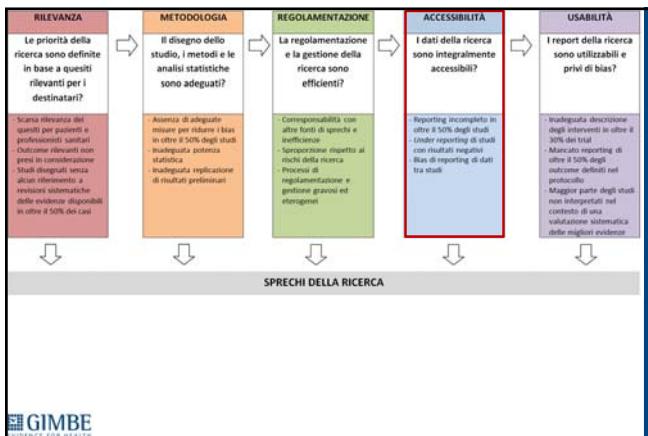


Aumentare il value delle risorse  
investite nella ricerca biomedica  
La campagna Lancet-REWARD  
Bologna, 9 novembre 2016

**Raccomandazioni REWARD. Sessione III**  
**Accessibilità ai dati e usabilità dei report della ricerca**



**DISCUSSANT**



**Luca De Fiore**

Direttore generale, Il Pensiero Scientifico Editore

**Giuseppe Remuzzi**

Direttore del Dipartimento di Medicina e U.O. di Nefrologia  
Azienda Ospedaliera Papa Giovanni XXIII, Bergamo

Coordinatore della ricerca presso l'Istituto Mario Negri di Bergamo e del Centro di Ricerche Cliniche per le Malattie Rare Aldo e Cele Daccò di Ranica (BG)

**Research: increasing value, reducing waste 4**

**Increasing value and reducing waste: addressing inaccessible research**

An-Wen Chan, Fujian Song, Andrew Vickers, Tom Jefferson, Kay Dickersin, Peter C Gatzsche, Harlan M Krumholz, Davina Ghersi, H Bart van der Worp

**Recommendations**

- 1 Institutions and funders should adopt performance metrics that recognise full dissemination of research and reuse of original datasets by external researchers
  - Monitoring—assessment of the proportion of institutional and funding-agency policies that explicitly reward dissemination of study protocols, reports, and participant-level data
- 2 Investigators, funders, sponsors, regulators, research ethics committees, and journals should systematically develop and adopt standards for the content of study protocols and full study reports, and for data sharing practices
  - Monitoring—surveys of how many stakeholders adopt international standards
- 3 Funders, sponsors, regulators, research ethics committees, journals, and legislators should endorse and enforce study registration policies, wide availability of full study information, and sharing of participant-level data for all health research
  - Monitoring—assessment of the proportion of stakeholder policies that endorse dissemination activities, and the proportion of studies that are registered and reported with available protocols, full study reports, and participant-level data

**ACCESSIBILITÀ**

**I dati della ricerca sono integralmente accessibili?**

- Reporting incompleto in oltre il 50% degli studi
- Under reporting di studi con risultati negativi
- Bias di reporting di dati tra studi

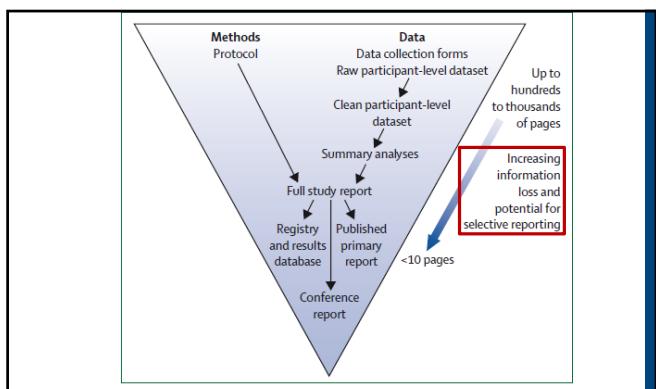


Figure 4: Key sources of information about study methods and results, with associated information loss and potential for selective reporting

Sharing clinical trial data: a proposal from the International Committee of Medical Journal Editors 

Published Online  
January 20, 2016

As a condition of consideration for publication of a clinical trial report in our member journals, the ICMJE proposes to require authors to share with others the de-identified individual-patient data (IPD) underlying the results presented in the article (including tables, figures, and appendices or supplementary material) no later than 6 months after publication.



The NEW ENGLAND JOURNAL of MEDICINE

Perspective  
AUGUST 4, 2016

Strengthening Research through Data Sharing

Elizabeth Warren, J.D.



Comment

Offline: Data sharing—why editors may have got it wrong

Richard Horton  
richard.horton@lancet.com

www.thelancet.com Vol 388 September 17, 2016



The NEW ENGLAND JOURNAL of MEDICINE

EDITORIALS



The Importance — and the Complexities — of Data Sharing

Jeffrey M. Drazen, M.D., Stephen Morrissey, Ph.D., Debra Malina, Ph.D.,  
Mary Beth Hamel, M.D., and Edward W. Campion, M.D.

