

*Accelerating  
the Search  
for Cures*



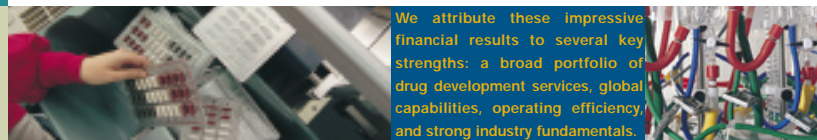
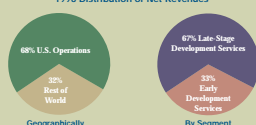
**COVANCE**  
THE DEVELOPMENT SERVICES COMPANY  
Shaping Solutions

## TO OUR SHAREHOLDERS

Once again, Covance is pleased to report that we achieved outstanding results for our shareholders, employees, and customers. In 1998, Covance delivered record revenue and earnings, and contributed to the development of innovative treatments for a broad range of medical conditions.



1998 Distribution of Net Revenues



We attribute these impressive financial results to several key strengths: a broad portfolio of drug development services, global capabilities, operating efficiency, and strong industry fundamentals.

### Consolidated Statements of Income Data

Year Ended December 31,

(Dollars in thousands, except per share amounts)

|                            | 1998       | Growth 98/97 | 1997       | Growth 97/96 | 1996                     | Growth 96/95 | 1995                     |
|----------------------------|------------|--------------|------------|--------------|--------------------------|--------------|--------------------------|
| Net Revenues               | \$ 731,574 | 23.9%        | \$ 590,651 | 19.4%        | \$ 494,828               | 20.9%        | \$ 409,174               |
| Income from Operations     | \$ 91,879  | 18.3%        | \$ 77,660  | 19.0%        | \$ 65,265 <sup>(1)</sup> | 25.1%        | \$ 52,177 <sup>(1)</sup> |
| Operating Income %         | 12.6%      |              | 13.1%      |              | 13.2%                    |              | 12.8%                    |
| Net Income                 | \$ 48,608  | 22.3%        | \$ 39,754  | 22.5%        | \$ 32,441 <sup>(1)</sup> | 20.2%        | \$ 26,996 <sup>(1)</sup> |
| Basic Earnings per Share   | \$ 0.84    | 21.7%        | \$ 0.69    | 21.1%        | \$ 0.57 <sup>(1)</sup>   | N/A          | N/A                      |
| Diluted Earnings per Share | \$ 0.83    | 20.3%        | \$ 0.69    | N/A          | N/A                      | N/A          | N/A                      |
| Weighted Average Shares:   |            |              |            |              |                          |              |                          |
| Basic                      | 58,050,114 |              | 57,254,042 |              | 57,063,644               |              | N/A                      |
| Diluted                    | 58,774,334 |              | 57,463,587 |              | N/A                      |              | N/A                      |

<sup>(1)</sup> Amounts exclude impact of special charges (1996 spin-off related charge of \$27,404 pre-tax, \$19,725 net of tax; 1995 restructuring charge of \$4,616 pre-tax, \$2,770 net of tax).

Covance, with headquarters in Princeton, NJ, is one of the world's largest and most comprehensive drug development services companies with 1998 revenues of approximately \$732 million, operations currently in 17 countries, and approximately 7,200 employees worldwide. Covance's purpose is to lead advancements in drug development through science, service, and shaping solutions.

For the full year ended December 31, 1998, Covance's net revenues grew 23.9% to \$731.6 million. Net income was \$48.6 million or 83 cents per share (diluted), up 22.3% compared to \$39.8 million or 69 cents per share (diluted) for the prior year. We attribute these impressive financial results to several key strengths: a broad portfolio of drug development services, global capabilities, operating efficiency, and strong industry fundamentals.

Full-year net revenues from Covance's early development services segment increased by 10.1% while the company's late-stage development services grew more rapidly at 31.9%. Covance also continued to experience strong revenue growth from both our domestic operations and operations outside of the United States. In 1998, net revenues generated from the company's businesses in the United States grew by approximately 24% to \$500.5 million over the prior year, while net revenues in Europe and the rest of the world grew by approximately 23% to \$231.1 million.

Strong industry fundamentals fueled by double-digit increases in pharmaceutical research and development (R&D) spending, and growing demand for outsourced drug development services, continued to contribute to the company's solid financial performance. For 1998, worldwide R&D spending was estimated at \$55 billion — more than double the figure from the beginning of this decade. Approximately two-thirds of this amount, or \$39 billion, was spent on drug development activities with more than \$5 billion outsourced to companies like Covance. Despite the significant increases in R&D spending over the past few years, the number of R&D personnel at top-tier pharmaceutical

companies has remained relatively flat. This suggests that pharmaceutical companies will need to outsource even more of their drug development activities.

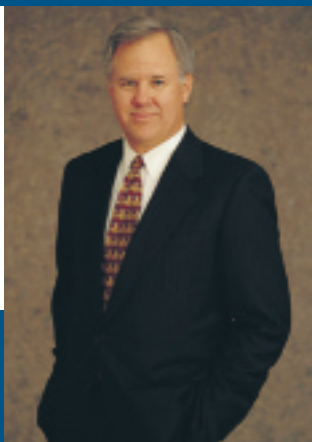
#### Enhancing a Strong Position

Covance devoted significant effort in 1998 to enhancing its strong position — by augmenting our therapeutic expertise and management talent, adding operating capacity and new capabilities, expanding our global presence, forging strategic customer relationships, and investing in innovation to accelerate the pace of drug development.

#### Augmenting Expertise and Management Talent

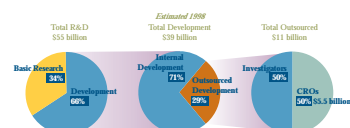
This year, Covance sharpened its competitive edge by expanding its pool of therapeutic expertise and management talent. We added nearly 20 physicians specializing in the leading areas of pharmaceutical R&D investment, such as neurology, cardiology, immunology, infectious diseases, oncology, and women's health. Nearly half of all compounds currently in development are concentrated in these therapeutic areas.

Covance is also pleased to report that Kathleen G. Murray, Executive Vice President and Chief Operating Officer of Northwestern Memorial Corporation, was appointed to our Board of Directors. Northwestern Memorial is a premier academic medical center and the flagship hospital of the greater Chicago healthcare system. Ms. Murray's extensive healthcare delivery background adds an important new dimension to our Board.



As pharmaceutical companies conduct an increasing number of multinational clinical trials, Covance's extensive global reach offers another competitive advantage.

### Strong Industry Fundamentals Growth Dynamics & Market Size



\*Estimate of Contract Research Organization (CRO) market available to Covance in 1998.

Our commitment to excellence in drug development continues to produce substantial benefits for our pharmaceutical customers and the patients they serve.

