

## Why You Should Learn How to Read Research

Knowledge is power and when you know how to read and understand the facts, you then have a strong line of reasoning when having a discussion with family, friends, and colleagues.

Scientific papers were once trusted sources for the latest breaking and noteworthy discoveries in the world of science and medicine. Today, those fields are influenced and controlled by companies and entities that have little interest in educating and informing the public.

Journals and scientific papers have become a form of advertising products and methods.

It is up to you, the consumer, to read and decide if something is the truth or if someone is twisting data to influence the public and ultimately sell more products. Corporations have become master manipulators at molding data. Information can be presented in ways that show a study is 'truthful' and 'factual', even when the raw data shows another conclusion. The purpose of this guide is to introduce you to some common tactics they use and help you understand how to read research to recognize how data can be manipulated to produce a biased conclusion.

With these insights you can become a research detective and decide for yourself where the truth lies.

# The Hidden Tricks Used to Form Biased Conclusions

It is hard to believe that science could be controlled by money and power and manipulated to push a product or intervention. Unfortunately, this has become the status quo in much of scientific research.

A study can be manipulated in several ways. For example, many papers showing negative outcomes simply do not get published. The truth is hard to discern because of this. Many other studies are "zombie studies" meaning the study was not actually conducted. It is estimated this happens to about 20% of papers.

Important data is often not included in the papers, so you need to know what to look for. What is not in a paper can be very revealing. An example of this is when details on adverse effects or subgroup analyses are left off. You may ask, 'why is this information being hidden?' One way to tell if a trial is manipulated is to compare the pre-registered protocols with the methods actually employed in the paper. Read more about this <u>here</u>. Questions to ask:

- Did outcomes change from the original protocol?
- Did statistical methods, sample size, inclusion or exclusion criteria change?
- Was there a clear sample group and control group?
- Were factors excluded (or included) that would cause the data to lean towards a particular result?

## Deepen Your Knowledge with More Reading

The following are great resources to further your understanding about reading research. They are clinicians, have careers in research science, are data experts, and/or have written and presented lectures on research and research design.

- Dr. Tess Lawrie's Substack

   <u>https://substack.com/@drtesslawrie</u>
- Alex Marinos' Substack
  - <u>https://substack.com/@doyourownresearch</u>
  - Tess Lawrie's interview with Andrew Hill: <u>https://twitter.com/alexandrosM/status/150012428</u> <u>3850219528?lang=en Tess Lawrie's interview with</u> <u>Andrew Hill</u>
- Aaron Hertz's Substacks
  - <u>https://ashmedai.substack.com/p/the-complete-idiots-guide-to-cooking</u>
  - <u>https://ashmedai.substack.com/p/did-the-cdc-</u> <u>doctor-their-2021-study</u>
- Dr. Pierre Kory's Substack
  - <u>https://pierrekory.substack.com/</u>
- A Midwestern Doctor's Substack

   <u>https://substack.com/@amidwesterndoctor</u>
- Kelly Kronhert's Substack <u>https://substack.com/@kelleyk</u>
- The Disinformation Playbook

   <u>https://www.ucsusa.org/resources/disinformation-</u>playbook

## 8 Steps to Begin Analyzing a Research Study

01 READ THE DISCLOSURES SECTION

O2 CHECK THE PUBLISHED DATE OF THE PAPER

O3 SKIM ALL THE SECTIONS OF THE PAPER

**C**4 READ THE INTRODUCTION

05 IDENTIFY HOW THIS PAPER FITS IN WITH THE FIELD OF RESEARCH OR ON A SPECIFIC TOPIC OF INTEREST

**READ THE DISCUSSION** 

READ THE ABSTRACT

LOOK THROUGH THE RESULTS AND METHODS SECTIONS

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## Step One: Always Read the Disclosure Section

#### This section is crucial to decipher whether the study is biased.

The disclosures section will reveal whether the study was conducted independently or whether a person, company, or other group had an impact on the study outcome. A study should ideally not have any conflicts of interest.

If the section shows that the researchers have received money from a company or work for a university that is receiving money from a drug company, they are not independent researchers. You should stop here and dismiss the study. If you are unsure or if another entity is sponsoring the research, find out who is involved in the noted organizations and see if they have another agenda or receive support of companies.

This requires a little time and detective work. Do you see that they have received support from any companies? Do the researchers have investments in the company's drug? Are they receiving monies from an organization that supports a company?

See below for an example of author affiliations from <u>a vaccine study</u>. See also the <u>list of investigators</u>. Another example is <u>this Substack</u> showing conflicts of interest.

