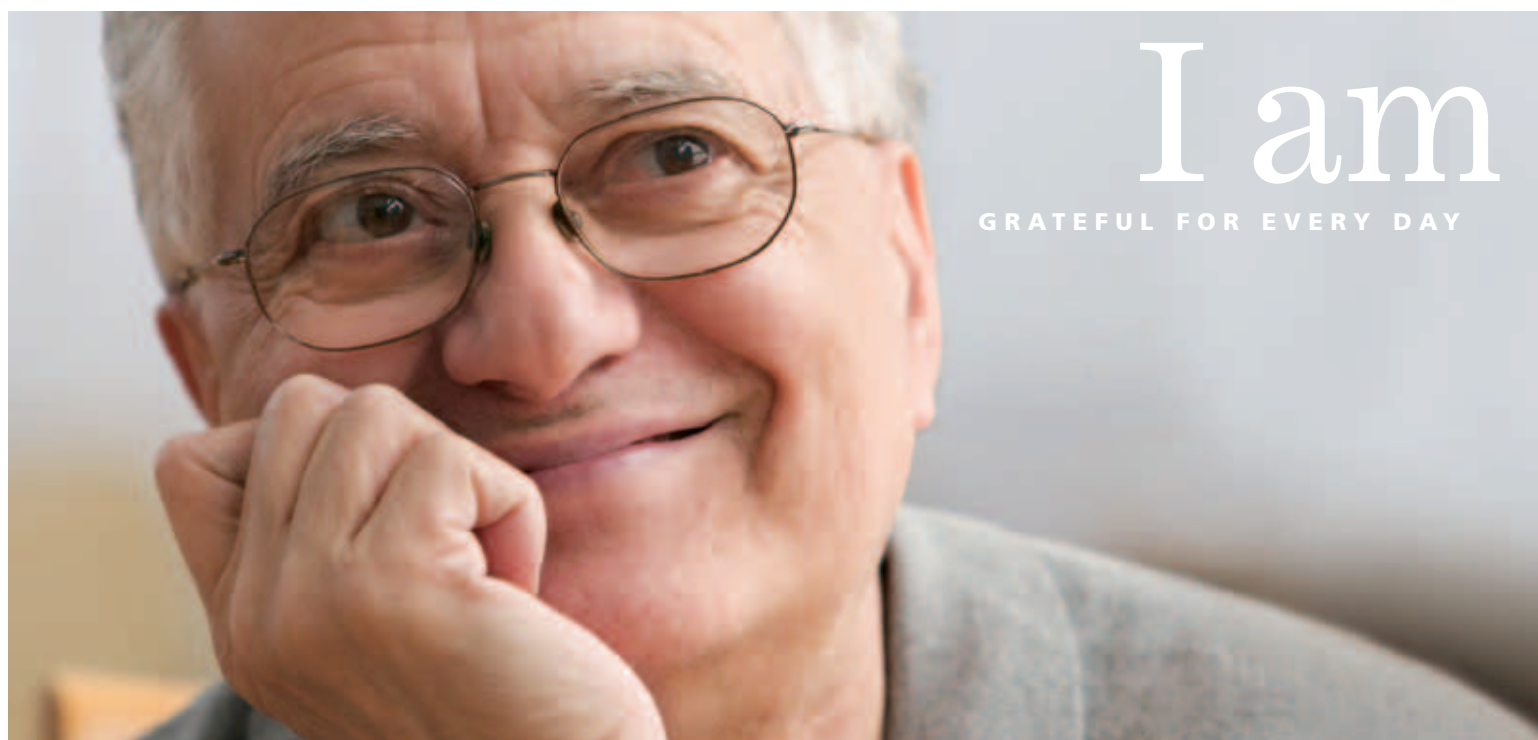


# Onyx Pharmaceuticals 2006 Annual Report

## Launching Our Fight Against Cancer



I am

GRATEFUL FOR EVERY DAY

Nexavar® (sorafenib) Tablets: In our first year of commercializing Nexavar, we have established a global brand and the basis for a powerful oncology franchise. With our collaborator, Bayer Pharmaceuticals Corporation, we have shown that Nexavar is a highly active drug with confirmed therapeutic benefits in patients with advanced kidney cancer. We and Bayer have also demonstrated our ability to successfully execute commercially, achieving rapid sales growth and market penetration in the United States and Europe, with \$165 million in worldwide net sales in 2006. In addition, we are now preparing regulatory filings in a second indication, advanced liver cancer.

## Clinically Proven, Well-tolerated Oral Drug Active in a Challenging Indication

In 2006, Onyx became a commercial company as we continued our collaboration with Bayer on the successful worldwide launch of Nexavar for patients with advanced kidney cancer. Working with Bayer in the United States and through Bayer in the rest of the world, we established the commercial infrastructure needed to introduce Nexavar and build a global oncology franchise. Through the dedicated teamwork of our collective clinical and commercial groups, we were able to achieve rapid sales growth and market penetration in the United States and Europe.

