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ANNUAL REPORT



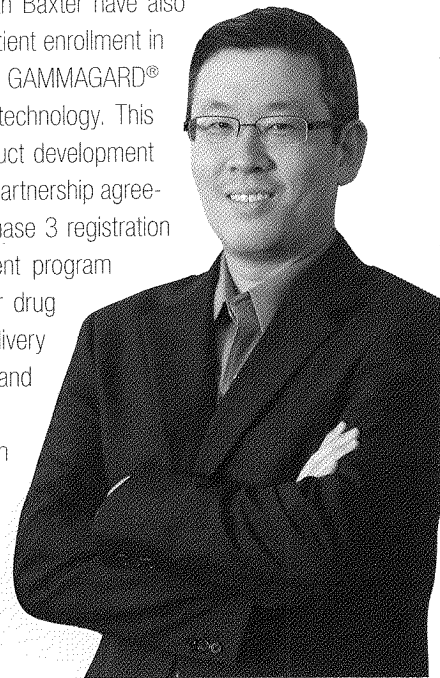
# Dear Fellow Shareholders:

*2009 was a pivotal year for Halozyme in many respects. Two of our partnered programs advanced into pivotal clinical trials—and one of them completed enrollment. We made pivotal decisions regarding prioritization and resource allocation within our portfolio to focus on best-in-class products with significant commercial potential. We also filled key positions to further strengthen our team—taking us a few steps closer toward realizing our vision of building a world class organization dedicated to developing new Matrix targeted therapies for patients.*

It brought me great personal satisfaction to announce the start of Roche's Phase 3 clinical trial of a subcutaneous formulation of Herceptin with rHuPH20 (or PH20). Roche is an important alliance partner for Halozyme, and we have enjoyed working with them for more than three years. The promise of fewer infusion reactions and a more convenient dosing regimen for Herceptin could enhance the quality of life for women throughout the world who undergo treatment for breast cancer every year. For most patients, treatment with Herceptin involves a trip to an intravenous (IV) infusion center or hospital to receive a 30 to 90 minute IV infusion. Subcutaneous administration of Herceptin with PH20 holds the promise of a five minute or less injection under the skin that potentially could be performed outside the hospital setting, increasing convenience and saving time. In addition, Phase 1 clinical trials began during 2009 for formulations of two other Roche biologics that incorporate our technology. One of them has been identified as MabThera®, a widely used product for the treatment of non-Hodgkin's lymphoma.

I am pleased to report that our two product alliances with Baxter have also shown impressive progress. Baxter BioScience completed patient enrollment in its Phase 3 pivotal trial for the subcutaneous administration of GAMMAGARD® with PH20, another significant achievement for our enabling technology. This program clearly demonstrates how quickly PH20 based product development with our partners can advance. We signed the GAMMAGARD partnership agreement in September 2007 and Baxter expects to finish the Phase 3 registration trial by the end of 2010, representing a clinical development program of just over three years, an almost unheard of timeframe for drug development in our industry. In addition, Baxter Medication Delivery launched HYLENEX® for pediatric hydration in October 2009, and its promotional campaign is well underway.

In mid-2009, Halozyme successfully completed a \$40 million equity financing to fund our product development. We continue



to operate in a highly capital efficient manner by investing judiciously in a resource constrained environment. This includes focusing our efforts on those programs that have the best possibility of maximizing value for our shareholders.

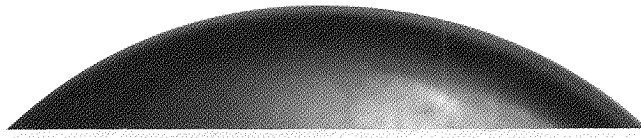
In this regard, we presented the results of several clinical trials from our Ultrafast Insulin program, including a Phase 2 meal study in type 1 diabetic patients. Notably, our formulations of insulin combined with PH20 continue to demonstrate improved insulin absorption resulting in better glucose control. Our goal remains to create a best-in-class mealtime insulin and I look forward to the presentation of additional Ultrafast Insulin clinical data throughout 2010.

PEGPH20, a new molecular entity for the systemic treatment of solid tumors, advanced into Phase 1 clinical development in 2009. Many solid tumors have a hyaluronan (HA) coating which, along with the associated elevation in interstitial fluid pressure (IFP), may serve to protect tumors from chemotherapy agents. Our preclinical cancer model experiments have demonstrated that intravenous PEGPH20 has the ability to degrade this HA coating, reduce the IFP, and help currently utilized anti-cancer treatments do a better job of reducing tumor size and prolonging survival. Our PEGPH20 agent represents a completely new mode of action for attacking solid tumors that may prove to be effective in a broad range of cancers, including pancreatic, breast, colon, and prostate. Halozyme's dermatology research program also remains active with the HTI-501 and MMP1ts conditionally active collagen degrading enzymes which are continuing to undergo a variety of preclinical testing.