N ENGL J MED 375;12 NEJM.ORG SEPTEMBER 22, 2016



BMJ 2016;355:i5295 doi:10.1136/bmj.i5295 (Published 10 October 2016)

Page 1 of 5

ANALYSIS

Beyond open data: realising the health benefits of sharing data

Accessible data are not enough. We need to invest in systems that make the information useful, say Elizabeth Pisani and colleagues

Key messages

Simple accessibility of data is enough to promote research transparency, but public health gains require more complex models  
Meaningful and equitable collaboration with local researchers and policy makers in low and middle income countries is needed to ensure the right research questions get asked and research results are used  
Useful data sharing requires long term investment in infrastructure, networks, and scientific careers, including in the data sciences  
It is not enough to share data: we need to share governance structures, scientific questions and ideas, and interpretation



## Priorità raccomandazioni REWARD



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## ACCESSIBILITÀ'

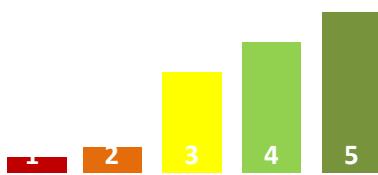
12. Istituzioni e finanziatori dovrebbero adottare indicatori di performance per valutare un'adeguata disseminazione della ricerca e il riutilizzo dei dataset originali da parte di ricercatori esterni

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## ACCESSIBILITÀ

### Raccomandazione 12

Media DS  
3.92 ± 1.07



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86

## ACCESSIBILITÀ'

13. Ricercatori, finanziatori, sponsor, enti regolatori, comitati etici e riviste mediche dovrebbero sviluppare e adottare in maniera sistematica standard internazionali relativi a:  

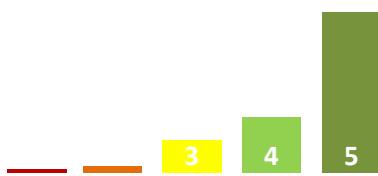
- contenuto di protocolli e report completi degli studi
- procedure di condivisione dei dati

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## ACCESSIBILITÀ

### Raccomandazione 13

Media DS  
4.41 ± 0.89



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79

BMJ 2014;349:g6276 doi: 10.1136/bmj.g6276 (Published 20 October 2014)

Page 1 of 2

## EDITORIALS

### Big strides in Europe towards clinical trial transparency

The EMA, EU, and UK HRA usher in an age of evidence enlightenment

Trish Groves *deputy editor*

*The BMJ*, London WC1H 9JR, UK

The European Medicines Agency (EMA) decided on 2 October that, for all new centralised drug marketing authorisations submitted after 1 January 2015, it will provide public access to the core content of clinical study reports and will allow researchers to download and use the reports for further analyses.<sup>3</sup>

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**EUROPEAN MEDICINES AGENCY**  
SCIENCE MEDICINES HEALTH

2 October 2014  
EMA/240810/2013

**European Medicines Agency policy on publication of clinical data for medicinal products for human use**

POLICY/0070  
Status: Adopted  
Effective date: 1 January 2015  
Review date: No later than June 2016  
Supersedes: Not applicable

  
**EUROPEAN MEDICINES AGENCY**  
SCIENCE MEDICINES HEALTH

20 October 2016  
EMA/650519/2016  
Media and Public Relations

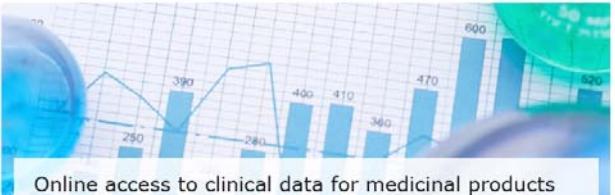
**Press release**

**Opening up clinical data on new medicines**  
EMA provides public access to clinical reports



  
**EUROPEAN MEDICINES AGENCY**  
**Clinical data**

Home Find Clinical Data ▾ About ▾



Online access to clinical data for medicinal products for human use

Easterbrook PJ, Berlin JA, Gopalan R, Matthews DR.

**Publication bias in clinical research**

Lancet 1991;337:867-72



OPEN ACCESS Freely available online

**PLOS MEDICINE**

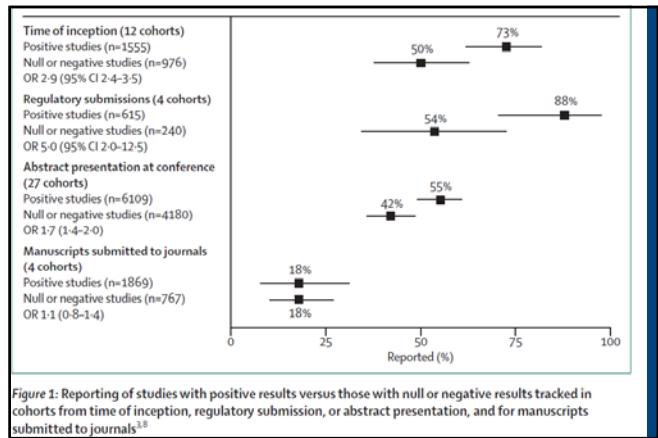
**Trial Publication after Registration in ClinicalTrials.gov: A Cross-Sectional Analysis**

