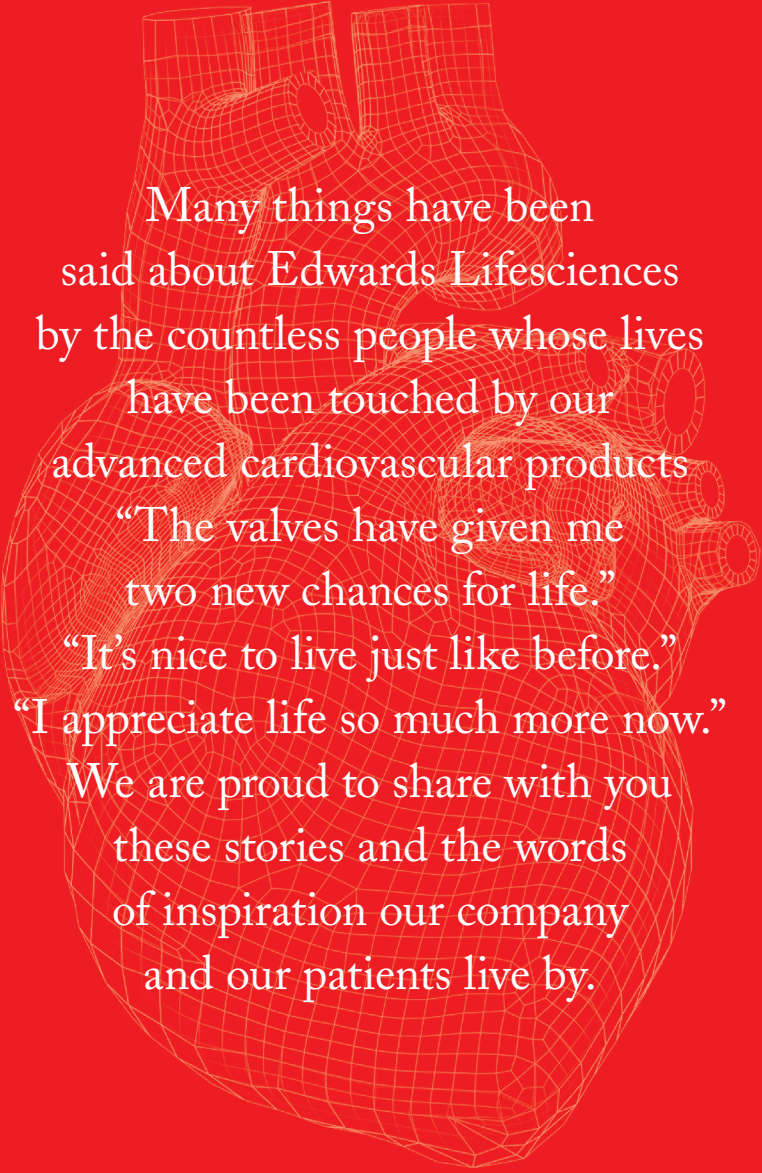


Two Thousand Five
Annual Report

Words
To Live By



Edwards



Many things have been
said about Edwards Lifesciences
by the countless people whose lives
have been touched by our
advanced cardiovascular products

“The valves have given me
two new chances for life.”

“It’s nice to live just like before.”

“I appreciate life so much more now.”

We are proud to share with you
these stories and the words
of inspiration our company
and our patients live by.

To Our Shareholders:

Innovative. Trusted. Leadership. These are but three of the words that characterize Edwards Lifesciences, and the way we run this company and live our lives. I am pleased to report that 2005 was another successful year of substantial strengthening for Edwards Lifesciences on many fronts. In our 5th year as an independent, publicly-traded company, we achieved all of our financial goals, introduced a number of new products, and made important progress on our growth initiatives. We also continued to contribute meaningfully to the communities in which our employees live and work.

Financial Gains and New Product Introductions

Our solid financial performance created a strong platform from which we continue to grow. We met or exceeded all of our 2005 financial goals, achieving sales in excess of \$998 million and improving our gross profit margin by more than 200 basis points. Non-GAAP net income grew 20%, and we also delivered free cash flow of \$126 million. We continued to grow and gain share in our Heart Valve Therapy and Critical Care franchises, while improving these product lines' profitability. On an underlying basis, all of Edwards' businesses posted higher sales growth rates over last year, and presently more than 80% of our sales come from products in #1 global market positions.

