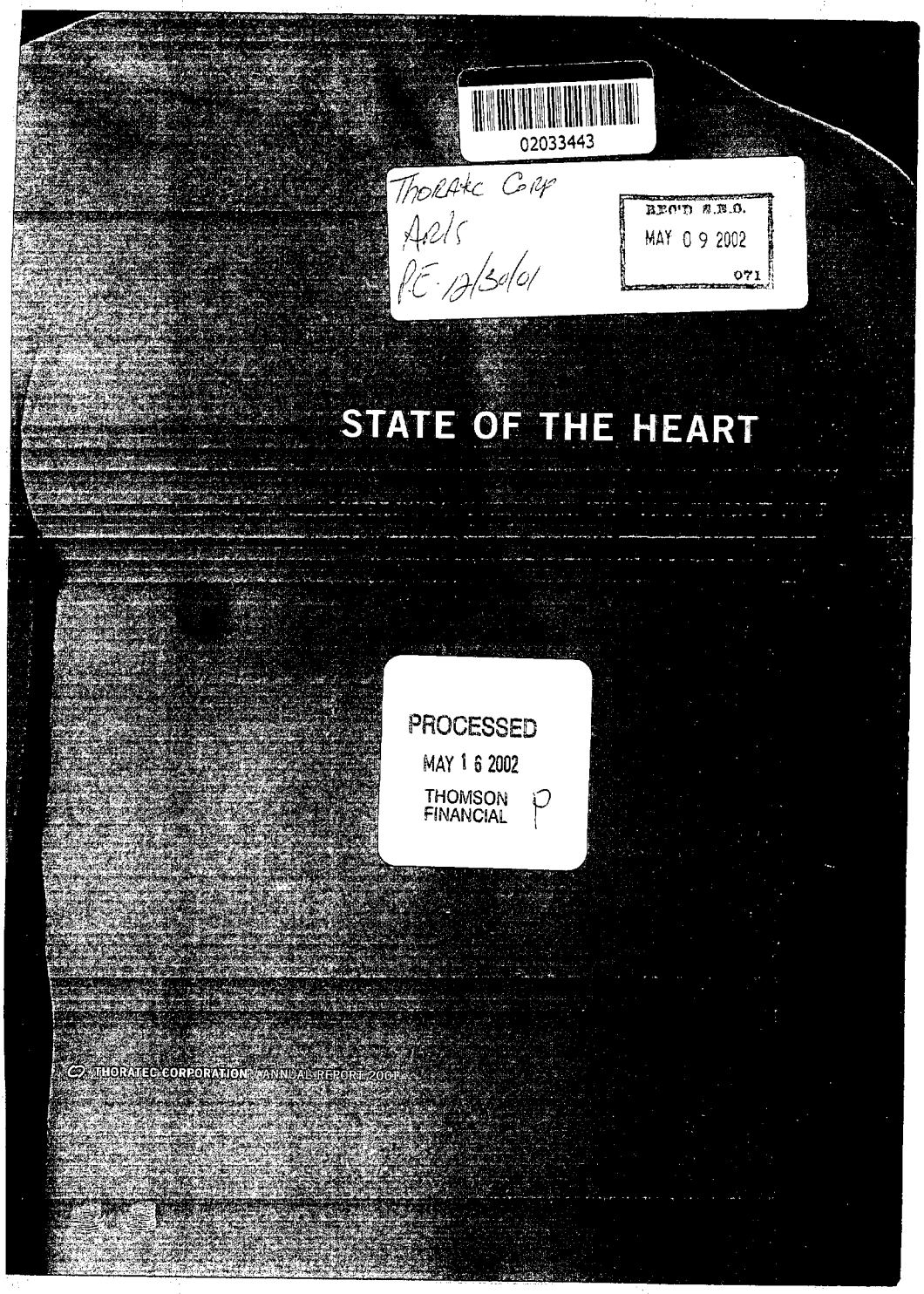
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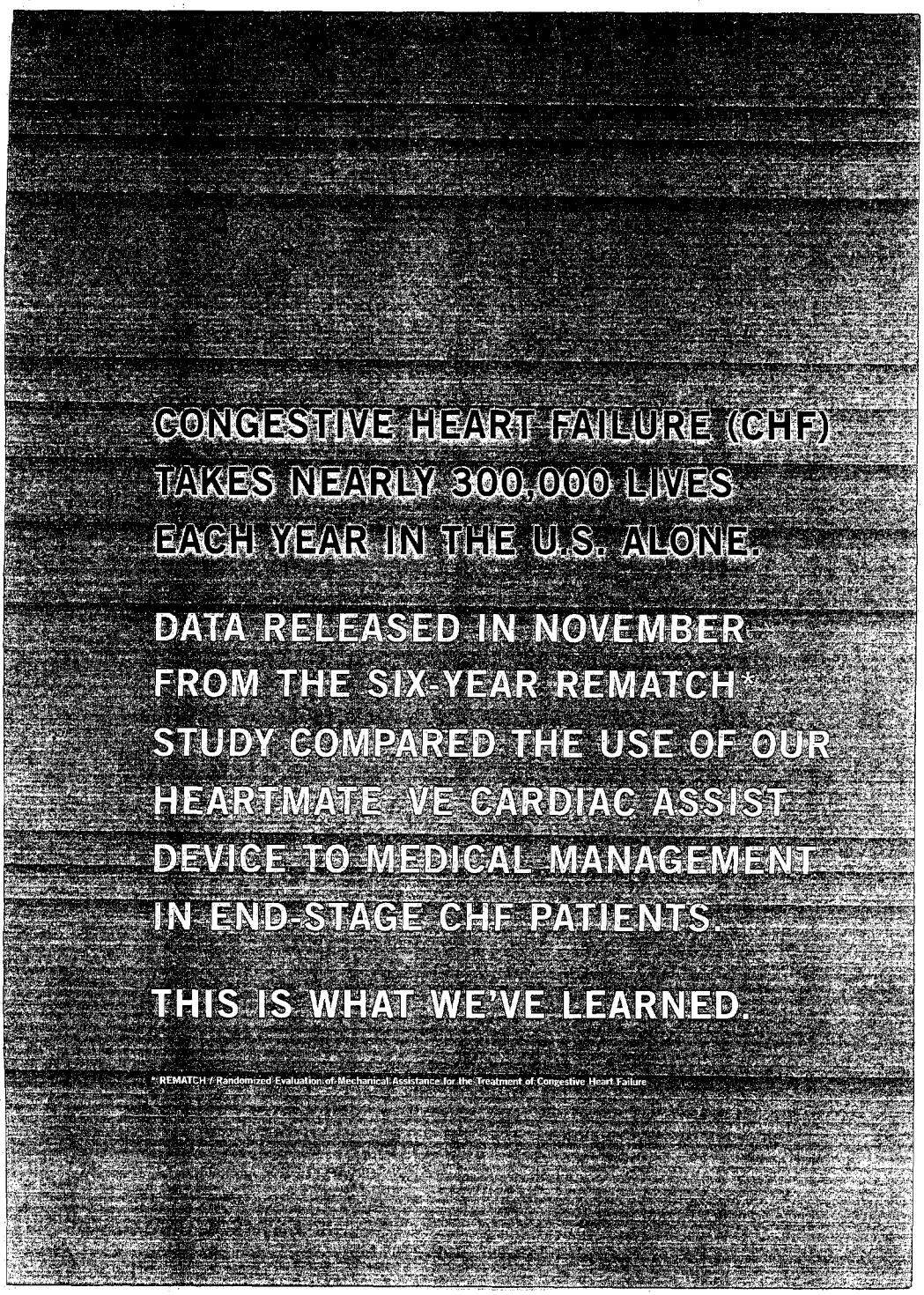
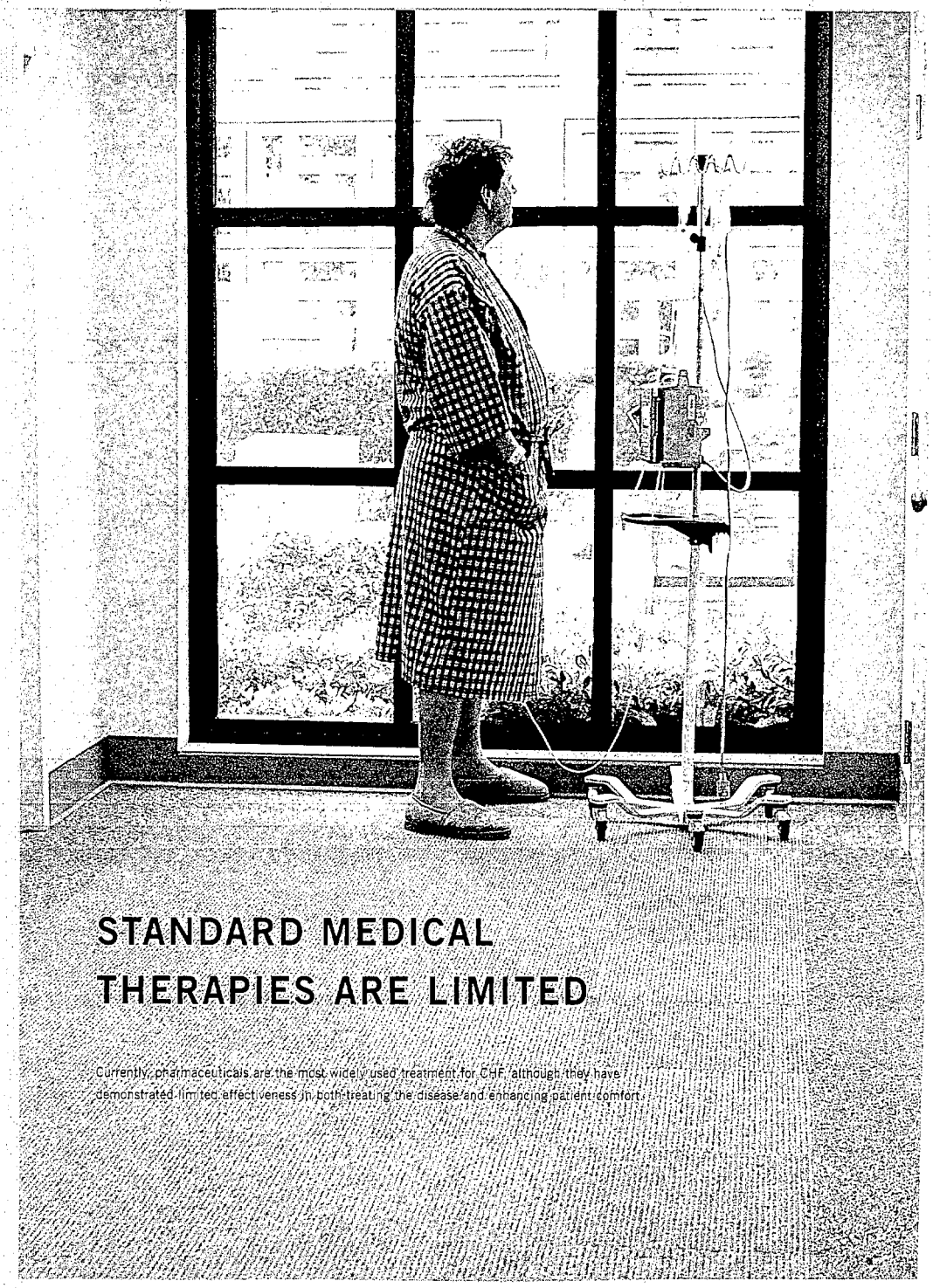
THORATEC CORPORATION / ANNUAL REPORT 2001