More recently, Covance appointed Paul H. Sartori, Ph.D. as Corporate Senior Vice President, Human Resources, an important step to maintaining effective management of our rapidly expanding global workforce. Dr. Sartori was formerly the Executive Vice President, External Affairs and Human Resources at Novartis Inc. By the end of 1998, Covance increased its workforce to approximately 7,200 employees worldwide, an increase of more than 20% over 1997.

#### Adding Operating Capacity and New Capabilities

To keep pace with market demand for high-quality drug development services, Covance added operating capacity and acquired new capabilities throughout 1998. The company commenced operations at a 45,000-square-foot packaging facility in Switzerland and currently is constructing a new 200,000-square-foot packaging facility in Pennsylvania. Covance also completed the construction of a 160,000-square-foot office building in New Jersey to accommodate growth in our clinical services business, and opened a new 112,000-square-foot laboratory and office building to expand our central laboratory operations in Indiana. In 1998, Covance's capital spending totaled \$75 million, a 33% increase over last year.

To expand preclinical capacity and enhance our early development capabilities, Covance acquired Berkeley Antibody Company, Inc. (BABCO) located in California. BABCO provides custom antibody production, applied immunology, and other preclinical services. This move will also improve Covance's access to the West Coast biotechnology community.

Covance augmented its late-stage capabilities by acquiring GD XI, Inc., a global provider of centralized electrocardiogram (ECG) analysis for clinical trials. A critical element of drug development, ECG analysis is performed in more than half of all clinical trials. This new service complements our central laboratory capabilities by enabling our clients to gather more of their clinical trial data in a centralized, efficient manner, and provides Covance another way to improve the speed of the clinical trial process.

#### Expanding Global Presence

As pharmaceutical companies conduct an increasing number of multinational clinical trials, Covance's extensive global reach offers another competitive advantage. In 1998, the company opened a new office in Beijing, China. In collaboration with the China Innovation Center for Life Sciences, an agency of the Chinese Ministry of Science and Technology, and leading Chinese pharmaceutical companies, Covance will be the first company to test traditional Chinese medicines for evaluation by the U.S. Food and Drug Administration. Covance also signed a letter of intent with the Ministry of Economic Affairs of the Republic of China (Taiwan) to further the development of drugs and medical devices in Taiwan.

In addition to our expansion in Asia, Covance enhanced its drug development capabilities in South Africa through a newly formed alliance with Clindev, an experienced and well-respected contract research organization in that country.

#### Forging Strategic Relationships

Approximately 55% of all drug development expenditures are made by the world's top 20 pharmaceutical companies. To better serve and anticipate the needs of this important customer group, Covance formed a dedicated Client Relations Group (CRG) in 1998. Led by senior executives, this group of professionals is focused on identifying opportunities to apply Covance's resources and expertise in all areas of drug development. The CRG also aims to create customized, value-added programs to meet the unique needs of the world's leading pharmaceutical companies.

#### Investing in Innovation

Covance's leadership extends to shaping solutions that address industry-wide issues that may prevent or slow the development of promising new compounds. Covance formalized its commitment to industry leadership by forming an internal resource known as Clinical Trials Research and Development. This dedicated team includes drug development and information technology specialists whose primary focus is to improve clinical data collection and analysis, and ultimately streamline the entire drug development process.

While the pharmaceutical industry has more new drug candidates in its R&D pipeline than ever before, few companies have sufficient financial resources and infrastructure to develop all of them. To offer pharmaceutical companies a solution to overcome these constraints, Covance entered into a strategic alliance with Proliance Pharmaceuticals, Inc. (Proliance). Proliance, a collaborative drug development company established in 1998, seeks to provide innovative project management and financing services to allow more molecules to reach the marketplace. As a preferred

provider, Covance will help Proliance rapidly and efficiently move compounds through the development process.

#### Partnering for Lasting Value

Our commitment to excellence in drug development continues to produce substantial benefits for our pharmaceutical customers and the patients they serve. Notably, Covance helped Genentech rapidly develop Herceptin®, the first breast cancer therapy targeting a gene defect. Covance was also involved in the development of Viagra®, and is currently assisting Eli Lilly and Company in a landmark global study to evaluate the cardiovascular benefits of Evista® in postmenopausal women.

In the year ahead, we will continue to strengthen our core drug development capabilities and identify new services that will better enable Covance to serve its pharmaceutical customers by "Accelerating the Search for Cures." We move forward with confidence in our ability to continue to deliver exceptional results and provide lasting value for all of our stakeholders.

On behalf of our Board of Directors and fellow employee-shareholders around the world, we thank you for your support and commitment to Covance as we continue to lead advancements in drug development through science, service, and shaping solutions.

Sincerely,

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Christopher A. Kuebler  
Chairman, President and Chief Executive Officer

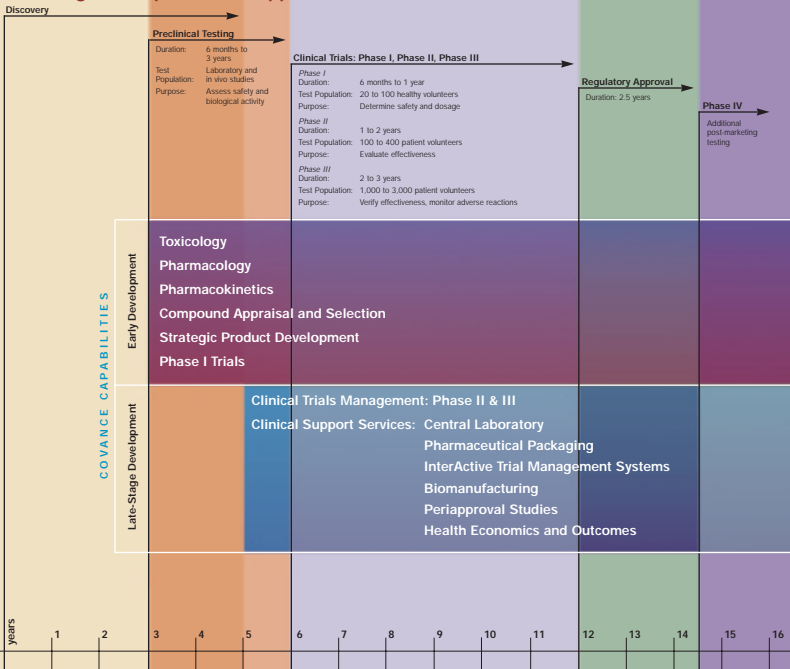
# DYNAMICS

of Drug Development

## Factors Driving Drug Development Outsourcing

- It can take up to 15 years and \$500 million to develop a new major therapy.
- Pharmaceutical companies have more promising compounds in their R&D pipelines than ever before, due to new drug discovery technologies.
- Pharmaceutical companies need to develop drugs faster to maximize patent protection and secure marketplace advantage.
- Sophisticated therapeutic and regulatory expertise is needed to successfully develop a compound.
- Companies must market globally to sufficiently recoup their R&D investments.
- It is risky for pharmaceutical companies to increase their R&D overhead and infrastructure due to the inherent uncertainty of R&D pipeline results.

