wrong conclusion for a single project. The important message here is that this type of analysis needs to be evaluated alongside other subjective criteria, such as the strength of management, competition, core strategic partners, pharmacoeconomic and payment analysis, patent protection, and commercialization, regulatory and financial strategy—in other words, a full and complete understanding of business strategy, issues, and risks.

By far the biggest risk for a biotech company is the risk that its management is unable to execute the business strategies, which may be excellent. Scientifically, in its chosen programs, a company can be as strong as Glaxo (London, U.K.). It can be financially sound with many years of cash burn in the bank. However, at different stages the company must have the necessary skills available to successfully execute its strategies and bring the product to market in the shortest time possible. Companies such as British Biotech (Oxon, U.K.) and Celltech (Berkshire, U.K.) need different skills than small start-ups, and the blends of skills required are constantly changing. Indeed for small biotech companies, the management focus should be on the "skills" available to the board, rather than on the individual executive directors themselves. For example, nonexecutive directors, part-time directors, consultants, and financial advisors can bring skills into play efficiently.

To summarize, the valuation of biotech companies is, and always will be, highly subjective, demanding a full and complete understanding of the industry specific risks involved. It is always dangerous to rely on past performance to predict the future. However, I agree that the development and examination of "success rate" factors is an extremely useful ongoing exercise that will add to the toolkit when valuing a biotech company.

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Canada knows biotech

To the editor:

I am writing with respect to the article by B.J. Spalding, "Canadian biotech lags behind U.S. biotech" (*Bio/Technology* 12:756-757, August). Even though B.J. Spalding has primarily used information from the Ernst & Young report, "Capitalizing on Potential," I feel that the article does a major disservice to Canada and its biotech industry. Canada is on par with the U.S. and the world in many areas of biotech; agriculture being an example. We do have differences from the U.S. in how we finance, in how we regulate, and how we define a biotech company. These all lead to differences when you put things on paper.

For example, here in Saskatoon we have one of the world's leading centers in agricultural biotechnology, which was not mentioned in the article. Outside of the large public research base, we have over twenty companies involved in agbiotech areas such as transgenic plants; animal health; biological products (biofertilizers, biopesticides, etc.); plant cell culture; value-added processing; enzyme production; and so on. Four years ago we had just five companies. There are places in the article indicating that Canada may be a poor place to do business if interested in biotech; I contest. Canada is an excellent opportunity for investors. We have some of the best scientists in the world in the life sciences area and have scientific leaders in many other areas.

This expertise is currently being translated into biotech business in Canada. Therefore, Canada should grow dramatically in several areas of biotech—agriculture, environment, and health—over the next five years. Public awareness, finance, and regulations are all issues, just as they are issues in the U.S. We are dealing with the issues, and we will see improvements in all aspects within the next few months. It's not that we are behind the U.S., just that we deal with issues differently. It's the Canadian way. As neighbors we probably can learn a lot from each other.

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Biotechnology, South Africa, and the new world order

This historic photograph shows the Mayor of Pretoria, South Africa, Alderman Cornelius Janse Uys, welcoming (from left to right) Eric Quaye of the University of Cape Coast (Cape Coast, Ghana), Stepthen Mutimba of the Kenya Forestry Research Institue (Nairobi, Kenya), and Clemence Bideri of the International Potato Center (Nairobi, Kenya) to a civic cocktail reception hosted by the Aldermen and Councilors of Pretoria in honor of participants in the All Africa Plant Tissue Culture Workshop. The two-week workshop, held there recently for young scientists from a half-dozen African countries, was jointly sponsored by the Foundation for Research Development (Pretoria) and the United Nations Educational, Scientific, and Cultural Organization's Biotechnology Action Council (UNESCO/BAC, Paris). This was the first ever UNESCO activity in South Africa, and it represents the initial stage of a far-reaching biotechnology initiative conceived to take advantage of the recent democratic changes that have transformed South Africa into one of the best hopes for positively affecting scientific and technological development in the rest of the continent.