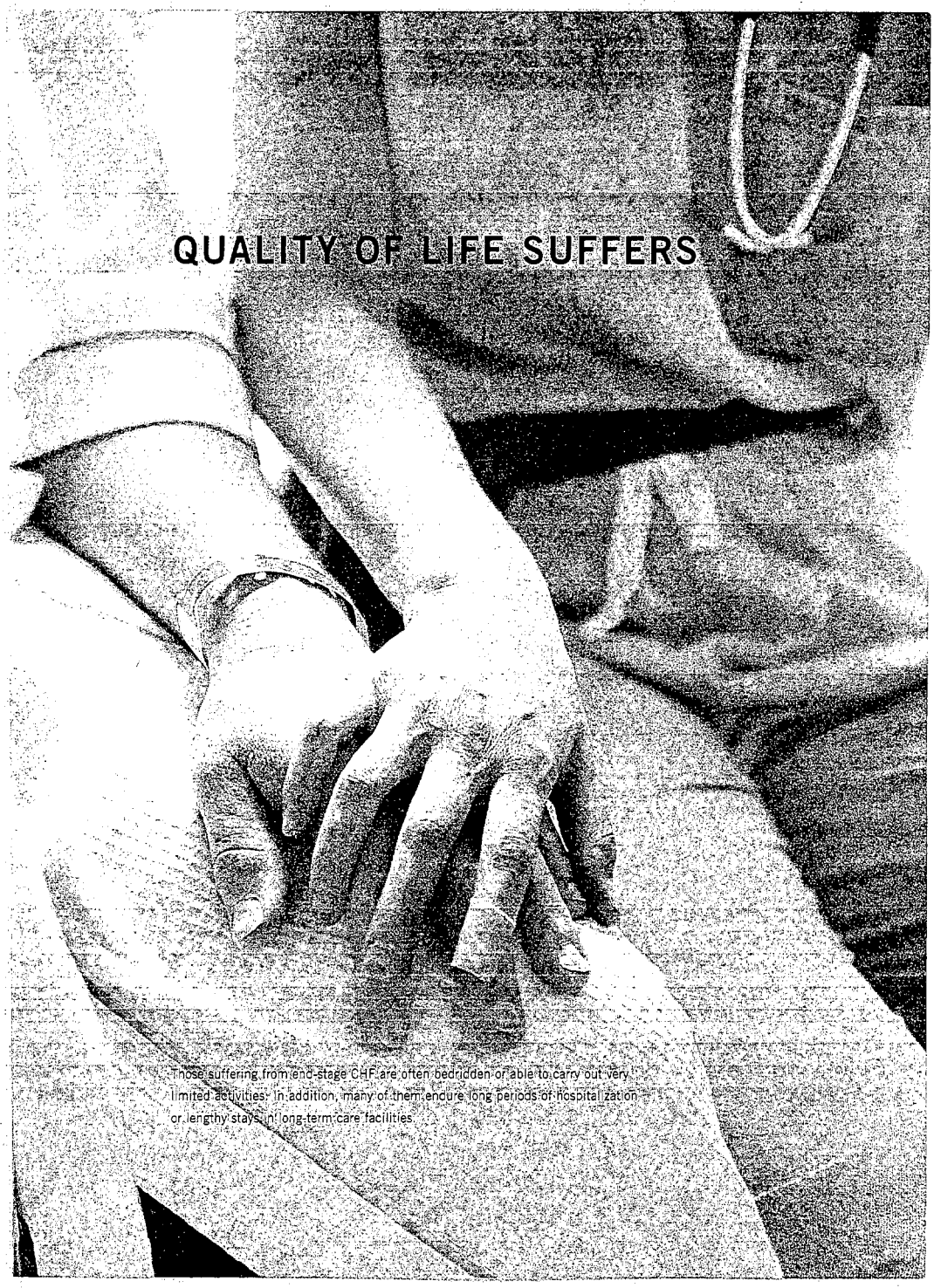
THORATEC CORPORATION : *Our mission is to be the global leader in the market for mechanical circulatory support* products. We will increase our presence with the cardiac surgeon by developing or acquiring innovative and proprietary technologies in the treatment of cardiovascular disease. Critical to our mission is building shareholder value through constant superior rates of profitable growth, financial strength and execution.


CONGESTIVE HEART FAILURE (CHF)
TAKES NEARLY 300,000 LIVES
EACH YEAR IN THE U.S. ALONE.
DATA RELEASED IN NOVEMBER
FROM THE SIX-YEAR REMATCH*
STUDY COMPARED THE USE OF OUR
HEARTMATE VE CARDIAC ASSIST
DEVICE TO MEDICAL MANAGEMENT
IN END-STAGE CHF PATIENTS.
THIS IS WHAT WE'VE LEARNED.
*REMATCH / Randomized Evaluation of Mechanical Assistance for the Treatment of Congestive Heart Failure