#### ORIGINAL ARTICLE

#### Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine

Fernando P. Polack, M.D., Stephen J. Thomas, M.D., Nicholas Kitchin, M.D., Judith Absalon, M.D., Alejandra Gurtman, M.D., Stephen Lockhart, D.M., John L. Perez, M.D., Gonzalo Pérez Marc, M.D., Edson D. Moreira, M.D., Cristiano Zerbini, M.D., Ruth Bailey, B.Sc., Kena A. Swanson, Ph.D., et al., for the C4591001 Clinical Trial Group\*

#### Author Affiliations

From Fundacion INFANT (F.P.P.) and iTrials-Hospital Militar Central (G.P.M.), Buenos Aires; State University of New York, Upstate Medical University, Syracuse (S.J.T.), and Vaccine Research and Development, Pfizer, Perl River (J.A., A.G., K.A.S., K.K., W.Y.K., D.C., P.R.D., K.U.J., W.C.G.) — both in New York; Vaccine Research and Development, Pfizer, Hurley, United Kingdom (N.K., S.L., R.B.); Vaccine Research and Development (J.L.P., P.L.) and Worldwide Safety, Safety Surveillance and Risk Management (S.M.), Pfizer, Collegeville, PA; Associação Obras Sociais Irmã Dulce and Oswaldo Cruz Foundation, Bahia (E.D.M.), and Centro Paulista de Investigação Clinica, São Paulo (C.Z.) — both in Brazil; Global Product Development, Pfizer, Peapack, NJ (S.R.); Cincinnati Children's Hospital, Cincinnati (R.W.F.); Johns Hopkins Bloomberg School of Public Health, Baltimore (L.L.H.), BioNTech, Mainz (ÖT., U.Ş.), and Medizentrum Essen Borbeck, Essen (A.S.) — both in Germany; Tiervlei Trial Centre, Karl Bremer Hospital, Cape Town, South Africa (H.N.); Hacettepe University, Ankara, Turkey (S.Ü.); and Worldwide Safety, Safety Surveillance and Risk Management, Pfizer, Groton, CT (D.B.T.).

Address reprint requests to Dr. Absalon at Pfizer, 401 N. Middletown Rd., Pearl River, NY 10965, or at judith.absalon@pfizer.com.

A complete list of investigators in the C4591001 Clinical Trial Group is provided in the Supplementary Appendix, available at NEJM.org.

## Step Two: Check the Published Date of the Paper

#### Is this research up to date?

Knowing the publication date will help you determine whether these are the most recent findings. Sometimes additional research has been done since a study's publication date.

One way investigators can manipulate data is by releasing some data first to create a certain belief and then quietly releasing the rest later. This is an effective strategy for manipulating public opinion. Aaron Hertz talks about this and other ways of playing with timing <u>in this</u> <u>section of his Substack</u>. This Substack is written satirically from the viewpoint of someone studying how to write propaganda.

Researchers can also decide to stop publishing data. Sometimes, a paper even mysteriously disappears! One important tip is to download a copy of whatever research paper you are reading and save it to your computer.

### Review > Swise Med Wkly. 2021 Oct 19:151:w30087. doi: 10.4414/smw.2021.w30087. eCollection 2021 Oct 11.

#### The very low risk of myocarditis and pericarditis after mRNA COVID-19 vaccination should not discourage vaccination

Philip Haaf <sup>1 2</sup>, Gabriela M Kuster <sup>1 3</sup>, Christian Mueller <sup>1</sup>, Christoph T Berger <sup>4</sup>, Pierre Monney <sup>2 5</sup>, Peter Burger <sup>2</sup>, Simon F Stämpfli <sup>2 6</sup>, Christine Helena Attenhofer Jost <sup>2 7</sup>, Michael J Zellweger <sup>1</sup>, Stefan Osswald <sup>1</sup>, Birgit C Donner <sup>8</sup>, Simon C Koestner <sup>2 9</sup>, Felix C Tanner <sup>3 10</sup>

Affiliations + expand

#### PMID: 34668687 DOI: 10.4414/smw.2021.w30087

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globulins or corticosteroids should be individually as sessed in severe cases [4, 10, 16]. Chest pain can be treate with paracterization, novaminsulfone, NSAIDs, or morphin as needed [4, 10, 16].