One of Halozyme's strengths continues to be our people and we ended the year with 139 dedicated employees. We have a strong track record of successfully landing our top choice recruits for positions at every level throughout the company. Most notably, we successfully filled key positions in research, clinical, and finance, landing talented individuals with senior-level experience at leading companies, such as Roche, Genentech, Amgen, and Merck. Overall, Halozyme continues to be an employer of choice, earning a Workplace Excellence Award from the Society for Human Resource Management in 2009. I do not know of a more talented team or organization with which I would rather be associated.

As I reflect on where we are today, I am anticipating our future with great optimism and excitement. While 2009 was a pivotal year indeed, the future looks even brighter. On behalf of the board of directors, management team, and our employees, I thank you for your continued interest and support, and invite you to track our progress as we continue to develop *Matrix therapies for life*.

Jonathan E. Lim, M.D.  
President, CEO and Director  
Halozyme Therapeutics, Inc.  
February 12, 2010





# The Extracellular Matrix

## A Target Rich Environment

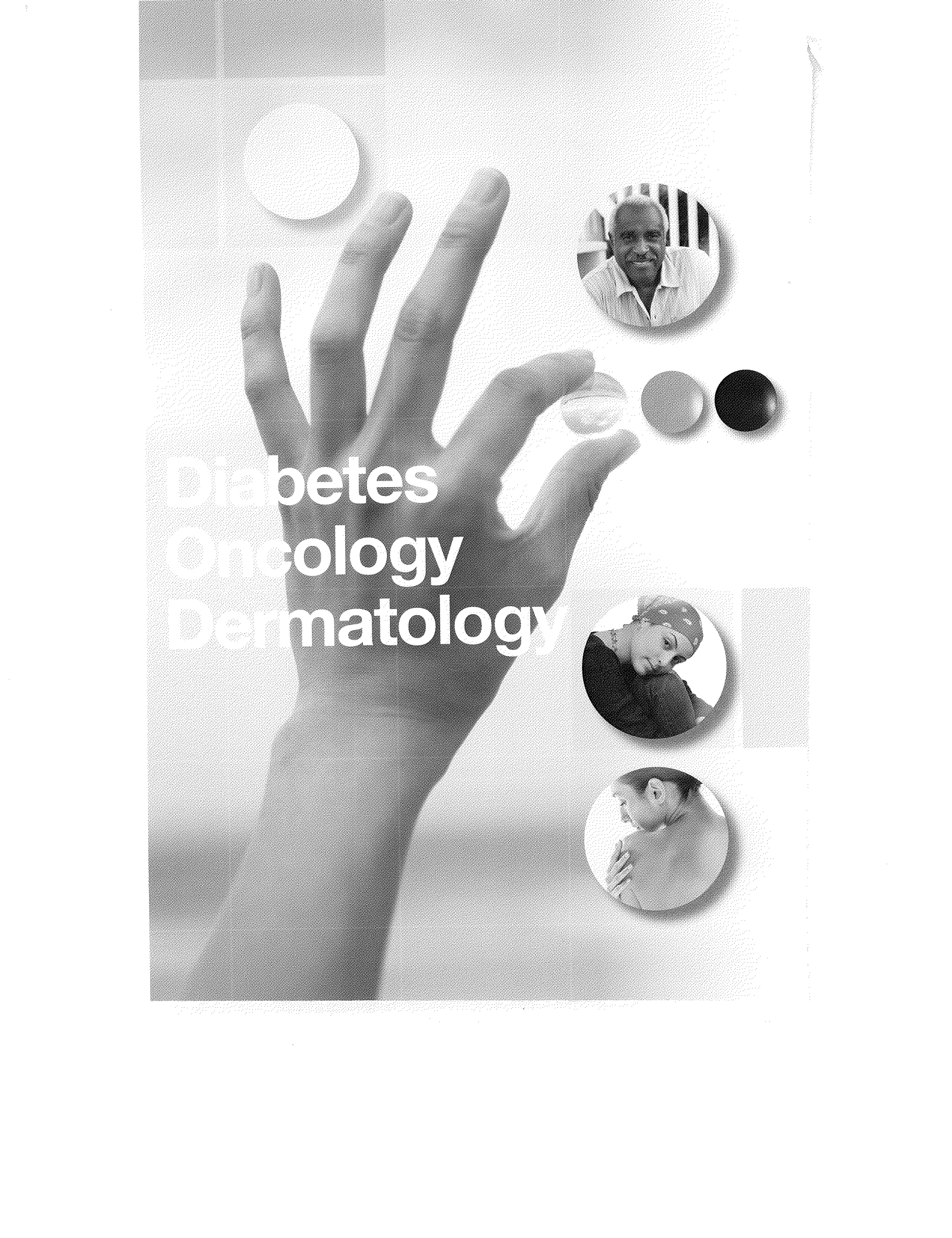
*Halozyme is a biopharmaceutical company dedicated to the development and commercialization of products targeting the area outside the cell known as the extracellular matrix, or "Matrix." The Matrix provides structural support in tissues and orchestrates many important biological activities, including cell migration, signaling, and survival. We have developed unique scientific expertise in the Matrix that allows us to pursue this target rich environment for generating product candidate leads.*