Our R&D investment, which we increased nearly 14% this year, is yielding considerable returns, with newer products representing a growing proportion of our sales and further extending Edwards' leadership in key areas. New product introductions included our PERIMOUNT Magna valve with ThermaFix treatment, Theon mitral tissue valve and Geoform valve repair ring in the U.S., as well as our PERIMOUNT Magna mitral valve in Europe. We also unveiled one of the most exciting new advancements in surgical heart valve treatment — our Ascendra minimal access heart valve system, which

enables aortic heart valve replacement to be performed on a patient's beating heart. We also introduced the FloTrac sensor and Vigileo monitor, the first innovations from a next-generation Critical Care platform that should yield a number of additional, less-invasive technologies in the coming years.

Growth Through Learning

This year, we continued to advance the state of the art and gained additional strength in our key growth initiatives. Although we fell short of our original sales goals for LifeStent peripheral vascular stents, we remain optimistic about our differentiated technology and the overall market opportunity. Preliminary 12-month results from our Phase I RESILIENT clinical trial showed promise in improving patients' circulation in the demanding superficial femoral artery, and we believe these early results bode well for LifeStent's future success.

Additionally, we made important progress in the development of our percutaneous heart valve programs. In the first quarter, we initiated a U.S. IDE clinical trial for our Cribier-Edwards percutaneous aortic heart valve, which uses a catheter delivery system to navigate the replacement valve through the patient's circulatory system instead of taking a surgical approach. We voluntarily suspended the study at mid-year in order to incorporate a new delivery system, which had reduced procedural complexity and improved clinical outcomes in cases outside the U.S. We were very pleased to have restarted patient cases by the end of the year.

In our two percutaneous mitral heart valve repair therapies, we incorporated a number of product enhancements, and clinical feasibility cases were underway at Canadian and European sites by year-end.

We believe percutaneous heart valve therapies offer hope to thousands of patients worldwide who are not good candidates for conventional open-heart valve surgery and face lim-

ited therapeutic options. With the experience gained this year, we are well-positioned for clinical progress in all of our percutaneous valve programs in 2006.

Strengthening Our Communities

With more than 5,400 employees now working in Edwards' operations globally, we continue extending our connections and contributions throughout the world. Fueled by the continued increasing demand for our innovative PERIMOUNT tissue heart valves, in June we opened a new heart valve manufacturing plant in Singapore to serve growing numbers of customers and patients.

Additionally, we announced the creation of The Edwards Lifesciences Fund, a \$20 million charitable fund intended to support advancements in knowledge and improvements in quality of life, focusing primarily on cardiovascular disease and the communities where our employees live and work. The 17 organizations that received funds from our first grant cycle will help realize the Fund's mission by assisting underserved individuals around the world.

Looking Ahead: Continued Leadership and Innovation

Going forward, Edwards will seek to further extend growth and leadership in our chosen areas of emphasis: heart valve disease, critical care technologies and peripheral vascular disease. We will continue emphasizing differentiated, physician-preference products with leadership potential, further building upon the contributions we have been fortunate to make. We also expect to continue investing aggressively in innovative technologies — balancing disciplined growth with new platforms that will enable us to treat even more patients whose conditions are underdiagnosed or untreated.

For 2006, we are confident in our ability to achieve our financial goals, generating total sales between \$1.02 and \$1.06 billion

(equating to an underlying growth rate of 8-10%); increasing gross profit margin by 150 to 200 basis points; delivering non-GAAP net income growth of 12-15% excluding the impact of special items and stock option expensing, and generating free cash flow of \$140 to \$150 million.

Over the decades since Miles Lowell Edwards first started his laboratory, Edwards has pledged to serve as a trusted partner in the community fighting cardiovascular disease. We remain a proud member of the medical technology community, which through its innovations, has contributed to extending patient longevity, increasing productivity and reducing hospitalizations around the world.

We expect the demand for Edwards' technologies to continue growing, as more patients require treatment for their advanced cardiovascular conditions, amplified by the increasing aging population and the progressive nature of this disease. While we are proud of our accomplishments to date, helping patients is our life's work, and there is much yet to do. We thank you for your interest and support as we continue to pursue our aspirations while serving our customers, patients, employees and shareholders.

Sincerely,



A handwritten signature in dark ink, appearing to read 'Michael A. Mussallem'. The signature is fluid and cursive, with a prominent 'M' and 'L'.