Clinical outcome and risk evaluation Clinical outcome of mRNA vaccine-associated myocarditis has been mostly very favorable viduot relevant arhythmis and with rapid complete spontaneous recovery (7).10. Ohy a few cases in older adults have been reported with outcomes varying depending on other pre-existing conditions [7], in addition to two cases with a fulminant course [17].

So far, Israel and the United States provide most information about vaccine-associated inflammation of the heart. There seems (12) and the state of the state of the state compare data. Based on the data available to date, see conditis occurring after mRNA vaccination is still verme [4]. The US Milliary Health System administered more than 2.8 million does of mRNA-based vaccines in these individuals and detected only 23 myocarditis cases

19, 11]. Up to 21 September 2021 and after more than 10.2 million doese of mRNA COVID-19 vaccines had been administered in Switzerland, 151 potential cases of vaccineassociated myocarditis have been reported to Swissmedic 201 All mouth-interventions need to be evaluated balancing

benefit versus terms of prevents hospitalisations compared with its risk of vacation-associated myocarditis seems to be very clearly in flowar of vacatiation (fig. 2), even more with increasing age. Given that SARS-GoV2 is constantly mutating, it seems likely that globally most individuals will be contact with

Biely that globally most individuals will be contact with this increasingly violent vious. Food the vancinated and annovacinated. To vancinate or not to vancinate both increcentari violes: a recently published lensel indupt viole to put risks for adverse event by the nRNA watching the doutest of the risks of the same adverse events after doumented infections with RARS-CAV-11. The risk rate of the mpocentities was estimated to increase by factor 3.2 after mRNA vancination, with 1 to 5 events pr 100000 persons

> conditis was interested by a finite of 18.3. April for securitin, the raise of enaltyic both ensions adverwas advecantially higher after inflection than after w ion [1]. Convertig, it is addressed whether condise inflations specifie to the eRNA platform. It should also be that a contain link has not yet been enalthinked be COVID-19 vaccination and perimoycondris.

Special considerations regarding mR is v nation. In general, there is a revenuendation for COV dention for all individuals 212 years of age. Given airoly door-turns knowledge regarding advense of nRNA wearlings, extra patterns are il aid-sidual

Some knowledge gaps What are the long-term effects of taR2 ed my coordins? after docurisk ratio of 2 persons the subficient liquies is effer regres and why is then inflammation mer codes? Marine in the inflammation mer codes?

> an all available camere divined and scientific orimentified COVID-14 vaccions by for earning all oils of vaccion associated representation and the analysis of the error will cover be a versform vaccion. All methods informations continue to choice beamse and methods and and to be balldraft heath. COVID-14 vaccions continue to the first of the ball of the ball of the ball for all dig ble information. Perplaying COVID-19 deduces transmission barries to be ball.

Vito o interestet international international VID synchronis, multi-system influenzation children and doch, and is encide to the furno of all social restrictions. Nevertheless, ouing and research are needed to better underent vaccine-associated cardiac damage. Review > Immun Inflamm Dis. 2023 Mar;11(3): 807. doi: 10.1002/iid3.807.

Adverse events following COVID-19 mRNA vaccines: A systematic review of cardiovascular complication, thrombosis, and thrombocytopenia

Farah Yasmin <sup>1</sup>, Hala Najeeb <sup>1</sup>, Unaiza Naeem <sup>1</sup>, Abdul Moeed <sup>1</sup>, Abdul Raafe Atif <sup>1</sup>, Muhammad Sohaib Asghar <sup>2</sup>, Nayef Nimri <sup>3</sup>, Maryam Saleem <sup>3</sup>, Dhrubajyoti Bandyopadhyay <sup>4</sup>, Chayakrit Krittanawong <sup>5</sup>, Mohammed Mahmmoud Fadelallah Eljack <sup>6</sup>, Muhammad Junaid Tahir <sup>7</sup>, Fahad Waqar <sup>3</sup>

Affiliations + expand PMID: 36988252 PMCID: PMC10022421 201:10.1002/iid3.807

> Results: A total of 81 articles analyzed confirmed cardiovas st-COVID-19 mRNA vaccines in 17,636 individuals and reported 284 deaths with any of 17,636 cardiovascular events with any mRNA vaccine, 17,192 were observed with the fizer-BioNTech) vaccine, 444 events with mRNA-1273 (Moderna). Thrombosis was freque ported with any mRNA vaccine (n = 13,936), followed by stroke (n = 758), myocarditis (n = 511), rdial infarction (n = 377), pulmonary embolism (n = 301), and arrhythmia (n = 254). Stratifying th results by vaccine type showed that thrombosis (80.8%) was common in the BNT162b2 coho while stroke (39.9%) was common with mRNA-1273 for any dose. The time between the vaccination dosage and the first symptom onset averaged 5.6 and 4.8 days with the mRNA-1273 and BNT162b2, respectively. The mRNA-1273 cohort reported 56 deaths compared to the 228 2b2, while the rest were discharged or transferred to the ICU.