The Enhanze™ technology platform utilizes our rHuPH20 enzyme, or PH20, to enable subcutaneous administration for large molecule biologic therapeutics. Enhanze increases the dispersion and absorption of injected biologics, with the goal of converting intravenous (IV) infusions to subcutaneous (SC) injections to produce a broad array of advantages such as reduced costs, improved patient convenience and compliance, or benefits in efficacy or safety. We are also applying PH20 to existing SC products to alter the pharmacokinetic (PK) profile of the injected drug to improve efficacy.

Our development pipeline also includes new molecular entities that alter aspects of the Matrix. Our PEGylated rHuPH20 enzyme, PEGPH20, targets solid tumors by clearing away the surrounding HA and reducing the interstitial fluid pressure to allow better penetration of chemotherapeutic agents into the tumor. In addition, our conditionally active Matrix-modifying enzymes, HTI-501 and MMP1ts, target collagen, a structural component of the skin, which may lead to applications in medical and aesthetic dermatology.

As the site for diverse biochemical pathways and numerous structural components, the Matrix remains a target rich environment for the discovery of therapeutic compounds. We believe that Halozyme is distinctly qualified to bring forth unique approaches derived from the Matrix for the treatment of medical conditions with large commercial potential.



A hand is shown holding a pill, with several other pills floating around it. The background is a grid of squares. There are three circular portraits of people: a man at the top, a woman in the middle, and a child at the bottom. The text 'Diabetes', 'Oncology', and 'Dermatology' is overlaid on the hand.

**Diabetes**  
**Oncology**  
**Dermatology**

# Lead Programs

*Proprietary Product Candidates. Halozyme's focus on the Matrix has yielded proprietary product candidates that target significant commercial therapeutic markets in endocrinology, oncology and dermatology. Halozyme maintains worldwide commercial rights to all of these opportunities. Our programs aim to be best-in-class, which will help to ensure their acceptance by patients, healthcare providers and payors.*

## Ultrafast Insulin—Making Mealtime Insulin Better

The primary goal of our Ultrafast Insulin program is to develop a best-in-class mealtime, or prandial, insulin relative to the current gold standard analog products that participate in the growing \$3 billion prandial insulin market. Our studies continue to demonstrate that the combination of currently available insulin products with our PH20 enzyme results in a more rapidly absorbed and faster acting insulin with a shorter duration of effect and greater consistency from dose to dose. We believe that this faster, more reproducible action will address important unmet needs, such as better and more consistent glycemic control with less hypoglycemia and hyperglycemia, and less weight gain.

We presented the initial results from our first Phase 2 mealtime study in patients with type 1 diabetes at the American Diabetes Association Scientific Sessions in June 2009 followed by additional data from the same study at the European Association for the Study of Diabetes in October 2009. This study tested PH20 with regular insulin and insulin lispro and compared the combinations to each insulin administered alone.

The study confirmed our previous Phase 1 findings that PH20 accelerated insulin absorption to yield a more rapid insulin concentration profile. This more rapid pharmacokinetic profile led to improvements in the blood glucose response. The study demonstrated a significant reduction in both peak and total hyperglycemic excursion for the combination of lispro with PH20 and regular insulin with PH20 compared to either insulin alone. The accelerated PK profile associated with co-administration of PH20 can result in a clinically meaningful reduction in post meal glycemic excursion, an important component of diabetes management.

We presented data at the Diabetes Technology Society meeting showing that the addition of PH20 to analog insulin results in greater dose-to-dose consistency in insulin absorption in the critical, early time points following injection. Coupled with the reproducible finding of accelerated

# Lead Programs (cont.)

insulin exposure and action, this property should help patients with diabetes achieve smoother, less variable blood sugar control.