Michael A. Mussallem

Chairman & Chief Executive Officer

This letter to shareholders contains figures that are not prepared in conformity with Generally Accepted Accounting Principles ("GAAP"). Management has determined that inclusion of these non-GAAP figures provides a more meaningful comparison of the company's ongoing operations. For a reconciliation of GAAP to non-GAAP figures, see the inside back cover of the accompanying Annual Report and SEC Form 10-K.

“I am
now a **better**
person, father
and husband.
Thank you for
giving me back
everything that
I was on the
verge of losing.”





Godefroy

For five years, Godefroy B., a 38 year-old father of two, had been experiencing increasing fatigue, irritability and impatience, but never considered the possibility that his symptoms could be related to a heart condition. It was only after he suffered two fainting incidents, including one while pulling his young son on a sled one wintry morning, that doctors diagnosed a congenitally malformed and severely calcified aortic heart valve that required immediate replacement. After consulting with his surgeon, Godefroy chose to receive the Carpentier-Edwards Magna pericardial heart valve. “The heart valve procedure changed my life,” he says. “I am now a better person, father and husband. Thank you for giving me back everything that I was on the verge of losing.”

Carpentier-Edwards PERIMOUNT Magna Heart Valve

Designed specifically to optimize patient blood flow and facilitate placement above the patient’s native valve opening, Edwards’ PERIMOUNT Magna aortic valve is the leading heart valve in the U.S. and the first and only therapy of its kind to combine more than two decades of clinical experience and innovation with Edwards’ advanced tissue treatment technologies.

“I am so
grateful to
everyone, the
doctors and
the Edwards
employees,
for this
wonderful
valve.”





Valerie

Valerie R. has been healthy all of her life; diagnosed with a heart murmur in 1988, she had enjoyed an active life until last March, when a series of unexpected fainting episodes were linked to a faulty aortic heart valve and the need for percutaneous heart valve replacement. Today, at age 92, Valerie enjoys working out twice weekly at the gym and is looking forward to welcoming guests to her new home this summer. “I am so grateful to everyone, the doctors and the Edwards employees, for this wonderful valve,” she says.

Cribier-Edwards Percutaneous Aortic Heart Valve

This experimental, proprietary technology is designed to treat patients with severe aortic heart valve stenosis by threading a replacement heart valve via a catheter through the patient’s circulatory system. Percutaneous heart valve replacement and repair represent important therapeutic options for patients, and Edwards leads the field with the most advanced and comprehensive platform of technologies in development. These new therapies offer the promise of less-invasive treatments, shorter hospital stays and faster recovery times for patients.

“This is a revolutionary product that allows nurses to intercede earlier, leading to **improved** outcomes for many patients.”





A1

At University of Pittsburgh Medical Center Presbyterian Shadyside, the team relies upon the Edwards FloTrac sensor and PreSep catheter as two important components of the hospital's Early Goal-Directed Therapy (EGDT) protocol and nurse-driven patient monitoring practices. According to A1 Minjock, RN, MSN, HRM, director of surgical critical care, FloTrac and PreSep were recently used on an adult cystic fibrosis patient who suffered from severe sepsis and required mechanical ventilation while awaiting a double-lung transplant. With the help of Edwards' technologies, the medical team was able to quickly manage the patient's multiple hemodynamic challenges, resulting in a successful procedure for the patient, who was discharged less than a month later.

Edwards FloTrac Sensor and PreSep Catheter

Edwards developed the FloTrac sensor so clinicians could less invasively monitor important hemodynamic performance parameters in a greater number of patients. Edwards' PreSep catheter is used in managing patients undergoing high-risk surgery or with severe sepsis — the spread of an infection to the bloodstream.

EDWARDS LIFESCIENCES CORPORATION

One Edwards Way, Irvine, California 92614

(800) 4-A-HEART or (949) 250-2500

www.edwards.com

Two Thousand Five
Annual Report & SEC Form 10-K

Numbers To Grow By



Edwards

EDWARDS LIFESCIENCES

For nearly 50 years, Edwards has been dedicated to supporting patients in their fight against advanced cardiovascular disease, the world's leading cause of death and disability. Through its focused research, development, discovery and commercialization efforts, the company has driven the creation of leading heart valve therapies and hemodynamic monitoring technologies, as well as cardiac surgery and peripheral vascular innovations, to help countless patients resume fuller, happier and more active lives. Unified in their mission, Edwards' employees truly embody the company's pledge to help patients each and every day.

