criterion in the GM301 trial[3] of Genasense plus dacarbazine versus dacarbazine alone in advanced melanoma because it is the best known prognostic marker in this disease. Unfortunately, the substantial therapeutic accomplishments of Genasense in a randomized, global, 771-patient trial in advanced melanoma (and specifically among 508 patients with a normal baseline LDH level, which showed statistically significant benefits in survival ($P = 0.018$), progression-free survival ($P = 0.0007$) and response rate ($P = 0.009$)) were ignored by Potera in favor of open-label, preliminary, phase 2 human data, and an additional single data set that involved antisense therapeutics in sick penguins.

The most accurate assessment of the current situation in oligonucleotide therapeutics in Potera's article came from John Rossi, who stated that "There's a place for RNAi and antisense." I hope that Potera takes careful note of this opinion, especially with respect to human cancer, and most importantly, that she takes greater care in her reporting of facts and their assessment.

Readers should note that although I am not a Genta stockholder and have no contractual relationships with the company, I was formerly a member of their scientific advisory board (but have not been since 2005).

COMPETING INTERESTS STATEMENT
The author declares competing financial interests: details accompany the full-text HTML version of the paper at http://www.nature.com/naturebiotechnology/.

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1. Potera, C. *Nat Biotechnol.* **25**, 497–499 (2007).
2. O'Brien S. *et al. J. Clin. Oncol.* **25**, 1114–1120 (2007).
3. Bedikian, A.Y. *et al. J. Clin Oncol.* **24,** 4738–4745 (2006).

Carol Potera responds:

If it appears that a positive tone was taken with some companies and not with others, it was unintentional. Not only the management at Isis, but also several of the other companies and academic antisense experts with whom I spoke expressed the common view that Genta has been treated very badly by the FDA. This was said with concern, not avarice. My comment "failure of the regulatory strategy" represents this common view. Perhaps it could have been strengthened with an added thought, such as "and does not reflect inferior science."

My comment "missed the required statistical cutoff" was intended to reflect exactly what Stein mentions. Although there are other markers, such as partial nodular response, that show that Genasense is effective in certain patient populations, the FDA ignored them and only focused on overall survival.

As for LDH, in cutting a paragraph about Genasense in melanoma trials to shorten the article, the sentence about LDH was left in and combined with the preceding paragraph about CLL. This was a mistake I did not catch. As Stein says, LDH is a marker used in melanoma trials, not CLL.

As for the paper by O'Brien *et al.*[1] that Stein mentions, that study was published in the March 20, 2007 issue of the *Journal of Clinical Oncology*, several months after I had submitted my original draft. I was not aware that this current study was available.

1. O'Brien S. *et al. J. Clin. Oncol.* **25**, 1114–1120 (2007).

Ethical framework for previously collected biobank samples

To the editor:

An increasing trend in biobank research is to pool collections of biological samples in international scientific studies, thereby amplifying their potential scientific value. The pooling of samples, however, poses several challenges to national/international legislation and ethical guidelines relevant to biobank samples and also introduces new issues for patient/donor interests—as highlighted by correspondence in your May issue last year[1], which indicated that for human biobanks "legal comparisons between regulations in different countries are laborious and defy generalizations." Indeed, routines that have been used for information and consent vary greatly between existing biobanks. A majority of samples stored in clinical biobanks have been collected without expressed consent for research from sample donors. When consent has been obtained, it has often taken different forms. Here, we present an ethical framework for research on previously collected biobank samples constrained by some of the above issues. On this basis, we also provide recommendations for adapting existing consent procedures on such samples.

The need to resolve the potential conflict between research interests, the safety, personal integrity (including privacy) and autonomy of research subjects, and the preservation of public trust in biomedical research is central to any discussion on ethics in research involving human subjects, human biological samples or personal information (as one of us (M.G.H.) has previously noted[2,3]). Biobank research aiming to improve knowledge, prevention and therapy of disease is clearly in the interest of researchers, sample donors and the population as a whole.

Having a biological sample stored in a biobank involves no direct physical risk to the donor once the sample has been obtained. Information may be derived from the samples or be traceable to them, as in combined register and biobank research. It is the inappropriate distribution of this information (e.g., to insurance companies or employers) that can potentially harm the donor. Thus, an ethical platform should minimize risks to the interests of individual research subjects while ensuring optimal scientific value of the research performed. This balance must not be reduced to a conflict between research and patient/donor interests, as sample donors also have interests in research (for reference, see paper by M.G.H.[4]).

To balance the interests at stake, we propose that each research project using established biobanks should be preceded by careful assessment by both the researchers themselves and an ethical review board (ERB) to ascertain predictable risks and burdens in relation to foreseeable benefits to the subject and others. This assessment would include a consideration of good practice in storing, coding and using samples, as well as appropriate procedures for obtaining consent and counseling.

Routines for coding and storage of biobank samples, with restricted access to personal information, must be in place to promote the safety and personal integrity of sample donors. Storage conditions should optimally preserve the usefulness of the sample while protecting against unauthorized access. Sample identities must be coded,