## The Drug Development and Approval Process in the '90s



## DYNAMICS OF DRUG DEVELOPMENT

Drug development is a complex activity that involves a vast array of talents and resources. The process requires medical and laboratory expertise, as well as a variety of specialists in toxicology, preclinical evaluation, clinical trial design and implementation, and biologics production. Data and information systems managers maintain the flow of information to the world's regulatory bodies, while specialists in health economics and other fields may be consulted to interpret and prepare the market into which new drugs will be introduced.

### Time and Resources

Today's drug development process has evolved through decades of scientific and technological innovation aimed at improving the safety and efficacy of new drugs before they come to market. As a consequence, it can take up to 15 years and \$500 million to bring a new therapy from discovery to market. Pharmaceutical companies are employing sophisticated technologies and strategies to optimize this enormous investment and to ensure expanded access to new therapies. For example,

- Applying revolutionary drug discovery techniques, such as genomics, combinatorial chemistry, and high-throughput screening, to enrich the product pipeline with a wide variety of promising therapeutic compounds;
- Developing products that fill unmet therapeutic needs;
- Conducting multinational clinical development programs in preparation for global regulatory review and, ultimately, marketing; and
- Performing economic analyses to pave the way for reimbursement of new products.

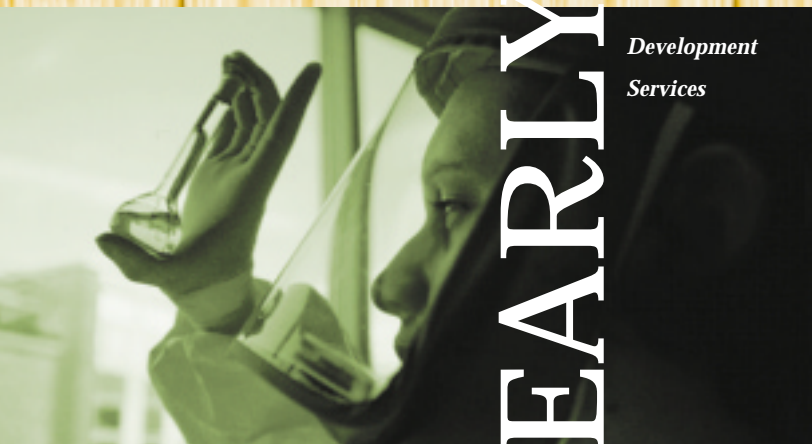
These strategies have been successful. In the past two years, the pharmaceutical industry has brought more than 100 new medicines to patients, representing an unprecedented number of approvals of new drugs and biologics. To maintain this momentum and more effectively manage the vast potential of their discovery programs, pharmaceutical companies are also recognizing drug development outsourcing as another key R&D strategy. Through strategic outsourcing with Covance, pharmaceutical

companies can access additional therapeutic and regulatory expertise, extensive preclinical and clinical drug development experience, and state-of-the-art technology — without adding the associated fixed costs. With expertise and experience in every phase of drug development and the ability to conduct clinical trials around the world, Covance truly is a leader in its field.



**Accelerating the Search for Viable Compounds**

Breakthrough medical therapies are not simply discovered; they are painstakingly nurtured, refined, and improved until they are proven safe and effective for patients.



This process begins in the early stages of development, when preclinical and Phase I (early human) studies assess the safety and efficacy of a newly discovered therapeutic compound.

How important is this aspect of drug development? Consider the risks of initiating large-scale human clinical trials before the safety profile of a new compound is understood. Imagine the tremendous resources that would be wasted if a compound continued through the pipeline, only to be abandoned later in development. Think of the potential that would be lost if a promising new drug

candidate languished on the shelf of a laboratory.

Covance has a keen understanding of the high stakes involved at this stage of development. With approximately one million square feet of preclinical research facilities in the United States, the United Kingdom, and Germany, and experts in toxicology (safety), pharmacology (compound properties), and pharmacokinetics (absorption, distribution, metabolism, and excretion), Covance can help companies assess the safety and potential therapeutic value of a compound in its infancy.

To improve the specificity and quality of preclinical data, Covance uses state-of-the-art technologies, such as highly specific autoradiography, which surpasses traditional methods for determining the distribution of compounds in tissues. Covance is also a leader in the use of transgenic technology to enhance safety assessments and is developing new methods of screening compounds for mutagenicity and carcinogenicity.

Results of early inquiries about the safety of a new drug candidate can be applied directly to the design and implementation of initial clinical studies in healthy

human volunteers. Covance maintains ISO 9001 certified Phase I testing facilities in the United States and the United Kingdom, and a comprehensive database of volunteers to speed enrollment in these trials. The database encompasses healthy volunteers, as well as a variety of people with special conditions and characteristics, such as the elderly, post-menopausal women, and people with diseases such as HIV or hypertension. In 1998, Covance conducted more than 80 Phase I studies, involving more than 1,600 people worldwide.

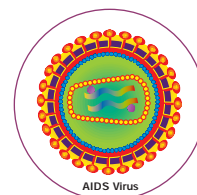


*Preclinical assessments of a new medicine's safety are crucial to making decisions about clinical development plans. Improving the quality and specificity of preclinical data can save time and money throughout the remainder of the drug development process.*

#### Global Early Development Facts

In 1998, an estimated \$16 billion or 40% of total drug development spending was for early development (preclinical through Phase I evaluation).

There were approximately 5,400 new compounds in preclinical evaluation worldwide during 1998, up nearly 10% from 1997.



AIDS Virus



To maximize the benefit of these services, Covance has pioneered a multidisciplinary approach to early drug development known as Strategic Product Development (SPD). SPD programs match experts in toxicology and pharmacology with specialists in clinical development and regulatory affairs to collaborate on the rapid preparation of a therapeutic compound for human clinical trials. This approach has been shown to compress early development timeframes, allowing drug companies to expedite strategic development decisions before making additional investments in the clinical development program. Covance's success in accelerating early drug development programs has cultivated a

growing interest in these services. Since 1995, Covance has conducted more than 50 such projects across 17 therapeutic areas.

#### Selecting the Right Compound

One of the most important decisions faced by pharmaceutical companies involves narrowing the number of new drug candidates by focusing on a "lead" therapeutic compound. With expertise in compound assessment and selection, Covance provides a variety of computer- and laboratory-based technologies to help drug companies evaluate the merits of each compound and rapidly identify a leading candidate.

