


SCIENCE IS...

exciting



Paul Weiss participated in a Phase II clinical trial of the anti-IgE antibody as a potential treatment for his allergic asthma.

Seeking scientific knowledge has the power to excite all involved in the pursuit. Ask anyone who works at Genentech. Here the excitement begins with discovery research and plays an important role at each step of the drug development process.

EXCITEMENT IS A GREAT EMOTION. YOU CAN FEEL IT WHEN YOU OVERCOME OR CONTROL AN ILLNESS AND ARE ABLE TO LIVE YOUR LIFE FULLY ONCE AGAIN. OR WHEN WINNING IN WHATEVER ENDEAVOR YOU UNDERTAKE. AT GENENTECH, EACH AND EVERY ADVANCE ACCOMPLISHED — WHETHER INCREMENTAL OR BREAK-THROUGH IN SCOPE — FUELS THE COMPANY'S EXCITEMENT AND WORK. FEW THINGS ARE MORE EXCITING THAN WINNING WHEN THAT SUCCESS BRINGS BETTER MEDICAL OUTCOMES TO PATIENTS.

Genentech scientists' enthusiasm for individual areas of interest contributes to the company's research direction. As it has since its founding, Genentech encourages its scientists to use their unique backgrounds and skills to develop

novel areas of research. Why bridle an excited scientist? Genentech's defined corporate research focus is in the areas of cardiovascular medicine, endocrinology and oncology. Individually developed research efforts often provide opportunities for these areas, as well as for the fourth "opportunistic" area.

A fundamental mission of Genentech's research group, in direct support of the company's Long-Range Plan, is to identify and release to clinical development each year exciting new products to maintain Genentech's product pipeline. Genentech is applying innovative technologies to meet this objective. For example, through a proprietary approach combining a variety of new technologies, Genentech scientists have increased by 100-fold their pace of novel molecule discovery. Advanced screening methods help to determine quickly which of these new molecules may show therapeutic promise.

Genentech's research group also continues its fruitful efforts with humanized monoclonal antibodies. Some of these monoclonal antibodies aim for novel molecular targets. Two monoclonal antibodies being studied have the same molecular targets as Herceptin, but have properties that might provide improved clinical benefits. Herceptin is a monoclonal antibody for which Genentech is currently preparing filings to seek regulatory approval for marketing.

Genentech's successful efforts investigating apoptosis, or programmed cell death, are also proving fruitful. By determining a variety of ways to induce apoptosis of cancerous cells without affecting healthy cells, Genentech is identifying innovative potential cancer therapies. One approach Genentech is studying to kill cancer cells selectively is to cut off their blood supply by interfering with angiogenesis — the formation of new blood cells. The anti-VEGF antibody, recently moved from research into the clinic as a potential cancer therapy, is one outcome of the company's research on angiogenesis. Thus, with other molecules discussed elsewhere in this report, Genentech's BioOncology initiative has exciting components from discovery research, through various stages of clinical testing, up through the market.

Beyond discovery research, the excitement of science carries through to preclinical pharmacological and toxicology testing; to scaling-up protein production from milliliter vials for research to 100-liter tanks for development; to purifying and formulating the manufactured protein for use in humans; to clinical testing in human volunteers; and, ultimately, to product approval. At that point, Genentech employees, patients and stockholders alike can all fully share in the excitement.