Later this year, we expect to present the results from three insulin studies within our Ultrafast Insulin program at major medical meetings.

The first is a Phase 2 treatment study in patients with type 1 diabetes that compares three times per day dosing of regular insulin with PH20 to insulin analog alone. The study will provide insight into the ability of PH20 to improve regular insulin compared to treatment with analog insulin and will provide important safety information with regard to chronic dosing for our PH20 enzyme.

Our first study in type 2 diabetes patients, a standard meal study, compares insulin lispro plus PH20 and regular insulin with PH20 to lispro alone. The primary endpoint of this trial is glycemic excursion over the first four hours following the meal challenge. This endpoint, as well as other pharmacokinetic and pharmacodynamic endpoints, will be compared at the optimum doses for each therapy.

The third study compares the three approved prandial insulin analogs with and without PH20 in healthy subjects. It is a head to head comparison of all three analogs and will examine their absorption and action profiles with and without PH20.

Our Ultrafast Insulin clinical development program is designed to provide information regarding key product attributes that we, as well as potential partners, would want to know. Later this year, we will have the results of seven clinical trials that we have conducted to demonstrate the value of our enzyme in combination with insulin. A second treatment study should be underway during the third quarter that will compare analog insulin with and without PH20. We are moving forward and funding these clinical studies as we continue to generate data and build value for the Ultrafast Insulin program.

## PEGPH20—HA Accumulation Offers a Novel Target for Cancer Therapy

The PEGylated version of our hyaluronidase enzyme, a new chemical entity, began its first Phase 1 clinical trial in 2009. PEGylation of the enzyme increases its plasma half-life from less than one minute to 48 to 72 hours, allowing for intravenous administration. This trial is being conducted in cancer patients with refractory solid tumors and is a dose escalation, repeat dose, pharmacokinetic, and pharmacodynamic safety trial of PEGPH20 administered IV as a single agent.



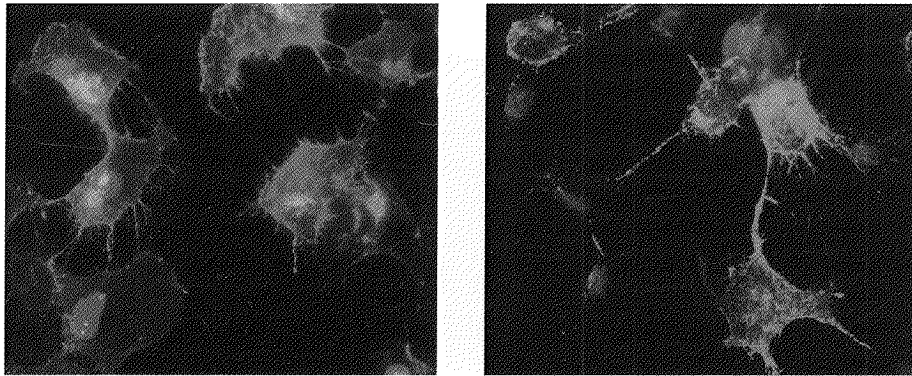
A wide array of solid tumor types overexpress hyaluronan, including pancreas, prostate, breast, colon, gastric and ovarian. Halozyme has conducted tests in a variety of animal tumor models that produce HA. We have found that removal of HA with our novel PEGPH20 agent occurs in a dose dependent manner, which results in a meaningful reduction in tumor size and prolonged time to progression compared to controls. It also appears to produce synergistic effects when administered in combination with cytotoxic agents in preclinical tumor models.

We are currently evaluating potential directions for additional clinical trials with PEGPH20 in the treatment of HA-positive solid tumors. For example, about 87% of pancreatic tumors produce hyaluronan, which could represent an attractive target for our future studies with PEGPH20.

#### **Dermatology—Applying Matrix Science to an Attractive Medical Specialty**

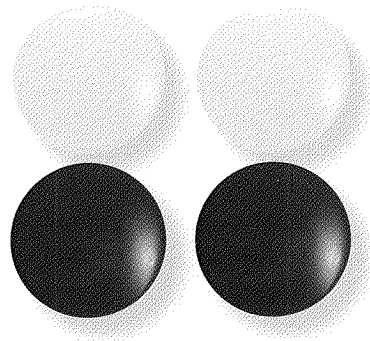
Two enzymes in our pipeline, HTI-501 and MMP1ts, degrade collagen and are currently undergoing preclinical investigations. HTI-501 is a human lysosomal enzyme, also known as cathepsin-L that is active under mildly acidic conditions. It has no activity at normal physiologic pH. MMP1ts, which stands for metalloproteinase temperature selective, only shows activity at room temperature. It has no activity at normal body temperature. This may permit greater control and duration of action, potentially improving the efficacy or safety of these product candidates.