#### Shaping Solutions for Rapid Results

"One of our customers had discovered a new anti-epilepsy compound with relatively few side effects. By conducting several research steps simultaneously in the United Kingdom and in North America, the SPD group was able to accelerate the early development stage of this exciting discovery by more than two months."

David Brown, Ph.D.,  
Covance Strategic Product Development Leader,  
Europe and Asia

Recently, Covance used its expertise to assess the relative safety and possible efficacy of a group of TNF-alpha inhibitors. These compounds may be able to prevent wasting syndrome in people with cancer and AIDS by blocking the immune system's reaction to these diseases. Specialized screening systems allowed Covance scientists to efficiently evaluate the permeability and toxicity of each candidate. Just two months after Covance began its assessment, one therapeutic compound clearly emerged as the leader and a development program was quickly initiated.



Development  
Services

# LATE-STAGE

## Accelerating the Search for Successful Therapies

Once early development studies are completed, the information learned from this process allows a pharmaceutical company to make the next critical decision: whether to proceed with the clinical development of a therapeutic compound.



### Shaping Solutions for Success

"Clinical trials often take unpredictable twists and turns, so Covance has to be flexible and prepared at all times. When results of a 14-country oncology trial showed a clear benefit earlier than expected, it was important for us to wrap up



A compound may pass the "go/no-go" decision if preclinical and Phase I studies show that it is safe and effective. But much more information — both financial and logistical — must be considered before committing a compound to further development:

- How will the company produce enough material to conduct its clinical trials?

- Does it have the expertise and resources to manage the complex logistics required to conduct a global clinical study?
- Does it have the potential to fill a void in a particular therapeutic area?
- How cost-effective is the new compound compared to other available treatments?

Covance can help a company answer these questions by evaluating all available scientific evidence, and offering a comprehensive range of clinical trial management and clinical support services to address the financial and logistical challenges of this commitment. In addition, Covance continually seeks innovative ways to enhance efficiency and quality at every phase of development, which can save our customers valuable time and money.

our data collection for final analysis. Covance was able to provide final data to the client six months ahead of schedule by tracking patient data on a daily basis and implementing data retrieval and review procedures that reduced the incidence of errors and improved the quality of clinical data."

Pat Devitt, Pharm.D.,  
Covance Clinical  
Development

**Success Story: Herceptin®**

"While assisting in the development of Herceptin®, Covance accessed the expertise of its Tumor Evaluation Committee to evaluate tumor response data as each case was completed. This group of independent experts in radiology and oncology provided confirmation of tumor response to therapy using a uniform set of guidelines that were



developed with the input of advisors to the U.S. Food and Drug Administration. This approach helped Genentech quickly demonstrate how their new breast cancer therapy worked. We are proud that Covance's expertise and experience helped accelerate the availability of this revolutionary treatment for patients suffering with breast cancer."

Mark Russo, M.D., Ph.D.,  
Covance Clinical  
Development

**Clinical Trials Management**

The decision to initiate Phase II and III clinical trials is a major turning point in the development of a new therapy — and represents an enormous commitment of resources.

To manage a project of this magnitude and complexity, Covance draws on its broad knowledge and experience — from clinical trial design and execution, to the preparation and submission of data to regulatory authorities in multiple countries. With clinical trial experts located

in 20 offices worldwide, Covance has one of the most experienced teams devoted exclusively to Phase II and III clinical trials.

In addition, the company employs more than 60 medical specialists in major research areas such as cardiology, immunology, infectious diseases, internal medicine, neurology, oncology, osteoporosis, women's health, and human pharmacology. These experts help guide decisions about clinical endpoints and other critical aspects of trial design.

**Success Story: Viagra®**

"Recently, Covance was involved in pivotal trials of the first oral medication for erectile dysfunction. Our global capabilities and flexibility allowed us to achieve maximum efficiency, which saved our customer valuable time in the collection and submission of clinical data. For example, we were able to allocate our staff wherever needed, whether in Europe



or the United States. To improve efficiency in the clinical research and data management process, Covance combined clinical and data management staff on the same team. Ultimately, we were able to help our customer meet their aggressive timetables. This important new therapy is now being marketed under the name Viagra®."

Ken Watters, M.D.,  
Covance Clinical  
Development

"The success of clinical trials largely depends on the efforts of investigators who enroll, treat, and monitor clinical study participants. Covance maintains databases of thousands of investigators to facilitate the rapid initiation of clinical studies and help ensure high-quality results.

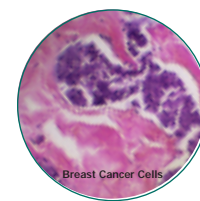
Covance's integrated data management systems can enhance the efficiency of the clinical development process — speeding enrollment, delivering data, and transcribing results with precision. For example, the company's "Sherlock" comput-

er system sleuths out inconsistencies and ambiguities in clinical data. "Sherlock," which has been used in more than 200 clinical trials, permits real-time analysis of data anywhere in the world.

**Clinical Support Services**

Each step of the clinical trial process requires a significant amount of coordination and support. Investigators must enroll patients, administer the study drug, and collect extensive information about each patient's reaction to the drug — including therapeutic effects and adverse events.

Covance creates customized sample collection kits which contain all of the materials and step-by-step instructions an investigator needs to gather specimens and return them to Covance for analysis.



Laboratory technicians must examine tissue and fluid specimens; information systems specialists must rapidly transfer data from place to place; and the study drug must be packaged and delivered to each site on schedule.

Covance orchestrates this complex process through specialized services that support the clinical trial process, including its central laboratory, pharmaceutical packaging, and other technical capabilities. Covance also provides contract biomanufacturing services to support our customers' growing

investment in biotechnology-based products.

**Central Laboratory**

With capabilities on four continents, Covance's central laboratory is the largest in the world dedicated exclusively to outsourced drug development. Our strategically located sites employ more than 1,400 scientists, technical specialists, and other support personnel to examine clinical study samples and combine data rapidly and accurately with information from a variety of sources.



**Global Clinical Development Facts**

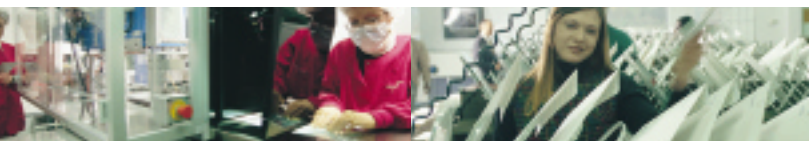
Almost half of all drug development spending is currently for Phase II, III, and IV clinical development.

More than 2,200 new drug candidates were in human clinical trials at the beginning of 1998.

For drugs approved between 1990-1995, the average clinical development time increased 20% — to nearly 7 years compared to 5.5 years for the average drug during the 1980's.

Today, a pharmaceutical company will perform, on average, an estimated 80 clinical trials involving 5,000 patients for each new drug application. This is approximately double the number of trials and patients from only a decade ago.