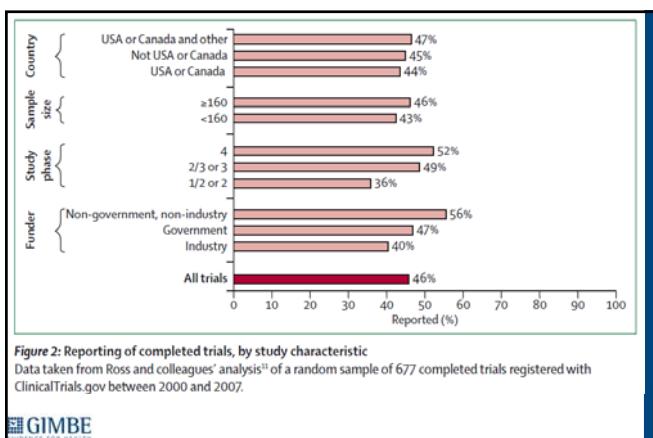
Joseph S. Ross<sup>1,2\*</sup>, Gregory K. Mulvey<sup>3</sup>, Elizabeth M. Hines<sup>4</sup>, Steven E. Nissen<sup>5</sup>, Harlan M. Krumholz<sup>3,6,7</sup>

<sup>1</sup> Department of Geriatrics and Adult Development, Mount Sinai School of Medicine, New York, New York, United States of America, <sup>2</sup>HORAD Research Enhancement Award Program and Geriatrics Research, Education, and Clinical Center, James J. Peters VA Medical Center, Bronx, New York, United States of America, <sup>3</sup>Center for Outcomes Research and Evaluation, Yale-New Haven Hospital, New Haven, Connecticut, United States of America, <sup>4</sup>Ashley College, Amherst, Massachusetts, United States of America, <sup>5</sup>Department of Cardiovascular Medicine, Cleveland Clinic, Cleveland, Ohio, United States of America, <sup>6</sup>Robert Wood Johnson Clinical Scholars Program and Section of Cardiovascular Medicine, Department of Medicine, Yale University School of Medicine, New Haven, Connecticut, United States of America, <sup>7</sup>Section of Health Policy and Administration, Yale University School of Epidemiology and Public Health, New Haven, Connecticut, United States of America

\* [Published September 8, 2009](#)







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## 10 esempi clamorosi

- Oseltamivir
- Rosiglitazon
- Gabapentin
- TGN1412
- Paroxetine
- Lorcainide
- Rofecoxib
- Celecoxib
- Ezetimibe–simvastatin
- Vitamin A and albendazole

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## Quali sprechi?

**EU-funded health research from 1998-2006**

- 6 billion of euros → 50% unpublished

*Galsworthy MJ et al. Lancet 2012*

## Quali effetti su morbilità e mortalità?

- Rofecoxib 100.000 heart attacks in 1999-2004 (US)
- Lorcainide 50.000 deaths per year in 1980s (US)

AllTrials: Withholding results costs lives

Occultare i risultati dei trial clinici costa vite umane, spreco denaro e espone i pazienti a sofferenze e rischi evitabili: il caso della Lorcainide

**2 ottobre 1999**

## Time to register randomised trials

*The case is now unanswerable*

Richard Horton *editor, Lancet*  
Richard Smith *editor, BMJ*

A version of this editorial also appears in the *Lancet* this week.<sup>12</sup>

**BMJ**      **THE LANCET**

**GIMBE**  
SCIENCE FOR HEALTH

BMJ 2013;346:f105 doi: 10.1136/bmj.f105 (Published 9 January 2013)  
Page 1 of 2

## EDITORIALS

### All trials must be registered and the results published

Academics and non-commercial funders are just as guilty as industry

Iain Chalmers *coordinator*<sup>1</sup>, Paul Glasziou *professor*<sup>2</sup>, Fiona Godlee *editor in chief*<sup>3</sup>

<sup>1</sup>James Lind Initiative, Oxford OX2 7LG, UK; <sup>2</sup>Centre for Research in Evidence-Based Practice, Faculty of Health Sciences, Bond University, Gold Coast, QLD, Australia; <sup>3</sup>BMJ, London, UK

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All Trials Registered | All Results Reported

Around half of clinical trials have never been reported. This is the story of the campaign to find them—and to fix medicine.

Read the AllTrials story

GIMBE EVIDENCE FOR HEALTH

**evidence** open access journal published by the GIMBE Foundation

**Editoriale**

**Tutti i trial devono essere registrati e tutti i risultati pubblicati**

Ricercatori e sponsor non commerciali hanno le stesse responsabilità dell'industria

Iain Chalmers<sup>1</sup>, Paul Glasziou<sup>1</sup>, Fiona Godlee<sup>2</sup>

<sup>1</sup> James Lind Initiative, Oxford, UK, <sup>2</sup>Centre for Research in Evidence-Based Practice, Faculty of Health Sciences, Bond University, Australia, <sup>3</sup>BMI, London, UK

Pubblicato 28 gennaio 2013

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CHI SIAMO COSA FACCIOVO NEWS PUBBLICAZIONI CONFERENZE GIMBE4YOUNG PRESS ROOM

