

Secrets of success

→ Interview by Raphaël Brenner

In the world of oncology drugs, Roche is one of the giants. Here, Chief Executive **Franz Humer** talks about the research and business strategies behind his company's success, and about novel therapies in the pipeline that could help alleviate patients' experience of cancer. He also speaks of his mission to save Europe from relegation in the field of medical research.

Austrian-born Franz B. Humer, Chairman and Chief Executive of Roche, has good reason to be happy. His company, based in Basel, is a world leader in cancer drugs and diagnostics, and he believes it holds one of the most exciting drug pipelines in the industry. Roche's success story is the outcome of shrewd strategic choices initiated in the late 1980s. "It is very important to see how science has developed in the last 10 years," says Humer. "The unravelling of the human genome has allowed biomedical research to make quantum leaps in oncology and because Roche was at the forefront of research, it was able to apply the new knowledge faster than others."

Several factors explain Roche's success. Very early on it decided to tackle the field of oncology from two angles: small molecules (chemical compounds) and large molecules (proteins and monoclonal antibodies). Then it made important acquisitions or took majority participations that boosted its research and development and turned it into the second largest biotechnology company

in the world. The acquisitions were: Genentech in 1990, Boehringer-Mannheim in 1998 and the Japanese company Chugai in 2001. Says Humer, "Our alliance with Genentech probably represents our most successful move in America, and I am sure that, with time, we will see that our acquisition of Chugai will be as successful for us in Japan as Genentech was for Roche in the US. On its side, Boehringer-Mannheim reinforced our know-how of oncology diagnostics and was a key factor in acquiring access to the knowledge base of tumour markers."

BIOTECHNOLOGY THE PILLAR OF GROWTH

The combination of diagnostics and pharmaceuticals in oncology has secured Roche a powerful position in this field. "As far as I know, our approach is unique," says Humer. "In our research centre in Germany, diagnostics and pharmaceutical research in oncology are located in the same building, in order to strengthen collaboration between the two." This approach has resulted in a rich harvest of drugs for Roche. Indeed, the



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company's revenue growth has been driven by its oncology division, whose 2003 sales rose 30% and accounted for a staggering 31% of its pharmaceutical sales.

This year may well turn out to be a watershed year for Roche's oncology division. In Spring 2004, a phase III study of MabThera (rituximab), a monoclonal antibody, reached its primary endpoints of response rate and progression-free survival two years early in the relapsed indolent form of non-Hodgkin's lymphoma. In February 2004, the FDA approved Avastin (bevacizumab), the first angiogenesis inhibitor for the treatment of colorectal cancer. Most recently, at the meeting of the American Society of Clinical Oncology in June, Roche unveiled encouraging results of clinical trials into two of its products: Tarceva (erlotinib), an EGFR inhibitor for use in patients with advanced non-small cell lung cancer who have progressed after

standard chemotherapy, and Xeloda (capecitabine) an oral form of chemotherapy used in the treatment of colorectal cancer.

The strength of Roche's in-house R&D is reflected in 119 research projects and 61 new molecular entities – nineteen of which are in oncology and focus on solid tumours and bone metastases. It is therefore no surprise that oncology is Roche's most important R&D field, and that it absorbs close to 20% of all investments into the various therapeutic areas of Roche's Pharma division.

Humer is pleased with the success of Avastin, which he says has enjoyed a very rapid and strong uptake in the US. Roche has now filed for approval in Europe, which it hopes will be accorded by the end of the year, after which it will launch a large number of trials in several countries. Roche and Genentech have already

initiated an extensive further development programme for Avastin in order to test the drug in combination with other treatments and also to see how it works in additional indications. “We want to assess as quickly as possible where else this drug can be useful,” says Humer.

With such assets, Humer sees no interest in any future merger, particularly with Novartis, its cross-town rival, which is also active in oncology: “We are not anti-Novartis. We simply oppose mergers in general. A merger does not make good industrial sense and would harm our capability to innovate. Mergers destroy teams, knowledge and research continuity.”