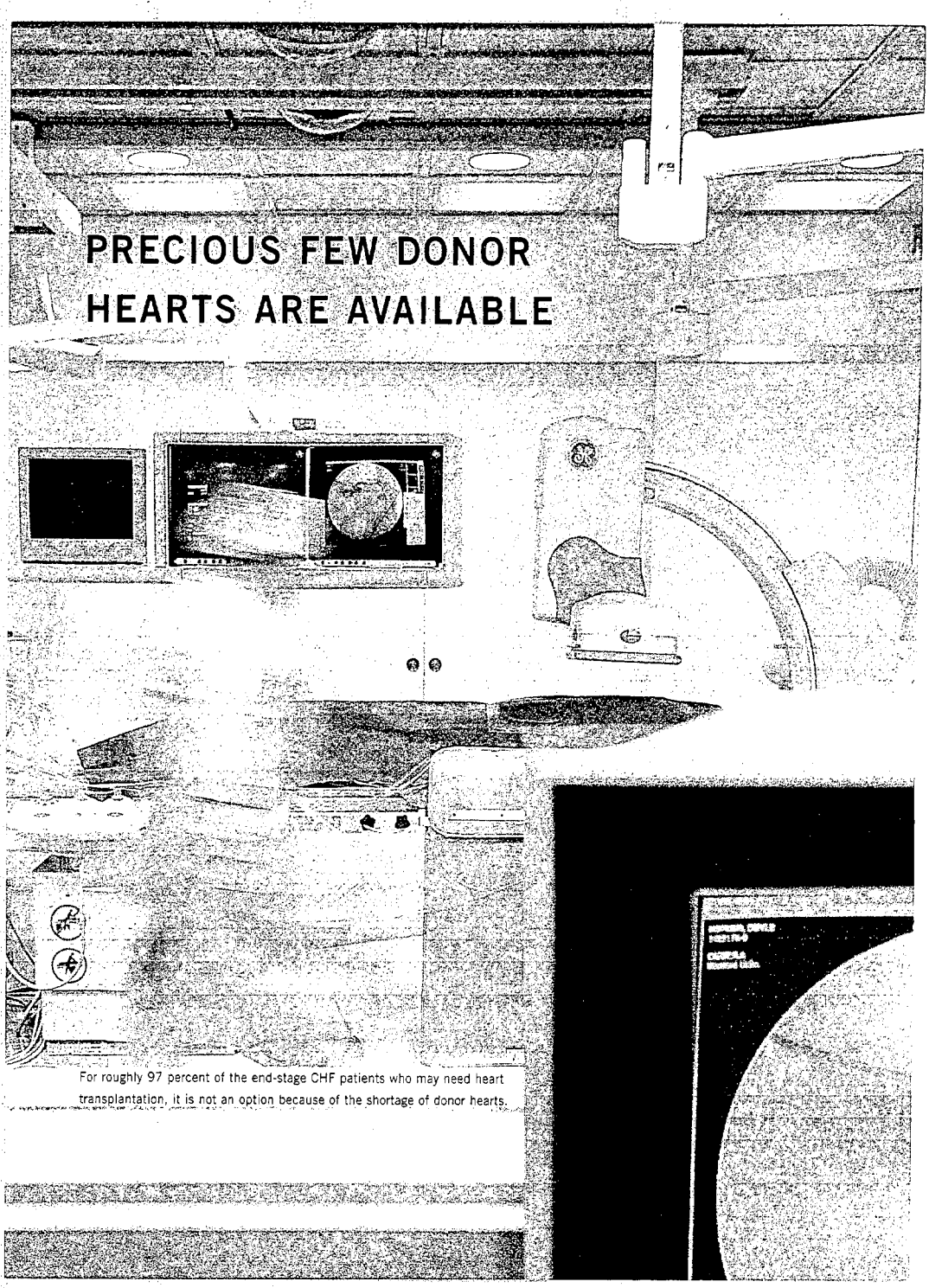


STANDARD MEDICAL THERAPIES ARE LIMITED

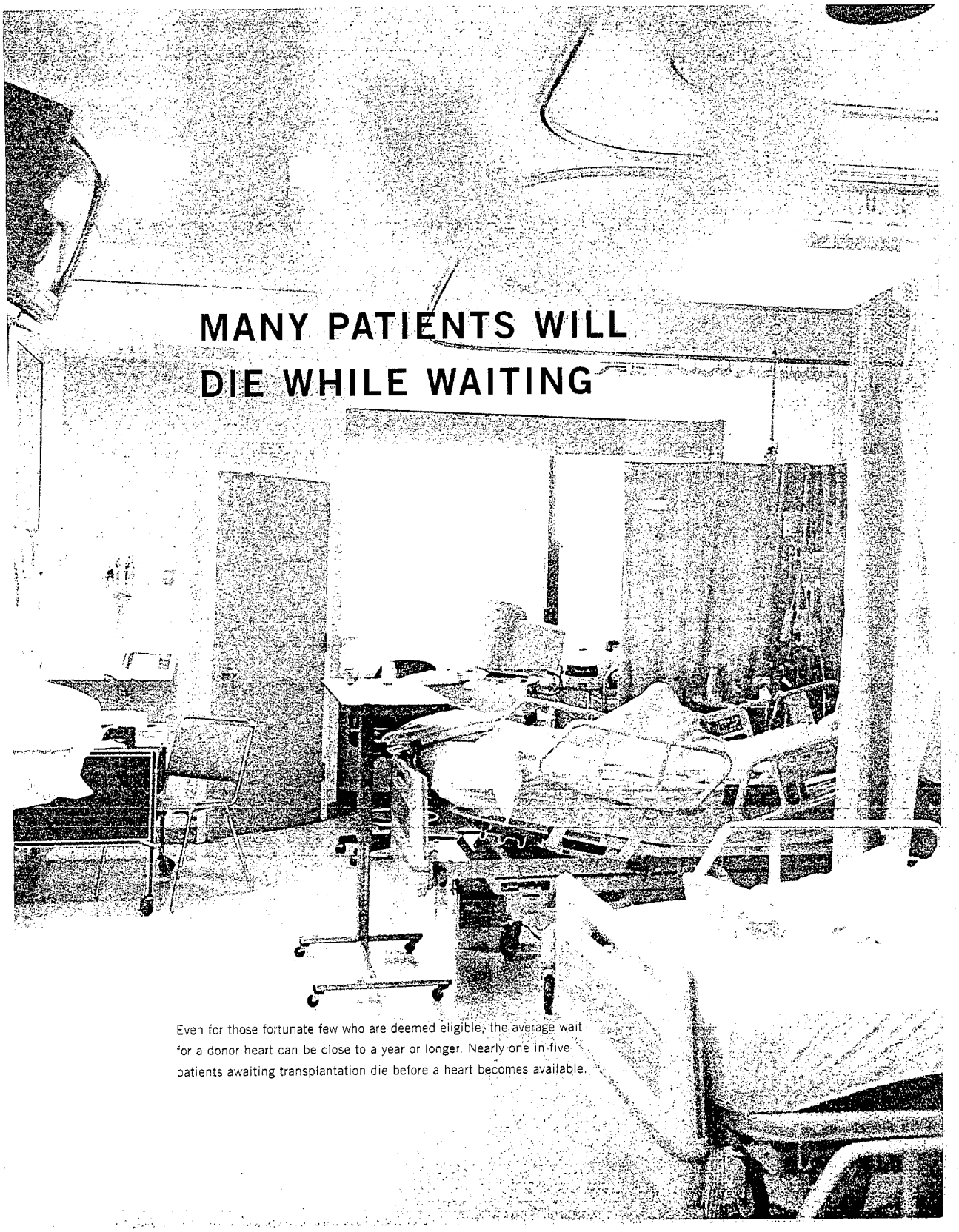
Currently, pharmaceuticals are the most widely used treatment for CHF, although they have demonstrated limited effectiveness in both treating the disease and enhancing patient comfort.


QUALITY OF LIFE SUFFERS
Those suffering from end-stage CHF are often bedridden or able to carry out very limited activities. In addition, many of them endure long periods of hospitalization or lengthy stays in long-term care facilities.

PRECIOUS FEW DONOR HEARTS ARE AVAILABLE



For roughly 97 percent of the end-stage CHF patients who may need heart transplantation, it is not an option because of the shortage of donor hearts.

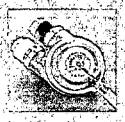


MANY PATIENTS WILL DIE WHILE WAITING

Even for those fortunate few who are deemed eligible, the average wait for a donor heart can be close to a year or longer. Nearly one in five patients awaiting transplantation die before a heart becomes available.

THORATEC DEVICES OFFER AN OPTION FOR SURVIVAL

VENTRICULAR ASSIST DEVICES (VADs) are mechanical blood pumps that assist or completely take over the pumping function of a failing heart. Thoratec offers two complementary lines of ventricular assist devices, which have now been implanted in nearly 5,000 patients. The Thoratec® VAD System, which includes the TLC-II™ Portable Driver, is the only FDA approved device that offers left, right or biventricular support for bridge to transplantation and post-cardiotomy recovery. The Company's HeartMate devices provide left ventricular support and are the leaders in long-term cardiac support for bridge to transplantation.

