



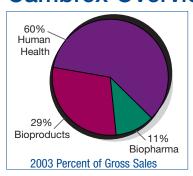
2003

Cambrex Corporation Summary Annual Report Innovation. Experience. Performance.

Mission

Cambrex is an innovative life sciences company dedicated to providing essential products and services that accelerate drug discovery, development and the manufacturing of human therapeutics.

Cambrex Overview



Cambrex Corporation had gross sales of \$405.6 million in 2003 and operates in three business segments: Human Health, Bioproducts and Biopharma. The Company supplies products and services primarily to pharmaceutical and biopharmaceutical companies, generic drug and biotechnology companies and research organizations.

Cambrex is a strong global organization with 1,900 employees in the United States, Europe, Asia and South America.

The Company secures leading positions in niche life sciences markets through its proprietary technologies, specialized capabilities, world-class regulatory record and excellent customer service.

Cambrex aims to increase shareholder value through a combination of organic growth and strategic acquisitions. Organic growth is driven by innovation, continuous improvement and best-in-class service. The Company will continue to acquire businesses, which will enhance its portfolio of technologies and leverage its capabilities and infrastructure.

2003 Financial Highlights*

	(dollars and shares in t	housands, except pe	r share amounts)
Years Ended December 31, For Continuing Operations	2003(a)	2002(b)	2001(c)
Gross sales	\$ 405,591	\$ 394,430	\$ 356,555
Gross profit	162,406	177,718	157,972
Operating profit	38,824	71,924	58,472
ncome from Continuing Operations	245	39,955	34,988
Earnings per share from Continuing Operations (Diluted)	0.01	1.51	1.32
Average shares outstanding (Diluted)	26,174	26,520	26,495
Total assets	778,503	835,283	818,375
Stockholders' equity	\$ 396,630	\$ 410,954	\$ 345,098

^{*} The financial highlights reflect continuing operations as a result of the sale of the Rutherford Chemicals business in November 2003.

Note: Cambrex Corporation has restated its results for 2002. This restatement resulted from a reassessment of the carrying value of an equity investment in a privately held emerging biotechnology company. The Company concluded that \$4.3 million of the investment should have been impaired as of the second quarter 2002. The impairment charge of \$4.3 million was recorded in Other expense and a related \$1.5 million tax benefit was recorded in Provision for income taxes. As a result, Income from continuing operations decreased by \$2.8 million.

⁽a) The 2003 Operating profit and income from continuing operations include a special pre-tax charge of \$11.3 million, recorded in operating expenses, for the settlement of certain class action lawsuits involving Mylan Laboratories. Income from continuing operations also includes approximately \$21.5 million of valuation allowances, recorded in Provision for income taxes, for deferred tax assets deemed unlikely to be realized for financial reporting purposes.

⁽b) The 2002 Operating profit and Income from continuing operations include special pre-tax charges of \$4.2 million, recorded in operating expenses, consisting of fixed asset impairments of \$1.6 million, closure costs for a small manufacturing facility of \$1.7 million and severance costs of \$0.9 million. Income from continuing operations also includes pre-tax investment impairments of \$7.3 million recorded in Other expense.

⁽c) The 2001 Gross profit, Operating profit and Income from continuing operations include pre-tax inventory write-downs of \$2.0 million, recorded in Cost of sales. Operating profit and Income from continuing operations also include pre-tax fixed asset impairment and severance charges of \$2.0 million and the impact of FASB 142 of \$8.0 million, recorded in operating expenses.

To Our Shareholders

We completed our life sciences transition with the sale of the Rutherford Chemicals business and can now devote all of our resources to our strategic business segments: Human Health, Bioproducts and Biopharma. In 2003, many exciting initiatives and new product programs were launched along with enhanced service capabilities to increase sales and improve profitability in all of our businesses.

Gross sales in the Human Health segment grew 4.7%. We maintained our leading position in generic active pharmaceutical ingredients and continued to make progress on the introduction of controlled substance products regulated by the United States Drug Enforcement Administration. To support growth in the Human Health segment, sales and business development personnel were added and production capabilities for controlled substances and high-potency compounds were expanded. In addition, a more proac-

tive approach to identifying collaborations helped increase our pipeline of projects and provided access to new technologies. As a result, we can offer several unique technology platforms such as radioisotope-labeled active pharmaceutical ingredients used in drug toxicology studies, large-scale pharmaceutical distillation capabilities, and a novel carbohydrate-based technology for developing complex chiral molecular structures used in pharmaceuticals. Our collaborative partners, who typically work on projects in the early stages of drug development and have limited manufacturing capabilities, have brought Cambrex several projects for scale-up that could lead to commercial manufacturing contracts.

