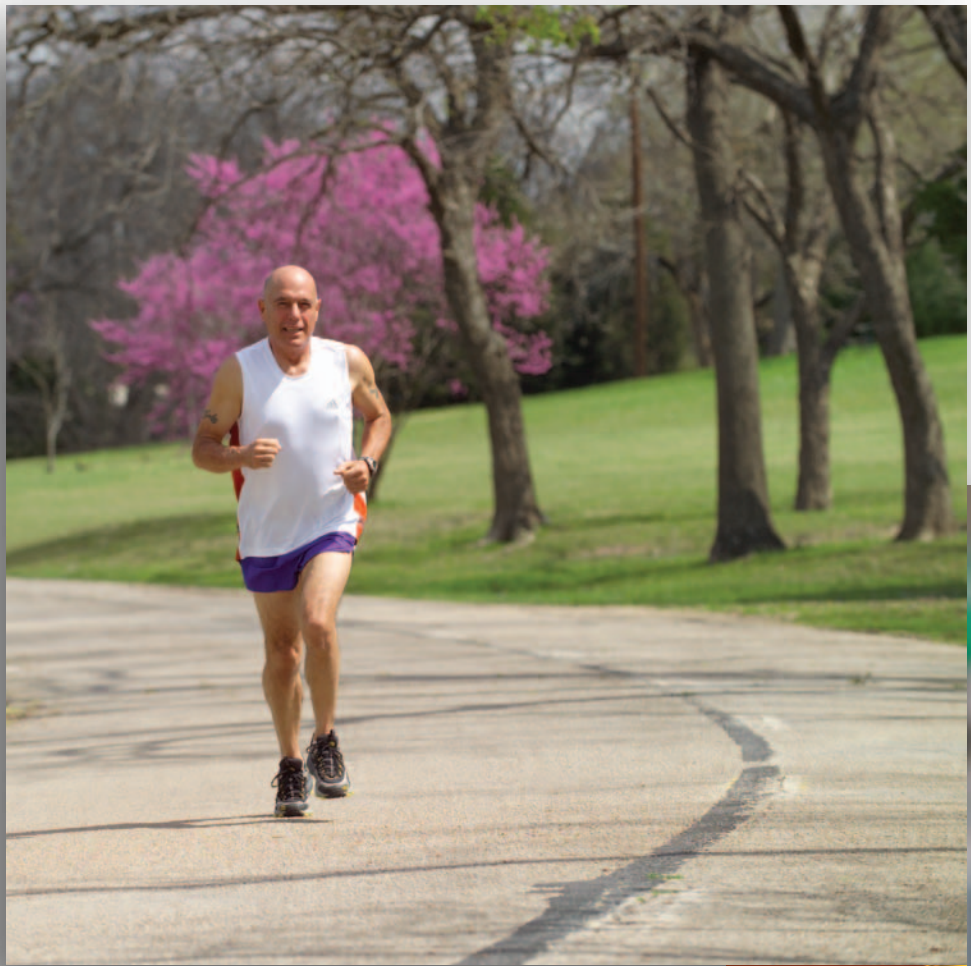
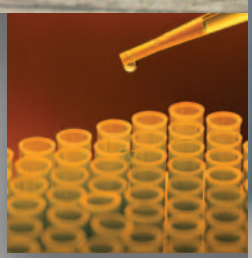
TRIMERIS



A PATIENT'S STORY



2003 ANNUAL REPORT

NEW DRUGS FOR THE TREATMENT OF VIRAL DISEASES

DISCOVERY AND DEVELOPMENT OF

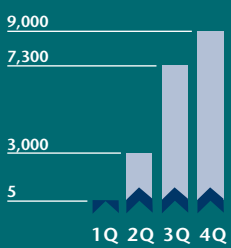
About the Company

Trimeris, Inc. (Nasdaq: TRMS) is a biopharmaceutical company based in Durham, North Carolina. We are engaged in the discovery, development and commercialization of a new class of antiviral drug treatments called fusion inhibitors. Fusion inhibitors impair viral fusion, a complex process by which viruses attach to, penetrate and infect host cells. By inhibiting the fusion process of particular types of viruses, like the Human Immunodeficiency Virus (HIV), our drug candidates offer a novel mechanism of action with the potential to treat a variety of medically important viral diseases.