Diffondere le conoscenze, migliorare la salute

Formazione Ricerca Consiliazione Sostegno Initiative • AllTrials • Dichiarazione di trasparenza • International Clinical Trials Day • Selling Sickness Premio Evidence Premio Salviamo il Nostro SSN GIMBE Awards Report attività

Home > Cosa facciamo > Sostegno Iniziative > AllTrials

Registrazione tutti i trial clinici Reportare tutti i risultati

In primo piano

GIMBE EVIDENCE FOR HEALTH

**Registrazione tutti i trial  
Reportare tutti i risultati**

Migliaia di sperimentazioni cliniche non sono mai state pubblicate. Le evidenze scientifiche emerse da questi studi sono perdute per sempre e non potranno essere utilizzate da professionisti sanitari e ricercatori, determinando errate decisioni cliniche, mancate opportunità per migliorare la pratica professionale e inutili risorsioni di risorse pubbliche e private.

Aderisci alla campagna AllTrials

- Scopri di più e firma la petizione: [www.alltrials.net](http://www.alltrials.net)
- Invita la tua organizzazione a aderire alla campagna
- Scrivere un articolo, un post, un editoriale o un comunicato per la newsletter della tua organizzazione
- Invita a noi, familiari e colleghi a firmare la petizione
- Condividi la campagna su Facebook e Twitter su #AllTrials
- Sostieni AllTrials

[www.alltrials.net](http://www.alltrials.net)

AllTrials è un'iniziativa lanciata da:

GIMBE EVIDENCE FOR HEALTH sostiene AllTrials [www.gimbe.org/alltrials](http://www.gimbe.org/alltrials)

**evidence** open access journal published by the GIMBE Foundation

Hot Topics OPEN ACCESS

**Occultare i risultati dei trial clinici rappresenta la violazione di un obbligo scientifico, etico e morale**

Antonino Cartabellotta<sup>1\*</sup>

\* Presidente Fondazione GIMBE

Pubblicato 29 aprile 2013

GIMBE EVIDENCE FOR HEALTH

**Box. Consigli ai pazienti invitati a partecipare a un trial clinico<sup>17</sup>**

Accettate di partecipare ad un trial clinico solo se:

- Il protocollo dello studio è stato registrato ed è pubblicamente accessibile.
- Il protocollo fa riferimento a revisioni sistematiche delle evidenze disponibili che giustificano la necessità del trial.
- Ricevete una garanzia scritta che i risultati completi dello studio saranno pubblicati e inviati a tutti i partecipanti che lo desiderano.

GIMBE EVIDENCE FOR HEALTH

BMJ 2015;350:h3397 doi: 10.1136/bmj.h3397 (Published 23 June 2015) Page 1 of 2

## EDITORIALS



### How medicine is broken, and how we can fix it

The chief medical officer's review on statins and oseltamivir may look for answers in the wrong places

Ben Goldacre senior clinical research fellow, Carl Heneghan professor of evidence based medicine

Centre for Evidence Based Medicine, Nuffield Department of Primary Health Care, University of Oxford, Oxford, UK



+ AllTrials

### What can I do to help to fix medicine?

If I am a...

Patient group	Trial participant	Doctor or medical student	Academic or researcher
University or research institution	Learned or professional society	Scholarly publisher or journal	Shareholder or investor
Pharmaceutical company	Non-commercial trial funder	Medicines regulator	Ethics regulator
			Health technology assessment agency

**evidence**  
open access journal published by the GIMBE Foundation

Standards & Guidelines 

Rendere pubblici i risultati dei trial clinici: lo statement dell'Organizzazione Mondiale della Sanità  
Organizzazione Mondiale della Sanità\*

**evidence**  
open access journal published by the GIMBE Foundation

Editoriale 

Razionale dello statement dell'OMS sul reporting tempestivo e la pubblicazione dei risultati dei trial clinici  
Vasee S. Moorthy<sup>1</sup>, Ghassan Karam<sup>1</sup>, Kirsten S. Vannice<sup>1</sup>, Marie-Paule Kleny<sup>1</sup>  
<sup>1</sup>World Health Organization, Geneva, Switzerland

 **ICMJE** INTERNATIONAL COMMITTEE OF MEDICAL JOURNAL EDITORS

EDITORIAL | Clinical Trial Registration: A Statement from the International Committee of Medical Journal Editors



 **ICMJE** INTERNATIONAL COMMITTEE OF MEDICAL JOURNAL EDITORS

**Update on Trials Registration**  
(October 2004)

**Update on Trials Registration: Is This Clinical Trial Fully Registered?: A Statement from the International Committee of Medical Journal Editors**  
(May 2005)

**Update on Trials Registration: Clinical Trial Registration: Looking Back and Moving Ahead**  
(June 2007)



 **ICMJE** INTERNATIONAL COMMITTEE OF MEDICAL JOURNAL EDITORS

Le riviste affiliate richiedono agli autori di registrare i propri trial in un registro:

- accessibile gratuitamente e consultabile elettronicamente
- gestito da un'associazione no-profit
- dotato di un meccanismo che garantisca la validità dei dati di registrazione

ICMJE raccomanda di pubblicare il numero di registrazione del trial alla fine dell'abstract