We expect preclinical investigations will continue as we learn more about the potential use of these novel enzymes in medical and aesthetic dermatology applications, such as scarring, fibrosis, Dupuytren's contracture, keloids, cellulite, and other conditions.



*Fluorescently Labeled Human Breast Cancer Cells, CD-44 left, Hyaluronan Binding Protein, right.*

# PARTNERSHIPS: Roche Baxter



*Product Alliances and Partnerships. Since Halozyme's founding, licensing our technology to outside parties to use with their own products has been an integral part of our business strategy. The alliances provide an important source of non-dilutive cash as a result of licensing fees, event-triggered milestone payments, and royalty payments based on commercial sales of products that utilize our technology. So far, Halozyme has received over \$100 million related to partnering deals. A wide variety of companies continue to evaluate and conduct feasibility studies with our technology. Obtaining additional partnership agreements, on terms that are acceptable from both strategic and financial standpoints, is a major part of our strategy. We currently have three licensing agreements with two companies, Roche and Baxter.*

## Subcutaneous Herceptin Phase 3 Clinical Trial Underway

Roche began its Phase 3 registration clinical trial for subcutaneous Herceptin (Herceptin SC) in October 2009. The study will enroll approximately 550 early stage HER2-positive breast cancer patients and will compare intravenous (IV) Herceptin to the subcutaneous (SC) formulation that contains our PH20 enzyme. Herceptin achieved worldwide sales of approximately \$5.1 billion in 2009 and Roche has stated it intends to file for approval of Herceptin SC in the European Union in 2012.

The currently approved IV formulation of Herceptin requires a 30 to 90 minute infusion and the patient travels to a hospital or an IV infusion center to receive treatment. Many Herceptin patients receive treatment for up to one year. Roche has also announced a \$185 million investment to develop a patient friendly, ready to use proprietary device that will be able to administer its biologics, such as Herceptin SC, as a subcutaneous injection in less than five minutes. This should provide for much greater convenience to patients and it may eventually allow for self administration of the treatment in the home setting. The device will contain a liquid formulation of Herceptin with PH20 and therefore will not require mixing or preparation by a pharmacist prior to use of the injection device.

We believe the start of the Phase 3 Herceptin SC registration study and the investment of \$185 million toward the development and manufacturing capability of a delivery device represents

*“Once available, Herceptin/Enhance will represent an important advance in the care of women with HER2-positive early breast cancer. In addition to Herceptin’s survival benefits, patients and the medical community alike will benefit from cost-and time-savings.”*

Jean-Jacques Garaud, Global Head of Pharma Development, Roche.

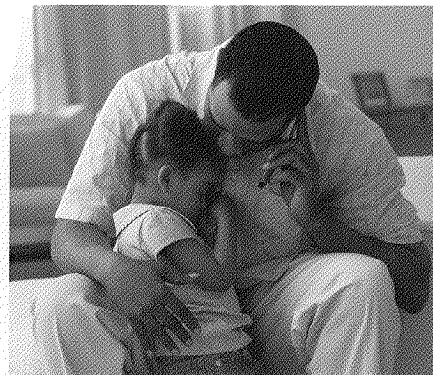
Roche's high level of commitment to our technology. In addition to Herceptin SC, MabThera SC and one other Roche biologic have entered the clinic. We expect additional advancement of the Roche targets covered in the alliance during 2010.

#### Completion of Phase 3 GAMMAGARD Study Expected in 2010

The Phase 3 pivotal registration study for GAMMAGARD Liquid plus PH20 for the treatment of primary immunodeficiency (PID) began at the end of 2008 and became fully enrolled in July 2009. Baxter has recently stated that the trial is expected to finish by the end of 2010 and that it expects to submit an application for approval in 2011. The patients enrolled in the trial receive subcutaneous treatment every three to four weeks with GAMMAGARD plus PH20 for 12 months and the rate of acute bacterial infections is the primary endpoint.

Primary immunodeficiency is an inherited condition that occurs when part of a person’s immune system is missing or does not function properly. Patients with PID, many of them children, cannot fight the germs that invade their bodies and cause infections. As a result of having a weakened immune system, patients receive lifelong intravenous treatment with immunoglobulin, the active ingredient in GAMMAGARD.

The worldwide sales for immunoglobulin total about \$6 billion and Baxter commands a significant share of the market. GAMMAGARD is currently approved for IV infusion. Subcutaneous administration of GAMMAGARD plus PH20 may allow patients to benefit from the convenience of self administration of the therapy in the home setting.