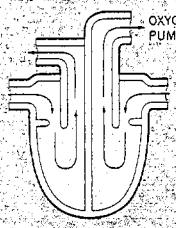


THORATEC VAD

HEARTMATE XVE

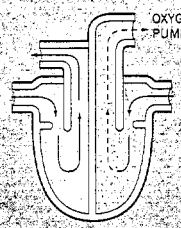
VENTRICULAR ASSIST DEVICES / RESTORING NORMAL BLOOD FLOW TO THE BODY

NORMAL HEART (BLOOD FLOW) 100%



THE HEART / The heart consists of two muscular side-by-side blood pumping chambers called ventricles. When the muscle of the right ventricle contracts, it sends blood to the lungs to receive oxygen. When the muscle of the left ventricle contracts, it sends oxygen-rich blood to the rest of the body through a large blood vessel called the aorta.

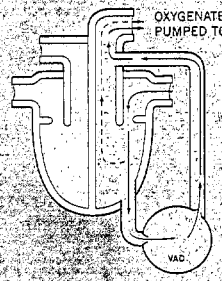
CONGESTIVE HEART FAILURE 50%



CHF / Congestive Heart Failure can greatly diminish the heart's ability to pump blood successfully. As a result, patients with CHF tend to feel weak, fatigued or short of breath. Everyday activities such as carrying groceries, climbing stairs or even walking become very difficult.

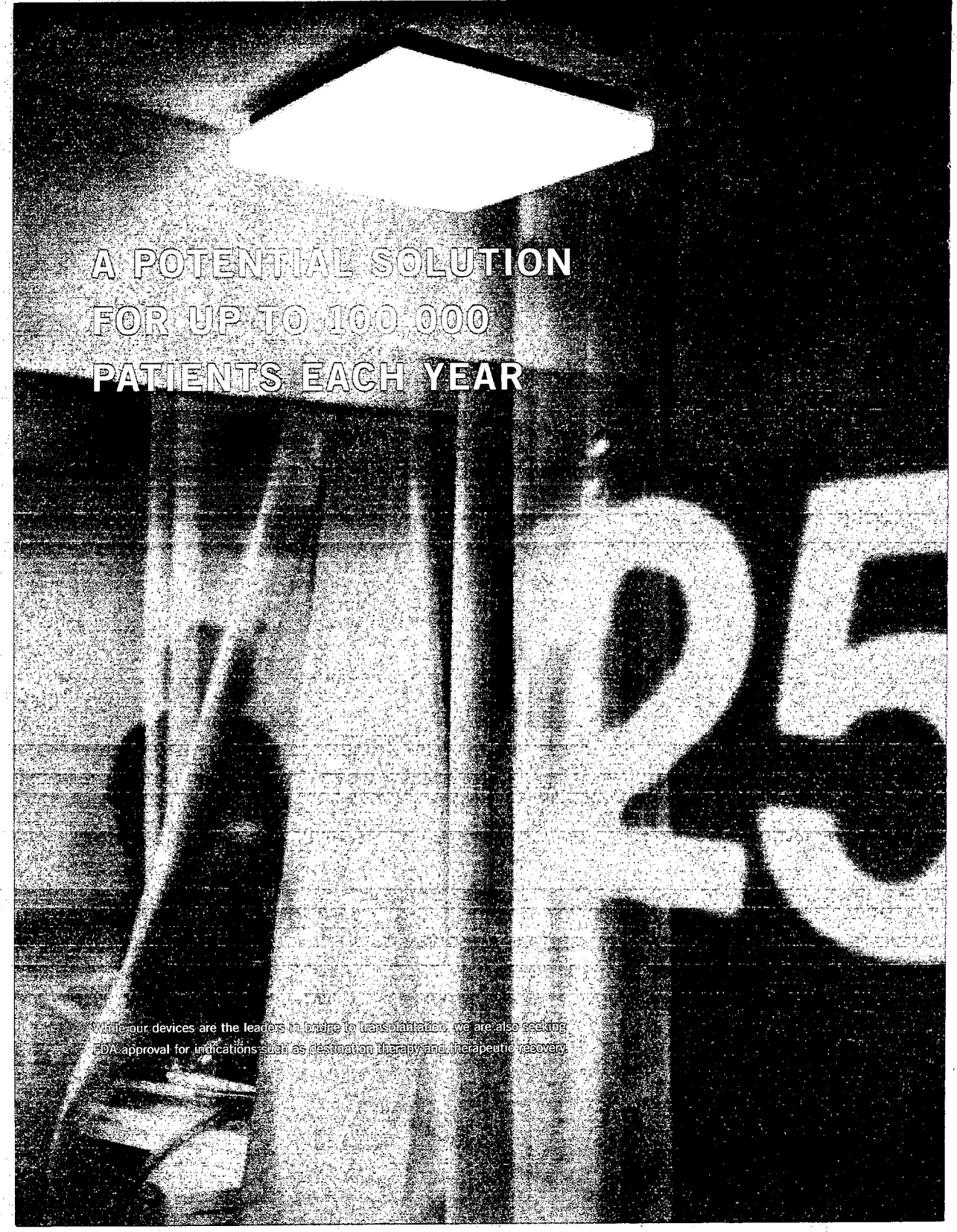
End Stage CHF patients may have only 50 percent or blood flow. Ultimately, the heart's inability to pump blood at a level sufficient to meet the body's demands can lead to death.

CONGESTIVE HEART FAILURE WITH VAD 100%



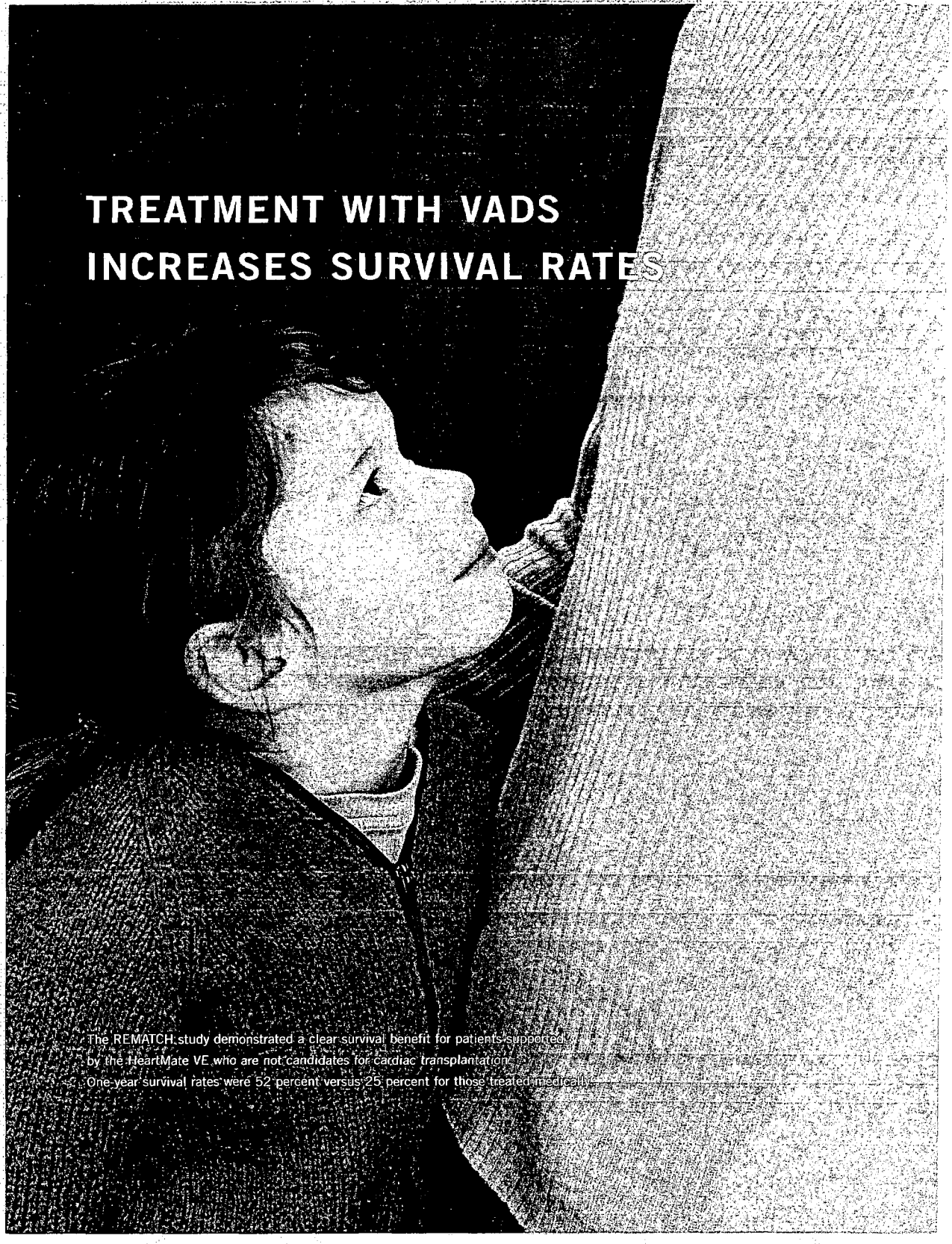
VADs / Blood is carried through a tube from the patient's left ventricle to the blood chamber of the VAD. An external control system triggers pumping. Blood is propelled out of the pump, into the aorta and out to the rest of the body.