**ICMJE** INTERNATIONAL COMMITTEE OF MEDICAL JOURNAL EDITORS

**ICMJE accetta la registrazione nei seguenti registri**

- [www.anzctr.org.au](http://www.anzctr.org.au)
- [www.clinicaltrials.gov](http://www.clinicaltrials.gov)
- [www.ISRCTN.org](http://www.ISRCTN.org)
- <http://www.umin.ac.jp/ctr/index.htm>
- [www.trialregister.nl](http://www.trialregister.nl)
- Uno dei registri primari che partecipano al progetto dell'OMS "International Clinical Trials Portal"

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World Health Organization

Health topics Data Media centre Publications Countries Programmes Governance About WHO Search

International Clinical Trials Registry Platform (ICTRP)

Welcome to the WHO ICTRP

The mission of the WHO International Clinical Trials Registry Platform is to ensure that a complete view of research is accessible to all those involved in health care decision making. This will improve research transparency and will ultimately strengthen the validity and value of the scientific evidence base.

The registration of all interventional trials is a scientific, ethical and moral responsibility.

WHO ICTRP

**GIMBE** EVIDENCE FOR HEALTH

**FICCOResearch**

F1000Research 2016, 5:2629 Last updated: 03 NOV 2016

CrossMark  Click for updates

**SOFTWARE TOOL ARTICLE**

**The TrialsTracker: Automated ongoing monitoring of failure to share clinical trial results by all major companies and research institutions [version 1; referees: awaiting peer review]**

Anna Powell-Smith, Ben Goldacre

Evidence-Based Medicine Data Lab, Centre for Evidence-Based Medicine, Nuffield Department of Primary Health Care Sciences, University of Oxford, Oxford, UK

V1 First published: 03 Nov 2016, 5:2629 (doi: 10.12688/f1000research.10010.1)  
Latest published: 03 Nov 2016, 5:2629 (doi: 10.12688/f1000research.10010.1)

Open Peer Review

**GIMBE** EVIDENCE FOR HEALTH

## Who's not sharing their trial results?

Trials registered on ClinicalTrials.gov should share results on the site shortly after completing, or publish in a journal. But many organisations fail to report the results of clinical trials. We think this should change. Explore our data (last updated October 2016) to see the universities, government bodies and pharmaceutical companies that aren't sharing their clinical trial results.

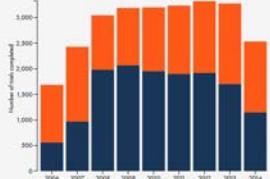
**Trial sponsors**

We've ranked the major trial sponsors with the most unreported trials registered on ClinicalTrials.gov. Click on a sponsor's name to find out whether it's getting better at reporting completed trials - or worse.

Name of sponsor	Total missing results	Total eligible trials	Percent missing
1 Sanofi	285	433	65.5%
2 Novartis Pharmaceuticals	201	534	37.6%
3 National Cancer Institute (NCI)	194	358	34.8%
4 Assistance Publique - Hôpitaux de Paris	186	292	63.7%
5 GlaxoSmithKline	183	809	22.6%
6 Merck & Co	157	312	50.3%
7 Yonsei University	129	194	71.6%
8 Seoul National University	121	207	63.3%

**Trials by year**

Since Jan 2006, all major trial sponsors completed 25,927 eligible trials and haven't published results for 11,714 trials. That means 43.2% of their trials are missing results.



## Who's not sharing their trial results?

**Why it matters:** Clinical trials are the best way we have of testing whether a medicine is safe and effective. They can involve thousands of people, patients and healthy volunteers, and take years to complete. But trials with negative results are twice as likely to remain unreported as those with positive results. This means that patients and doctors don't have the full information about the benefits and risks of treatments. We believe all clinical trials, past and present, should be reported in full. Read more on AllTrials.net and sign the petition.

**Our methodology:** We regularly download details of all trials registered on ClinicalTrials.gov. We include all interventional trials completed between Jan 2006 and two years ago, except for Phase 0/1 trials and those that have made a formal request to delay results. Next, we look for summary results on ClinicalTrials.gov, or linked results on PubMed. Our table includes only sponsors with more than 30 trials: to see all sponsors, download the full dataset. We understand this method isn't perfect. However, we feel that researchers have a clear obligation to ensure that their results are published, and discoverable. If they have failed to post summary results, or to ensure the trial ID is in their PubMed entry, then their results will be listed here as missing. See our paper for full details.

**How to improve your score:** Hello trial sponsors! Want to improve your score? Simply post summary results on ClinicalTrials.gov, or ask your journal to add the trial's NCT ID to the PubMed entry for published results. You should see the data update shortly.

**Get in touch:** We welcome feedback. See our full data and code and please get in touch by email or on Twitter with feedback.

THE TIMES

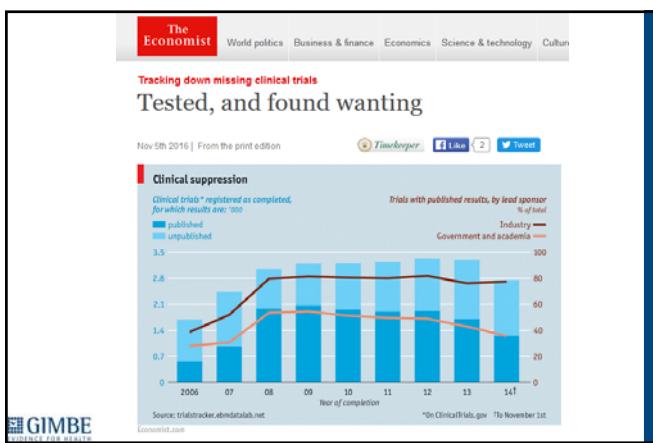
Read the full article  
Just register a few details.

