



Industry-funded research

We would like to believe that the profession of dentistry is evidence based, and the materials and procedures we use are validated by extensive, controlled studies. In other words, we aspire to treat our patients with methods that have been proven safe and effective. However, high-quality research is expensive. The cost of test materials, trained staff and faculty, and statistical analysis as well as the fees associated with decent sample size can be very high. The resources available to raise such costly funds are extremely limited, making thorough research virtually impossible.

The National Institutes of Health, European Science Foundation, and other similar organizations around the world support independent research, employing various review systems for research grant applications. The percentage of the funded applications is minimal; furthermore, dental research is not considered a top priority for funding. Most agencies require preliminary data to be included in the application. Providing such data obviously costs money as well. Some of the academic institutions provide seed funds for investigators to initiate a research program, but in most cases, researchers are forced to acquire resources for their research as they are running out of the seed money. Moreover, investigators are sometimes required to support their own salary from research funds.

Industry-supported research can be one of the resources to fill this paucity in funding, though it must be performed in full transparency by all involved parties: the investigator, funding company, and publisher. We cannot ignore the common notion that research funded by any interested party raises a certain level of concern regarding the accuracy of data. I believe that over the years these concerns have been slightly reduced: Manuscript authors and conference presenters are required to report any possible conflict of interest between a funding agent and the data presented. The amount of

valuable studies published by industry scientists themselves, without the intervention of clinicians and scientists from academic and clinical institutions, is persistently growing and further relieving data accuracy concerns. I truly believe that all involved parties focus on providing excellent and valuable data. However, they must make sure that the study is well designed and blinded, that the data are accurately analyzed, and that the conclusions are data driven.

When an industry is interested in evaluating a new product or system, it contacts a well-known investigator or clinician to study it. In most cases, the study is performed in more than one site to validate the results. In my opinion, a publication reporting the data from all participating sites (head to head or separately but not all the data pooled together) is the most reliable and demonstrative report. Unfortunately, this kind of report is not very common. It should be led by the developer and not necessarily by the investigator or clinician who performed the study. Data showing similar trends in the various sites would be acceptable. Moreover, the report can analyze the effects of factors that may be specific to certain sites on the study results; this can provide valuable information prior to the commercial use of any product.

In dentistry especially, there is a real need for industry-driven research. With the expected intensified shortage in funding and increase in expense, it is obvious that we will experience a growth in industry-funded research. Collaborative research between the industry and independent clinicians or investigators can be very beneficial to the profession and even stimulate growth. However, transparency and very high-quality research methods are vital for the success of such common projects.

Eli Eliav
Editor-in-Chief