a particular time limit after study completion (88/153);
- (2) **Control of Content** – The rights of a sponsor to review, edit, or approve communications (298/308); and
- (3) **Embargo with Content Restrictions** – Sponsor-imposed embargo for a specific period of time in conjunction with other "control of content" restrictions (182/308)

In general, sponsors used consistent, standardized text for their entries.

Table 2. Analysis of "Other" Sponsor-Imposed Restrictions (8/17/09)

| "Other" Restriction Areas   | Number of Trials (N = 308) | Number of Sponsors (N = 57)* |
|---|----------------------------|------------------------------|
| <b>After multi-site results disclosure</b>  | <b>153</b>                 | <b>22</b>                    |
| No time limit specified   | 65                         | 8                            |
| Time limit specified, after study completion  | 88                         | 15                           |
| 12 months   | 60                         | 8                            |
| 18 months   | 22                         | 3                            |
| 24 months   | 7                          | 4                            |
| <b>Control of Content</b>   | <b>298</b>                 | <b>55</b>                    |
| PI not permitted to disclose**  | 59                         | 6                            |
| Sponsor written consent/approval  | 19                         | 15                           |
| Sponsor can change confidential information only or delay disclosure (e.g., patent pending)     | 103                        | 20                           |
| Sponsor review & comment, including "Good faith"/"mutually agreeable" resolution of differences | 60                         | 20                           |
| Unspecified**   | 57                         | 7                            |
| <b>Embargoes with Content Restrictions</b>  | <b>182</b>                 | <b>46</b>                    |
| ≤60 days  | 135                        | 28                           |
| >60 and ≤180 days   | 16                         | 9                            |
| Unspecified amount of time  | 31                         | 18                           |
| <b>Extended Embargo for Confidential Information</b>  | <b>62</b>                  | <b>15</b>                    |

\*Subcategories are not additive: a sponsor may have several types of agreements \*\*Not associated with an embargo time period

## Discussion

Of the studies with sponsor-imposed restrictions on results disclosure, 74% (308/415) were not captured by existing embargo categories at ClinicalTrials.gov.

Limitations of this analysis relate to both the sponsor-provided text describing "Other" disclosure agreements as well as the categories to which we assigned this text. For example, non-specific language was difficult to code accurately and restrictions specified infrequently in the sample (e.g., interim results, press releases) were not captured by our categories.

Despite these limitations, our analysis suggests that additional categories would more accurately reflect common restrictions.

## Conclusion

Developing and implementing additional categories of results disclosure restrictions could enhance transparency by providing consistent, comprehensive descriptions common to sponsor-PI agreements.

## Background on ClinicalTrials.gov (<http://ClinicalTrials.gov>)

- Largest public (NIH-funded) registry with 78,000 interventional and observational clinical research studies
- Results reporting required by law— as of September 27, 2008<sup>[1]</sup>
- Online submission of summary results: interactive and batch upload
- Public access to "basic results," of certain clinical trials

[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] For example, Gøtzsche PC, et al. Constraints on publication rights in industry-initiated clinical trials. *JAMA*. 2006 Apr 12;295(14):1645-6; Mello MM, Clarridge BR, Studdert DM. Academic medical centers' standards for clinical-trial agreements with industry. *N Engl J Med*. 2005 May 26;352(21):2202-10; Schulman KA et al. A national survey of provisions in clinical-trial agreements between medical schools and industry sponsors. *N Engl J Med*. 2002 Oct 24;347(17):1335-41.