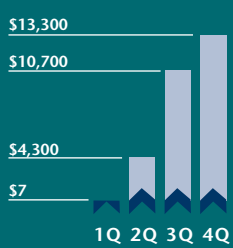
Highlights

- U.S. Food & Drug Administration (FDA) granted accelerated approval for FUZEON® following a six-month priority review
- European Commission approved FUZEON for use in the European Union
- *The New England Journal of Medicine* published results of international pivotal trial program for FUZEON
- Unprecedented, commercial-scale production of FUZEON demonstrated — one of the most complex peptides ever chemically manufactured
- 48-week data submitted to FDA to support full approval of FUZEON
- FUZEON named one of *Business Week's* Best Products of 2003
- Research agreement with Roche extended to discover and develop next generation of HIV fusion inhibitors

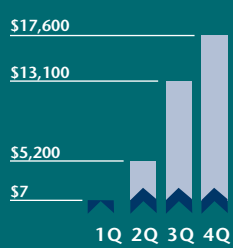
FUZEON kits sold in U.S.



U.S. Net Sales of FUZEON
($ in thousands)



Worldwide Net Sales of FUZEON
($ in thousands)



Roche and Trimeris split profits/losses on the sale of FUZEON in the U.S. and Canada. Trimeris receives a royalty on sales in the rest of the world.

On the cover:

Only four years ago, Richard Apodaca was unable to walk as a result of HIV-related nerve problems, and his prospects for survival were growing slimmer each day as the medicines available to him were no longer working. A remarkable turnaround in his health as a result of newer AIDS treatments like FUZEON has allowed Richard to participate in marathons throughout the world.

Dani P. Bolognesi, Ph.D.
Chief Executive Officer
and Chief Scientific Officer

To Our Fellow Shareholders

2003 marks the ten-year anniversary of Trimeris, Inc. and the achievement of the Company's most important milestone to date — the commercial introduction of FUZEON®, our first product for the treatment of HIV. The commercialization of our first drug validates our novel scientific approach and establishes Trimeris as a pioneer and leader in the field of fusion inhibition. FUZEON was developed in collaboration with our partner, F. Hoffmann-La Roche Ltd, and represents the first new class of HIV drugs in seven years. FUZEON is the first drug that inhibits HIV entry into the immune cell and is fully active against viruses that have developed resistance to existing drugs.

While I am extremely proud of our achievements in 2003, we didn't accomplish all that I had expected. Due to product supply concerns at the time of regulatory approval in March 2003, Roche and Trimeris made a strategic decision to launch FUZEON on a progressive basis. This progressive launch contributed to slower adoption of the drug by the market. Now that supply limitations are firmly behind us, we are maximizing our efforts to accelerate FUZEON's uptake. Roche and Trimeris recently expanded FUZEON distribution from a single vendor to retail and specialty pharmacies throughout the U.S. as a result of supply improvements. This significant expansion will simplify the prescribing process for clinicians and improve access and convenience for patients.

We recognize the importance of patient support prior to and during FUZEON therapy, as well as clinician, nurse and patient education. Building on the foundation and momentum of existing initiatives, we are expanding numerous support and educational programs at national, regional and local levels.

In an effort to encourage initiation of therapy, we are intensifying awareness of FUZEON through compelling advertising and promotional campaigns. These print and Internet campaigns, directed to patients, clinicians, pharmacists and treatment educators, began in April in the U.S. and will continue throughout 2004.

We are embarking on a program of post-marketing clinical trials with FUZEON in 2004. These trials are designed to provide additional data on the role of FUZEON in a broader range of potential patients. We are also working to improve the delivery, convenience and formulation of FUZEON.

Based on the strength of our clinical trial data, as well as the clinical performance of FUZEON in the field, we are confident that we have established fusion inhibitors as important medicines in the treatment of HIV. However, due to challenges in achieving the desired properties of the formulation for T-1249, our second drug candidate, the clinical development of T-1249 is currently on hold. Our research will continue to focus on the pursuit of new formulations of T-1249 and next-generation peptide fusion inhibitors that are more convenient for chronic administration and have improved efficacy and resistance profiles.