OUR CREDO

At Edwards Lifesciences, we are dedicated to providing innovative solutions for people fighting cardiovascular disease. Through our actions, we will become trusted partners with customers, colleagues and patients creating a community unified in its mission to improve the quality of life around the world. Our results will benefit customers, patients, employees and shareholders. We will celebrate our successes, thrive on discovery and continually expand our boundaries. We will act boldly, decisively and with determination on behalf of people fighting cardiovascular disease. Helping Patients is Our Life's Work, and Life is Now.

SELECTED OPERATING INFORMATION

Twelve months ended December 31, <i>(in millions)</i>	2 0 0 5	2 0 0 4	2 0 0 3
Net sales	\$ 997.9	\$ 931.5	\$ 860.5
Cost of goods sold	374.6	370.2	359.4
Gross profit	623.3	561.3	501.1
Selling, general and administrative expenses	348.7	319.9	289.4
Research and development expenses	99.0	87.0	72.8
<i>Operating Statistics</i>			
As a percentage of net sales:			
Gross profit	62.5%	60.3%	58.2%
Selling, general and administrative expenses	34.9%	34.3%	33.6%
Research and development expenses	9.9%	9.3%	8.5%
Operating margin ^(a)	17.6%	16.6%	16.1%

(a) Operating margin is calculated by subtracting selling, general and administrative expenses and research and development expenses from gross profit and then dividing by net sales.

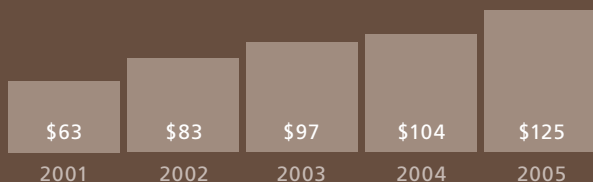
The information contained in the table above should be read in conjunction with Edwards Lifesciences' "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Consolidated Financial Statements" found in the accompanying Annual Report on Form 10-K.

SELECTED PERFORMANCE DATA

For a reconciliation of GAAP to non-GAAP figures, see the inside back cover.

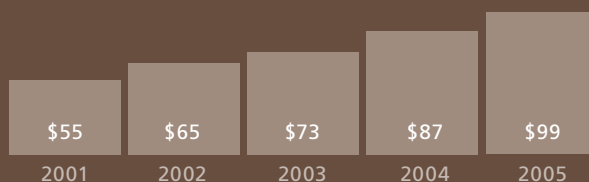
Non-GAAP Net Income (in millions)

Edwards continues to meet or exceed its annual net income growth goals.



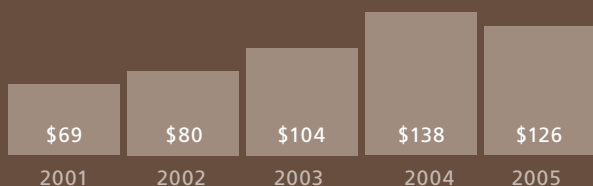
R&D Expense (in millions)

Edwards continues to increase its investment in research and development.



Non-GAAP Free Cash Flow (in millions)

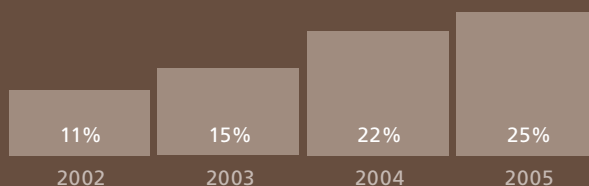
Edwards generates strong cash flow, reflecting strong operating results and consistent working capital management.



Sales of New Products

(introduced in the last three years as a percentage of total annual sales)

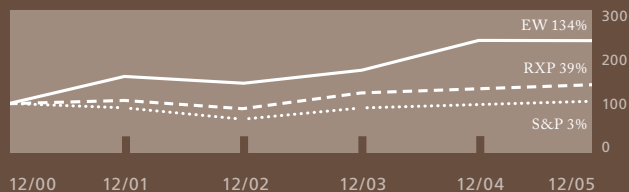
Edwards' investments in R&D are producing an exciting pipeline of differentiated new products.



