













pipeline

...AND DEVELOPMENT OF INNOVATIVE PRODUCTS







With 15 potential products in various stages of clinical development, all for treating serious medical conditions, Genentech's product pipeline offers hope to waiting patients.

-  CARDIOVASCULAR
-  ENDOCRINOLOGY
-  OPPORTUNISTIC
-  BIOONCOLOGY


PHASE I	
	AMD Fab Age-related Macular Degeneration*
	LPD-02 Inflammatory Bowel Diseases

PHASE II	
	Anti-CD11a Antibody (hu124) Psoriasis**
	Anti-CD18 Antibody Acute Myocardial Infarction
	Anti-VEGF Antibody Several Types of Solid-tumor Cancers
	Herceptin Non-breast Cancers***
	Thrombopoietin[†] Thrombocytopenia Related to Cancer Treatment
	VEGF Coronary Artery Disease**

as lifeline

PHASE III	
	Anti-IgE Antibody Allergic Asthma, Allergic Rhinitis
	Neuleze™ Diabetic Peripheral Neuropathy**
	Pulmozyme Cystic Fibrosis Early Intervention**
	Rituxan Intermediate- and High-grade Non-Hodgkin's Lymphoma
	TNK Acute Myocardial Infarction**
	Xubix™†† Acute Coronary Syndrome

PREPARING REGULATORY FILING

	Nutropin Depot™ Growth Hormone Deficiency in Children
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* Currently preparing for Phase I clinical trial.

** Patient enrollment completed.

*** Currently preparing for Phase II clinical trial.

† Pharmacia & Upjohn (P&U) has exclusive worldwide rights for thrombopoietin (TPO). P&U and Genentech will jointly develop TPO.

†† Under clinical development by Roche. Genentech retains option rights.

GENENTECH'S PRODUCT DEVELOPMENT PIPELINE

Through well-designed clinical trials, Genentech seeks to identify whether its projects meet certain key criteria early in the development process. This way the company can move only those candidates with the highest likelihood for success into more expensive and time-consuming late-stage clinical development. Genentech designs late-stage trials to provide answers needed by regulatory authorities to definitively determine safety and efficacy as needed for seeking marketing approval. At all stages, Genentech works closely with its development partners and with regulatory authorities to help ensure a smooth and expeditious development process. In all four of its areas of clinical focus, Genentech made significant progress in 1998.

BIOONCOLOGY

Besides obtaining approval for Herceptin in 1998, Genentech progressed with continued studies of Rituxan and Herceptin and with other oncology products in its pipeline.

With partner IDEC Pharmaceuticals Corporation, Genentech announced results of a small Phase II pilot study combining Rituxan with standard chemotherapy in patients with previously untreated intermediate- or high-grade non-Hodgkin's lymphoma (NHL). The two companies continue to study this indication in Phase III trials. Rituxan is

currently approved for a type of low-grade NHL. Genentech is also preparing to study Herceptin for additional cancer indications in Phase II clinical trials.

A Genentech antibody to the protein vascular endothelial growth factor (VEGF) began Phase II clinical trials. Designed to block the growth of new blood vessels to growing tumors, the anti-VEGF antibody may be useful for treating a variety of solid-tumor cancers, such as lung and colon cancer.

In collaboration with Pharmacia & Upjohn, Inc. (P&U), Genentech continued Phase II clinical trials of thrombopoietin (TPO). This blood growth factor induces the growth of platelets — cells that assist in blood clotting. Many cancer therapies lead to a side effect called thrombocytopenia, a platelet deficiency that can lead to uncontrolled bleeding. Genentech and P&U are investigating whether TPO can prevent or reduce the severity of thrombocytopenia related to cancer treatment.

ENDOCRINOLOGY

In 1998, Genentech completed Phase III clinical trials with Nutropin Depot, a sustained-release growth hormone product that may require an injection only once or twice monthly instead of daily. Based on positive results, with partner Alkermes, Inc., the company is preparing regulatory filings to seek approval to market Nutropin Depot for treating

growth hormone deficiency in children.