The Bioproducts segment performed exceptionally well in 2003 and represents a significant opportunity for growth in 2004. Sales from cells, media, cell therapy and endotoxin detection products and services all grew more than 10% in 2003.

In the Biopharma segment, state-of-the-art integrated process development laboratories were brought on-line in June 2003 to support early development projects.

Through a combination of enhanced capabilities and a strengthened sales and business development function, strides were made toward replacing the revenue and profit lost in this segment when one of our largest customer's product failed to receive FDA approval. With the contract biopharmaceutical market expected to grow 10-15% annually, we are optimistic about our continued recovery and future growth.

Consolidated gross sales revenue from continuing operations increased by 2.8%. Net income declined primarily due to lower contract biopharmaceutical manufacturing revenues, the previously announced settlement with Mylan and an unusually high tax rate. Margins were compressed due to higher employee benefits and insurance costs.

New Products

New products and technologies are essential to our growth. We continue to innovate, deliver creative solutions, earn our customers' loyalty and maintain our market leadership positions.

In the Human Health segment, new products were focused in several key areas including controlled substances, products requiring high containment, taste masking systems and drugs for the central nervous system, weight loss, pain management, smoking cessation, allergies, anti-bacterial indications, Alzheimer's, Parkinson's and other diseases.

In the Bioproducts segment over fifty new products generated more than 15% of revenues in 2003. The products included novel normal human cell systems, bioassays, formatted gels for electrophoretic separations and the manufacture of cell therapy products. We introduced the *PyroGene™* Recombinant Factor C endotoxin detection system, which will eliminate the use of the blood of the horseshoe crab, the raw material for the traditional assay. We also previewed our on-line *PyroSense™* endotoxin detection system used to test water-for-injection for the production of injectable drugs, medical devices and other therapeutic products.

Our success in the cell therapy business, which grew more than 100% in 2003, demonstrates our experience in cGMP manufacturing and processing of human cells and media. Several new cell therapy contracts for clinical trials and two contracts for commercial products were added to our portfolio. To support this growth, expansion of the Walkersville,



Maryland cell therapy facility was initiated during 2003 and will be completed in 2004.

Cambrex has an industry-leading position in cells and optimized media and is committed to providing clients cellular models to improve research productivity. New cell systems were introduced including the blood-brain barrier, which is used to evaluate the transfer of central nervous system therapeutics from the circulatory system to the brain. An astrocyte cell system was introduced for use in the study of brain diseases, such as Alzheimer's disease and strokes.

Our strength in cell-based bioassays resulted in the introduction of two new assay systems. $MycoAlert^{T}$, a detection system for a common bacterial contaminant in biologics called mycoplasma, reduces the typical testing period for the traditional cell culture method from twenty-eight days to minutes. Using the same platform technology, we introduced $PKLight^{T}$, a fast and convenient assay system for the determination of a wide-range of protein kinases. Both proprietary products are being rapidly accepted by the market.

In the Biopharma segment, seven new client projects were added in 2003 including two contracts for products in Phase III clinical trials, one for an insulinlike growth factor and the other for a staphylococcus vaccine. A five-year contract was renewed with Ligand Pharmaceuticals, Inc. that covers the manufacture of its commercial product *Ontak*®, a therapeutic approved for cutaneous T-cell lymphoma, as well as a new, second generation product.

Organizational Changes

In November 2003, Gary Mossman was appointed President and CEO, Cambrex Pharma and Biopharmaceuticals businesses. In conjunction with this change, Steven Klosk was appointed C00 of the combined businesses in addition to his role as Executive Vice President – Administration. Edward Robinson joined the Cambrex Pharma and Biopharmaceuticals businesses as Executive Vice President – Europe.