VADs also have sensors to adjust their pumping capacity to the needs of the patient's body. For example, the VAD pumps faster during exertion and slower when a patient is sleeping, just as the natural heart does.


A POTENTIAL SOLUTION
FOR UP TO 100 000
PATIENTS EACH YEAR
While our devices are the leaders in bridge to transplantation, we are also seeking
FDA approval for indications such as destination therapy and therapeutic recovery.


VADS WILL ESTABLISH
A NEW STANDARD OF CARE
As CHF becomes more pervasive, the patient need is immense.
Pioneered by Thoratec, new device technology has demonstrated compelling
results in treating the disease and improving patients' quality of life.

TREATMENT WITH VADS INCREASES SURVIVAL RATES

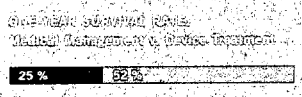


The REMATCH study demonstrated a clear survival benefit for patients supported by the HeartMate VE who are not candidates for cardiac transplantation. One-year survival rates were 52 percent versus 25 percent for those treated medically.

REMATCH device patients also had a higher quality of life. Not only did they have a better state of mind, but they were also able to resume many aspects of a normal lifestyle.

THE AMERICAN HEART ASSOCIATION NAMED THE THORATEC HEARTMATE ONE OF 2001's MOST IMPORTANT RESEARCH ADVANCES IN THE TREATMENT OF HEART DISEASE.

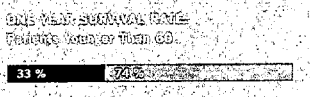
HIGHLIGHTS FROM THE REMATCH TRIAL



One year survival for patients on the HeartMate VE was 52 percent versus 25 percent for patients treated medically.*

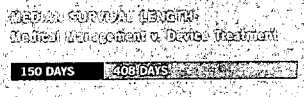
Two year survival rates were 23 percent versus 8 percent for those receiving optimal medical management.*

The REMATCH trial is still ongoing, and a number of HeartMate VE patients remain alive after two years.



At one year, survivability for patients younger than 60 years of age on the HeartMate VE was 74 percent versus 33 percent for patients treated medically.*

These findings suggest that for every 1,000 patients with end-stage heart failure, the implantation of a left ventricular assist system could prevent at least 270 deaths annually.*



Patients supported by the HeartMate VE generally reported a higher quality of life in terms of functionality, mobility and mental health, with many able to resume aspects of a normal lifestyle, including limited exercise.*

Median survival for the HeartMate VE patients was 408 days and the longest living HeartMate VE patient is still alive at more than three years. The median survival rate for the control group was 150 days, with the longest living control patient surviving 798 days.*

*Rose EA, Gelijns AC, Moskowitz AJ, et al. Long-term use of a left ventricular assist device for end-stage heart failure. *New England Journal of Medicine* 2001;345:1435-43.

IT'S BEEN A GROUNDBREAKING YEAR / D. KEITH GROSSMAN, PRESIDENT AND CEO

TO OUR SHAREHOLDERS / Rarely does a company experience two truly defining moments in the course of a year. Yet that was the case at Thoratec in 2001, beginning with our merger with Thermo Cardiosystems in February and ending with the release of data from our landmark REMATCH trial in November.

These two events, however, do not stand alone as milestones of our success in 2001. We also achieved significant progress across our broad range of clinical trial programs, and continued to realize the promise of our merger by increasing market share for existing products and generating an improving financial performance. This impressive track record has continued in 2002, with a recommendation for approval of our destination therapy filing by an FDA advisory panel.

LEADING AN EMERGING MARKET / Fortuitously, the past year has been an important one for devices designed to treat late-stage heart failure, a disease affecting over a half-million new Americans each year. With Thoratec leading the way, advancements in our industry through improved technology and more compelling clinical trial results have increasingly validated the use of devices as a treatment option, particularly since currently approved medications do not represent a true solution.

As the first company to receive FDA approval for a bridge to transplant device in 1994, we have continued to utilize our proprietary technology and expertise to help the cardiac surgeon dramatically improve the standard of care for congestive heart failure (CHF) patients. With three of the four devices approved for use in the U.S., our products are the most versatile and widely used circulatory support systems for patients with end-stage CHF. Today, our devices account for approximately 70 percent of the worldwide cardiac assist marketplace and have been implanted in nearly 5,000 patients.

We are uniquely poised to become a leader in the treatment of heart failure. We have the broadest line of proven implanted and paracorporeal devices, a long-term track record of gaining regulatory approvals and the most active clinical trial program of any company in our sector. More importantly, our leadership position in emerging technology is backed by a deep and talented team of research, development, sales and marketing professionals. Additionally, we now have the financial means sufficient to develop necessary internal resources and the flexibility to pursue strategic partnerships and ventures serving our long-term growth strategy.

HIGHLIGHTS / Successful Merger Integration / FDA Panel Recommends PMA Approval / Improving Financial Performance / Market Share Gains

ANTICIPATED MERGER SYNERGIES COMING TO FRUITION / I am pleased to report that the merger integration process has gone extremely well and we are realizing the operating and financial synergies we had anticipated. The Company has a highly coordinated sales and marketing effort and our research and development teams are leveraging their combined skills and knowledge. Our program to consolidate all VAD device manufacturing at our Pleasanton facility is on track for completion by the end of 2002. The larger and deeper company created by our transaction provides us the opportunity to extend our partnership with cardiologists and cardiovascular surgeons and implement our strategy of developing a broad range of solutions for managing heart failure.

SUCCESSFUL RESULTS OF REMATCH TRIAL / A major catalyst for that strategy has been the REMATCH trial, the data from which was released in mid-November. REMATCH was a collaborative effort among the National Institutes of Health, Columbia University and Thoratec. As outlined by the investigators, REMATCH clearly demonstrated clinically and statistically meaningful survival benefits and improved quality of life for end-stage CHF patients supported by our HeartMate VE LVAS versus those in the trial that were treated with optimal medical management. In fact, the data suggest that using assist devices could save 270 lives out of every 1,000 patients suffering from end-stage heart failure. The survival and quality of life data that have been recorded subsequent to the submission of our PMA Supplement have been equally, if not more, encouraging.

Based on the REMATCH findings, we submitted a PMA Supplement seeking approval to use the HeartMate VE for destination therapy. Our goal is to serve a market that is believed to be up to 100,000 patients and more than $6 billion annually in the U.S. This was the first submission in our sector to receive an expedited review from the FDA, which led to a review by the agency's Circulatory System Devices Advisory Panel in early March 2002. The panel's decision to recommend that the FDA approve, with conditions, the Company's filing was a major step in the PMA approval process and we are hoping for a mid-2002 review by the agency.

An important competitive advantage for us, if we receive FDA approval, is that we already have an installed base of nearly 140 HeartMate centers and strong relationships with them. Consequently, we have a distinct competitive advantage because we already have sales and education programs in place to support this new indication.

Introduction of HeartMate XVE / Implantations of IVAD & HeartMate II / Successful *Vectra* VAG U.S. Introduction and Launch of European Sales Effort / Completion of Phase I and Initiation of Phase II Aria™ CABG U.S. Clinical Trial

The REMATCH trial also included a cost analysis comparing the long-term costs and benefits of treating end-stage heart failure patients with the HeartMate VE versus medical therapy and other high-tech procedures such as cardiac transplantation, lung volume reduction and liver transplantation. We expect the HeartMate VE will be well positioned for adoption based on the cost-effectiveness ratio that we anticipate from the data analysis.

We have initiated discussions regarding reimbursement with third party payors, including the Centers for Medicare and Medicaid Services (CMS), the body which governs Medicare coverage and reimbursement policies. These discussions have been encouraging and we are hoping for a favorable outcome.

Our unparalleled clinical experience has resulted in the development of an enhanced version of the HeartMate VE. The HeartMate XVE is now being used with bridge to transplantation patients and, based on the approval of our destination therapy PMA Supplement, we will seek approval to include this enhanced device for treatment of that patient population as well.

