

# Is the marketing of pharmaceuticals a matter of style over substance?

By Jonathan Mason

In a recent letter to *The Journal*, Anthony Cox highlighted the need for new health care professionals to be equipped with skills to appraise pharmaceutical industry marketing materials critically (P7, 1 February, p154). I agree, but it is not just recently qualified professionals who need to acquire these skills. We all do.

According to the National Prescribing Centre, in the United Kingdom, the pharmaceutical industry spends about 1.5 per cent of its revenue from sales to the National Health Service on information and 9 per cent on promotion. It can sometimes be difficult to differentiate between industry-sponsored information as a form of education and industry-sponsored information as a form of promotion. Such information is not always accurate and should not be seen as a reliable source of medicines information.

Pharmaceutical marketing has become more sophisticated in recent years. The industry has generally moved on from using advertisements showing dodgy graphs with split axes. However, although direct promotional material must comply with the terms of a product's marketing authorisation, evidence to support claims made in advertisements is not always robust. A number still refer to "data on file". When they do refer to published papers these often turn out to be short abstracts for posters presented at an industry-sponsored conference (usually one sponsored by the company concerned), and consequently are unlikely to have been subjected to rigorous peer-review.

Much pharmaceutical advertising relies on highlighting a drug's effects on surrogate markers (lowering cholesterol levels, decreasing blood pressure, etc). This is particularly true for "me-too" drugs, the marketing for which frequently relies on little or no clinical trial evidence.

## SELECTIVELY REPORTED RESULTS

When trial evidence is available results are often reported selectively to exaggerate the effects of the product. The most commonly used method is to report results as relative risk reduction (RRR), ie, the percentage reduction in events in the treated group event rate compared with the control group event rate. Reporting RRR appears to inflate small differences in effect. A more meaningful measure, preferred by proponents of evidence-based medicine (EBM), is absolute risk reduction (ARR), ie, the arithmetic difference in absolute risk between study and control groups. The reciprocal of ARR is the number-needed-to-treat (NNT), which is useful for translating trial results into meaningful figures. Pharmaceutical industry promotional material rarely refers to either ARRs or NNTs.

One would have hoped that National Institute for Clinical Excellence guidance would help to counteract some of the marketing strategies of the industry. However, when NICE guidance is issued it is either used selectively or ignored. Perhaps the best example of selective use of NICE guidance is celecoxib (Celebrex), an advertisement for which has stated: "NICE has reviewed the use of COX-2 selective inhibitors in the treatment of arthritis. COX-2 selective inhibitors *should* [my emphasis] be used in preference to standard NSAIDs in any one of the following groups: prolonged use of standard NSAIDs at their maximum recommended doses; 65 years of age and over; previous clinical history of upper GI ulcers, bleeds or perforation; co-prescribed with medications known to increase the likelihood of upper GI adverse events; serious comorbidity."

However, what NICE actually says is: "COX-2 selective inhibitors are not recommended for routine use in patients with rheumatoid arthritis (RA) or osteoarthritis (OA). They should be used, in preference to standard NSAIDs, when clearly indicated in management of RA or OA *only* [my emphasis] in patients who may be at 'high risk' of developing serious gastrointestinal adverse effects." This is hardly the ringing endorsement from NICE that the advertisements would have us believe.

Companies may market their drugs in ways that contradict NICE guidance, and there is nothing we can do about it because advertising only has to comply with the terms of the product's marketing authorisation. A good example is that of rosiglitazone (Avandia), the latest advertisement for which states: "When you need additional therapy for obese patients not controlled on metformin monotherapy, why choose anything else?"

The inference that rosiglitazone should be added to metformin as first-choice additional therapy is at odds with NICE guidance on rosiglitazone for type 2 diabetes. NICE recommends that patients with inadequate blood glucose control on oral monotherapy with either metformin or a sulphonylurea should first be offered metformin and sulphonylurea combination therapy before the use of rosiglitazone is considered.

In addition to direct advertising, a lot of pharmaceutical marketing now employs "infomercial"-type promotion. Some infomercials are quite blatantly promotional; others are subtler and use an "expert" to review information about a product or ther-

apeutic area. Such reviews are supported by educational grants from the pharmaceutical industry and invariably include a statement which says that the views expressed in the publication are those of the author and not necessarily those of the publisher or the pharmaceutical company. They are often provided free of charge either as articles in "free" journals, or as special supplements. Such journals are paid for by advertising.

## STANDING UP TO MARKETING

So how can we counter the marketing strategies employed by the pharmaceutical industry? What is needed is a multifaceted approach. Undergraduate and postgraduate training programmes should teach the skills needed to appraise pharmaceutical advertising critically. Primary care trusts and other NHS organisations need to set up robust and enforceable policies for managing the entry of new drugs and for dealing with NICE guidance. This may require development of interface formularies (ie, formularies across primary and secondary care) and more widespread use of clinical decision-making support tools, such as Prodigy. Organisations will also need to develop guidelines and policies for working with the pharmaceutical industry (including setting up registers of interests).

We could also learn lessons from the United States, where the EBM movement is fighting back. A new organisation, No Free Lunch ([www.nofreelunch.org](http://www.nofreelunch.org)), has been set up to counter pharmaceutical company marketing. It has developed a variety of resources, including a "pen amnesty programme" in which practitioners are invited to send drug company pens to the organisation, which will replace them with their own "No Free Lunch" pens. Drug company pens are then donated to charity.

The website home page features a questionnaire to ascertain "drug company dependence". It asks: "Have you ever prescribed Celebrex? Do you get annoyed by people who complain about drug lunches and free gifts? Is there a medication logo on the pen you're using right now? Do you drink your morning eye-opener out of a Lipitor coffee mug? If you answered yes to two or more of the above, you may be drug company dependent."

It has initiated a "drug-free practitioners" listing, which is made up of health care providers who have pledged to be "drug company free". The listing aims to provide a mechanism for patients to find health care providers who practice EBM, and to raise awareness of this issue both among the public and the medical profession.

Maybe we need to set up a similar organisation in the UK.

*Jonathan Mason is prescribing adviser at Canterbury and Coastal Primary Care Trust*