In the United States, more than 10,000 patients and approximately 4,500 physicians have had experience with Nexavar since its approval by the U.S. Food & Drug Administration in December 2005 – an event that

established Nexavar as the first new drug for patients with advanced kidney cancer in more than a decade. Outside of the United States, Bayer has made excellent progress, securing approvals in nearly 50 countries to date, including those belonging to the European Union. Consequently, Nexavar has been launched in Germany, Italy, France, Spain and the United Kingdom, and many more product launches are either planned or underway. These combined efforts produced total worldwide net sales of \$165 million in 2006.

Nexavar is a targeted anticancer therapy that impedes tumor growth in two important ways: by inhibiting the proliferation of tumor cells and by cutting off the tumor's blood supply, an effect known as anti-angiogenesis. Because Nexavar is a clinically proven, well-tolerated oral drug with activity in a challenging indication, it has generated a high

degree of interest in the oncology community in testing the drug against a range of different cancers, using it in combination with a variety of different treatment regimens and treatment settings. As a result, there are over 100 company-, cooperative group-, government- or investigator-sponsored studies of Nexavar that have either been completed or are underway. We are building on this strong clinical foundation to establish Nexavar's position within the international oncology market as a valuable and important drug across multiple tumor types.



**Building a Global Oncology Franchise.** Kidney cancer is our first step in realizing the potential of Nexavar. With Bayer, we continue our global commercialization efforts, and are also investing in a comprehensive clinical development program to leverage Nexavar's unique attributes with the goal of establishing it as a mainstay of cancer therapy in a range of different tumor types and treatment settings.

## Realizing Nexavar's Full Clinical and Commercial Value

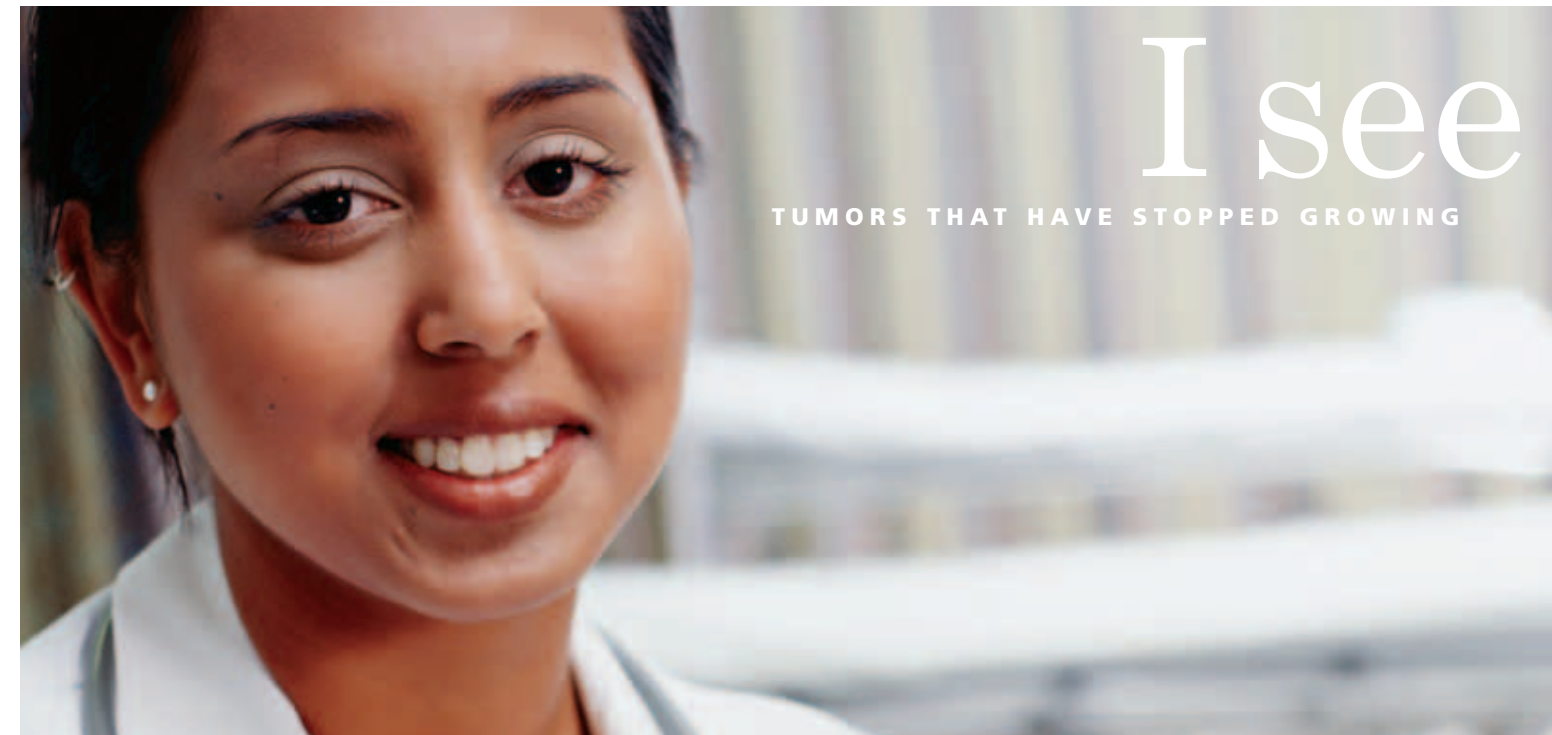
With Bayer, we have a clear two-part strategy for realizing the full clinical and commercial potential of Nexavar. First, we are addressing underserved tumors as a rapid way of getting to the market to benefit patients and establish a global oncology presence. Our success in commercializing Nexavar in its first indication just five years after beginning clinical trials validates this part of our strategy. In addition, due to positive interim results, we recently halted a Phase 3 clinical trial early in advanced liver cancer – a devastating disease for which there are limited treatment options. A pivotal trial in another tumor with limited treatment options, melanoma, is also underway.

