

Trust that there are no competing interests

From: [Key Concepts for assessing claims about treatment effects and making well-informed treatment choices \(Version 2022\)](#)

1.4e Do not assume that there are no competing interests.

Explanation

People with an interest in promoting a treatment (in addition to wanting to help people) – for example, to make money – may promote treatments by exaggerating benefits, ignoring potential harmful effects, cherry picking which information is used, or making false claims. Conversely, people may be opposed to a treatment for a range of reasons, such as cultural practices.

Tamiflu (oseltamivir) is an example of how financial conflicts of interest can result in misleading claims about the effects of a treatment [[Doshi 2012](#), [Loder 2014](#)]. Tamiflu was approved for seasonal influenza by the U.S. Food and Drug Administration in 1999. Several [randomized trials](#) and [systematic reviews](#) emphasised the benefits and safety of Tamiflu. Most of them were funded by Roche, which also marketed and promoted Tamiflu. In 2005 and 2009, the fear of pandemic flu led to recommendations to stockpile Tamiflu and billions of dollars were spent on this. After battling with the company for over four years, a team of review authors finally accessed the complete data held by the company. After carefully reviewing all the documents, they found no compelling evidence to support claims that oseltamivir reduces the risk of complications of influenza, such as pneumonia and hospital admission, claims that had been used to justify international stockpiling of the drug [[Jefferson 2014 \(SR\)](#)]. Tamiflu was found to slightly reduce the time to alleviation of flu symptoms in adults and to slightly reduce the risk of flu symptoms in people exposed to the flu. It was also found to have adverse effects that potentially outweighed the benefits. As a result of biased reporting of the research and misinformed recommendations and decisions, billions of dollars were wasted.

Basis for this concept

Financial conflicts of interests can lead to bias in several ways [[Dunn 2016 \(OR\)](#)]. Researchers with conflicts of interest are more likely to choose less effective control comparison treatments, leading to more favourable results for a new drug [[Dunn 2013 \(SR\)](#), [Hugenholtz 2006 \(SR\)](#), [Lathyris 2010 \(SR\)](#)]. They may be more likely to selectively report [outcomes](#) that favour the treatment and not to publish the results of a trial if it does not favour the treatment [[Dwan 2013 \(SR\)](#)]. They also may be more likely to draw conclusions and recommend the treatment [[Als-Nielsen 2003 \(SR\)](#), [Chartres 2016 \(SR\)](#), [Yank 2007 \(SR\)](#)].

Studies of pharmaceuticals, devices, and dental implants that have been sponsored by the manufacturing company have more favourable results and conclusions than studies sponsored by other sources of support [[Lundh 2017 \(SR\)](#), [Popelut 2010 \(SR\)](#), [Saltaji 2021 \(SR\)](#)].

Review authors may also be more likely to interpret results favourably when they have financial conflicts of interest [[Barnes 1998 \(SR\)](#), [Bes-Rastrollo 2013 \(SR\)](#), [Dunn 2014 \(SR\)](#), [Jørgensen 2006 \(SR\)](#), [Mandrioli 2016 \(SR\)](#)]. Cost-effectiveness studies funded by industry are more likely to present favourable results than other studies [[Bell 2006 \(SR\)](#)], and authors of clinical practice guidelines may be more likely to recommend a treatment when they have a financial conflict of interest [[Nejstgaard 2020 \(SR\)](#), [Norris 2011 \(SR\)](#), [Tabatabavakili 2021 \(SR\)](#)].

Promotion of treatments is regulated in many countries. Nonetheless, advertisements are frequently misleading [[Every-Palmer 2014](#), [Faerber 2012 \(RS\)](#), [Folsom 2010 \(RS\)](#), [Huang 2007 \(OR\)](#), [Klara 2018 \(RS\)](#), [Morganroth 2009 \(RS\)](#), [Othman 2009 \(SR\)](#), [Salas 2008 \(RS\)](#), [Sansgiry 1999 \(RS\)](#), [Spielmans 2008 \(RS\)](#), [Vendra 2019 \(RS\)](#), [Wayant 2020 \(RS\)](#)]. Because vitamin and mineral supplements are regulated as foods rather than treatments in the U.S., they are not regulated in the same way as treatments. Thus, supplement manufacturers can market, sell, and obtain substantial profit from a supplement despite uncertain benefits and potential harms [[McCormick 2010 \(OR\)](#)]. Expenditures on supplements in the U.S. were estimated to be \$21–25 billion a year in 2010, and increasing.

A majority of health news reports do not consider conflicts of interest [[Oxman 2022 \(SR\)](#)].

The assumption that non-financial conflicts of interest can influence the outcomes of treatment comparisons, reviews, and recommendations is logical, but in contrast to financial conflicts of interest, there is little evidence of biased effects of non-financial conflicts of interest [[Akl 2014 \(RS\)](#), [Bero 2014](#)].

Implications

Ask if people making claims that a treatment is effective have conflicting interests. If they do, be careful not to be misled by their claims about the effects of treatments.

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