Stock Performance vs. Selected Indices

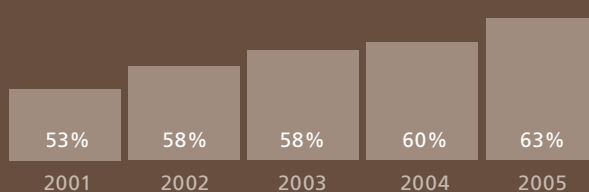
Since 2000, Edwards' stock price has increased one hundred and thirty-four percent — outperforming the broader market and its medical products peer group.

— EW - - RXP (Morgan Stanley Healthcare Products Index) ···· S&P 500



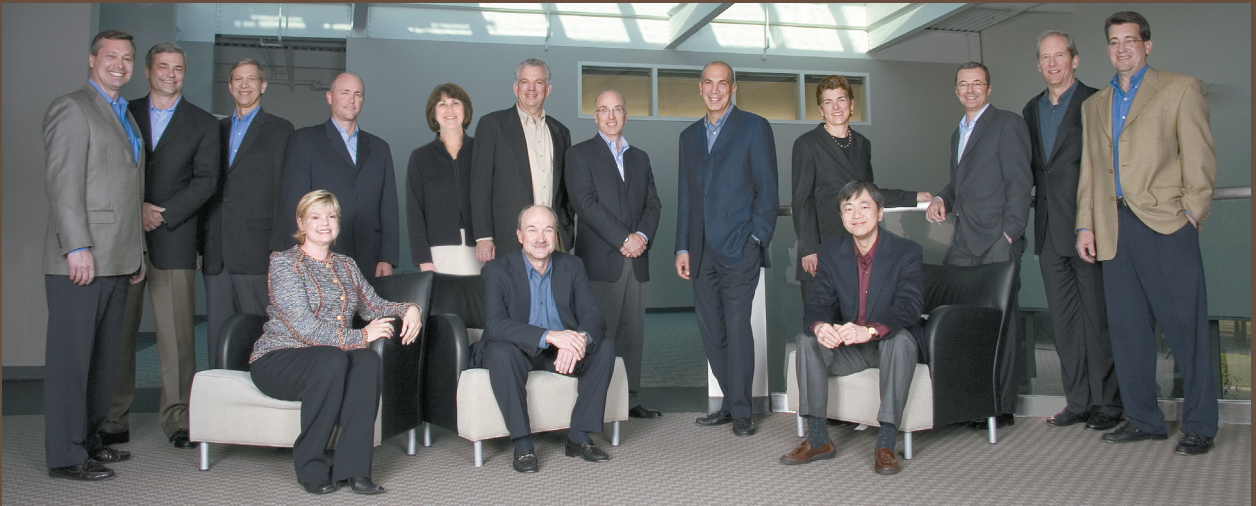
Gross Profit Margin (gross profit as a percentage of net sales)

The sale of higher margin products, while de-emphasizing or exiting lower margin businesses, is lifting Edwards' gross profit margin.



SAFE HARBOR STATEMENT This Annual Report contains forward-looking statements within the meaning of the federal securities laws. These statements involve risks and uncertainties that could cause the company's future business, financial condition, results of operations or performance to differ materially from that expressed or implied by the forward-looking statements. All statements other than statements of historical fact in this Annual Report or referred to or incorporated by reference into this Annual Report are "forward-looking statements." You are encouraged to refer to the discussion of Risk Factors that may be found in the company's Annual Report on Form 10-K and other filings with the Securities and Exchange Commission.

EXECUTIVE MANAGEMENT



(left to right)

J. Alex Martin

Corporate Vice President,
North America

Robert C. Reindl

Corporate Vice President,
Human Resources

Stanton J. Rowe

Corporate Vice President,
Percutaneous Valve Interventions

Anita B. Bessler

Corporate Vice President,
Global Franchise Management

Randel W. Woodgrift

Corporate Vice President,
Manufacturing Operations

Patricia L. Garvey, Ph.D.

Corporate Vice President,
Global Reimbursement

Stuart L. Foster

Corporate Vice President,
Technology & Discovery

John H. Kehl, Jr.

Corporate Vice President,
Strategy & Business Development

Thomas M. Abate

Corporate Vice President,
Chief Financial Officer & Treasurer

Michael A. Mussallem

Chairman &
Chief Executive Officer

Corinne H. Lyle

Corporate Vice President,
Global Operations

Huimin Wang, M.D.