*Covance provides innovative information technology-based services that allow customers to more efficiently manage their clinical studies and to improve the exchange of important real-time clinical trial information.*



Information technology plays a key role at Covance's central laboratories — delivering data, managing specimens, and transcribing results with precision. For example, Covance's data access tool (CoAxxess™) allows clients from around the world to obtain real-time updates on their clinical trials using a special Covance server. Another high-tech tool — the SMART™ system, an acronym for specimen management, allocation, referral, and tracking — helped Covance manage more than

two million medical specimens globally in 1998.

Covance's laboratory professionals are also highly skilled in advanced laboratory techniques to make the clinical trial process more targeted and effective. Covance was the first in its field to develop and work with an automated polymerase chain reaction (PCR) assay — a technique which generates billions of copies of a gene or nucleic acid sequence to enhance efficiency and improve consistency of clinical trial results.

During a clinical trial, PCR can be used to obtain a clearer picture of the amount of virus carried by individuals before, during, and after the study drug is administered. PCR, coupled with genotyping, may also be used to predict responses to a particular drug under development.

**Pharmaceutical Packaging**

In clinical trials, the right package design can ease drug administration, eliminate waste, and even improve the integrity of clinical data. Recognizing this critical success factor, Covance offers clients an experienced team of packaging specialists who are trained to meet the needs of the clinical trial protocol.

At Covance's three packaging facilities — in the United States, the United Kingdom, and Switzerland — our experts design and develop

the packaging for and manage the distribution of clinical supplies. Covance also uses robotic technology and sophisticated visual monitoring systems to ensure quality.

The packaging and labeling requirements for large global clinical studies can be highly complex. For example, a recent study managed by Covance presented substantial hurdles because of the large number of countries involved in the program and the different labeling requirements needed in each of them. The study drug also had to be

re-tested every six months, and the expiration date on the label changed each time it was tested.

To address these issues, Covance designed a multilingual "booklet label" that covered all regulatory requirements for each country. In addition, Covance's computerized labeling process provided on-time, country-specific labeling when the clinical supplies were prepared for shipment.

**InterActive Trial Management Systems**

Covance offers interactive services to randomize and monitor patient enrollment in clinical trials, track adverse event occurrences, and ensure "just-in-time" delivery of clinical drug supplies. Our 24-hour interactive voice response (IVR) technology provides customers around the world with critical clinical trial information in 25 languages. This real-time data helps pharmaceutical companies make rapid and more informed decisions about

whether to add or delete a treatment step in the protocol, or to continue, modify, or end a study.

Interactive voice technology can also improve patient compliance, which can significantly effect the progress of a clinical study. By utilizing a touch-tone system for patients to record their diaries, Covance achieved a compliance rate of more than 97% in a hormone replacement therapy trial. In 1998, the Covance IVR system was used to collect more than 300,000 patient diary entries.

### Biotechnology Benchmarks

In 1998, the United States biotech industry spent \$9 billion in R&D.

To date, more than 80 biotechnology medications and vaccines have been approved in the United States.

Nearly 350 biotech-based drugs and vaccines are currently in human clinical trials.

There are 1,275 biotech companies in the United States.

*Covance uses state-of-the-art bioreactors to manufacture biopharmaceuticals for clinical research and commercial supply.*

### Success Story: StressGen

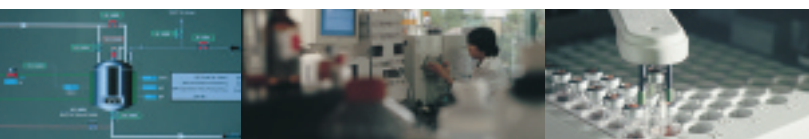
"Moving our cervical dysplasia therapeutic into clinical trials was a major step for our company. However, we did not have the facilities to produce this recombinant protein in sufficient quantities for our studies. Covance,

with its state-of-the-art biomanufacturing facility and experienced production team, provided the solution we needed. Entering into a contract manufacturing agreement with Covance allowed us to focus our energies on product development, while the Covance scientists handled production."

Marvin Siegel,  
Vice President of Research and Development, StressGen Biotechnologies Corporation

evaluation, clinical development, commercial launch, and beyond.

In 1998, the development of EntreMed, Inc.'s antiangiogenesis-based cancer therapy, Endostatin™ protein, was advanced through a manufacturing agreement with Covance to produce enough recombinant protein to complete preclinical studies and commence human clinical trials. Covance also produced StressGen Biotechnologies Corporation's recombinant protein for clinical studies on its cervical cancer vaccine.



### Biomanufacturing

Advances in biotechnology have enabled scientists to develop medicines that use proteins, enzymes, antibodies, and other substances naturally produced in the human body to fight infections and diseases, as well as to correct genetic disorders. However, manufacturing biotechnology-based compounds is a challenging and capital-intensive undertaking.

By working with Covance, biotechnology and traditional pharmaceutical companies can advance the development

of biotech compounds without investing in high-cost equipment and specialized production staff.

In 1997, Covance opened a state-of-the-art 109,000-square-foot process development and Good Manufacturing Practice (GMP) facility in Research Triangle Park, North Carolina.

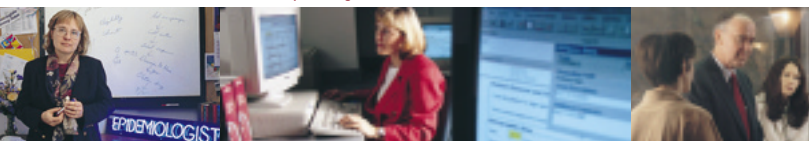
Combining scientific expertise with business acumen, Covance can provide customers with a variety of biological cell replication systems to produce biologic compounds for preclinical



*Covance experts like Harris Koller, Pharm.D., and leaders of his Clinical Trials Research and Development team, such as Iris Houllhan, continually examine and redesign the clinical trial process to streamline drug development from start to finish.*

#### Shaping Solutions for Success

"Development does not end when a new drug is approved. Many of our customers agree that periapproval studies provide valuable information that is unobtainable during traditional clinical trials. For example, rigorous



#### Periapproval Studies

Clinical trials can answer basic scientific questions about the efficacy and tolerance of a new therapy. However, a variety of factors not studied in clinical trials can challenge the safety, effectiveness, and availability of a treatment. For example, patients may be taking several other medications when they initiate therapy with a new product, increasing the risk of drug interactions. Further, a complicated or lengthy dosing regimen could hinder compliance with therapy.

adverse event monitoring may identify a rare safety problem before millions of people use the drug. These studies may help pinpoint the cause of the adverse event, which may have nothing to do with the drug itself. This information can mean the difference between modifying the product labeling and recalling the drug from the market."

**James Bannon, Pharm.D.,**  
Covance Periapproval Services

Many companies have expanded development to include periapproval studies that analyze the real-world use and commercial appeal of a new therapy. These studies can shed light on numerous issues that may be encountered as a new product reaches the market.