The improvements incorporated into the XVE are designed to increase patient comfort, ease implantation and provide for longer device life. These include a longer, smaller diameter and more flexible lead designed to improve patient comfort and provide more flexibility for surgeons to accommodate larger patients. In addition, a rotating tunneling bullet was added to ease implantation and facilitate tunneling of the driveline through the exit site on the patient. Other changes include a redesign of the graft to reduce kinking, battery module improvements to increase battery life, and software enhancements intended to increase the life of the bearings and valves.

APPROVED DEVICES GAINING MARKET SHARE / While the REMATCH trial and effort to gain FDA approval for the destination therapy indication has been a focal point for management, it did not dilute our efforts to gain market share for our approved devices. At year-end, our cardiac assist devices were being used by more than 280 heart centers worldwide. Due to successful cross-selling efforts, a number of centers now use both the Thoratec VAD and HeartMate devices.

MARKETED PRODUCTS / WORLDWIDE LEADERSHIP IN CARDIAC CARE

CURRENT INDICATIONS / PRODUCTS	MARKETED PRODUCT	PRODUCT ATTRIBUTES	MARKET OPPORTUNITY*
BRIDGE TO TRANSPLANTATION / BTT	HeartMate IP HeartMate VE, XVE Thoratec VAD TLC-II	Long-Term, Pneumatic Support Long-Term Support Short to Long-Term, Mobile BIVAD Mobile Power Supply	$300 Million
POST-CARDIOTOMY RECOVERY / PC	Thoratec VAD TLC-II	Short-Term Support Mobile Power Supply	$135 Million
HOME DISCHARGE	HeartMate VE, XVE	Long-Term Support	
VASCULAR GRAFTS	*Vectra* VAG	Reliable Access for Hemodialysis	$120 Million
HOSPITAL POINT OF CARE COAGULATION SYSTEMS	Hemochron® Hemochron Jr.®	Bedside Coagulation Testing Micro-Coagulation System	$115 Million
PROFESSIONAL AND HOME TESTING PROTHROMBIN TIME	ProTime®	Office, Clinic or Home Use	$340 Million
SINGLE-USE SKIN-INCISION DEVICES	Tenderfoot® Tenderlett® Surgicutt®	Heel-Stick Incision Device Finger-Stick Incision Device Bleeding Measurement	$65 Million

*Estimated

DEVELOPMENT PIPELINE / MORE TO COME FROM ONE OF THE INDUSTRY'S TOP DEVELOPMENT TEAMS

FUTURE INDICATIONS / PRODUCTS	PRODUCTS	PRODUCT ATTRIBUTES	STATUS	MARKET OPPORTUNITY*
DESTINATION THERAPY / DT	HeartMate VE, XVE HeartMate II HeartMate III	Permanent Support Miniature Axial Flow VAD Bearingless Motor for Longer Life	PMA Supplement Clinical Trial In Development	$6 Billion
BRIDGE TO TRANSPLANTATION / BTT	HeartMate II HeartMate III Thoratec IVAD	Miniature Axial Flow VAD Bearingless Motor for Longer Life Half-Size, Implantable VAD	Clinical Trial In Development Clinical Trial	$300 Million
THERAPEUTIC RECOVERY / BTR	Thoratec VAD Thoratec IVAD HeartMate II HeartMate III TLC-II	LVAD, RVAD or BiVAD Support Half-Size, Implantable VAD Miniature Axial Flow VAD Bearingless Motor for Longer Life Mobile Power Supply	PMA Supplement Clinical Trial Clinical Trial In Development PMA Supplement	>$6 Billion
HOME DISCHARGE	Thoratec VAD Thoratec IVAD HeartMate II HeartMate III TLC-II	LVAD, RVAD or BiVAD Support Half-Size, Implantable VAD Miniature Axial Flow VAD Bearingless Motor for Longer Life Mobile Power Supply	Clinical Trial Clinical Trial Clinical Trial In Development Clinical Trial	
VASCULAR GRAFTS	Aria CABG	Coronary Revascularization	Clinical Trial	$1 Billion

*Estimated

CARDIAC ASSIST PRODUCTS / HEARTMATE XVE / HEARTMATE IP

At the same time, we made significant progress in our long-term strategy to extend our technology through expanded treatment indications and new devices. We received U.S. approval to market our TLC-II Portable VAD Driver, a lightweight device used to power the Thoratec VAD System. This device, which has been available in Europe for several years, has been instrumental in generating broader market share for the Thoratec VAD System.

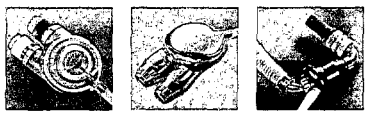
As currently approved in the U.S., the TLC-II can be used by patients in the hospital or for short excursions away from the hospital. However, we have a clinical trial underway, which if successful and approved by the FDA for this indication, would allow patients supported by the device to be discharged to their homes. We are now close to accumulating sufficient patient experience to file that PMA Supplement and we hope to receive this home discharge approval in the second half of 2002.

THERAPEUTIC RECOVERY / We continue to be enthusiastic about the market potential for the Thoratec VAD System being used to achieve recovery of the natural heart. Our PMA Supplement included data that demonstrated that 23 patients who were supported by the device sufficiently recovered the use of their natural heart so that they did not require further support or transplantation.

With an estimated patient population that exceeds 100,000 in the U.S. annually, therapeutic recovery approval could be a major breakthrough in treatment options, given the shortage of hearts available for transplant and the opportunity to forego the trauma and expense associated with a surgical procedure to implant a new heart or permanent support device.

Our dealings with the FDA on this filing are continuing and we believe that a final review is being impacted by the urgency of other submissions, such as our REMATCH filing. Nevertheless, we are hopeful that FDA approval of our PMA Supplement will occur during the current year and that we will be in a position to add revenues from the therapeutic recovery indication beginning in 2003.

NEXT GENERATION DEVICES / Serving as the driver for our continued leadership in the cardiac assist device marketplace is a pipeline of next generation devices that we believe will enter the market perhaps as soon as next year.



CARDIAC ASSIST PRODUCTS / THORATEC VAD / IVAD / HEARTMATE II

We are at an important juncture in our program to gain market approval for the HeartMate II, an implantable, rotary flow LVAS intended to support patients for 5-7 years. We are at approximately the halfway mark in our goal to implant 20 patients in Europe before seeking marketing approval. In the U.S., we hope to receive approval of our IDE in the first half of 2002.

The axial flow design of the HeartMate II makes the device quieter than pulsatile devices and features a unique mode that controls blood flow based on patient activity, such as rest or exercise. It is designed to provide long-term support and, because it has only one moving part and is the size of a D-cell battery, the HeartMate II is less invasive to implant than other devices.

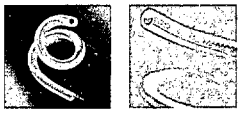
Another potential near-term extension of our product line is the Implantable VAD, or IVAD. Weighing less than a pound, the device utilizes the same working components as the Thoratec VAD System blood pump and is designed to provide long-term support as a bridge to transplantation. The IVAD has an outer housing of titanium alloy suitable for implantation and is small enough to allow for biventricular support for those patients who may require it.

Our European IVAD clinical program has realized several milestones, including the initial implant of patients in Germany. In addition, we are readying clinical trials in both the United Kingdom and France. In the U.S., we implanted our first patient in March 2002. The U.S. study will involve up to 30 patients at up to ten centers.

VASCULAR GRAFTS / The Company's vascular graft products play an important role in our strategy to offer an ever-growing number of treatment solutions.

The *Vectra®* Vascular Access Graft (VAG) is a prosthetic graft used to provide vascular access for patients undergoing hemodialysis. We see the worldwide market for this device as approximately $120 million and growing approximately ten percent annually. Since the U.S. introduction in mid-2001, sales have exceeded our expectations. Our U.S. marketing and distribution partner for the *Vectra* is IMPRA, Inc., a division of C.R. Bard, Inc., and they have done an excellent job of achieving rapid market penetration.

VASCULAR GRAFTS / ARIA CABG / *VECTRA* VAG



Based on that performance, we signed a new agreement with IMPRA in early 2002 covering a number of international markets, including selected countries in Europe, Scandinavia, the Middle East and Northern Africa. We are looking for success similar to that realized in the U.S. and believe this broader distribution program will add meaningful revenues beginning in the latter half of the year.

