What the industry says

Rebecca Lawrence, News & Features Editor

There are serious concerns in the industry over how far behind Europe still is from the US. These concerns were uncovered during a confidential voting session of key pharmaceutical industry players at the IBC Biomics meeting in Stuttgart (Germany; 13-16 November 2000). The group of almost 100 professionals included a cross-section of most of the industry sectors, including from large pharmaceutical companies, large and small biotechnology companies, venture capitalists, investors, management consultants, academics and service providers. Delegates ranged from CEOs and Directors to junior managers and were mostly from the UK, Germany and Switzerland.

Europe versus the US

In the vote, 78% of delegates from large pharmaceutical companies felt that Europe is significantly lagging behind the US, 52% of the group saying Europe is 2–4 years behind. Contrary to popular belief, John Ansell, Director of John Ansell Consultancy in the UK showed data suggesting that Europe is actually falling further behind the US. 'The number of actual deals being made by European (and US) genomic companies is increasing, but not at the same rate as the US', he explained.

To compound this problem, Ansell said that for the top 20 companies, deals between US and European companies actually decreased in number between 1999 and 2000. He warned: 'US companies may decide that, although things are coming along in Europe, it is not a real trend and therefore may give up doing deals with European biotechnology companies altogether.'

Of the countries in Europe, voters thought that, other than Germany and the UK, Scandinavia and Switzerland have the greatest potential for growth in genomics in the next 10 years, with Israel showing surprisingly strong support from the venture capitalists.

The public

There was some surprise over the lack of impact of public opinion of the industry on future business plans, with 38% of delegates from pharmaceutical companies, 56% from large biotechnology companies (defined as more than 7 years old and employing more than 40 people) and 40% from smaller biotechnology companies saying it would have no impact at all. However, this view was not shared by those from academia, where 75% said it did impact their plans.

Patenting

There was a split in the group over whether current gene patenting laws for DNA sequences provide enough protection for investment in genomic-based drug research, with delegates from pharmaceutical companies expressing dissatisfaction and large biotechnology companies voting equally on both sides. John Morrison from AstraZeneca (Alderley Park, Cheshire, UK) commented that they found the current patent situation quite stifling. A further large group (31%) would not commit to answering the question until some of the laws have been tested.

Discovery of new drugs

A major concern of the majority of the delegates (64%) was that there is a shortage of well-trained personnel within the genomics and proteomics industries, this being felt particularly strongly by large biotechnology companies (70%) and academia (83%).

There was also a spilt as to whether personalizing treatment would mean the

end of blockbuster drugs, the bias for those in large pharmaceutical companies swinging firmly towards disagreement. However, during the panel discussion, John Ansell pointed out that many diseases are nothing to do with genetics and these can therefore be treated using blockbusters. Furthermore, Eric de la Fortelle (Structural GenomiX, La Jolla, CA, USA) reminded the audience that we would not want to genotype antibiotics too much as we need to avoid resistance developing even faster, and therefore this is another area that will probably produce blockbuster drugs when new drugs are found.

The future

Of the whole group, 53% thought that the greatest bottleneck in genomebased R&D is target validation, with bioinformatics (19%), target identification (10%) and biological assays (8%) being much less important. Just over half of the group (51%) thought that functional genomics/proteomics will have the biggest impact on the discovery of blockbuster drugs and that the main usefulness of genomics and proteomics is to speed up drug discovery (44%), closely followed by finding new products (34%). There is also much optimism that these techniques will be able to speed up drug development by at least 1-3 years (53%), with 29% thinking it may reduce the length of the process by even longer. The majority (61%) also thought that in silico technologies would help reduce drug discovery time significantly.

Few in the assembled group (11%, mostly investors) thought that genetic profiling of patients would be common place within the next 3 years. In fact, most of the group thought that we will not see this type of testing as routine for another 5–7 years.