The phrase "periapproval studies" refers to clinical studies that are performed after Phase III data have been completed and submitted to regulatory authorities. Periapproval studies, including Phase IV studies, pick up where Phase III leaves off, seeking to analyze or resolve

outstanding safety and effectiveness questions across a broad spectrum of patients. These trials include simplified safety and effectiveness studies and market acceptance research. Periapproval studies also include compassionate-use programs for patients with life-threatening diseases who are awaiting approval of a new drug.

By blending its medical expertise and market knowledge, Covance excels in performing these high-volume studies quickly and efficiently. Access to thousands of healthcare practitioners in a variety of

medical specialties enables Covance to examine complex issues in the context of the everyday practice of medicine. Our specially trained team of nurses and physicians monitor and report more adverse events each year than most major drug companies. State-of-the-art optical scanning systems simplify the compilation of vast amounts of data. In 1998, more than 25,000 patients were enrolled in periapproval studies, and more than 1.2 million pages of patient data were reviewed and analyzed.

#### Health Economics and Outcomes

In today's world of managed care and managed costs, economics play an increasingly important role in the acceptance of a new therapy among payers, physicians, and patients. Health insurers may be unwilling to pay for a new treatment if its benefits are not apparently justified by the cost.

Covance's specialists in health economics are adept at identifying challenges to launching a new product in a cost-constrained environment. Having created more than

200 reimbursement programs and published studies in more than 50 peer-reviewed publications, Covance has the experience required to analyze and communicate the economic benefits of a new therapy, and speed its acceptance in the medical community.

Recently, Covance formed the Payer Alliance Group™ to help customers secure appropriate coverage and reimbursement for innovative medical therapies by bridging the communications gap between pharmaceutical manufacturers and payers.

for a new class of therapy for rheumatoid arthritis and to provide a turnkey hotline service to clarify these options for patients and physicians. By anticipating reimbursement problems in advance, and helping patients access their insurance benefits after launch, more patients will benefit from this new product when it becomes commercially available."

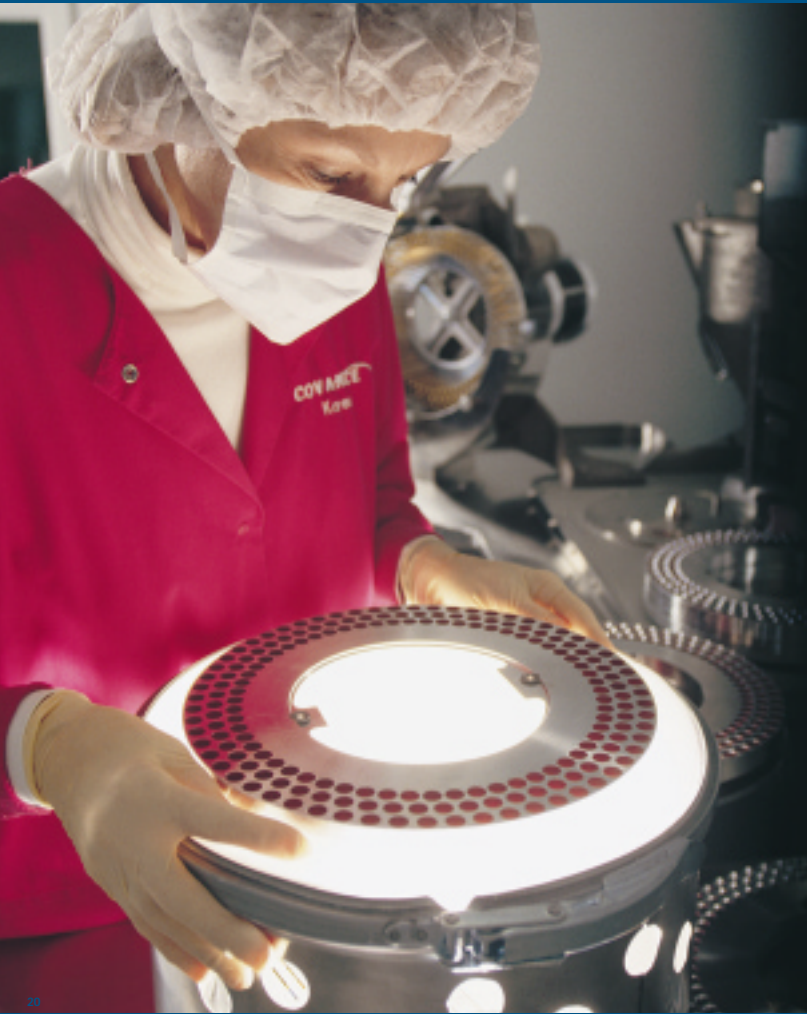
**Luis Gutierrez, Jr.,**  
Covance Health Economics and Outcomes Services



#### Shaping Solutions for Success

"Based on Covance's substantial biotechnology experience, one of our clients asked us to formulate and implement a strategy to optimize reimbursement options

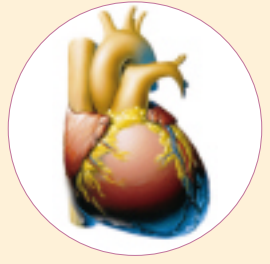




# A CASE STUDY: ADVANCING *the health of women*

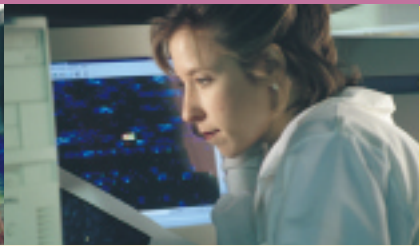
### THE RUTH "MEGA-TRIAL"

Pharmaceutical companies are investing more resources in women's health research than ever before. This expanded focus on women's health makes good medical and business sense. Women today are living about one-third of their lives after menopause, a group at particularly high-risk for serious illnesses. In addition, research indicates that women make up to 75% of all household healthcare-spending decisions, and are increasingly interested in preventative care.



"RUTH is unique as a clinical initiative because of its size, scope, duration, and scientific significance. This study may dramatically improve understanding of health issues affecting women across many cultures."  
Pamela W. Anderson, M.D.,  
Eli Lilly and Company





"Flexibility is extremely important in effectively managing a clinical trial such as RUTH. Covance's experience and technological resources will help us monitor each clinical trial site, and allow us to determine whether changes or adjustments need to be made early in the clinical trial. The ability to identify potential problems and shape solutions immediately is a real plus that can produce meaningful time-savings and ensure the rapid delivery of credible health information to patients and physicians."