Outlook for 2004

With broad technology platforms in cell and molecular biology and small and large molecule API development and manufacturing, Cambrex is positioned for renewed growth in 2004 and beyond. We will continue to invest in technology, build upon our leadership position in cell therapy, maximize product release testing services revenues, and provide value-added drug delivery technologies for our portfolio of active pharmaceutical ingredients. A major focus in 2004 will be to accelerate the integration of unique products and services from drug discovery to the patient.

Our employees are the key to the continued success of Cambrex. Their consistent sustained efforts to accelerate growth, innovate and improve productivity and quality in an environment of true teamwork allows us to partner effectively and provide the best service to our customers.

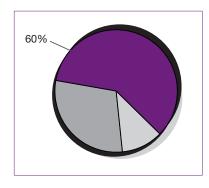
ama A. Mack

James A. Mack Chairman of the Board

President and Chief Executive Officer

Pictured: (left to right) Gary L. Mossman, President and CEO, Cambrex Pharma and Biopharmaceuticals businesses; Luke M. Beshar, Executive Vice President and Chief Financial Officer; Steven M. Klosk, Executive Vice President—Administration and COO, Cambrex Pharma and Biopharmaceuticals businesses; N. David Eansor, President, Cambrex Biopharmaceuticals business; Peter E. Thauer, Senior Vice President—Law and Environment, General Counsel and Secretary; Salvatore J. Guccione, Executive Vice President, Corporate Strategy and Development and Paolo Russolo, President, Cambrex Profarmaco business.

Human Health



Human Health_____\$242,165¹

The Human Health segment is comprised of products and services for process development and cGMP manufacture of more than 120 active pharmaceutical ingredients (APIs) and 110 advanced pharmaceutical intermediates that are supplied worldwide to generic drug and innovative pharmaceutical companies. Cambrex assists customers with chemical process selection, analytical methods development and testing, process optimization and regulatory services. Approximately 50% of the segment

revenues are derived from generic APIs, 40% from sales to branded or innovative drug companies and 10% from the sale of other custom manufactured fine chemicals.

Cambrex produces APIs for client clinical trials, client evaluation of generic equivalence and the commercial sale of approved therapeutics.

Generic APIs are sold on an order-by-order basis. However, regulatory requirements (through the reference of a Cambrex Drug Master File in the client's Abbreviated New Drug Application) and the Company's longstanding reputation provide continuity in supply relationships.

Business with innovative pharmaceutical companies is secured with long-term contracts for approved therapeutics and shorter-term contracts for products in clinical trials.

Product Category	Principal Products
Active Pharmaceutical Ingredients Pharmaceutical Intermediates Imaging Chemicals Fine Custom Chemicals Other	Amiodarone, Diltiazem, Sotalol, Lorazepam, Tramadol, 5-amino-salicylic acid, and x-ray contrast intermediates.

Products/Services/Capabilities	Primary Markets	Growth Drivers
 Analytical development Biocatalysis Chiral chemistry Generic APIs High containment products High energy reactions High potency APIs Process route selection Process dev Process dev Process opti Radioisotope APIs Regulatory s Stability test Taste maskindrug deliver 	Pharmaceutical Companies assess- beled port and	 Pharmaceutical R&D spending Drug patent expirations Initiatives to reduce the cost of healthcare Amount of capital available to emerging pharmaceutical companies to fund drug development

¹ Gross Sales

Cambrex's state-of-the-art containment facilities allow the synthesis of Class IV high potency substances under cGMP. Both personnel and the product are protected from exposure.

Pictured: (I to r) Shubha Kannan, QC Analyst and Irina Plotnikow, QC Supervisor, Cambrex North Brunswick.



Company initiatives and healthcare market dynamics enabled growth in the Human Health segment. The expiration of patents for existing therapeutics and the favorable regulatory environment encourages the introduction of cost-effective generic drugs. These market forces indicate the generic API market will continue to grow in the foreseeable future.

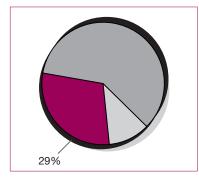
Sixty-three new products generated 16.6% of sales revenue for therapeutic applications such as: weight loss, smoking cessation, attention deficit disorder, allergies, cardiovascular and antibacterial indications.