The second part of our strategy is to leverage Nexavar's unique attributes, particularly its oral availability and combinability, to establish its efficacy in the most prevalent tumor types in combination with approved, often standard-of-care,

therapies. We are focusing this program on common cancers in which targeted agents, both antiproliferatives and antiangiogenics, have demonstrated efficacy.

We have differentiated Nexavar in the marketplace to fuel both global sales and future development. One of the first multi-kinase inhibitors, Nexavar has dual mechanisms of action against two common characteristics of tumors – uncontrolled cell growth, or proliferation, and dependency on blood vessel growth for nutrients and oxygen, or angiogenesis. In kidney cancer, we have established Nexavar's activity when used as a single agent, delivered in a convenient tablet form. We have also shown Nexavar to be well tolerated, with manageable side effects. Nexavar's tolerability, along with its oral delivery, suggest that it may be used in the earlier stages of disease or as a maintenance therapy, supporting our goal of allowing patients to live longer with a higher quality of life.

Importantly, unlike most standard regimens used in cancer, Nexavar generally did not demonstrate significant bone marrow suppression in pivotal clinical studies, increasing the potential for combinability with a range of existing anticancer treatments. In fact, we have demonstrated Nexavar's combinability in early stage clinical trials involving more than a dozen leading cancer agents and believe that the full value of Nexavar may be realized in combination settings with existing therapies or other novel therapies. Because of these many differentiating characteristics, there is significant investigator enthusiasm in exploring the agent in a range of combinations and tumor types. As we execute our development strategy, we plan to leverage this interest to extend the breadth and impact of our clinical trial program.



Addressing Underserved Tumors. Our rapid commercialization of Nexavar in advanced kidney cancer, a disease without an established therapy, provided patients with a new therapeutic option while giving us broad exposure in the clinical community. We are building on this important clinical foundation by working to maximize the value of Nexavar for patients with kidney cancer. In addition, we have recently demonstrated efficacy in a Phase 3 trial in liver cancer, and we are also conducting a pivotal trial in melanoma, another cancer with limited treatment options.



### Broadening Nexavar's Clinical Utility

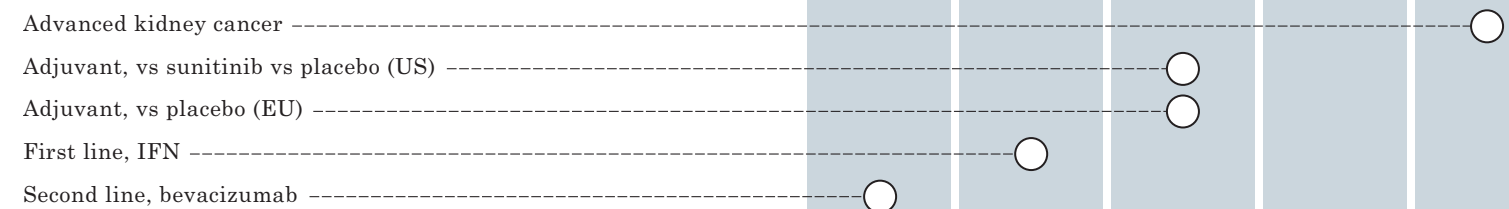
In our program addressing underserved tumors, we are focused on expanding the utility of Nexavar in its first indication, advanced kidney cancer, and in advanced liver cancer and melanoma – cancers that remain difficult to treat and where limited progress has been made. In kidney cancer, our pivotal Phase 3 clinical trial showed Nexavar doubles the time that patients can live without disease progression. In addition, we have multiple combination treatment studies in progress. Two long-term Phase 3 studies, one in the United States and one in Europe,

will assess the efficacy of Nexavar when administered to kidney cancer patients at an earlier stage of their disease.