Fiona Ogborn, Covance Global Project Director



Covance has participated in nearly 1,000 studies and clinical trials to develop new therapies for the treatment of diseases that affect a disproportionate number of women, including breast cancer and osteoporosis. Now, Covance is assisting Eli Lilly and Company (Lilly) in a landmark study in women's health called RUTH, an acronym for "Raloxifene Use for the Heart." This multi-year "mega-trial" will involve more than 10,000 women in 26 countries and will test the ability of a new drug to reduce the risk for heart disease.

Discovered and marketed by Lilly as Evista®, raloxifene hydrochloride is a selective estrogen receptor modulator (SERM). It has been shown to prevent bone loss in postmenopausal women, without evidence of increased risk of breast or uterine cancer. In addition, preliminary studies have shown that raloxifene favorably altered several markers of cardiovascular disease, including LDL or "bad" cholesterol.

Now, RUTH will build on this preliminary data and assess whether long-term use of raloxifene reduces the incidence of coronary death and non-fatal heart attack in postmenopausal women. Other medically significant endpoints, such as the change in the incidence of breast cancer and bone fractures, will also be evaluated during the study.

**Translating Science into Medicine**

To help translate this science into medicine as rapidly as possible, Lilly turned to Covance for its medical expertise and experience in conducting global clinical trials. Covance has participated in nearly 250 cardiovascular trials, involving more than 35,000 patients around the world.

In addition, Covance's ability to provide integrated clinical trial support services — such as central laboratory and pharmaceutical packaging — to facilitate clinical trial operations made Covance a natural choice to assist with such a complex study.

Evista® is a trademark of Eli Lilly and Company.



**RUTH Facts**

RUTH is the largest privately funded clinical trial investigating women's health ever conducted.

Nearly 200 clinical trial sites in 26 countries will participate in the double-blinded, randomized, placebo-controlled trial.

RUTH is expected to enroll more than 10,000 women.

As many as 60,000 women may be screened to qualify for participation in the study.

**Shaping Solutions for Success**

*Covance and Lilly are taking a highly integrated approach to managing the entire clinical trial process. A project steering committee (shown above) — which includes Covance and Lilly personnel, as well as a representative from each of the 26 countries participating in the project — promotes a timely exchange of ideas and fosters a commitment to the project.*

**Service Under a Microscope**

Routine blood tests analyzed by Covance on behalf of Lilly during earlier osteoporosis trials revealed that raloxifene lowered cholesterol, a known risk factor for heart disease. For RUTH, Covance will measure total cholesterol levels from more than 60,000 blood samples.

To effectively manage this major task, Covance created a customized collection kit, which contains all of the test tubes and step-by-step instructions an investigator needs to gather specimens and return them to Covance for analysis. Investigators can send specimens to one of the labs that is closest to them, in the United States, Europe, or South Africa. These specimens will be analyzed and the data will be entered into a specially designed database. By controlling the laboratory process in-house, and by manufacturing, distributing, and receiving the kits, Covance can significantly reduce the potential for errors, and ensure consistency in laboratory analyses.

Covance is also using state-of-the-art data and drug management technologies to improve accuracy and efficiency in reporting RUTH data and fulfilling the clinical trial inventory needs. A centralized data tracking system will streamline the processing of vast amounts of clinical data from almost 200 sites worldwide. Optical scanning will allow rapid data transfer from clinical trial sites to a computerized data center, where results can be input in minutes. Covance robotic packaging technology, combined with an interactive voice-response system, will handle "just-in-time shipment" of study medications to clinical sites, and speed packaging while minimizing inventory waste.

## DIRECTORS & EXECUTIVE OFFICERS



### Board of Directors (photographed from left to right)

**Nigel W. Morris**, President and COO  
Capital One Financial Corporation; Corporate Governance Committee  
Compensation and Organization Committee

**J. Randall MacDonald**, Executive Vice President  
Human Resources & Administration  
GTE Corporation; Corporate Governance Committee  
Compensation and Organization Committee

**Van C. Campbell**, Vice Chairman  
Coming Incorporated; Audit and Finance Committee

**Robert M. Baylis**, Retired Vice Chairman  
CS First Boston Corporation; Audit and Finance Committee

**Christopher A. Kuebler**, Chairman of the Board,  
President and Chief Executive Officer  
Covance Inc.; Corporate Governance Committee

**Kathleen G. Murray**, Executive Vice President and COO  
Northwestern Memorial Corporation; Corporate Governance Committee

**William G. Ughetta**, Retired Senior Vice President and General Counsel  
Coming Incorporated; Audit and Finance Committee  
Corporate Governance Committee

**Irwin Lerner**, Retired Chairman of the Board and Executive Committee  
Hoffmann-LaRoche Inc.; Compensation and Organization Committee

