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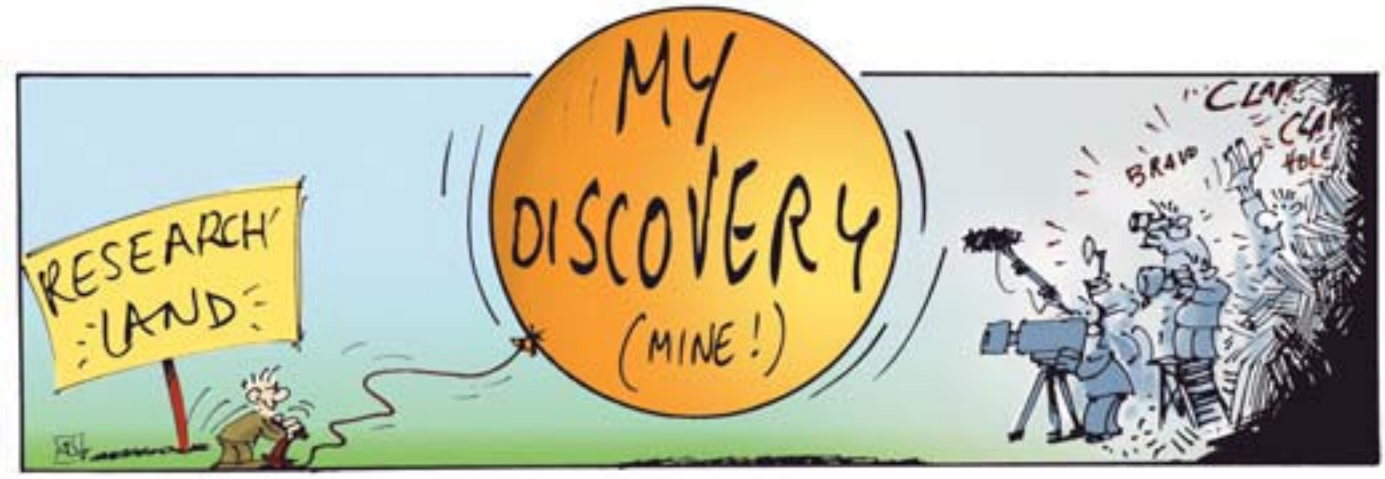
Medical research centres: deceptive press releases



● **A healthy dose of skepticism is needed.**

Medical information aimed at the general public is often more sensational than factual and informative (1).

A study published in 2009 examined academic medical centres' press releases that often form the basis for news stories in the lay media. The authors studied the quality of 200 press releases selected at random from among those published by 20 American university medical centres in 2005 (2).

Weak evidence, exaggerated results. Among 113 press releases concerning clinical trial findings, 40% concerned studies providing weak evidence (small sample size, surrogate endpoints, non-comparative trials, etc.). Less than half of the press releases mentioned that the results should be interpreted with caution.

More than one-quarter of the 200 press releases exaggerated the importance of the findings. The researchers were quoted in almost all of the press releases, and 26% overstated the importance of the results of their research. Representatives of the 20 academic medical centres studied all stated that their researchers regularly requested press releases, and were involved in their production and approval (2).

Mice are not humans. 64 out of 87 press releases concerning animal experiments and other laboratory research claimed that the results were relevant to human health (2).

One example was a press release entitled: "Scientists inhibit cancer gene. Potential therapy for up to 30 percent of human tumors". The text cited a researcher who claimed that the results pointed to the possibility of developing a cancer treatment with no adverse effects, despite the fact that neither efficacy nor adverse effects had been studied in humans (2).

In fact, two-thirds of widely publicised animal experiments never translate into human therapeutics (2).

Researchers also exaggerate importance of results. This analysis shows that press releases issued by researchers and their organisations are largely unreliable, no doubt due in part to the funding and prestige to be gained from overstating the implications of their work.

Journalists should resist sensationalism and meticulously analyse press releases from organisations engaged in biomedical research. And the public should be wary of widely publicised medical information promising miracles. Factual information is needed, along with a healthy dose of scepticism.

Selected references from Prescrire's literature search.

1- Prescrire Rédaction "Gare aux "scoops" sur les "innovations médicales"" *Rev Prescrire* 2004; **24** (256): 857-858.

2- Woloshin S et al. "Press releases by academic medical centers: not so academic?" *Ann Intern Med* 2009; **150** (9): 613-618.