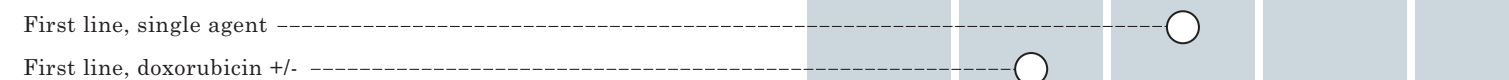
Our studies in advanced liver cancer and melanoma, like those in kidney cancer, are very broadly focused in terms of exploring Nexavar in patients at various stages of their disease and in different treatment settings, including in combination with other agents. In this way, we expect to identify the clinical settings where Nexavar can add the most value. In liver cancer, an interim analysis of Phase 3 clinical trial data in February 2007 showed that Nexavar was able to significantly extend survival when given as a single agent to patients with advanced

disease. As a result, Onyx and Bayer halted the trial early and plan to file for regulatory approval in the U.S. and Europe in this indication as rapidly as possible. In melanoma, while we were disappointed that our Phase 3 trial combining Nexavar with carboplatin and paclitaxel did not meet its primary endpoint, we are encouraged by preliminary data from a Phase 2 trial combining Nexavar with dacarbazine (DTIC). We will look to the final results of this study to guide our next steps in developing this potential combination regimen.

### Kidney Cancer



### Liver Cancer



### Melanoma



Expanding Trials in Common Tumors. We are exploring the potential of adding Nexavar to standard-of-care treatments in common tumors through an expanding clinical program in lung and breast cancer. This program seeks to leverage Nexavar's tolerability, convenient oral administration, and combinability to address the significant unmet medical needs of the hundreds of thousands of patients affected by these tumors worldwide.



### Targeting Devastating Diseases with Large Patient Populations

We are beginning to explore the utility of adding Nexavar to existing drug regimens in common tumors with significant unmet medical needs and where proof of concept exists that antiangiogenics or antiproliferatives are effective. In this program, we are focusing initially on lung and breast cancer – two devastating diseases with very large patient populations that could potentially benefit from Nexavar's tolerability, oral administration, and combinability. We are partnering with key opinion leaders to explore many therapeutic options simultaneously.

In non-small cell lung cancer, a 900-patient pivotal Phase 3 trial is underway. In this study, previously untreated lung cancer patients are receiving Nexavar or a placebo in combination with carboplatin and paclitaxel, standard chemotherapeutic agents for lung cancer. We are also enrolling patients in or planning randomized Phase 2 lung cancer studies, including a large study in third-line patients sponsored by one of the largest clinical cancer research organizations in the United States.

In breast cancer, we are capitalizing on the clinical community's strong desire to explore the efficacy of Nexavar in a

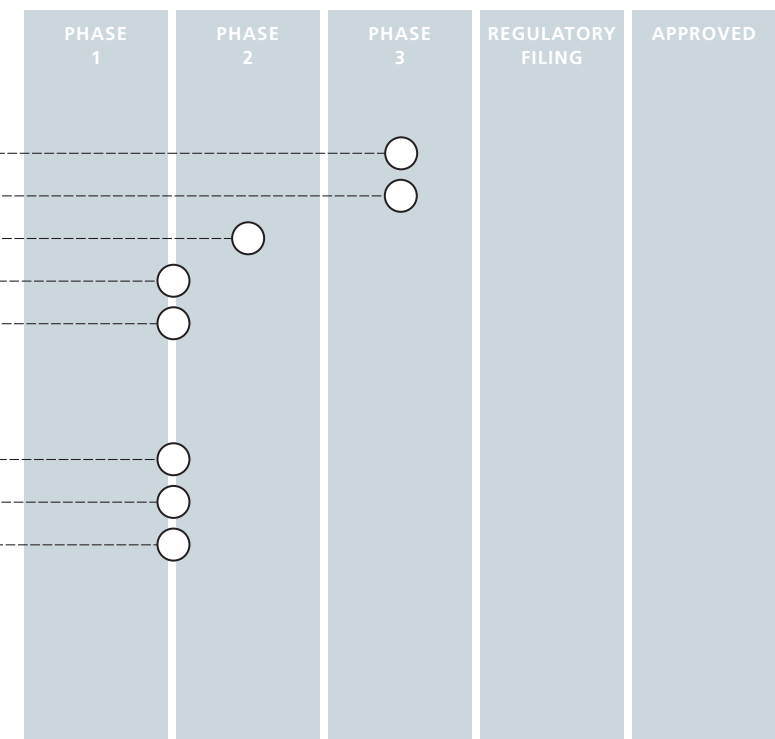
broad range of disease and treatment settings, including in combination with chemotherapy, hormonal therapy and targeted agents. A comprehensive Phase 2 program of multiple international, randomized studies is now being planned with leading breast cancer experts providing extensive input on trial design and collaborating on execution. We look forward to the initiation of some of these trials in the coming year.