Increased pharmaceutical R&D spending and improved capital availability for emerging pharmaceutical companies have kept the drug development pipeline strong with more than 1,000 therapeutics in clinical trials in the United States. With innovative drug companies, Cambrex establishes the client relationship early in the development process and the relationship continues to grow as the product proceeds from clinical trials to FDA approval.

Cambrex was able to offer its clients radioisotopelabeled drug candidates and APIs, large-scale, low pressure cGMP distillation, high pressure hydrogenation, new chiral technologies, and products using sodium cyanide and other hazardous reactions through third party alliances. In addition to accessing new technologies, our partner companies feed Cambrex development projects that require our scale-up expertise. The Company continues to have focused commercial development programs in the areas of high potency, cytotoxic compounds, controlled substances, high-energy reactions, controlled release and taste masking of APIs to provide our customers the value-added services they need.

Cambrex continued to provide capital investments to support growth in the Human Health segment. These investments included the addition of a small-scale pharmaceutical plant to manufacture controlled substances in the Charles City, lowa facility and the installation of an isolator to handle highly potent drug compounds at the Cambrex Center of Technical Excellence in North Brunswick, New Jersey.

Bioproducts



Bioproducts \$119,298¹

The Bioproducts segment is comprised of innovative products and services for bioresearch and industrial applications, cell therapeutics and pharmaceutical release testing. The segment is made up of three categories: (1) Cells and Media, (2) Endotoxin Detection, and (3) Electrophoresis, Chromatography and Other.

The Cells and Media category includes specialized normal human

cell systems, cell therapy services, cell culture media used in the production of biopharmaceuticals and cellbased and custom assays.

Endotoxin Detection is a niche technology used worldwide by pharmaceutical quality assurance departments for the detection of gram negative bacteria. Endotoxin Detection is an FDA mandated test for injectable therapeutics, implantable medical devices and water-for-injection systems in pharmaceutical plants. This category includes reagents, equipment, software and testing services.

The Electrophoresis, Chromatography and Other category includes products for the separation and sequencing of DNA, RNA and proteins for bioresearch.

Products sold to the research and testing market are typically purchased on an order-by-order basis. The Company's e-commerce functionality enables efficient, rapid order placement and facilitates customer inquiries.

Product Category	Principal Products
Cells and Media Endotoxin Detection Electrophoresis, Chromatography and Other	Clonetics® normal human cell systems, Poietics® differentiating cell systems, Reliant®, NuSieve®, MetaPhor®, PAGEr® nucleic acid and protein products, MycoAlert™ and PKLight™ bioassays and BioWhittaker™ endotoxin detection reagents, readers and automated instruments.

Products/Services/Capabilities	Primary Markets	Growth Drivers
 Cells and Media Biotherapeutic media Cell based bioassays Cell therapy services Custom bioassay services Custom media services Normal human cell systems Electrophoresis and Chromatography and Other Mutation detection products Nucleic acid electrophoresis Protein electrophoresi Sequencing products Equipment Kits Reagents Software Testing services 	 Pharmaceutical, biopharmaceutical, and biotechnology companies Research organizations and institutions 	 Pharmaceutical and biotech research spending The number of biotech drugs in development Capital available to fund drug development Government research spending

¹ Gross Sales

We provide cell therapy manufacturing services to Ortec International, Inc. Cambrex has the exclusive rights to manufacture Orcel®, a novel cellular matrix of skin cells to heal chronic and acute wounds.



Pharmaceutical R&D and government spending, improved capital availability to emerging therapeutic companies, and the introduction of products and services designed to save customers' time, improve their efficiency and enhance product performance, enabled growth in the segment.

The Company introduced a number of new products in 2003. The blood-brain barrier model is the first commercially available product for researchers to study the transport of drugs across the blood-brain barrier. The integrated astrocytes cell system is used to make new discoveries in brain dysfunction, memory function and neuronal biochemistry.

Several new cell therapy clients were added with products targeting large markets such as wound healing and cardiovascular disease. Cambrex has contracts for two approved therapeutics and has several other clients with products in clinical trials.

New bioassay systems bring speed and convenience to our customers. The fast and easy $MycoAlert^{\text{TM}}$ mycoplasma detection kit ensures cell cultures are contamination free.

