How trustworthy are the authors?

The ultimate goal of research is to find true answers to challenging questions. Most scientists share this goal, recognizing that the outcomes of research projects are unpredictable in terms of direction and magnitude. Unfortunately, uncertainty about the outcome of a trial may create conflicts for those with vested or self-servings interests, whether they be financial or scientific. Authors must take full responsibility for their published articles, even if the trials are designed and conducted by a for-profit sponsor.

One key factor contributing to this potential bias relates to the authors of scientific articles, who typically exercise total control over what is reported. Some are tempted to present their results by over-interpreting the good news and/or by downplaying the bad news. Adding a positive spin to study findings has certain advantages. It increases the likelihood of getting the article published in a reputable journal, leads to peer recognition, invitations to conferences and academic promotions, and brings more funding opportunities from industry sponsors.

These potential conflicts of interest are well recognized by medical journal editors, who have taken actions to deal with them. Simple disclosure is easy, but this does not preclude favorable spinning of trial results.

What do journals do?

In 1984, the New England Journal of Medicine was the first medical journal to require authors of original articles to disclose potential conflicts of interest. This requirement was later expanded to writers of editorials. Initially, compliance with this policy was not very strict. Even the NEJM admitted failure to follow its own guidance for eighteen review articles.1

The rules are getting even more stringent. They now apply to all coauthors and have been broadened to include journal reviewers. Disclosure of potential conflicts is now part of funding decisions at the National Institutes of Health and also contributes to decisions about who can serve on FDA Advisory
Committees. It has been proposed that disclosure itself may affect study credibility. First, after a conflict of interest is disclosed, the person may feel less of an obligation to exercise “balance” (so-called “moral licensing”). Second, the person making a disclosure could assume that others may discount his views or conclusions. To counteract this, he may bias his position even more (so-called “proactive exaggeration”). A survey of 300 readers of the British Medical Journal left no doubts — data from a “pain study” were considered to be of less interest, importance, relevance, validity and believability when the authors were thought to be employees of a fictitious drug company compared to a medical clinic.

Do financial ties influence results reporting?
Review articles on the risk of passive smoking have come to very divergent conclusions. Barnes and Bero analyzed 106 such review articles and observed that in 39 (37%), the authors did not report any health problems. Almost three quarters of these articles were written by persons with very close ties to the tobacco industry. Not surprisingly, the only statistically significant predictor of reporting no harm linked to passive smoking was investigator affiliation with the industry.

Stelfox et al. reported the same year on a survey of authors who had published articles on the cardiovascular safety of calcium channel blockers. They