Genentech is also investigating a potential medicine for the treatment of a common side effect of diabetes called peripheral neuropathy. This condition can cause pain and/or numbness of the hands and feet and can lead to severe complications, sometimes including amputation. Neuleze is in a Phase III clinical trial to determine if it can ameliorate peripheral neuropathy in diabetic patients. Enrollment in this trial is completed and patient evaluation is ongoing.

CARDIOVASCULAR MEDICINE

Four potential cardiovascular medicines developed by Genentech are in the clinic.

Genentech scientists selectively mutated the gene encoding tissue-plasminogen activator to develop TNK, a custom thrombolytic protein that may be easier to administer than Activase. Enrollment in the Phase III trial is complete and data analysis is under way. Genentech's development of TNK is designed to support the company's acute thrombolytic position, as is an ongoing Phase II trial of the anti-CD18 antibody used in combination with thrombolytic therapy. This trial is studying whether the anti-CD18 antibody can further improve blood flow in heart attack patients.

The other two projects in Genentech's cardiovascular development portfolio may offer a

more sustained approach to treating cardiovascular disease. They have the potential to prevent acute occurrences such as heart attacks.

Because the clumping of platelets is involved in the formation of blood clots that lead to heart attacks, Genentech's partner Roche is investigating Xubix, an oral drug that blocks a receptor on platelets involved in this clumping. Roche is conducting Phase III trials to determine if Xubix can reduce the risk of secondary heart attacks and death in patients with acute coronary syndrome (which includes unstable angina and heart attacks). Genentech retains certain U.S. option rights to Xubix.

Genentech completed enrollment in Phase II trials of VEGF as a potential treatment for ischemic cardiovascular disease. The trials are studying whether VEGF can enhance blood flow to the heart by growing new blood vessels to bypass blocked coronary arteries in patients with advanced cardiovascular disease.

OPPORTUNISTIC

Genentech is developing several potential medicines that fall outside of its three defined areas of medicine and into its fourth, "opportunistic," area of focus.

In Phase III trials, an anti-IgE antibody is under clinical development for two related potential indications: allergic asthma and allergic rhinitis (hay fever). This

antibody has the potential to interfere early in the complex, multistep process that leads to the symptoms of allergies and asthma. Genentech is investigating this potential medicine with its partners Novartis AG and Tanox Biosystems, Inc.

Also in Phase III trials, Genentech continues to investigate the potential benefits of managing cystic fibrosis patients with Pulmozyme early in the progression of their disease, before significant symptoms appear. Genentech has already gained approval for a label change to include safety data for the use of Pulmozyme in patients under the age of five. Results from this continuing trial may help physicians determine when best to begin their cystic fibrosis patients on Pulmozyme therapy.

With partner XOMA Ltd., Genentech completed enrollment in Phase II clinical trials of an anti-CD11a antibody as a potential treatment for psoriasis. This antibody may inhibit certain white blood cells of the immune system, which could lead to improvement in this autoimmune skin disorder.

With partner LeukoSite, Inc., Genentech is involved in investigating another antibody to receptors on certain white blood cells. Preclinical studies have indicated that these receptors may be involved in inflammatory bowel diseases. An antibody to these receptors, called LDP-02, is in Phase Ib/IIa trials as a potential treatment for these diseases.

Genentech is also currently planning Phase I clinical trials of AMD Fab, a fragment of an anti-VEGF antibody, for the potential treatment of age-related macular degeneration (AMD). In this condition, abnormal blood vessel growth in the retina of the eye can lead to blindness.

Besides conducting clinical trials of these potential medicines, Genentech also develops and refines the processes for their manufacture. The company seeks to produce extraordinarily complex medicines of the highest quality. It must do so economically and in a quantity and time frame appropriate to supply clinical trials and, upon approval, meet market demands. Depending on the processes involved, Genentech may develop production processes for its potential medicines in its manufacturing facilities in either South San Francisco or – newly opened in 1998 – Vacaville, California. Together, excellent clinical and manufacturing science will lead to new opportunities for patients and new products for Genentech's markets.