Corporate Vice President,
Japan & Intercontinental

Patrick B. Verguet

Corporate Vice President,
Europe

Bruce P. Garren

Corporate Vice President,
Government Affairs &
General Counsel

Keith A. Reisinger

Corporate Vice President,

TRADEMARKS Cribier-Edwards, Edwards, the stylized E logo, FloTrac, GeoForm, Life is Now, Magna, PERIMOUNT Theon, PreSep, ThermaFix and Vigileo are trademarks of Edwards Lifesciences Corporation. 1-800-4-A-HEART, Carpentier-Edwards, Edwards Lifesciences, LifeStent, PERIMOUNT, PERIMOUNT Magna and Swan-Ganz are trademarks of Edwards Lifesciences Corporation and are registered in the United States Patent and Trademark Office. LifeStent and LifeStent NT are trademarks of Edwards Lifesciences AG. **CERTIFICATION** On June 6, 2005, Edwards Lifesciences submitted to the New York Stock Exchange a certification signed by its Chief Executive Officer that as of June 3, 2005 he was not aware of any violation by Edwards Lifesciences of the NYSE corporate governance listing standards. In addition, the certifications signed by the Chief Executive Officer and Chief Financial Officer required under Section 302 of the Sarbanes-Oxley Act were filed as an exhibit to Edwards' Annual Report on Form 10-K for the year ended December 31, 2005.

C O R P O R A T E I N F O R M A T I O N

Corporate Headquarters

Edwards Lifesciences Corporation
One Edwards Way, Irvine, CA 92614
(800) 4-A-HEART or (949) 250-2500
www.edwards.com


Annual Meeting

The Annual Meeting of Shareholders will be held on May 11, 2006 at 10:00 a.m. (Pacific) at the offices of Edwards Lifesciences Corporation, One Edwards Way, Irvine, CA 92614.

SEC Form 10-K

A copy of Edwards Lifesciences' annual report to the Securities and Exchange Commission on Form 10-K is available on the company's web site at www.edwards.com or upon request to the Investor Relations department at (949) 250-2806.

Stock Symbol

 Edwards Lifesciences' stock is traded on The New York Stock Exchange (NYSE) under the symbol EW.

Information on the Internet

Edwards Lifesciences' web site at www.edwards.com provides a wide range of information for customers, patients and shareholders. Persons interested in investing in Edwards Lifesciences are invited to visit the "Investor Relations" section of the web site to access press releases, SEC filings and other company information.

Corporate Public Relations

Members of the news media should call (949) 250-5070.

Investor Information

Shareholders, securities analysts and investors seeking additional information about Edwards Lifesciences should contact: David K. Erickson
Vice President, Investor Relations
(949) 250-2806 Phone
(949) 250-2248 Fax
investor_relations@edwards.com

Analyst Coverage

For a list of research firms and analysts who cover Edwards Lifesciences, please visit the Investor Relations section of the company's web site at www.edwards.com.

Transfer Agent

Correspondence about share ownership, account status, the transfer or exchange of shares, lost stock certificates, duplicate mailings or change of address may be directed to:

Computershare Investor Services
P.O. Box 43069,
Providence, RI 02940-3069
(800) 756-8200
Hearing impaired # TDD: (800) 952-9245
hwww.computershare.com

Independent Registered Public Accounting Firm

PricewaterhouseCoopers LLP
Orange County, CA

Board of Directors

Michael A. Mussallem
Chairman & Chief Executive Officer,
Edwards Lifesciences Corporation

Mike R. Bowlin
Former Chairman &
Chief Executive Officer,
Atlantic Richfield Company

John T. Cardis
Former Partner
Deloitte & Touche

Robert Ingram
Vice Chairman, Pharmaceuticals,
GlaxoSmithKline

Vernon R. Loucks Jr.
Chairman,
The Aethena Group, LLC

Barbara J. McNeil, M.D., Ph.D.
Professor and Chair,
Department of Health Care Policy,
Harvard Medical School

Philip M. Neal
Former Chairman &
Chief Executive Officer,
Avery Dennison Corporation

David E.I. Pyott
Chairman & Chief Executive Officer,
Allergan, Inc.

Edwards Lifesciences is an affirmative action, equal opportunity employer.