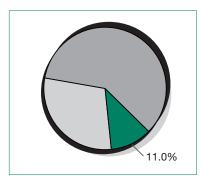
The Company launched the *PyroGene*™ Recombinant Factor C endotoxin detection system and previewed the industry's first automated on-line testing equipment to replace the manual collection and testing of samples. The equipment is being beta-tested at customers' facilities and is expected to be commercially available by the end of 2004.

The Company introduced several new electrophoresis and separation products focused on improving speed and performance including the $Reliant^{\circ}$ FastLaneTM Gel System, $SimplyLoad^{TM}$ DNA Ladders, $SyPro^{\circ}$ Ruby Protein Gel Stain and $PAGEr^{\circ}$ DuramideTM Precast Gels.

Capital investments were made in 2003 to support growth in the Bioproducts segment. These investments include the addition of new cell therapy suites and equipment to support more efficient processing of endotoxin detection reagents and cell culture media.

A new e-commerce system was launched in 2003 to optimize our customers' on-line ordering experience, automate the supply chain, and reduce transaction costs.

Biopharma



Biopharma ______\$44,1281

The Biopharma segment is comprised of services for process development and cGMP manufacture of therapeutic proteins and biopharmaceuticals for large and emerging drug companies.

Cambrex provides robust and cost-effective biologics solutions for its clients worldwide. The custom process development services ensure rapid technology transfer, optimized process yields and a proven track

record of meeting clients' timelines for pre-clinical, clinical and commercial requirements.

Analytical testing, media optimization, and regulatory services support manufacturing to provide our clients a complete solution to their development and cGMP manufacturing needs. Cambrex was one of the first contract biopharmaceutical manufacturers to produce therapeutics approved for the United States and Europe.

Projects are completed on terms designed specifically for the client's clinical and commercial needs. Development projects are typically covered by a time and materials commercial contract for the quantity needed for clinical evaluation. For approved therapeutics, the commercial agreement typically converts to a long-term supply contract based on a fixed price per unit.

Product Groups	Principal Products
Contract biopharmaceutical manufacturing services	Ontak®, recombinant proteins, vaccines, whole cell vaccines, plasmid DNA, biomolecules and diagnostics.

Products/Services/Capabilit	ties	Primary Markets	Growth Drivers
 Analytical, environmental and regulatory services Bacteria and yeast, mammalian cells, microbial cell banks Manufacture of licensed products Media optimization and production Recovery and purification 	 Scale-up services Small-scale fill and finish Technology transfer Transgenic milk down- stream processing experience Upstream and down- stream process development Validation services 	Pharmaceutical, biopharmaceutical and biotechnology companies	 Pharmaceutical and biotech research spending The number of biotech drugs in development Amount of capital available to emerging pharmaceutical companies to fund drug development Government spending

¹ Gross Sales

Our existing biopharmaceutical capacity will be enhanced with the installation of a 500 liter cell culture reactor in Baltimore, Maryland and a 2,500 liter fermentation unit in Hopkinton, Massachusetts.

Pictured: Hope Rodgers, Production Logistics Coordinator, Cambrex Bio Science Baltimore.



In 2003, the Biopharma segment lost a large contract as the result of a client's product not receiving United States FDA approval. The loss of the contract resulted in the Company's Baltimore facility operating at sub-optimal levels in the second half of 2003, which negatively impacted revenues and gross profit.

Additional business development personnel were added to accelerate the acquisition of new projects and restore capacity utilization levels.

Cambrex won two new important projects, one for an insulin-like growth factor licensed to Tercica, Inc. from Genentech, Inc. and the other for a staphylococus vaccine developed by Nabi Pharmaceuticals. Both products are in Phase III clinical trials. Also, the Company's five-year contract with Ligand Pharmaceuticals for production of *Ontak*® and its next generation of products was renewed.

In June, the Company opened a state-of-the-art process development laboratory in its Baltimore, Maryland facility. The laboratory has multiple 10 liter and 100 liter reactors and is designed for products in early development. In the six months since open-

ing, the facility has reached the first year targeted capacity utilization levels. Additional space is available for further expansion.

In addition to the process development laboratory, the Company began construction of a 500 liter cell culture suite in the Baltimore, Maryland facility and a 2,500 liter fermentation unit in the Hopkinton, Massachusetts facility. Both will be operational in 2004.

The market for contract biopharmaceutical development and manufacturing services remains robust with improved biotech funding in 2003, more than 350 biotechnology drugs in development in the United States and double-digit growth projected over the next four to five years.