## Step Three: Skim All the Sections of the Paper

Make notes for yourself while reading each section to help evaluate the study and clarify questions you may have.

As you go along, take notes, and look up the definitions of any words you're unsure of. If you come across an acronym later in a work, a helpful suggestion is to use "CTRL F" on the keyboard to search for the first time it is mentioned, as here is where it will be defined. Note the definitions, the sample population, the method of testing, and other important facts that can impact the study outcome.



## Step Four: Read the Introduction

Read the introduction carefully to learn more about the background of the subject.

This includes past research on the subject and the factors that led the researchers to choose to conduct this study. If you are not familiar with the subject, take your time to learn more about it.

As you learn more about the subject, you should also check out some of the references in the introduction. Note the definitions, the sample population, the method of testing, and other important facts that can impact the study outcome.

Also note that defining the content can have an impact on the outcome of the study. Aaron Hertz discusses definitions <u>here</u> in his Substack.



## Step Five: Identify How the Paper Fits Into the Field of Research

Does this paper fit in with the field of research and with the special topics of interest or have the authors tampered with the data?

What is the principle issue this paper is attempting to address? Will you be better able to comprehend the work's significance and motivation after reading and analyzing the paper? What is the researcher's rationale for studying this intervention or drug? Are there safe alternatives available? Is there a financial incentive for the researchers to draw a particular conclusion? Look for evidence of "spin". Read more about "spin" <u>here</u>.

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#### PNAS Misrepresentation and distortion of research in biomedical literature



Abstract Methods Definition of the Concept of Spin Practices of Spin Prevalence of Some Forms of Spin in... Impact of Spin Why Researchers Add Spin to Their Reports How Can We Reduce the Use of Spin? Conclusions Acknowledgments References

#### **Definition of the Concept of Spin**

Spin has become a standard concept in public relations and politics in recent decades. It is "a form of propaganda, achieved by providing a biased interpretation of an event or campaigning to persuade public opinion in favor of or against some organization or public figure" (https://en.wikipedia.org/w/index.php?title=Spin (propaganda)&oldid=793952705). "Spin doctors" modify the perception of an event to reduce any negative impact or to increase any positive impact it might have on public opinion. For this purpose, spin doctors could attempt to bury potentially negative information or selectively "cherry-pick" specific information or guotes.

The concept of spin can also be applied to scientific communications. Spin can also be defined as a specific reporting that fails to faithfully reflect the nature and range of findings and that could affect the impression that the results produce in readers, a way to distort science reporting without actually lying (7). Spin could be unconscious and unintentional. Reporting results in a manuscript implies some choices about which data analyses are reported, how data are reported, how they should be interpreted, and what rhetoric is used. These choices, which can be legitimate in some contexts, in another context can create an inaccurate impression of the study results (3). It is almost impossible to determine whether spin is the consequence of a lack of understanding of methodologic principles, a parroting of common practices, a form of unconscious behavior, or an actual willingness to mislead the reader. However, spin, when it occurs, often favors the author's vested interest (financial, intellectual, academic, and so forth)

## Step Six: Read the Discussion

#### The discussion section is where you find the paper's data findings.

The discussion section of the paper is where that data findings are explained and the "story unfolds about the subject matter". In this section, the samples and measuring tools are presented. The effectiveness of the study is discussed along with whether the study confirmed or disproved the hypothesis. Unfortunately, here the narrative can also be controlled. Aaron Hertz discusses in this section of his Substack how the data can be manipulated and not adjusted correctly to control the results in the favor of what the researchers want. It will be important in this section to pay attention to how they discuss the data. Look closely at the diagrams and charts, too.



#### Misreporting the Methods.

Authors could intentionally or unintentionally misrepresent the methods they used. This type of spin will alter the readers' critical appraisal of the study and could impact the interpretation

## Step Seven: Read the Abstract

#### Here is where you find the general summary of the material.

The study's main objectives, the method of investigation, the key findings, the overview of the interpretations, and the conclusions are often summarized in the abstract. Compare the abstract's important points to the information offered in the paper's other sections, such as the discussion, the results, and the conclusions sections. It will be important to consider the Methods section when looking at the abstract to check to see if the abstract reflects what the data is showing in the conclusion of the study. Here are some examples for further reading:

- <u>This link</u> is from Kelly Kronhert's Substack, in which she points out numerous flaws in different studies on Long COVID.
- <u>This study</u> where <u>this article</u> shows where the data was manipulated in a complex manner.