Half of medical trial results kept secret

Tom Whipple, Science Editor  
November 4 2016, 1201am, The Times

By not publishing the results of clinical trials, researchers can slow the assessment of new treatments, campaigners say. Getty Images

Almost half of all clinical trials worldwide still go unpublished despite repeated warnings that pharmaceutical companies and universities are endangering the public by not releasing the results of their research.

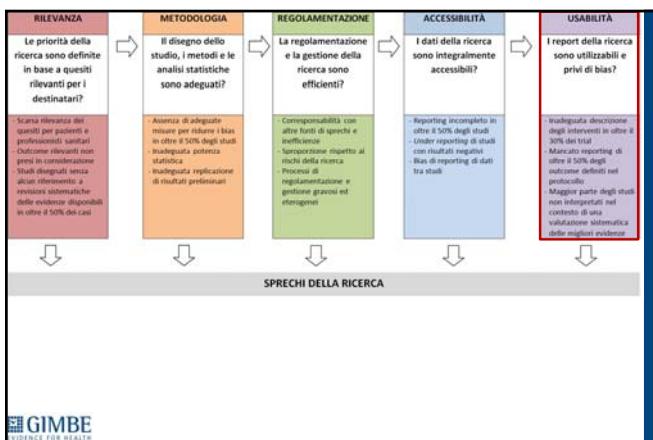


### ACCESSIBILITÀ

14. Finanziatori, sponsor, enti regolatori, comitati etici, riviste biomediche e legislatori dovrebbero sostenere e rafforzare per tutte le tipologie di ricerca sanitaria le policy relative a:

- registrazione degli studi
- ampia accessibilità a tutte le informazioni
- condivisione dei dati a livello di partecipante individuale

[GIMBE](#) SCIENCE FOR HEALTH



Research: increasing value, reducing waste 5

Reducing waste from incomplete or unusable reports of biomedical research

Paul Glasziou, Douglas G Altman, Patrick Brossard, Isabelle Boutron, Mike Clarke, Steven Julious, Susan Michie, David Moher, Elizabeth Wager

[GIMBE](#) SCIENCE FOR HEALTH

## USABILITÀ

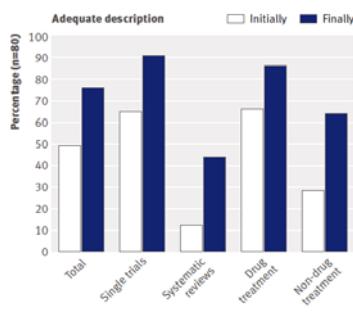
### I report della ricerca sono utilizzabili e privi di bias?

- Inadeguata descrizione degli interventi in oltre il 30% dei trial
- Mancato reporting di oltre il 50% degli outcome definiti nel protocollo
- Maggior parte degli studi non interpretati nel contesto di una valutazione sistematica delle migliori evidenze

## ANALYSIS

### What is missing from descriptions of treatment in trials and reviews?

Replicating non-pharmacological treatments in practice depends on how well they have been described in research studies, say **Paul Glasziou** and colleagues



**Fig 2 |** Percentage of studies with sufficient description of treatment initially (based only on the published paper) and after supplementary information was obtained



BMJ 2013;347:f3755 doi: 10.1136/bmj.f3755 (Published 10 September 2013)

Page 1 of 10

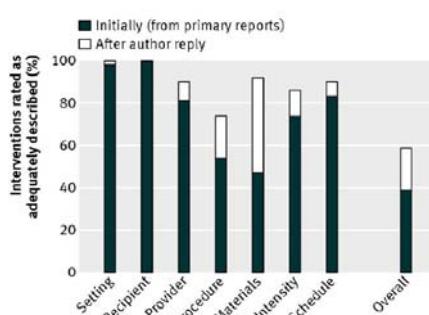
## RESEARCH

### Poor description of non-pharmacological interventions: analysis of consecutive sample of randomised trials

OPEN ACCESS

Tammy C Hoffmann associate professor of clinical epidemiology, Chrissy Erueti assistant professor, Paul P Glasziou professor of evidence-based medicine

Centre for Research in Evidence-Based Practice, Faculty of Health Sciences and Medicine, Bond University, Qld, Australia, 4229



**Fig 1** Percentage of interventions rated as adequately described, in primary report and after author reply, for each checklist item



### Abstract

38%, 49%

### Abstract

Trials: missing effect size and confidence interval (38%); no mention of adverse effects (49%)<sup>72</sup>

### Methods

40-89%, 33%  
65%, 31%

### Methods

Trials: 40-89% inadequate treatment descriptions<sup>11,13</sup>  
fMRI studies: 33% missing number of trials and durations<sup>1</sup>  
Survey questions: 65% missing survey or core questions<sup>25</sup>  
Figures: 31% graphs ambiguous<sup>6</sup>