### Lung Cancer

- First line, carboplatin/paclitaxel +/- -----○
- First line, cisplatin/gemcitabine +/- -----○
- Multiple lines, single agent -----○
- Combination with chemotherapy\* -----○
- Combination with targeted therapy\* -----○

### Breast Cancer

- Combination with chemotherapy\* -----○
- Combination with hormonal therapy\* -----○
- Combination with, or following, targeted therapies\* -----○



\*Finalizing protocols

Dear Fellow Stockholders: 2006 was a year of major achievement for Onyx, as we and our collaborator, Bayer, demonstrated our ability to successfully commercialize Nexavar in its first indication, the treatment of patients with advanced kidney cancer. Our launch programs in the United States and a growing number of countries internationally yielded \$165 million in net sales for Nexavar in its first year of commercialization. At the same time, we are aggressively investing in and executing a comprehensive development program to fully realize Nexavar's clinical and commercial potential. As part of this effort, we have recently demonstrated efficacy in a pivotal clinical trial in a second tumor type, advanced liver cancer.

#### Commercial Success

We are proud of what we have accomplished and anticipate that this is just the beginning of building a global oncology franchise. At the core of this franchise is Nexavar – a targeted oral drug that acts against cancer by inhibiting proliferation and angiogenesis, two fundamental mechanisms associated with the growth of tumors. We have proven Nexavar's efficacy in what had historically been one of the most difficult-to-treat cancers, and we are competing successfully in that marketplace. We also completed enrollment in two pivotal clinical trials in liver cancer and melanoma, and have initiated our first large randomized Phase 3 clinical trial in lung cancer. This broad clinical development program reflects our two-part business strategy. First – establish an initial oncology presence with Nexavar in underserved indications, and second – maximize Nexavar's potential by adding it to the standard-of-care agents in common tumors.

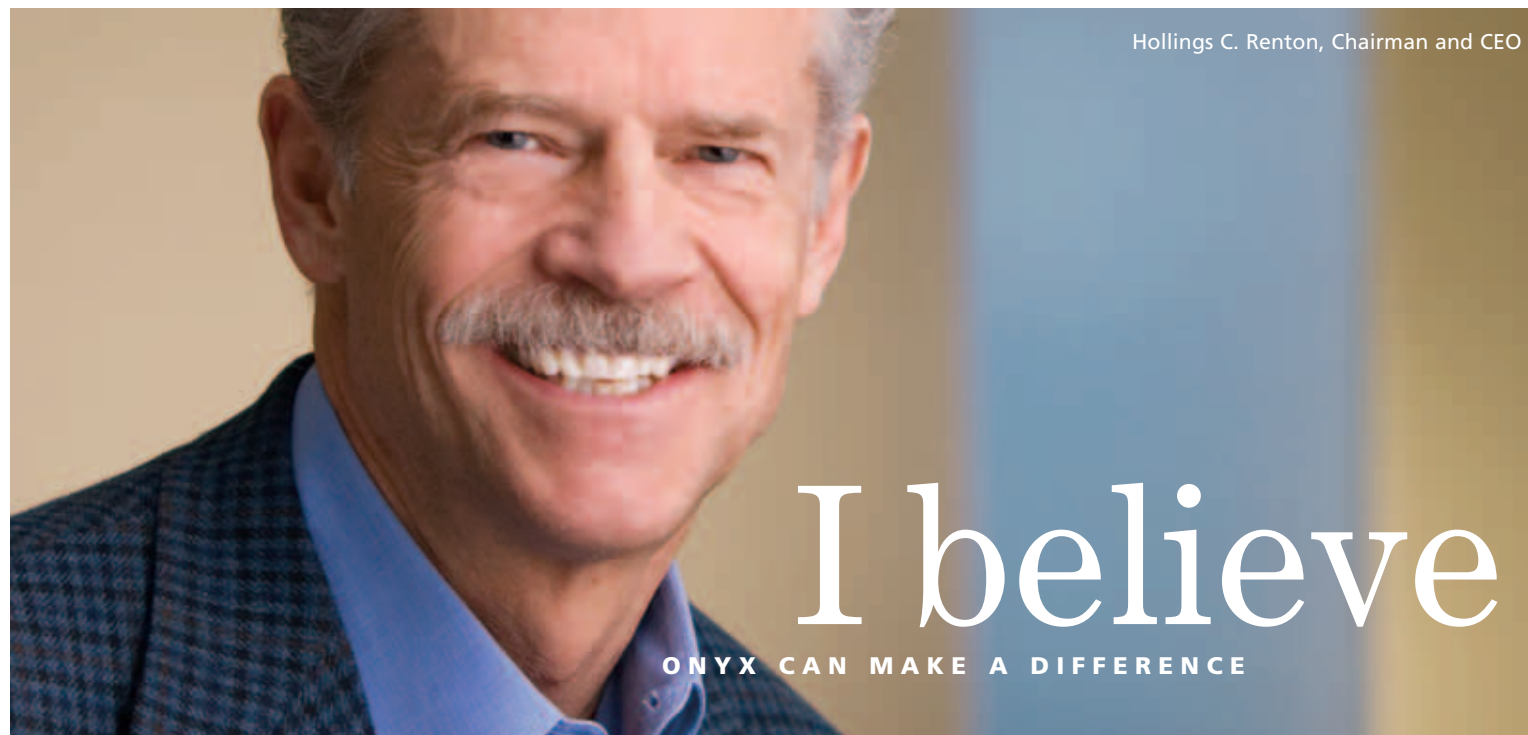
In the United States, where Bayer and we are co-promoting Nexavar as a treatment for advanced kidney cancer, we saw very rapid sales growth and market penetration. To date, in the U.S. more than 10,000 patients have been treated by approximately 4,500 prescribing physicians. This positive response has been duplicated outside of the United States, where Bayer has made substantial progress in rapidly securing registrations, building commercial infrastructure and obtaining consistent pricing approvals at or near parity with U.S. levels. Nexavar is now available in approximately 50 countries worldwide, including Germany, France, Spain, the United Kingdom and Italy, fueling overall sales growth. Bayer's well-established presence and marketing leadership further strengthen Nexavar's market potential internationally.