The Aria CABG (Coronary Artery Bypass Graft), a small diameter graft, is designed to be a prosthetic alternative for patients who undergo a bypass procedure and lack sufficient quality native vessels to complete the revascularization of the heart. The harvest of natural vessels is often a traumatic and costly procedure that increases patient morbidity and Aria may represent the first off-the-shelf alternative for these patients.

Ours is the only such device currently undergoing clinical trials in the U.S. The Phase I results were encouraging in demonstrating preliminary safety of the Aria. Phase II of the study will expand enrollment up to a total of 162 patients in up to 20 centers. Both the Aria and native control grafts will be evaluated by angiography at one year to determine patency, or flow of each graft. We have also included modifications to this phase of the study that we hope will help accelerate patient enrollment.

ITC PRODUCTS / We have a stable and growing source of revenues from our International Technidyne Corporation (ITC) Division, a leader in the single-use skin incision and blood coagulation diagnostic equipment markets. Because this group's products are targeted principally to patients undergoing coronary bypass and angioplasty procedures, ITC further rounds out our presence in the cardiovascular area.

ITC had a solid year, achieving sales and profitability targets, led by a 40 percent growth in sales of its ProTime point-of-care coagulation diagnostic system used by patients taking blood-thinning drugs.

We anticipate that ITC's revenues will experience double-digit growth in 2002 based on strategic initiatives that were implemented during 2001. These include a more focused sales strategy, including additions to the sales organization and the appointment of new distributors. In addition, ITC has launched a sales effort in Europe and increased its presence with nursing homes and home healthcare agencies that represent important market opportunities for the group's offerings.

ITC PRODUCTS / HEMOCHRON® / TENDERFOOT® / PROTIME®

ITC expects to introduce several new diagnostic products during 2002 and is exploring synergistic opportunities with other companies for joint venture product development and marketing efforts. In addition, we are seeking ways to leverage our strong presence in the VAD area to benefit ITC.

The accomplishments of the past year, while noteworthy, we believe will pale in comparison to what we hope to achieve in the months and years ahead. The events of 2001, combined with the anticipated developments in 2002, create a platform for a very exciting future.

We believe that revenue growth will be fueled by the approval of our REMATCH PMA, therapeutic recovery indication and home discharge for the TLC-II. We may also receive approvals in Europe for the HeartMate II and IVAD. Augmenting our core assist device business will be continued market penetration of our *Vectra* VAG and measurable growth from ITC as they increase market share with both existing products and new offerings.

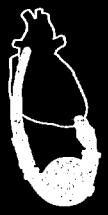
The achievements we have realized and the optimistic outlook we possess would not be possible without a dedicated group of employees. Their efforts in the past year to complete the post-merger integration, while moving the business forward, were exceptionally successful and deserve recognition.

On behalf of all of us at Thoratec, we appreciate your support and interest and look forward to reporting on our progress in the future.

Sincerely,

D. Keith Grossman / President and Chief Executive Officer

GIL MADRID
Age / 67
Diagnosis / Cardiomyopathy



HeartMate VE

The patient who to date has spent the longest period of time—more than three years—supported by a HeartMate VE, Gil Madrid has been able to experience the joy of four generations of his family, including the recent birth of his great granddaughter.

A resident of San Diego, Gil, 67, had been an attorney for a university in the Philippines before immigrating to the U.S. in 1990. He had experienced a heart attack and was suffering from congestive heart failure when he was implanted with the device as a participant in the REMATCH trial.

Today, in addition to enjoying his family and entertaining them with his harmonica playing, Gil attends movies, eats out, visits with old friends and reads all types of novels, with science fiction and mysteries being his favorites.

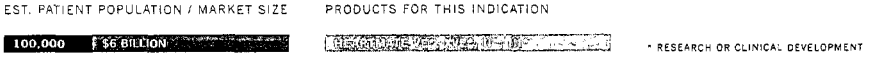
GIL'S EXPERIENCE OF BEING ABLE TO RESUME MANY ASPECTS OF A NORMAL LIFESTYLE IS ONE SHARED BY A NUMBER OF HIS FELLOW REMATCH PATIENTS WHO WERE SUPPORTED BY THE HEARTMATE VE.

It is believed that, because of their age or other diseases, up to 100,000 patients with end-stage CHF are not eligible for heart transplantation. These are truly the sickest of CHF patients. The slightest bit of activity tires them out and they are often bedridden or confined to long-term medical care facilities. In addition to a poor quality of life, they experience a low survival rate. Currently, medications are the primary treatment regimen for these patients, but they often prove to be ineffective and the survival rates and quality of life remain relatively dismal. Clearly, this is a large patient population with an unmet need.

REMATCH was a six-year clinical trial that was a collaboration among the National Institutes of Health, Columbia University and Thoratec. It compared the patient experience of those supported by a device versus those being treated medically.

The survival and quality of life results were compelling with both one and two year survival rates for device patients surpassing those being treated medically and exceeding clinician assumptions when REMATCH began. The data demonstrated that the HeartMate VE is an acceptable alternative therapy for end-stage heart failure patients who are not candidates for transplantation and suggested that using assist devices could save 270 lives out of every 1,000 patients suffering from this condition.

These results led to the recent FDA advisory panel recommending approval, with conditions, of our submission to use the HeartMate VE in this destination therapy treatment—an approval we hope to have by mid-2002.



SAKANG IS ONE OF NEARLY 5,000 PATIENTS WHO HAVE BEEN SUPPORTED BY A THORATEC DEVICE WHILE AWAITING A HEART TRANSPLANTATION.

The Thoratec VAD System and HeartMate left ventricular assist system have been the world's most widely used heart assist devices for bridge to transplantation. Because there is a chronic shortage of donor hearts and the estimated waiting time for a heart can be lengthy, patients must often be supported by a cardiac assist device until a heart becomes available.

We manufacture three of the four devices currently approved for this indication in the U.S. The Thoratec VAD System is the only biventricular support system approved for this indication. Because it remains outside the body, it can be used in small adults and children and has been used in patients as young as six years old. The TLC-II is a portable driver for the VAD System that has been approved for use worldwide and provides patients a level of mobility to resume many aspects of a normal lifestyle. We recently initiated clinical trial activities in both the U.S. and Europe for the IVAD, an implantable version of the Thoratec VAD.

The first FDA-approved cardiac assist device in 1994, the HeartMate is the leader in long-term cardiac support and has provided more than 1,000 cumulative patient years of support. It has been used as a bridge to transplantation in well over 200 transplantation patients for one year or longer and at least 25 patients for longer than two years. A next generation device, the HeartMate II, has been in clinical trials in Europe for a year, and we expect to launch our U.S. clinical program during 2002.

EST. PATIENT POPULATION / MARKET SIZE	APPROVED PRODUCTS FOR THIS INDICATION	RESEARCH OR CLINICAL DEVELOPMENT
5,000-10,000 / $300 MILLION	THORATEC VAD / HEARTMATE / VENTRACOR / TLC-II	HEARTMATE II / IVAD

SAKANG DANG
Age / 31
Diagnosis / Dilated Cardiomyopathy

Thoratec BiVAD

"Being supported by the Thoratec VAD System saved my life until I was fortunate enough to receive a donor heart," Sakang says.

An immigration attorney who lives in the San Francisco Bay Area, Sakang Dang, 31, was diagnosed with dilated cardiomyopathy and lupus more than four years ago. She was not benefiting from treatment with medications and got to the point at which doctors felt she needed a new heart. She was on cardiac assist for nearly two months until the transplantation took place last summer.

Since then, Sakang has been exercising at home, playing with her two German Shepherd mixes, involved in church activities and planning a wedding anniversary trip to Mexico. She hopes to return to work by the middle of the year.

BRET SIMISTER
Age / 38
Diagnosis / Dilated Cardiomyopathy

Thoratec BiVAD

A major part of Bret Simister's new lease on life is starting a new company. This 38 year-old software engineer and entrepreneur who lives in San Francisco was initially diagnosed with the flu. However, his fever persisted and he passed out at home several days later.

During the ambulance ride to the hospital—which would turn out to be the first day of a five-month stay there—paramedics determined that Bret had no blood pressure. Doctors subsequently diagnosed Bret as having a virus that had weakened his heart.

After more than 150 days of being supported by the Thoratec VAD System, Bret recovered the use of his natural heart and has resumed most aspects of a normal lifestyle. In addition to starting his own company, he is biking, hiking and running, recently competing in a 5K race.

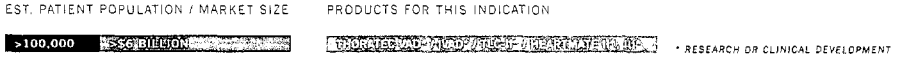
THOUSANDS OF CHF PATIENTS COULD EXPERIENCE A REMARKABLE RECOVERY OF THEIR NATURAL HEART SIMILAR TO BRET'S.