The combination of an industry-leading regulatory record, experience producing licensed products, enhanced capabilities, more commercial development personnel and favorable market dynamics, will drive improved operating performance in this business.

Corporate Information

Senior Officers

James A. Mack

Chairman of the Board, President and Chief Executive Officer

Luke M. Beshar

Executive Vice President and Chief Financial Officer

Thomas N. Bird

Vice President – Corporate Development

Robert J. Congiusti

Vice President Information Technology

Ronnie D. Carroll, Ph.D.

Vice President and Chief Technology Officer, Pharmaceutical Technologies

N. David Eansor

President, Cambrex Bioproducts business

Salvatore J. Guccione

Executive Vice President, Corporate Strategy and Development

Steven M. Klosk

Executive Vice President – Administration and COO Cambrex Pharma and Biopharmaceuticals businesses

Monika Lekander

Vice President, General Manager – Therapeutics

Daniel R. Marshak, Ph.D.

Vice President and Chief Technology Officer, Biotechnology

Gary L. Mossman

President and Chief Executive Officer, Cambrex Pharma and Biopharmaceuticals businesses

Paolo Russolo

President, Cambrex
Profarmaco business

Gregory P. Sargen

Vice President, Finance

Peter E. Thauer

Senior Vice President – Law and Environment, General Counsel and Secretary

Peter van Hoorn

President, Cambrex Biopharmaceuticals business

Board of Directors

James A. Mack

Chairman of the Board, President and Chief Executive Officer Director since 1990

Rosina B. Dixon, M.D. (2)(4)

Consultant to pharmaceutical companies
Director since 1995

Roy W. Haley (1)(4)

Chairman, President and Chief Executive Officer WESCO International, Inc. (Electrical distribution company) Director since 1998

Kathryn Rudie Harrigan (1)(4)

Henry R. Kravis Professor of Business Leadership Columbia University Director since 1994

Leon J. Hendrix, Jr. (3)(4)

Chairman
Remington Arms Company, Inc.
(Sporting firearms and
ammunition manufacturer)
Director since 1995

Ilan Kaufthal (2)(4)

Vice Chairman of Investment Banking Bear, Stearns & Co., Inc. Director since 1981

William B. Korb (1)(4)

Retired Director, President and Chief Executive Officer Marconi Commerce Systems, Inc. (Gasoline pump and dispenser manufacturer) Director since 1999

Robert LeBuhn (2)(3)(4)

Retired Chairman of the Board Investor International (U.S.), Inc. (A private investment firm) Director since 1981

John R. Miller (2)(4)(5)

Retired Chairman and Chief Executive Officer Petroleum Partners, Inc. (A company providing outsourcing services to the petroleum industry) Director since 1998

Peter G. Tombros (1)(3)(4)

Chairman and Chief Executive Officer VivoQuest (A private biopharmaceutical company) Director since 2002

⁽¹⁾ Member of Audit Committee

⁽²⁾ Member of Compensation Committee

⁽³⁾ Member of Governance Committee

⁽⁴⁾ Member of Regulatory Affairs Committee

⁽⁵⁾ Lead Director

Scientific Advisory Board

Lester Mitscher, Ph.D.

Distinguished Professor of Medicinal Chemistry University of Kansas

Ivan M. Roitt, D.Sc., F.R.S.

Emeritus Professor Department of Immunology University College London Co-Director of the Immunoprotein **Engineering Group**

Michael R. Rosen, M.D.

Gustavus A. Pfeiffer Professor of Pharmacology Professor of Pediatrics Director, Center for Molecular Therapeutics Columbia University College of Physicians and Surgeons New York, New York

David J. Triggle, Ph.D.

Distinguished Professor School of Pharmacy and Pharmaceutical Sciences State University of New York

Florian Wurm, Dr. rer. nat.