#### Expanding Market Opportunity

Clearly, Nexavar and other new targeted agents are greatly expanding the kidney cancer market. Given the recent availability of multiple effective treatment options, physicians are able to select the most appropriate therapy based on an

individual patient's profile. We believe that many patients are likely to be treated with multiple agents, either sequentially or – as new data emerges – in combination with other anticancer drugs. As an effective and well-tolerated drug that offers the convenience of oral administration, Nexavar is well positioned to play a leading role in this increasingly hopeful treatment scenario for advanced kidney cancer patients and their families.

To maximize Nexavar's potential to help patients with kidney cancer, we have multiple ongoing clinical trials exploring the agent's use in different treatment settings and in different combinations with other cancer agents. This is in addition to our pivotal Phase 3 kidney cancer trial, which showed that Nexavar doubled progression-free survival in a previously treated patient population. We also have two Phase 3 adjuvant trials to assess Nexavar's efficacy in earlier-stage patients and several Phase 2 combination treatment studies underway.



Hollings C. Renton, Chairman and CEO

I believe

ONYX CAN MAKE A DIFFERENCE

“When I was diagnosed, I made a list of all the things I wanted to do before I died. Thanks to Nexavar, I have checked almost all of them off. Most importantly, I have learned to live each day with joy and hope, and I can feel God working in the midst of my cancer.”

This patient's outcome should not be considered indicative of outcomes that other patients may experience with Nexavar.

**SUSAN** was diagnosed with kidney cancer in February 2005. Her disease had spread from her kidneys to her lungs, and her prognosis was grim. Thinking she might have six months to one year left, the prosecutor-turned-minister rejected treatment with then-approved drugs. Following unsuccessful treatment with an experimental combination therapy, she welcomed the opportunity in September 2005 to enter the Nexavar® clinical study. In November, scans showed that her tumors had shrunk 25 percent – a result that was repeated two months later in January. Now her tumors are quite small, and her disease appears stable.

Since beginning treatment with Nexavar, Susan has traveled to Hawaii several times, enjoyed a Mediterranean cruise, and recently was feted at a “Miracle 60th Birthday Party.”

“Although I have had to slow down while fighting this disease, every day is an amazing gift,” stated Susan. “I am so grateful that due to the advent of drugs like Nexavar, physicians are now able to provide hope along with the diagnosis of cancer.”

## Broad Clinical Programs in Underserved Tumors

In addition to kidney cancer, we are seeking to develop Nexavar for two other underserved tumor types – advanced liver cancer and melanoma. In advanced liver cancer, we decided to halt our large, pivotal Phase 3 clinical trial evaluating Nexavar as a single agent in patients with advanced disease due to positive data from a planned interim analysis conducted early in 2007. These data showed that the trial met its primary endpoint resulting in superior overall survival in Nexavar-treated patients as compared to placebo-treated patients, with no demonstrated difference in the rate of serious adverse events between the two patient groups. This is a major clinical milestone for Bayer and Onyx, and most importantly, for patients with advanced liver cancer who have limited treatment options. Based on these results, we are planning to file for regulatory approval in the U.S. and Europe in this indication as soon as possible.

In advanced melanoma, we were disappointed to learn at the end of

2006 that our Phase 3 clinical trial of Nexavar in combination with the chemotherapeutics carboplatin and paclitaxel in previously treated patients did not meet its primary endpoint of improving progression-free survival. However, there is another Phase 3 trial ongoing in melanoma, in combination with the same chemotherapeutic agents in patients that have not been previously treated.