## Step Eight: Read the Results and Methods Sections

These are the most complex sections of the study and often where data can be most manipulated.

When reading the results and methods sections, it's crucial to keep the following things in mind:

- Sample size
- Statistical significance
- Graphics and tables do they match the conclusions?
- Supplemental materials

Aaron Hertz spends a lot of time in his Substack explaining the numerous ways researchers can manipulate and cherry-pick data to slant the outcome of the study in their favor. These 3 sections are extremely useful in explaining how this is done:

- How to rig a study
- Doctoring the datasets
- <u>Control the standards of</u>
   <u>evidence</u>



# How the Results and **Methods Sections Can Be Manipulated**

#### Rigging the study design involves these and other tactics. For a more in depth discussion, see links in text.

- Writing the rules so the results come out in your favor by manipulating the sample and control groups.
- Rigging the study protocol so it comes out in your favor.
- Sabotaging the administration of the treatment and/or the placebo. Aaron Hertz explains this here.
- Influencing the behavior of the study participants with money or other rewards.

- Hiring staff that don't really know what they are doing.
- Removing data or subjects that conflict with what you want to data to show.
- Not adjusting the data properly.
- Manipulating the data endpoints.
- Using measurement tools to best manipulate your data.
- Recruiting the media to spin the study.
- Controlling the standards:, for example calling a study "low quality" when in fact it is not.

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#### Brook Jackson's Email to FDA Regarding Ventavia **Pfizer Trial Site:**

( @ ~ 9/25/20 Brook Jackson To: ocod@fda.hhs.gov >

#### ATTN: Laura Re: Pfizer C4591001 Patient Safety Report

#### Hello Laura,

4:57

Thank you for your time this morning. It is without hesitation that I am reporting my immediate concern for subject safety in the above-mentioned trial. In total, the 3 sites have enrolled over 1,000 subjects. I am the Regional Director for 2 of those 3 sites and have been in my current position for almost 2 weeks.

I have been witness to subjects that were discharged prior to the protocol required 30 minute post dose assessment.



Subjects are dosed without PI oversight or a MD, NP or RN available in the event of a reaction.

Subjects are placed in a hallway after their injection of IP and are not being monitored by clinical staff. This is done because the practice is scheduling more subject visits than the clinic can accommodate and exam rooms are needed.

Safety assessments via e-diaries are not being completed.

SAE follow-up is not being performed in a timely manner.

Temperature excursions have not been reported, IP not guarantined and the Sponsor has not been made aware.

ATTN: Laura Re: Pfiz... Protocol deviations are not being

captured or reported to the Sponsor.

Laboratory specimens are mislabeled.

Site SOPs are not being followed.

Other company policies and procedure are not being followed.

HIPAA information is not being protected.

Clinical site staff are targeted for pointing out these findings.

The site is in full "clean-up" mode and bringing staff from other locations for immediate QC.

I would like to request to speak with your department regarding my concerns.

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# Conclusions

Interpreting science has never been as difficult as it is now, but with these tips and tricks, hopefully you will be a better investigator.

Science has been hijacked by corporate interests and sometimes the researchers don't have the consumer, the clinician, or the patient's best interest at heart.

There are numerous ways in which the information can be skewed to push or sell an intervention or product. The "bad" data is used as propaganda to corrupt journals, medical schools, hospital patient care protocols, and the treatment methods used in the treatment plans.

When you dive deep into the conflicts of interest, you will most quickly find who is funding these studies and why they are trying to push a certain conclusion. It is up to you to become an informed consumer and actively be involved in picking apart the information presented to you in these studies. Be wary that the media and government agencies may also not be using unbiased studies to push their mandates, regulations, and guidelines. Always remember, when you have found something questionable in a research study, or you have found a study with good and factual results, your healthcare provider should be open to having a discussion with you about what you have found or would like to try out and/or answer any questions you may have about the validity of a study you have read.

A trusted and knowledgeable healthcare provider will want to have these discussions with you, and they should also always offer you informed consent first before suggesting a procedure. This information should include ALL RESEARCH known about the medication or intervention.



# About the FLCCC

# The Organization and Mission

https://covid19criticalcare.com/about-the-flccc/

## **Our Impact Reports**

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