Professeur ordinaire de Biotechnologie, Swiss Federal Institute of Technology Lausanne, EFPL Laboratory of Cellular Biotechnology Lausanne, Switzerland

Shareholders Information

Annual Meeting

April 22, 2004 at 1:00 PM Sheraton Meadowlands Hotel and Conference Center Seminar Room Two Meadowlands Plaza East Rutherford, New Jersey 07073

Common Stock

Listed on New York Stock Exchange under the ticker Symbol CBM

Investor Relations

Anne-Marie Hess Director, Investor Relations & **Corporate Communications Cambrex Corporation** One Meadowlands Plaza East Rutherford, New Jersey 07073 Tel: (201) 804-3062

Transfer Agent and Registrar

American Stock Transfer & Trust 59 Maiden Lane New York. New York 10038 Tel: (718) 921-8200

Auditors

PricewaterhouseCoopers LLP 400 Campus Drive Florham Park, New Jersey 07932

Tel: (973) 236-4000

Glossary

Abbreviated New Drug Application (ANDA) - Application made to the FDA for a generic version of a branded drug.

Active Pharmaceutical Ingredient (API) - The active therapeutic ingredient of the drug product.

Advanced Intermediates - Organic molecules that require several synthesis steps and/or special technologies to produce.

Assay - A laboratory test or technique to identify and/or measure the amount of a particular substance in a sample, or for determining characteristics such as a composition, purity, activity, or weight.

Bioassay - Determination of the strength or biological activity of a substance, such as a drug or hormone, by comparing its effects with those of a standard preparation on a test organism.

Biologic - A class of therapeutics manufactured using biological fermentation or mammalian cell culture. Contrasted with chemical manufacturing of traditional drugs.

Biotechnology - The use of living organisms, such as bacteria or yeasts, or biological substances, such as enzymes, to perform industrial or manufacturing processes.

Cell Biology - The study of the characteristics of cells at the structural and functional level; it is closely linked to molecular biology.

Current Good Manufacturing Practice (cGMP) - A set of principles and procedures which, when followed by manufacturers of drugs and other therapeutics, helps ensure that the products manufactured will be of the required quality. cGMP is based on the premise that quality cannot be tested but must be built into each batch of product during all stages of manufacturing.

Combinatorial Chemistry - A modern method of generating large chemical libraries that are screened for activity as potential drug candidates.

Controlled Substance - A drug or chemical substance whose possession and use are regulated under the United States Drug Enforcement Administration Controlled Substances Act.

Diagnostic - A tool used in the diagnosis and monitoring of diseases.

DMF - Drug Master File.

DNA - Deoxyribonucleic acid.

DNA Sequencing - A technique for determining the order of nucleotide bases in a segment of DNA.

Drug Discovery - The early stage of drug development where potential drugs are identified using assays and other experiments.

Electrophoresis - A method of separating large molecules (such as DNA fragments or proteins) from a mixture of similar molecules.

Endotoxin - A toxic substance produced by certain bacteria.

Enzyme - A protein that regulates a biochemical or chemical reaction. Often serves as a therapeutic target for drug discovery.

FDA - United States Food and Drug Administration.

Molecular Biology - General term referring to the study of the structure and function of proteins and nucleic acids.

New Drug Application (NDA) - An application to FDA for a license to market a new drug in the U.S. Sponsor companies submit NDAs after completing clinical trials on a new drug.

New Products - Cambrex defines new products as those that have been introduced in the past five years. The five year time frame reflects the typical elapsed time from when Cambrex starts to work with a client whose product is in clinical trials to the time the product receives regulatory approval and is sold commercially.

Nucleic Acid - A large molecule composed of nucleotide subunits.

Process Validation - Establishing, through documented evidence, a high degree of assurance that a specific process will consistently yield a product that meets predetermined specifications and quality characteristics.

Protein - The product of a specific gene, comprised of a polymer of amino acids.

Proteomics - The study of proteins and their interaction in biochemical pathways in states of health and disease.

RNA - Ribonucleic Acid.

Small Molecule - A molecule having a molecular weight generally less than 1,000 mass units. These molecules are generally produced by organic synthesis.

Targets - Specific points of drug intervention within pathways to block or augment a desired function.

Therapeutic - A treatment for a disease. May be chemical or biologic.

Validation - The establishment of documented evidence (for example, data derived from rigorous testing) that provides a high degree of assurance that a specific process or system will consistently yield a product meeting predetermined specifications and quality attributes.

Innovation: Bringing new ideas to our products

Exploring better ways of serving our

customers

Experience: Providing knowledge-based solutions

Performance: Delivering premium products and

services

Anticipating our customers' needs Exceeding their expectations