We are encouraged by the preliminary results of a Phase 2 study of Nexavar given in combination with dacarbazine (DTIC) to previously untreated patients. These results show that there was a 50 percent overall improvement in progression-free survival in patients receiving the combination therapy versus patients treated with DTIC alone. Based on the final results of this study, expected later in 2007, we will decide whether to proceed with a Phase 3 trial of this combination in this very difficult-to-treat cancer.

### Large Growth Opportunities

The major growth opportunity for Nexavar – and the second part of our business strategy – focuses on adding it to the standard-of-care

agents for common tumors. We are seeking to leverage Nexavar's tolerability, oral administration, and combinability to address unmet patient needs in major indications where targeted agents have been shown to be active. Our first major initiative is in lung cancer, which remains the number one cause of cancer deaths worldwide despite recent therapeutic advances. In early 2006, we and Bayer initiated a pivotal Phase 3 trial in previously untreated patients with non-small cell lung cancer who are receiving either Nexavar or placebo in combination with carboplatin and paclitaxel. We expect to complete enrollment in this large 900-patient study in 2007. In addition, to mitigate development risk and extend our reach in lung cancer, we also have multiple randomized Phase 2 studies now enrolling or being planned.

Our next major development initiative is in metastatic breast cancer, a devastating disease with an average survival period of one to three years. In breast cancer, we are working with a leading group of breast cancer

experts to design multiple randomized Phase 2 clinical trials and expect that these experts will also lead some of these studies worldwide. These trials are focused on combining Nexavar with a broad range of agents administered at various stages of the disease, including different forms of chemotherapy, hormonal therapy, and other targeted agents. We look forward to sharing more details of this comprehensive program as it advances through the coming year.

### Investing in the Future

We are absolutely committed to capitalizing on Nexavar's promise as an oral antiangiogenic, antiproliferative agent, and its first-to-market status in kidney cancer. To lead the execution of our growing clinical and commercial programs, we continue to make key management appointments. In June, Laura Brege joined Onyx as Executive Vice President and Chief Business Officer. Laura was previously Senior Vice President and Chief Financial Officer at COR Therapeutics. Her strong track record of commercial operations, corporate development, and strategic finance

expertise will enhance our ability to establish a major oncology franchise in Nexavar. In addition, Greg Schafer joined Laura's team as our Chief Financial Officer.

Financially, we are in a strong position to pursue comprehensive development of Nexavar. With Bayer, our success in commercializing the agent in its first indication is reflected in 2006 worldwide net sales of \$165 million; these revenues are recorded by Bayer, and we share equally in the profit, with the exception of sales in Japan. As of December 31, 2006, we had cash, cash equivalents, and marketable securities of approximately \$270 million. Our strong balance sheet will enable us to continue to invest in Nexavar's development, advance programs into later-stage studies, and to move into additional tumor types and more combination settings. As Nexavar sales continue to grow, we will also increase our commercial activities as needed to ensure successful launches and to maximize sales of the drug worldwide.

Our progress in the past year sets us on a clear path toward accomplishing our goal of establishing Nexavar as a global standard of care for patients living with cancer. With Bayer, we have successfully developed and commercialized a targeted oral agent in our first indication. We are also looking forward to launching Nexavar in its second indication, advanced liver cancer, assuming a favorable review by regulatory agencies. As a result, we are increasingly confident that Nexavar will benefit patients with a wide variety of cancers. We want to thank the employees, physicians, patients, partners, and stockholders who have helped to make Nexavar the success that it is today and for their continued support as we continue to work to fully capitalize on the Nexavar opportunity.

Hollings C. Renton  
Chairman, President and  
Chief Executive Officer  
March 23, 2007

“Without Nexavar, I doubt that I would be alive today...I want to thank all the people who have worked to make this drug possible. They have given me back to my children and grandchildren. Thanks to them, I can sing again.”

This patient's outcome should not be considered indicative of outcomes that other patients may experience with Nexavar.

**BRENDA**, a gospel and country singer, never suspected that she had kidney cancer. She only found out while undergoing routine tests prior to surgery for a ruptured disk in the fall of 2005. The scans told an ominous story; her entire left kidney was involved, and there was evidence the disease had spread to her lungs. Suffering also from severe asthma, Brenda faced a difficult challenge – an initial operation for her disk problem followed by the surgical removal of her kidney just one month later. In addition, she had come to a critical decision about her post-operative care, declining any treatment with chemotherapy or radiation due to her concern about their side effects.

Brenda's refusal of traditional cancer therapies led her physician to turn to Nexavar®, one of the first of a new generation of oral, targeted treatments for cancer. In May 2006, Brenda began taking Nexavar tablets. In October, her test results revealed that the metastasized tumor masses were shrinking. With her side effects limited to hair loss, Brenda is extremely grateful for the availability of Nexavar.