# PARTNERSHIPS: (CONT.)

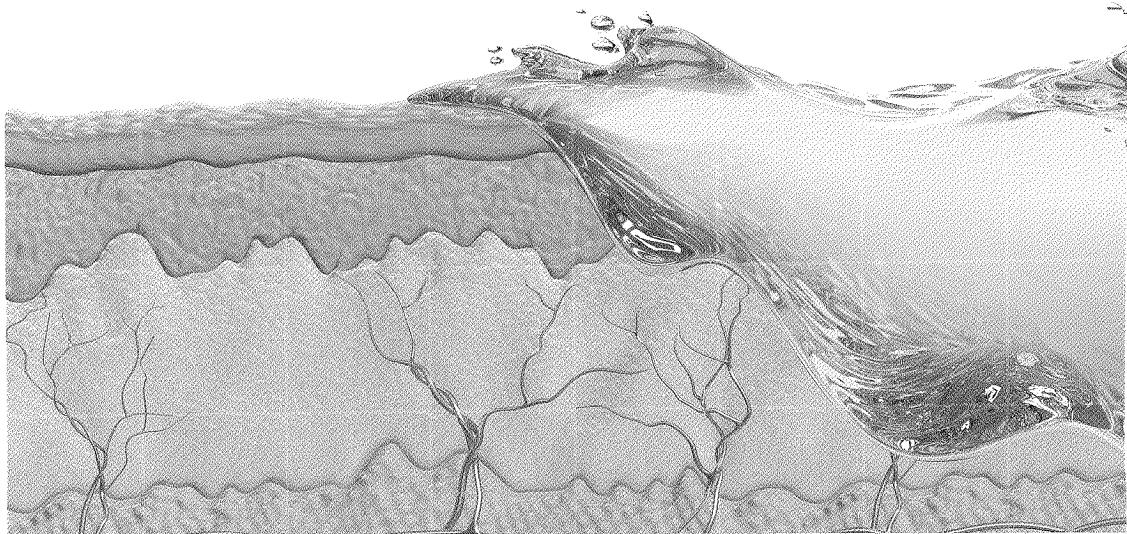
## **HYLENEX Launched for Treatment of Pediatric Hydration**

Baxter's Medication Delivery business introduced HYLENEX for the treatment of pediatric hydration in October 2009 at the American College of Emergency Physicians meeting in Boston. The results of its clinical study "Recombinant Human Hyaluronidase-Enabled Subcutaneous Pediatric Rehydration" were published at the same time in the peer reviewed journal Pediatrics. Enrollment for another pediatric hydration trial was recently completed and Baxter continues to evaluate additional uses for HYLENEX.

Restoring fluids to dehydrated children by intravenous administration can be challenging and may require multiple attempts to insert the needle, and up to 20 to 40 minutes to initiate IV treatment. The veins of pediatric patients are small and dehydration makes them even harder for emergency room personnel to find and access. Rehydration using HYLENEX can be started through a small needle placed into the skin between the child's shoulder blades. The published study found that 90% of subcutaneous catheters were successfully inserted and secured on the first attempt and 96% of physicians rated the procedure easy to perform. With HYLENEX recombinant facilitated subcutaneous rehydration, the median time from insertion to start of therapy was two minutes. This may alleviate much of the discomfort and emotional tension for both patients and parents in the emergency room.

## **Partnerships Proceeding Toward Commercialization**

With two pivotal Phase 3 registration programs for partnered products underway, Herceptin SC and GAMMAGARD, and a third, HYLENEX, in its initial launch phase, Halozyme has made important