Much work remains to realize the full potential of FUZEON in revolutionizing the HIV treatment landscape. We have learned a great deal about the issues facing this unique drug and look forward to seeing the results of our focused marketing and support initiatives on the uptake of FUZEON in 2004. We will continue to work diligently with our partners at Roche to leverage the solid foundation we have built to date. I am deeply committed to the success of FUZEON and confident that we have a sound strategy and the ability to carry out our plans.

We have gained a wealth of experience since our inception in 1993 and could not have accomplished so much without the vision and continued support of our partners, employees and shareholders. We are dedicated to creating value for our shareholders through the development of our fusion inhibitor franchise. I look forward to reporting our progress to you in 2004.

NEW TREATMENT OPTION FOR PATIENTS

FUZEON OFFERS AN IMPORTANT

Richard Apodaca

Richard, 61, has been living with HIV for 21 years. Prior to entering clinical trials for FUZEON more than three years ago, Richard's viral load was soaring and his CD4+ immune cell count had plummeted. At one point, Richard was down to nine CD4+ cells. Today, his viral load is undetectable and CD4+ immune cells have rebounded into the triple digits as a result of newer AIDS treatments including FUZEON.

A remarkable turnaround in his health has allowed Richard to participate in marathons around the world. Richard also stays active with numerous AIDS causes and health and fitness programs for overweight children.

"FUZEON really brought me back. I can't express what a wonderful gift this has been to me — I no longer think of myself as having a death sentence, but a manageable disease."

Richard Apodaca, patient

Reverend Frederick F. Batiste, Jr.

Frederick, 51, was diagnosed with HIV in 1993. Since March 2003, Frederick has been on a treatment regimen containing FUZEON. According to Frederick, FUZEON has worked well for him, and the drug has given him a reason to hope and continue living.

Because of his HIV status, Frederick feels empowered to educate others about the disease and serves as a spokesperson within the African-American community. He feels a sense of achievement knowing his experiences and knowledge about the disease can be beneficial to others and has organized a Healthcare Ministry to educate others about HIV/AIDS.

FUZEON™ enfuvirtide

"Among the African-American community, HIV awareness and education are very limited because of the stigma that comes with the disease. But, I hope that we can get people more educated so that they find it easier to seek treatment. I was very glad to find out that FUZEON was on the market. It's made a remarkable difference in my life. I feel like I can live through this now."

Reverend Frederick F. Batiste, Jr., patient

Beatriz Diaz

Beatriz, 45, a Hispanic mother of four, was diagnosed with HIV in 1993. She was shocked to learn that she would have the additional challenge of living with HIV while raising her children. Since starting FUZEON therapy in March 2002, her viral load has dramatically declined and CD4+ immune cell count has risen.

Beatriz feels energetic enough to walk everyday and also enjoys knitting, crocheting and making ornamental centerpieces. She has a bright outlook on life and renewed hope due to FUZEON.

"I was taking a couple of medications, and they weren't working. I just kept getting sicker. I have been taking FUZEON for two years and my CD4+ count has risen to 714. It's a big jump from where I was. FUZEON has become part of my daily routine. How grateful I am that my doctor suggested that I try this treatment. I feel good, and I feel that I can continue with my life."

Beatriz Diaz, patient

Laura Seeley

Laura, 33, was diagnosed with HIV in 1995. After failing as many as 10 combination regimens, Laura entered a FUZEON clinical trial in 2001 hoping for a treatment that would allow her to live a healthier life and enable her to return to work. Within her first six months on FUZEON, Laura's immune system rebounded and her viral load became undetectable.

Today, Laura is the Program Director for Women at Risk, an AIDS service organization for HIV positive women. She has been married since 2000.

"Since enrolling in the FUZEON clinical trial, my life has changed dramatically. I was able to go back to work and really look forward to a future that's filled with possibilities."

Laura Seeley, patient

Claire

Claire, 7, is the youngest of six children. Her mother, grandmother and two great uncles are also HIV-infected. She entered a pediatric study for FUZEON in 2002 when her HIV disease reached a critical level. Less than three weeks following treatment initiation with FUZEON, her viral load become undetectable and has remained so ever since. Her CD4+ immune cells have also risen significantly. Her parents believe that access to FUZEON saved their daughter's life, and today Claire is a very happy, active child.