FROM IV TO ORAL DRUGS

Humer ranks the development of oral forms of chemotherapy for cancer patients as one of Roche’s most significant achievements. Having lost his wife to breast cancer after a three-year struggle, he has a personal understanding of the plight of cancer patients.

“I went through all the hopes and despairs one can imagine. I used to inject my wife with chemotherapy and, believe me, it was a nightmare. One should never forget that injecting is a dreadful act – it makes a patient sick, not to mention the fact of feeling even sicker because of being hospitalised or immobilised at home.” Oral drugs, says Humer, will “change the way cancer treatment is experienced.”

For the possibilities of oral drugs to be fully realised, however, Humer believes a change in the economic incentives for hospitals and physicians is needed. “In many countries, the rules of the game today in terms of financial incentives are such that if doctors or hospitals can choose between making more money on an injectable drug or prescribing an oral cancer drug, they choose the injectable one – even if the oral form is available. The incentive system needs to be restructured. We fought a two-year battle in the US to put Xeloda on equal footing with IVs in terms of reimbursement. The need is there and this is an example of an area where we can work

with patient organisations.” Together with Genentech, Roche is now trying to develop an orally active compound against the HER-2 target.

RELATING TO PATIENTS

Humer believes his personal experience of cancer alongside his wife has given him some insight into the needs of cancer patients. “The loneliness of cancer patients is not sufficiently understood,” he stresses. Humer wants to see closer co-operation between patient organisations and the pharmaceutical industry, but notes: “this relationship has to be carefully structured and nurtured. It must not be a mere commercial relationship. Nor would I advocate the involvement of patient organisations in the development process, because this is driven by scientific data and regulatory requirements. On the other hand, in later stages of the development process, that is, in phases IIIb and IV, we are involving patients to a great degree and this is proving



very fruitful. I favour seeing Europe move closer to the US in enabling greater access to patients.”

As a step in this direction, he has appointed a go-between to enhance contacts with cancer patient organisations at the international level, with further staff responsible for liaising with cancer patient organisations in each of the major markets.

Humer is convinced that patient organisations will play an increasingly pivotal role, particularly in funding issues: “Governments won’t be able to do everything and will need help in setting priorities. This is where patient organisations will have substantial influence.”

STEMMING THE DECLINE IN EUROPEAN RESEARCH

As the new President of the European Federation of Pharmaceutical Industries and Associations (EFPIA), Humer has set himself the mission of helping to resolve Europe’s research crisis. In the last 12 years, the European pharmaceutical



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industry has forfeited its place to the US as the world leader in sales and research. While, just a decade ago, European pharmaceutical companies invested 70% of their R&D budgets in Europe, this figure has now fallen to 50% and is expected to continue falling. Among other factors, Humer attributes the change to the faster access to markets and patients enjoyed by US companies. He believes the key to resolving the crisis lies with the recommendations of the G-10 group, established by the European Commission and made up of health and trade representatives, pharmaceutical and generic industries and patient groups.

The crucial issue is whether individual Member States will have the political will to implement the recommendations. Warns Humer: “If we don’t turn this around, Europe will not have a productive pharmaceutical industry in the future, and this will be a tragedy.” The new drug legislation recently passed by the European Parliament

is, he notes, a step in the right direction and will accelerate the approval process: “This is particularly important in oncology, where patients often face access delays for innovative drugs. For our part, we intend to tackle access delays by putting cancer drugs on the market as soon as they receive approval, at a price fixed by us, and only afterwards begin negotiating the reimbursement price with the regulatory agencies of each country.”

On the down side, Humer raises the alarm regarding the EU’s new pharma legislation and clinical trials directives: “This adds another unnecessary layer of requirements. Large companies will be able to absorb this, but it will have a negative impact on smaller companies and on hospitals and research institutes.

This is the reason why the G-10 is just the beginning of our struggle. We need to change the situation dramatically if we wish to restore Europe’s attractiveness.”