### Results

50%, 65%,  
54%, 92%,  
24%, 40%

### Results

Clinical trials: outcomes missing: 50% efficacy and 65% harm outcomes per trial incompletely reported<sup>6</sup>  
Animal studies: number of animals and raw data missing<sup>17</sup> (54%, 92%); age and weight missing (24%)  
Diagnostic studies: missing age and sex (40%)<sup>15</sup>

### Discussion

50%

### Discussion

Trials: no systematic attempt to set new results in context of previous trials (50%)<sup>19</sup>

### Data

Almost all

### Data

Trials: most data never made available; author-held data lost at about 7% per year

**Figure 3:** Estimates of the prevalence of some reporting problems (see publication column, figure 1). fMRI=functional MRI.



## Frequency and reasons for outcome reporting bias in clinical trials: interviews with trialists

BMJ 2010;341:c7153

R M D Smyth, research associate,<sup>1,2</sup> J J Kirkham, research associate,<sup>1</sup> A Jacoby, professor of medical sociology,<sup>2</sup> D G Altman, professor of statistics in medicine,<sup>3</sup> C Gamble, senior lecturer,<sup>1</sup> P R Williamson, professor of medical statistics<sup>1</sup>

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## WHAT IS ALREADY KNOWN ON THIS TOPIC

Outcome reporting bias is the selection for publication of a subset of the original recorded outcomes on the basis of the results

Outcome reporting bias has been identified as a threat to evidence based medicine because clinical trial outcomes with statistically significant results are more likely to be published

## WHAT THIS STUDY ADDS

The prevalence of incomplete outcome reporting is high

This study has, for the first time, provided a detailed understanding of why trialists do not report previously specified outcomes

Trialists seem to be generally unaware of the implications for the evidence base of not reporting all outcomes and protocol changes

BMJ 2010;341:c7153

COMPARE  
TRACKING SWITCHED OUTCOMES IN CLINICAL TRIALS

METHODS | RESULTS | TEAM | FAQ | BLOG

### Tracking switched outcomes in clinical trials

COMPARE (CEBM Outcome Monitoring Project) takes a new approach. We are monitoring all trials published in the top five medical journals (*NEJM*, *JAMA*, *The Lancet*, *Annals of Internal Medicine*, *BMJ*).

We are analysing each trial for outcome switching, by comparing the protocol (or registry entry if a pre-trial protocol is unavailable) with the trial report. For any trial where we find that outcomes have been switched, we are writing letters to the journal to correct the record.

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67

TRIALS CHECKED

9

TRIALS WERE  
PERFECT

354

OUTCOMES NOT  
REPORTED

357

NEW OUTCOMES  
SILENTLY ADDED

On average, each trial reported just 38.2% of its specified outcomes. And on average, each trial silently added 5.3 new outcomes.

58

LETTERS SENT

18

LETTERS PUBLISHED

8

LETTERS  
UNPUBLISHED AFTER  
4 WEEKS

32

LETTERS REJECTED BY  
EDITOR

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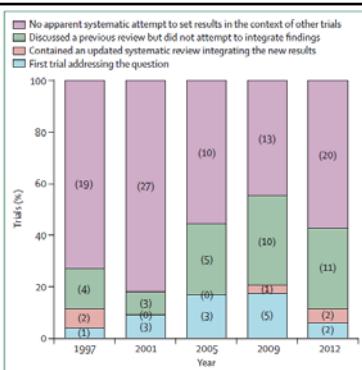


Figure 2: Percentage (and number) of trials that set their results in the context of a systematic review by 4 year intervals  
Data from references 69 and 70.

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## Further emphasis on research in context

Sabine Kleinert, Laura Benham, David Collingridge,  
William Summerskill, Richard Horton

www.thelancet.com Vol 384 December 20/27, 2014

### Panel: Research in context

#### Evidence before this study

This section should include a description of all the evidence that the authors considered before undertaking this study. Authors should state: the sources (databases, journal or book reference lists, etc) searched; the criteria used to include or exclude studies (including the exact start and end dates of the search), which should not be limited to English language publications; the search terms used; the quality (risk of bias) of that evidence; and the pooled estimate derived from meta-analysis of the evidence, if appropriate.

#### Added value of this study

Authors should describe here how their findings add value to the existing evidence (including an updated meta-analysis, if appropriate).

#### Implications of all the available evidence

Authors should state the implications for practice or policy and future research of their study combined with existing evidence.

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**Library for health research reporting**

The Library contains a comprehensive searchable database of reporting guidelines and also links to other resources relevant to research reporting.

