

European entrepreneurs earn \$1.5 billion in 1995

The headline numbers compiled in the latest Ernst & Young (London) report on European entrepreneurial biotechnology—European Biotechnology 96: Volatility & value—look impressive. The number of "biotechnology companies" rose from 486 in 1994 to 584 in 1995, while the number of employees increased 7% from 16,100 to 17,200. Total revenues for the whole sector moved forward 20% to an estimated Ecu 1.158 billion (\$1.522 billion) in fiscal year 1995. Research and development (R&D) spending by the whole sector is estimated to have risen 21% to Ecu 605 million (\$795 million), while estimates that the composite net loss have dropped 49% to Ecu 144 million (\$189 million).

The Ernst & Young numbers, like other statistics on biotechnology, should be treated with care. The composite figures are based on responses and published data from about 20% of companies in the sector, albeit the larger ones. But as the same methodologies and definitions (of "biotechnology," for instance) are used to develop Ernst & Young's panoramas of the US biotechnology sector, comparisons with other Ernst & Young data may be meaningful. Europe still has less than half the number of entrepreneurial biotechnology companies than the United States, its composite turnover is 12%, and its R&D spending just over 10% of that achieved by US firms.

More accurate transatlantic comparisons can be made when looking at the numbers provided by those companies that have their shares traded openly on various stock markets. Ernst & Young has identified 28 pubquoted European bioscience companies—almost an exact order of magnitude less that in North America. The companies posted total revenues of Ecu 297 million (\$390 million) in the most recently reported fiscal year, and account for a quarter of the European sector's total revenues. They also account for just over a quarter of R&D spending and half the losses of the European sector in the current year. In the previous year, however, the publicly quoted companies accounted for 84% of the total industry's losses. The dramatic change is largely due to Elan Corp. (Athlone, Eire), the New York Stock Exchange-listed drug delivery technology company, which turned a loss of around I£50 million (\$80 million) in 1994 to a profit of some I£42 million (\$68 million) in 1995.

European R&D spending across the sector is lower on a per capita basis than for US companies; on average, European R&D budgets are around Ecu 35,000 (\$46,000) per employee, compared with Ecu 54,000 (\$71,000) per employee in the US. However,

among the top-spending companies, there is little difference. Indeed, only Biogen (Cambridge, MA) has a larger R&D spend per employee than Europe's flagship bioscience company, British Biotechnology (Oxford, UK). This may be because success in product development has forced some North American biotechnology companies to dilute their R&D efforts with recruitment in manufacturing and sales.

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listed on the London Stock Exchange increased more than 150% in 1995, according to the newsletter BioBusiness, while that of NASDAQ-quoted companies grew by only 80%. Although positive phase II results from British Biotechnology and Celltech (Slough, UK) have driven the increase, the current UK valuations may be inflated. Traditional estimates of company values that use realworld data on profits and revenue obviously do not work for loss making, revenueless biotechnology companies. Therefore, investors base estimates of value on future revenues-basing those, in turn, on estimates of what product, how much of it a company might sell, and when. Ernst & Young notes that UK bioscience companies enjoy market capitalization values that are higher than for North American counterparts with comparable assets and at a comparable stage of clinical advancement.

Anthony Colletta, pharmaceutical analyst at ABN AMRO Hoare Govett (London) suggests, that naiveté and the lack of choice may have led to the apparent overvaluation. "UK investors and analysts have a more restricted level of market understanding than those in the US. There is also still no supply—demand balance in British stocks," he said.

European companies have been able to raise more than Ecu 300 million (\$394 million) from various capital sources, over an order of magnitude less than their North American counterparts (see \$2 billion raised as biotech investment boom continues, p.568). Only two companies, Peptide Therapeutics (Cambridge, UK) and Biocompatibles International (Uxbridge, UK), have raised money in initial public offerings (IPOs) through the London Stock Exchange (LSE), while PolyMasc Pharmaceuticals (London) and Stanford Rook (London) have raised money through the newly created Alternative Investment Market (AIM) of the LSE. PolyMasc took the unusual step of avoiding venture capital funding and headed straight for the public equity market, a model that others may try to emulate late in the future.

Ernst & Young expects IPO activity among European companies to increase through 1996 and 1997. More than a third of CEOs expect to raise funds in public equity markets in the next two years, with 12% saying it is "very likely." But where will the money come from? A number of British companies are already committing to the LSE and AIM markets, and others expect to do so. Continental European biotechnology companies are less clear. MorphoSys (Munich, Germany) says it will probably float on the LSE in the next 18 months or so. Others are less attracted to the UK. France's leading companies, Genset (Paris) and Transgene (Strasbourg), are still considering NASDAQ, although they may couple IPOs with a listing on the new Paris high technology market, the Nouveau Marché. Europe's bioscience sector is still awaiting more details of the proposed European NASDAQ clone, EASDAQ, which is now scheduled to begin in the autumn.

British Biotechnology is expected to unveil the first set of phase III clinical trial results of its potential oral cancer therapy, marimastat, at the end of May. That will determine, says one analyst, whether British Biotechnology "is worth £5 or £50." It is likely, too, to be an important test of the volatility of European biotechnology.

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