RECONCILIATION OF GAAP TO NON-GAAP FIGURES

To supplement the consolidated financial results prepared in accordance with Generally Accepted Accounting Principles (“GAAP”), the Company uses non-GAAP financial measures that exclude certain items, such as in-process research and development expenses, special charges and credits, and results of discontinued businesses. Management does not consider the excluded items part of day-to-day business or reflective of the core operational activities of the Company as they result from transactions outside the ordinary course of business. Management uses non-GAAP financial measures internally for strategic decision making, forecasting future results and evaluating current performance. Guidance is provided only on a non-GAAP basis due to the inherent difficulty in forecasting such items. By disclosing non-GAAP financial measures, management intends to provide investors with a more meaningful, consistent comparison of the Company’s core operating results and trends for the periods presented.

Non-GAAP financial measures are not prepared in accordance with GAAP; therefore, the information is not necessarily comparable to other companies and should be considered as a supplement to, not a substitute for, or superior to, the corresponding measures calculated in accordance with GAAP. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Notes to the Consolidated Financial Statements.”

RECONCILIATION OF GAAP TO NON-GAAP FIGURES

Non-GAAP Net Income 2001-2005

Twelve months ended December 31, <i>(in millions, except per share data)</i>	2005	2004	2003	2002	2001
Net income, as reported (GAAP)	\$ 79.3	\$ 1.7	\$ 79.0	\$ 55.7	\$ (11.4)
Reconciling items, net of tax					
Purchased in-process research and development expenses (see Note 3*)	1.2	91.5	12.4	-	-
Asset and investment impairment charges (see Note 4)	16.3	5.4	-	54.1	3.9
Repatriation taxes (see Note 15)	15.8	-	-	-	-
Restructure 3F agreements (see Note 4)	13.6	-	-	-	-
Charitable fund (see Note 4)	9.0	3.1	-	-	-
Realignment and severance charge (see Note 4)	7.2	-	9.6	-	-
Royalty settlements, litigation gains and other legal settlements, net (see Note 4)	1.7	-	-	(9.1)	-
Discontinued products charges (see Note 4)	1.2	6.9	-	-	-
Tax benefits of settlement (see Note 15)	(8.0)	-	-	-	-
Discontinued businesses, net (see Note 4)	(12.3)	-	2.8	-	56.3
Sale of property development rights (see Note 4)	-	(4.5)	-	-	-
Arbitration settlement (see Note 4)	-	-	4.2	-	-
Puerto Rico pension curtailment (see Note 4)	-	-	1.8	-	-
Tax benefits of Brazilian reorganization (see Note 15)	-	-	(13.2)	-	-
Tax benefit of perfusion services divestiture	-	-	-	(20.1)	-
Non-recurring spin-off charges	-	-	-	2.3	-
Other non-recurring charges	-	-	-	-	8.9
Breaking of interest rate swap agreement	-	-	-	-	3.7
Adoption of SFAS No. 133	-	-	-	-	1.5
Non-GAAP net income	\$ 125.0	\$ 104.1	\$ 96.6	\$ 82.9	\$ 62.9
Non-GAAP earnings per share					
Basic non-GAAP earnings per share	\$ 2.10	\$ 1.75	\$ 1.63	\$ 1.41	\$ 1.07
Diluted non-GAAP earnings per share	\$ 1.98	\$ 1.67	\$ 1.58	\$ 1.35	\$ 1.07
Weighted average common shares outstanding					
Basic	59.6	59.6	59.1	59.0	58.9
Diluted	65.0	64.7	62.9	61.3	58.9

Non-GAAP Free Cash Flow 2001-2005

Twelve months ended December 31, <i>(in millions, except per share data)</i>	2005	2004	2003	2002	2001
Net cash provided by operating activities, as reported (GAAP)	\$ 136.8	\$ 180.6	\$ 142.1	\$ 150.5	\$ 106.4
Capital expenditures, as reported (GAAP)	(48.5)	(42.5)	(37.9)	(40.7)	(37.5)
Reconciling items:					
Charitable fund contribution	15.0				
Restructure 3F agreements	22.8				
Implementation of accounts receivable securitization program	-	-	-	(30.1)	-
Non-GAAP free cash flow	\$ 126.1	\$ 138.1	\$ 104.2	\$ 79.7	\$ 68.9

*Notes referenced above can be found in the consolidated financial statements in the accompanying SEC Form 10-K.

EDWARDS LIFESCIENCES CORPORATION

One Edwards Way, Irvine, California 92614

(800) 4-A-HEART or (949) 250-2500

www.edwards.com