**Reporting guidelines for main study types**

Randomised trials	CONSORT	Extensions	Other
Observational studies	STROBE	Extensions	Other
Systematic reviews	PRISMA	Extensions	Other
Case reports	CASE	Extensions	Other
Qualitative research	SQRG	COREQ	Other
Diagnostic/prognostic studies	STARD	TREND	Other
Quality improvement studies	SQUARE		Other
Economic evaluations	CHEERS		Other
Animal pre-clinical studies	ARRIVE		Other
Study protocols	SPRINT	PRIMARK	Other

See all 343 reporting guidelines

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**AGREE Reporting Checklist**  
Checklist per il reporting delle linee guida  
[www.evidence.it/AGREE-checklist](http://www.evidence.it/AGREE-checklist)

**CARE – Linee guida CASe REport**  
Linee guida per il reporting dei casi clinici  
[www.evidence.it/CARE](http://www.evidence.it/CARE)

**CONSORT Statement 2010**  
Linee guida per il reporting dei trial controllati randomizzati  
[www.evidence.it/CONSORT](http://www.evidence.it/CONSORT)

**PRISMA Statement**  
Linee guida per il reporting di revisioni sistematiche e meta-analisi di trial controllati randomizzati  
[www.evidence.it/PRISMA](http://www.evidence.it/PRISMA)

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**SQUIRE Guidelines**  
Linee guida per il reporting degli studi sul miglioramento della qualità dell'assistenza sanitaria  
[www.evidence.it/SQUIRE](http://www.evidence.it/SQUIRE)

**SPIRIT**   
**SPIRIT Statement**  
Linee guida per la stesura dei protocolli dei trial clinici  
[www.evidence.it/SPIRIT](http://www.evidence.it/SPIRIT)

**STARD**   
**STARD 2015**  
Linee guida per il reporting degli studi di accuratezza diagnostica  
[www.evidence.it/STARD](http://www.evidence.it/STARD)

Turner et al. Systematic Reviews 2012, 1:60  
<http://www.systematicreviewsjournal.com/content/1/1/60>

**RESEARCH** Open Access

**Does use of the CONSORT Statement impact the completeness of reporting of randomised controlled trials published in medical journals? A Cochrane review<sup>a</sup>**

Lucy Turner<sup>1</sup>, Larissa Shamseer<sup>1</sup>, Douglas G Altman<sup>2</sup>, Kenneth F Schulz<sup>3</sup> and David Moher<sup>1,4\*</sup>

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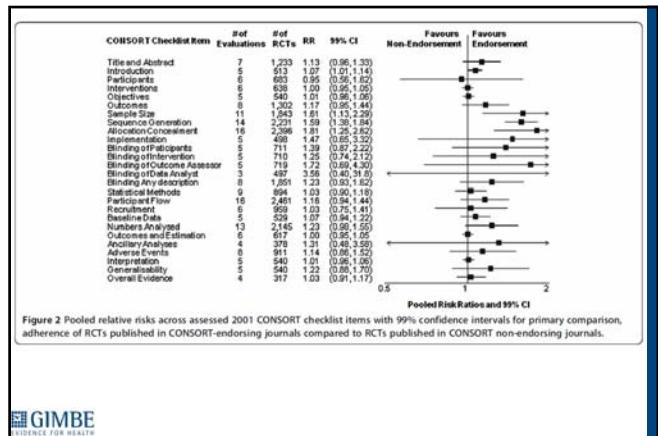
**SYSTEMATIC REVIEWS**

**Consolidated standards of reporting trials (CONSORT) and the completeness of reporting of randomised controlled trials (RCTs) published in medical journals (Review)**

Turner L, Shamseer L, Altman DG, Weeks L, Peters J, Kober T, Dias S, Schulz KE, Plint AC, Moher D

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### Priorità raccomandazioni REWARD



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### USABILITÀ'

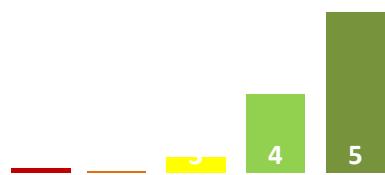
15. Finanziatori ed enti di ricerca devono allineare i criteri di regolamentazione e incentivazione della ricerca al miglioramento della qualità e completezza del reporting

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### USABILITÀ

#### Raccomandazione 15

Media DS  
4.52 ± 0.74



66

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### USABILITÀ'

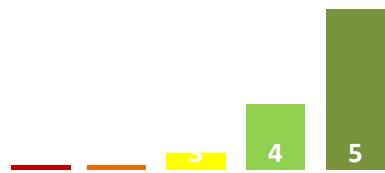
16. Finanziatori e enti di ricerca dovrebbero assumersi la responsabilità di realizzare infrastrutture di reporting, al fine di supportare buone pratiche di reporting e archiviazione

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### USABILITÀ

#### Raccomandazione 16

Media DS  
4.49 ± 0.82



61

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### USABILITÀ'

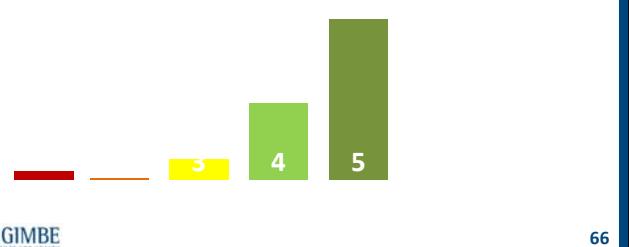
17. Finanziatori, enti di ricerca ed editori dovrebbero migliorare le potenzialità e le capacità di autori e revisori al fine di garantire un reporting completo e di elevata qualità

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## USABILITÀ

Raccomandazione 17

Media DS  
4.44 ± 0.87



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