# Corporate Information

## Management

**Hollings C. Renton**  
Chairman, President and  
Chief Executive Officer

**Laura A. Brege**  
Executive Vice President and  
Chief Business Officer

**Henry J. Fuchs, M.D.**  
Executive Vice President and  
Chief Medical Officer

**Edward F. Kenney**  
Executive Vice President and  
Chief Commercial Officer

**Jeffrey D. Bloss, M.D.**  
Vice President, Clinical  
Development

**Gregory J. Giotta, Ph.D., J.D.**  
Vice President and  
Chief Legal Counsel

**Jeanne Y. Jew**  
Vice President, Corporate and  
Commercial Development

**Randy A. Kelley**  
Vice President, Sales

**Patricia A. Oto, R.Ph.**  
Vice President, Regulatory Affairs

**Gregory W. Schafer**  
Vice President and  
Chief Financial Officer

**Kathleen Stafford**  
Vice President, Human Resources

**Julianna Wood**  
Vice President, Corporate  
Communications and Investor  
Relations

**Todd J. Yancey, M.D.**  
Vice President, Medical Affairs

## Board of Directors

**Paul Goddard, Ph.D.**  
Chairman and Chief  
Executive Officer,  
ARYx Therapeutics, Inc.;  
Chairman, AP Pharma;  
Director, Adolor Corporation

**Antonio J. Grillo-López, M.D.**  
Chairman, Neoplastic and  
Autoimmune Diseases Research  
Institute

**Magnus Lundberg**  
Chief Executive Officer,  
Phadia AB

**Corinne H. Lyle**  
President, Global Operations,  
Edwards Lifesciences Corporation

**Hollings C. Renton**  
Chairman, President and  
Chief Executive Officer,  
Onyx Pharmaceuticals, Inc.

**Wendell Wierenga, Ph.D.**  
Executive Vice President,  
Research and Development,  
Ambit Biosciences

**Thomas G. Wiggins**  
Consultant,  
Stiefel Laboratories, Inc.

## Advisor and Founder

**Frank McCormick, Ph.D., F.R.S.**  
Director, UCSF Comprehensive  
Cancer Center and Cancer  
Research Institute; David A.  
Wood Distinguished Professor  
of Tumor Biology and Cancer  
Research; Associate Dean,  
School of Medicine, University of  
California, San Francisco; Founder  
of Onyx Pharmaceuticals, Inc.

## Corporate Secretary

**Robert L. Jones, J.D.**  
Partner, Cooley Godward  
Kronish LLP

## Corporate Counsel

**Cooley Godward Kronish LLP**  
San Francisco and Palo Alto,  
California

## Independent Auditors

**Ernst & Young LLP**  
Palo Alto, California

## SEC Form 10-K

A copy of the Company's Annual  
Report on Form 10-K, as filed with  
the Securities and Exchange  
Commission, is available without  
charge by calling or writing the  
Investor Relations Department as  
listed under Stockholder Inquiries.

## Transfer Agent and Registrar

Inquiries regarding change of  
address, lost stock certificates,  
changes in stock ownership, and  
other matters related to stock  
ownership should be directed to  
the Transfer Agent.

Wells Fargo Bank, N.A.  
Wells Fargo Shareowner Services

For telephone inquiries:  
(800) 468-9716

For overnight delivery:  
161 North Concord Exchange  
South St. Paul, MN 55075-1139

For mail delivery:  
P.O. Box 64854  
St. Paul, MN 55164-0854

## Stockholder Inquiries

Inquiries and requests for informa-  
tion should be directed to:

**Investor Relations**  
Onyx Pharmaceuticals, Inc.  
2100 Powell Street  
Emeryville, CA 94608  
(510) 597-6500  
email: [ir@onyx-pharm.com](mailto:ir@onyx-pharm.com)  
[www.onyx-pharm.com](http://www.onyx-pharm.com)

## Dividends

Onyx has not paid cash dividends  
on its common stock and does not  
plan to pay any cash dividends in  
the foreseeable future.

## Annual Meeting

The annual meeting of stockholders  
will be held at 10:00 a.m. on May 25,  
2007, at Onyx Pharmaceuticals,  
Inc., 2100 Powell Street, Emeryville,  
California.

**Forward-looking Statements:**  
This annual report contains forward-  
looking statements that involve risks  
and uncertainties including statements  
about our business and the develop-  
ment and commercialization of Nexavar.  
Our actual results could differ materially  
from those anticipated in these forward-  
looking statements as a result of certain  
factors, including those set forth under  
"Business" and "Risk Factors," and  
elsewhere in our Annual Report on  
Form 10-K.

**Trademarks:** Changing the way cancer  
is treated™ is a trademark of Onyx  
Pharmaceuticals, Inc. Nexavar®  
(sorafenib) tablets is a trademark of  
Bayer Pharmaceuticals Corporation.



# I live

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F: 510.597.6600

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