"I'm really glad that I can run and jump. Last summer I got to swim again for the first time in a couple of years"

Claire, patient

EXPANDING OUR FUSION INHIBITOR FRANCHISE

Looking forward, Trimeris' goal is to strengthen and expand our fusion inhibitor franchise. As part of our business strategy, we conduct research and development activities both internally and with collaborative partners.

In January 2004, we announced an extension of our research agreement with Roche to discover, develop and commercialize the next generation of HIV fusion inhibitors. Our peptide research will focus on the investigation of improved formulation and delivery technologies to enable less frequent dosing and the discovery of new peptides with enhanced efficacy and resistance profiles. Our objective is to develop an HIV fusion inhibitor that can be administered on a once-weekly or once-monthly basis.

We are also working with Roche to enhance the product profile of FUZEON. We are investigating the development of a formulation for once-daily dosing, as well as the use of alternative delivery systems for FUZEON administration. Because injection site reactions are the most common adverse events associated with FUZEON, we are conducting studies in an effort to reduce the frequency and severity of these reactions. We believe that any product enhancements made to FUZEON could potentially be applied to other fusion inhibitors.

Outside the scope of our Roche collaboration, we have research programs that are focused on the development of small molecule HIV fusion inhibitors that could be orally administered. We presently have research agreements with Array BioPharma, Inc. and Tranzyme, Inc. (formerly Neokimia, Inc.). We have an active business development program that evaluates additional opportunities on an ongoing basis.

Annual Meeting of Shareholders

The Trimeris Annual Meeting of Shareholders will be held on June 22, 2004 at 9 a.m. at the North Carolina Biotechnology Center, 15 Alexander Drive, Research Triangle Park, North Carolina. All shareholders are cordially invited to attend.

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Raleigh, North Carolina 27601

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Legal Counsel

Wilmer Cutler Pickering LLP
2445 M Street, N.W.
Washington, D.C. 20037

Financial and Other Information

The Company's Annual Report filed with the Securities and Exchange Commission on Form 10-K, periodic filings and press releases are available to shareholders without charge. To obtain copies contact:

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3518 Westgate Drive, 3rd Floor
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Phone: 919.419.6050
Fax: 919.419.1816
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Electronic copies of these reports are also available at: www.trimeris.com

Trimeris' common stock is traded on the Nasdaq National Market System under the symbol: TRMS

Board of Directors

Dani P. Bolognesi, Ph.D.
Chief Executive Officer and Chief Scientific Officer, Trimeris Inc.

E. Gary Cook, Ph.D.
Retired President and Chief Executive Officer, Witco Corporation

J. Richard Crout, M.D.
President, Crout Consulting

Jeffrey M. Lipton
Chairman of the Board of Directors
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Retired Chairman and Chief Executive Officer, Glaxo Inc.

Kevin C. Tang
Managing Director, Tang Capital Management LLC

Corporate Officers & Senior Management

Dani P. Bolognesi, Ph.D.
Chief Executive Officer, Chief Scientific Officer, and Director

Robert R. Bonczek
Chief Financial Officer, General Counsel

M. Nixon Ellis, Ph.D.
President

George W. Koszalka, Ph.D.
Senior Vice President, Corporate Strategy

M. Lynn Smiley, M.D.
Senior Vice President, Clinical Research

Timothy J. Creech
Corporate Secretary, Vice President of Finance

Trademarks

This document and any attachments may contain forward-looking information about the Company's financial results and business prospects that involve substantial risks and uncertainties. These statements can be identified by the fact that they use words such as "expect," "project," "intend," "plan," "believe" and other words and terms of similar meaning. Among the factors that could cause actual results to differ materially are the following: there is uncertainty regarding the success of research and development activities, regulatory authorizations and product commercializations; the results of our previous clinical trials are not necessarily indicative of future clinical trials; and, our drug candidates are based upon novel technology, are difficult and expensive to manufacture and may cause unexpected side effects. For a detailed description of these factors, see Trimeris' Form 10-K filed with the Securities and Exchange Commission (the "SEC") on March 12, 2004 and its periodic reports filed with the SEC.

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