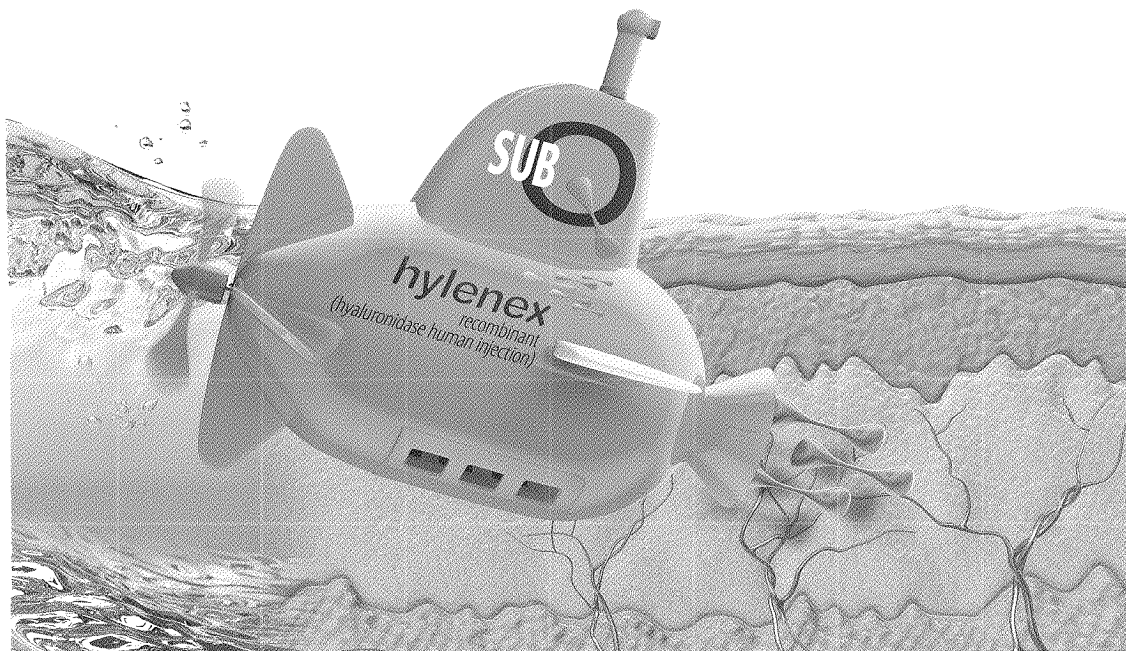
progress in transitioning its technology toward commercialization. Additional clinical advancement in the coming years will propel the company further along the path of commercial success.

#### Early Stage Development Strategy—The Next Frontier for New Matrix Therapies

Our early stage research activities continue to explore the Matrix for unique proteins and approaches in the discovery of innovative therapies. We believe the Matrix is a target rich environment for biologic leads. One direction in which we are headed is the development of conditionally active biologics, or CABs. CABs offer a unique way to provide treatment solutions to medical conditions that may be safer and more effective. They are designed to interact with their targets under highly specific, predefined conditions in the body. For example, HTI-501 is active only in slightly acidic conditions. We believe that by injecting the agent in a mildly acidic formulation, HTI-501 will only produce a therapeutic effect at the site of injection until the body normalizes the injection site back to neutral physiologic pH.

We recently committed to the identification of additional conditionally active biologics through the research alliance we announced with BioAtla LLC. It was initiated to construct and screen novel high throughput recombinant protein libraries directed against targets in oncology, aesthetic dermatology and inflammation. Halozyme will receive exclusive worldwide commercial rights from BioAtla to CABs that arise from the agreement. Basic research on the first compound covered by the agreement will be underway during the second half of 2010.

This is just one example of how Halozyme is using the Matrix to identify paths for new molecular entities that will result in unique and better treatments for patients.



# Our People

Our strength lies in the energy, dedication and expertise of our people. We excel in a work environment that has been described as “chaordic,” a unique blend of chaos (entrepreneurial, fast-paced, highly adaptive to dynamic change) and order (right-sized processes, focused prioritization, disciplined execution). As a small, growing biotech company with finite resources, our people wear multiple hats and make contributions across departments, programs and scientific disciplines. We are nimble and flexible as we embrace change, and operate at a breakaway pace to advance the development and commercialization of our unique pipeline to fulfill our mission of serving patients.



# Abbreviated Financials

Years Ended December 31,

<b>Statement of Operations Data:</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>
<i>(In thousands, except per share amounts)</i>					
<b>REVENUES:</b>					
Revenues under collaboration agreements	\$ 12,700	\$ 8,052	\$ 3,160	\$ 311	\$ —
Product sales	971	712	640	671	127
Total revenues	13,671	8,764	3,800	982	127
<b>OPERATING EXPENSES:</b>					
Cost of product sales	312	332	240	437	52
Research and development	56,614	44,233	20,554	9,215	10,220
Selling, general and administrative	15,203	14,634	11,155	6,913	3,417
Total operating expenses	72,130	59,199	31,950	16,565	13,689
OPERATING LOSS	(58,458)	(50,435)	(28,150)	(15,583)	(13,561)
Interest and other income (expenses)	98	1,718	4,254	831	286
NET LOSS BEFORE INCOME TAXES	(58,361)	(48,717)	(23,896)	(14,752)	(13,275)
Income tax benefit	—	(63)	—	—	—
NET LOSS	\$ (58,361)	\$ (48,654)	\$ (23,896)	\$ (14,752)	\$ (13,275)
Basic and diluted net loss per share	\$ (0.67)	\$ (0.61)	\$ (0.32)	\$ (0.24)	\$ (0.26)
Shares used in computing basic and diluted net loss per share	86,700	79,844	74,318	62,610	50,317

