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**From preclinical evidence to public expectation:
ethical and clinical implications of miscommunicated cancer research**

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Dear Editor,

The communication of preclinical cancer research to the public represents a critical interface between science and clinical practice. Recent events surrounding the retraction of a high-profile study on pancreatic cancer highlight the risks associated with premature dissemination of experimental findings, particularly when amplified by media coverage and intertwined with financial interests. This point of view discusses how the misrepresentation of early-stage data may influence patient expectations, clinical decision-making, and trust in healthcare systems. Drawing from both clinical experience and personal context, the article emphasizes the ethical responsibility of researchers, journals, and media to ensure transparency and proportionality in scientific communication. The case underscores the need to reinforce standards for conflict of interest disclosure and to promote a more cautious translation of preclinical findings into public narratives, especially in life-threatening conditions such as pancreatic adenocarcinoma.

The translation of scientific evidence into public information is a critical and often fragile step in modern medicine. The recent publication by Liaki *et al.* reported complete pancreatic tumor regression in murine models and received widespread media attention before being retracted by *Proceedings of the National Academy of Sciences* because of undisclosed competing financial interests.¹ This case offers an opportunity to reflect on how the translation of preliminary scientific findings into public information may fail, and with what consequences.

Pancreatic adenocarcinoma remains one of the most aggressive malignancies, characterized by late diagnosis and limited therapeutic options.² In such a context, reports of complete tumor regression inevitably attract attention from both the scientific community and the general public. However, the findings in question were derived from murine models, a stage of research that historically shows a high rate of attrition before clinical applicability is achieved.³ The gap between preclinical success and effective treatment in humans remains substantial.

In clinical practice, this gap is well recognized. Nonetheless, it is frequently minimized in public communication. In the present case, the dissemination of results was accompanied by strong media amplification and occurred before adequate scientific scrutiny and discussion. The subsequent retraction by *Proceedings of the National Academy of Sciences*, due to undisclosed competing financial interests related to a company involved in the potential commercialization of the research, highlights the importance of transparency in maintaining scientific credibility.¹

The central issue is not whether the research was promising. Many preclinical studies show encouraging results. Rather, the concern lies in the timing, context, and manner in which such findings are communicated. In oncology, premature or exaggerated interpretations are not neutral: they shape expectations, influence perceptions of therapeutic progress, and may indirectly affect clinical choices. This reflection is also informed by personal experience. A close family member of mine is currently affected by pancreatic adenocarcinoma and is undergoing treatment. This circumstance has reinforced my awareness of how patients and their families are exposed to a continuous flow of information, often characterized by overinterpretation and sensationalism. Despite being professionally equipped to critically appraise such information, I observed how widespread narratives, driven by social media, television, and general journalism, can generate misleading impressions of imminent therapeutic breakthroughs.

The phenomenon of “hype” in biomedical research has been extensively described, particularly in oncology, where early-stage findings are frequently presented as having direct clinical relevance.⁴ The rapid diffusion of generative artificial intelligence further increases the risk that preliminary findings may be amplified or presented without adequate scientific context, reinforcing unrealistic expectations among patients and the public.⁵ However, this case also raises additional concerns regarding the intersection of scientific publication, financial interests, and public fundraising. When research findings are communicated in parallel with initiatives that may benefit from increased visibility or optimism, the need for full disclosure and caution becomes even more critical.

Responsibility in this context is shared across multiple actors. Researchers must ensure rigorous adherence to transparency standards, including full disclosure of potential conflicts of interest.

Journals must enforce editorial policies consistently, particularly in cases where alternative submission pathways could introduce bias. Media outlets should contextualize scientific findings appropriately, avoiding the amplification of preliminary results beyond their actual significance.

Importantly, science is inherently self-correcting. Retractions are a necessary component of this process and should be viewed as a sign of methodological integrity rather than failure.⁶ However, the visibility of corrective actions is often substantially lower than that of initial claims, contributing to persistent distortions in public understanding.

In conclusion, this case should be interpreted not as an isolated episode but as an illustration of broader systemic vulnerabilities in the communication of biomedical research. Maintaining trust in medicine requires not only robust data but also responsible and proportionate dissemination of scientific information. As clinicians, we are not only interpreters of evidence but also mediators between science and patients. This role entails a commitment to clarity, rigor, and ethical responsibility in both research and communication.

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