### Executive Officers

**Christopher A. Kuebler**, Chairman of the Board,  
President and Chief Executive Officer

**Richard J. Andrews**, Corporate Senior Vice President and  
President, Client Relations Group – Europe

**Charles C. Harwood, Jr.**, Corporate Senior Vice President and  
Chief Financial Officer

**Jeffrey S. Hurwitz**, Corporate Senior Vice President,  
General Counsel and Secretary

**Kim D. Lamon, M.D., Ph.D.**, Corporate Senior Vice President and  
Group President, Clinical Development Services

**James D. Utterback**, Corporate Senior Vice President and  
President, Client Relations Group – North America and Asia

**Paul H. Sartori, Ph.D.**, Corporate Senior Vice President,  
Human Resources

**Michael G. Wokasch**, Corporate Senior Vice President and  
Group President, Early Development Services

## SELECTED FINANCIAL DATA

### Year Ended December 31,

| (Dollars in thousands, except per share data)   | 1998       | 1997       | 1996                     | 1995                     | 1994       |
|---|------------|------------|--------------------------|--------------------------|------------|
| <b>Income Statement Data:</b>                   |            |            |                          |                          |            |
| Net revenues                                    | \$ 731,574 | \$ 590,651 | \$ 494,828               | \$ 409,174               | \$ 319,501 |
| Costs and expenses:                             |            |            |                          |                          |            |
| Cost of revenue                                 | 484,128    | 389,785    | 324,345                  | 270,726                  | 213,490    |
| Selling, general & administrative               | 117,844    | 92,329     | 80,014                   | 64,201                   | 48,892     |
| Depreciation and amortization                   | 37,723     | 30,877     | 25,204                   | 22,070                   | 18,520     |
| Spin-off related charge                         |            |            | 27,404                   |                          |            |
| Restructuring charge                            |            |            |                          | 4,616                    |            |
| Total   | 639,695    | 512,991    | 456,967                  | 361,613                  | 280,902    |
| Income from operations                          | 91,879     | 77,660     | 37,861 <sup>(a)</sup>    | 47,561 <sup>(a)</sup>    | 38,599     |
| Other expense, net:                             |            |            |                          |                          |            |
| Interest expense, net                           | 7,361      | 8,314      | 6,791                    | 5,269                    | 4,307      |
| Other expense (income)                          | 373        | 167        | 1,116                    | (784)                    | (712)      |
| Other expense, net                              | 7,734      | 8,481      | 7,907                    | 4,485                    | 3,595      |
| Income before taxes and equity investee results | 84,145     | 69,179     | 29,954 <sup>(a)</sup>    | 43,076 <sup>(a)</sup>    | 35,004     |
| Taxes on income                                 | 35,099     | 29,367     | 17,377                   | 18,445                   | 14,924     |
| Equity investee loss (gain)                     | 438        | 58         | (139)                    | 405                      | 435        |
| Net income                                      | \$ 48,608  | \$ 39,754  | \$ 12,716 <sup>(a)</sup> | \$ 24,226 <sup>(a)</sup> | \$ 19,645  |
| Basic earnings per share                        | \$ 0.84    | \$ 0.69    | \$ 0.22 <sup>(a)</sup>   | N/A                      | N/A        |
| Diluted earnings per share                      | \$ 0.83    | \$ 0.69    | N/A <sup>(a)</sup>       | N/A                      | N/A        |
| <b>Balance Sheet Data:</b>                      |            |            |                          |                          |            |
| Working capital                                 | \$ 81,488  | \$ 59,488  | \$ 65,946                | \$ 18,472                | \$ 12,961  |
| Total assets                                    | \$ 593,415 | \$ 484,014 | \$ 451,047               | \$ 322,510               | \$ 271,992 |
| Long-term debt                                  | \$ 149,909 | \$ 132,423 | \$ 163,000               | \$ 89,836                | \$ 75,178  |
| Stockholders' equity                            | \$ 225,015 | \$ 157,057 | \$ 110,704               | \$ 82,517                | \$ 63,908  |
| <b>Other Financial Data:</b>                    |            |            |                          |                          |            |
| Gross margin                                    | 33.8%      | 34.0%      | 34.5%                    | 33.8%                    | 33.2%      |
| Operating margin                                | 12.6%      | 13.1%      | 13.2% <sup>(a)</sup>     | 12.8% <sup>(a)</sup>     | 12.1%      |
| Net margin                                      | 6.6%       | 6.7%       | 6.6% <sup>(a)</sup>      | 6.6% <sup>(a)</sup>      | 6.1%       |
| Current ratio                                   | 1.42       | 1.35       | 1.43                     | 1.15                     | 1.12       |
| Debt to capital                                 | 0.40       | 0.46       | 0.60                     | 0.52                     | 0.54       |
| Book value per share                            | 3.88       | 2.74       | 1.94                     | N/A                      | N/A        |
| Net days sales outstanding                      | 55         | 48         | 50                       | 47                       | 33         |

(a) Excluding the impact of the fourth quarter 1996 one-time spin-off related charge totaling \$27,404 (\$19,725 net of tax), income from operations, income before taxes and equity investee results and net income for the year ended December 31, 1996 were \$65,265, \$57,358 and \$32,441, respectively, and basic earnings per share ("EPS") was \$0.57.

(b) Excluding the impact of the second quarter 1995 restructuring charge totaling \$4,616 (\$2,770 net of tax), income from operations, income before taxes and equity investee results and net income for the year ended December 31, 1995 were \$52,177, \$47,692 and \$26,996, respectively.

(c) Since Covance common stock began "regular way" trading on the NYSE on January 14, 1997, computation of diluted EPS for 1996 is not possible.

(d) Operating margin and net margin exclude the impact of the fourth quarter 1996 one-time spin-off related charge. Including the impact of this charge, operating income and net margin were 7.7% and 2.6%, respectively.

(e) Operating margin and net margin exclude the impact of the second quarter 1995 restructuring charge. Including this charge, operating income and net margin were 11.6% and 5.9%, respectively.

# PURPOSE AND PRINCIPLES



**Our Purpose**

To lead advancements in drug development through science, service, and shaping solutions.

**Our Principles**

Our principles guide our behavior and state our aspirations:

***Pursuit of growth and profit***

Growth and profit are measures of our corporate strength. We emphasize revenue growth and profit growth in order to invest in our business, provide opportunities for individual advancement, and deliver long-term value for our customers and shareholders.

***Quality and customer service***

We are committed to continuous, measurable improvement in the services we provide and to enhancing their value for our customers. To do this, we take an active interest in thoroughly understanding and meeting our customers' needs.

***Respect for the individual***

Respect and appreciation for each person's dignity, safety, differences, and work/life balance are vital. We treat our colleagues, customers, and suppliers as we expect to be treated.

***Scientific excellence***

Rigor in the application of science is our standard. We explore all scientific approaches that increase the value of our services to our customers.

***Integrity and personal responsibility***

The actions of every individual matter. Each of us has a responsibility to do the right thing in all circumstances. We honor all of our commitments.

***Innovative thinking***

Shaping solutions requires thinking beyond the obvious. We strive to create the best possible outcome for every project and we pursue fundamental improvements in the drug development process.

***Collaboration and teamwork***

Our greatest contributions arise from connecting with our customers, our communities, and each other. Every interaction is an opportunity to build enduring relationships based on mutual respect and understanding. Effective communication is an inherent part of these relationships.

**Market Prices of Common Stock**

The Company's Common Stock is traded on the New York Stock Exchange (symbol: CVD). The following table sets forth the high and low sales prices on the New York Stock Exchange since January 14, 1997, when the Company's Common Stock commenced trading on a "regular way" basis.

| Quarter             | High     | Low      |
|---------------------|----------|----------|
| First Quarter 1997  | \$22.875 | \$15.500 |
| Second Quarter 1997 | \$20.625 | \$14.625 |
| Third Quarter 1997  | \$23.187 | \$18.125 |
| Fourth Quarter 1997 | \$22.750 | \$17.063 |
| First Quarter 1998  | \$24.875 | \$17.688 |
| Second Quarter 1998 | \$24.750 | \$20.125 |
| Third Quarter 1998  | \$28.875 | \$21.625 |
| Fourth Quarter 1998 | \$29.563 | \$23.375 |

As of February 10 1999, there were 8,897 holders of record of the Company's Common Stock.

The Company has not paid any dividends during 1998 or 1997. The Company does not currently intend to pay dividends in the foreseeable future, but rather, intends to reinvest earnings into its business. The Company is also restricted (subject to certain exceptions) from paying dividends on its Common Stock by certain covenants contained in a credit agreement to which the Company is a party.

Design: Wolkatz Design Associates, Philadelphia. Principal Photography: Peter Olson, Philadelphia

Covance is an independent, publicly held company with headquarters in Princeton, New Jersey, USA. Covance is the marketing name for Covance Inc. and its subsidiaries around the world.

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**COVANCE**  
THE DEVELOPMENT SERVICES COMPANY

*Shaping Solutions*

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