Years Ended December 31,

<b>Balance Sheet Data:</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>
<i>(In thousands)</i>					
Cash and cash equivalents	\$ 67,465	\$ 63,716	\$ 97,679	\$ 44,189	\$ 19,132
Working capital	60,045	59,794	92,313	41,343	17,803
Total Assets	77,150	76,563	103,460	46,091	20,510
Deferred revenue	60,482	49,448	39,269	19,982	254
Total stockholders' equity	6,903	15,380	57,768	23,081	18,207

*Halozyme's 2009 annual report draws its inspiration from the ancient Chinese board game Go. It is a game of strategic complexity for two players, who place black and white stones on the vacant intersections of a grid with the objective of controlling the most territory. Players experience sacrifice, struggle, abstract reasoning, deep meditation, concentration, balance, and discipline, but overall it is a game about building and positioning oneself for success.*

# CORPORATE INFORMATION



## Board of Directors

**Robert L. Engler, M.D.**  
Professor Emeritus at  
University of California, San Diego and  
Co-founder, Sicor and  
Collateral Therapeutics

**Kathryn E. Falberg**  
Senior Vice President,  
Chief Financial Officer,  
Jazz Pharmaceuticals, Inc.

**Gregory I. Frost**  
Vice President and Chief Scientific Officer,  
Halozyme Therapeutics

**Kenneth J. Kelley**  
Managing Director,  
K2 Bioventures

**Randal J. Kirk**  
Senior Managing Director,  
Third Security, LLC

**Jonathan E. Lim, M.D.**  
President and Chief Executive Officer,  
Halozyme Therapeutics

**Connie L. Matsui**  
Former, Executive Vice President, Corporate  
Strategy & Communications, Biogen-Idec

**John S. Patton, Ph.D.**  
Founder and President,  
Dance Pharmaceuticals

## Management Team

**Jonathan E. Lim, M.D.**  
President & Chief Executive Officer

**Gregory I. Frost, Ph.D.**  
Vice President &  
Chief Scientific Officer

**Kurt A. Gustafson**  
Vice President &  
Chief Financial Officer

**Jonathan A. Leff**  
Vice President &  
Chief Medical Officer

**Robert J. Little**  
Vice President &  
Chief Commercial Officer

**James E. Cartoni**  
Vice President, Legal

**William J. Fallon**  
Vice President of Manufacturing  
& Operations

**Don A. Kennard**  
Vice President of Regulatory  
Affairs & Quality Assurance

## General Information

**Corporate Headquarters**  
11388 Sorrento Valley Road  
San Diego, CA 92121

**General Counsel**  
DLA Piper  
San Diego, California

**Independent Auditors**  
Ernst & Young  
San Diego, California

**Transfer Agent**  
Corporate Stock Transfer, Inc.  
3200 Cherry Creek Drive South, Suite 430  
Denver, Colorado 80209  
303-282-4800

**Form 10-K Annual Report**  
Each Shareholder may receive without  
charge a copy of the Annual Report on form  
10-K filed with the Securities and Exchange  
Commission by written request addressed to  
Investor Relations at the address provided.

**Stock Listing**  
Halozyme Therapeutics, Inc. common stock  
trades on the Nasdaq Stock Market under  
the symbol HALO.

**Safe Harbor Statement:** This Annual Report contains forward-looking statements regarding our business, financial condition, results of operations and prospects. Words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates" and similar expressions or variations of such words are intended to identify forward-looking statements, but are not the exclusive means of identifying forward-looking statements in this Annual Report. Additionally, statements concerning future matters such as the development or regulatory approval of new products, enhancements of existing products or technologies, revenue and expense levels and other statements regarding matters that are not historical are forward-looking statements.

Although forward-looking statements in this Annual Report reflect the good faith judgment of our management, such statements can only be based on facts and factors currently known by us. Consequently, forward-looking statements are inherently subject to risks and uncertainties and actual results and outcomes may differ materially from the results and outcomes discussed in or anticipated by the forward-looking statements. Factors that could cause or contribute to such differences in results and outcomes include without limitation those discussed under the heading "Risk Factors" below, as well as those discussed elsewhere in this Annual Report. Readers are urged not to place undue reliance on these forward-looking statements, which speak only as of the date of this Annual Report. We undertake no obligation to revise or update any forward-looking statements in order to reflect any event or circumstance that may arise after the date of this Annual Report. Readers are urged to carefully review and consider the various disclosures made in this Annual Report, which attempt to advise interested parties of the risks and factors that may affect our business, financial condition, results of operations and prospects.