Therapeutic recovery, or patients recovering the use of their natural heart after being supported by a VAD, could be a potentially large opportunity for our devices, with an estimated patient population in excess of 100,000 and a *potential market of $6 billion or more.*

A number of patients have had this experience after utilizing the assist device to allow the damaged heart to rest and recover. Although not a currently approved indication for our device, we have a PMA Supplement seeking approval for use of the Thoratec VAD System for therapeutic recovery before the FDA.

Our filing included data showing that 23 patients recovered the use of their natural heart sufficiently to be removed from the Thoratec VAD System. These patients ranged in age from 12 to 46 years old and were supported by the device from 10 to 190 days. Follow-up on the patients ranged from one to three years with an 86 percent survival rate.

This potential treatment option is important because it demonstrates the promise of reversing the complications of end-stage heart failure. In addition, this form of recovery is far more desirable than the trauma and expense associated with either heart transplantation or the implant of a permanent support device.



THE VECTRA VASCULAR ACCESS GRAFT (VAG) IS MAKING DIALYSIS A MORE COMFORTABLE AND EFFECTIVE EXPERIENCE FOR THOUSANDS OF PATIENTS SUCH AS GLADYS.

Since we began marketing the *Vectra* in the U.S. in mid-2001, it has become a new standard of care for patients undergoing hemodialysis. Based on Thoratec's proprietary biomaterial, Thoralon®, the device provides access to the bloodstream by creating a shunt between an artery and vein.

Unlike competitive offerings, the *Vectra* enables patients to begin hemodialysis usually within 24 hours. Its self-sealing properties also ensure long-term integrity, provide rapid hemostasis and reduce bleeding complications.

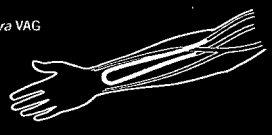
We continue to explore how our proprietary graft technology can be incorporated into new devices that will serve the cardiovascular community. The Aria CABG graft represents a potentially major breakthrough for patients undergoing bypass surgery and a $1 billion market opportunity for Thoratec. Currently, no artificial graft has full approval or is being marketed in the U.S. for this treatment.

Today, surgeons must perform what is often a traumatic and costly procedure to harvest native vessels to complete revascularization of the patient's heart. In many cases, patients lack sufficient quality native vessels due to illness or prior procedures.

We believe that Aria is unique in its potential ability to provide long-term patency, or blood flow, in a small diameter graft. We are looking forward to enrolling patients in our Phase II clinical trial later this year.

GLADYS NICHOLS
Age / 78
Diagnosis / Kidney Failure

Vectra VAG

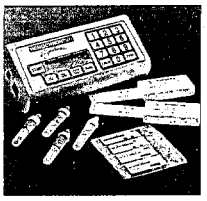


Gladys Nichols returned from a trip to New York "not feeling well", even though the Palo Alto caterer had recently had a physical. At her doctor's suggestion, Gladys went to a local urgent care center, where she was diagnosed with internal bleeding caused by kidney failure.

Following a two-week hospital stay, she was able to return home, although she would begin a four times a week dialysis routine that she has been on for more than a year now.

The first few months of dialysis were difficult, but ultimately Gladys was implanted with a *Vectra* VAG. The *Vectra* has made dialysis a more comfortable and effective treatment.

As a result of her illness, Gladys had to retire from her more than four-decade career. Although she misses catering for celebrities and presidential candidates, she enjoys cooking for her family, doing things around the house and visiting friends.



INTERNATIONAL TECHNIDYNE (ITC) PRODUCTS, MARKET LEADERS IN BLOOD COAGULATION TESTING AND MONITORING DEVICES

Rounding out our broad offerings for the cardiovascular market are the product lines of our International Technidyne Corporation (ITC) Division, which for more than three decades has been providing leading testing and monitoring equipment.

ITC's three product lines include: Hemochron®, for bedside anticoagulation management, screening and transfusion management; the ProTime® System to test the blood of patients using blood-thinning drugs; and Tenderfoot® and Tenderlett® heel and finger stick incision devices for blood collection.

ITC turned in a solid performance during 2001 with ProTime revenues increasing by 40 percent over the prior year. The group benefited from new management initiatives that enhanced sales and distribution programs—efforts that have laid the groundwork for growth in the future.

We have increased our presence in the important nursing home and home healthcare markets and now have a solid distribution program in Europe. In addition, ITC has several new products that it expects to begin marketing by the middle of 2002. At the same time, we are looking for ways to leverage the knowledge of our assist device team with ITC's business and ways to enhance our presence with the cardiologist.

2001 (ITC) REVENUE

$42 MILLION

ITC MARKETED PRODUCTS

HEMOCHRON / HEMOCHRON JR. / PROTIME / TENDERFOOT / TENDERLETT

FINANCIAL STATEMENTS

SELECTED CONSOLIDATED FINANCIAL DATA

The selected consolidated financial data presented below for the five fiscal years ended December 29, 2001 is derived from audited financial statements. The data set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes thereto appearing elsewhere in this Annual Report. Certain reclassifications have been made to the financial statements previously reported to conform to current practice.

The Merger of Thoratec and Thermo Cardiosystems, Inc., or TCA, was completed on February 14, 2001, which we call the Merger. We issued new shares of our common stock to the shareholders of TCA in exchange for all the outstanding common stock of TCA at an exchange ratio of 0.835 shares of Thoratec stock for each share of TCA stock. The Merger was accounted for as a reverse acquisition because the former shareholders of TCA owned a majority of our outstanding stock subsequent to the Merger. For accounting *purposes, TCA is deemed to have acquired Thoratec and therefore for fiscal years 1997, 1998, 1999 and 2000 all financial information* presented herein represents the results of operations of TCA. Our 2001 consolidated financial information presented herein includes the financial results of TCA for the full fiscal year and Thoratec's financial results for the post-merger period from February 14, 2001 through December 29, 2001. The weighted average number of common shares previously reported by TCA has been adjusted for all periods presented to reflect the exchange ratio of 0.835 to 1.

Our fiscal year ends on the Saturday closest to December 31. Accordingly, our fiscal year will periodically contain more or less than 365 days. For example, 1997 ended on January 3, 1998, 1998 ended on January 1, 1999, 1999 ended on December 31, 1999, 2000 ended on December 30, 2000, and 2001 ended on December 29, 2001.

	FISCAL YEAR				
	2001	2000	1999	1998	1997
	(In thousands, except per share data)				
STATEMENT OF OPERATIONS :					
Product sales	$113,384	$ 83,396	$ 78,611	$ 65,301	$ 60,842
Gross profit	60,544	48,566	45,285	38,244	35,380
Amortization of goodwill and purchased intangible assets	15,674	—	—	—	—
In-process research and development	76,858	—	—	—	—
Merger, restructuring and other costs	7,134	1,831	—	—	—
Net income (loss)	(87,866)	7,524	9,584	7,820	9,019
Basic and diluted earnings (loss) per share	$ (1.68)	$ 0.23	$ 0.30	$ 0.24	$ 0.28
BALANCE SHEET DATA :					
Cash and cash equivalents	$ 91,726	$ 30,236	$ 418	$ 42,026	$ 71,158
Working capital	135,924	149,207	115,471	98,904	136,702
Total assets	530,241	176,685	169,928	172,363	173,208
Subordinated convertible debentures	54,838	54,838	58,011	70,000	70,000
Long-term deferred tax liability and other	81,020	—	—	—	—
Total shareholders' equity	$373,343	$105,869	$ 96,940	$ 88,714	$ 92,963

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The statements in "Management's Discussion and Analysis of Financial Condition and Results of Operations" that relate to future plans, events or performance are forward-looking statements which involve risks and uncertainties. These factors, and others, are discussed more fully below and in our filings with the Securities and Exchange Commission, or SEC. Actual results, events or performance may differ materially from those anticipated in these forward-looking statements as a result of a variety of factors. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. We undertake no obligation to publicly release the result of any revisions to these forward-looking statements that may be needed to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

OVERVIEW

We are a leading manufacturer of circulatory support products for use by patients with congestive heart failure, or CHF. According to the American Heart Association, 4.7 million patients in the United States suffer from CHF and an additional 550,000 patients are diagnosed with this disease annually. We were the first company to receive FDA approval to commercially market a ventricular assist device, or VAD, to treat patients with late-stage heart failure, which comprises approximately 5% of the CHF patient population. Our VADs are used primarily by these CHF patients to perform some or all of the pumping function of the heart and we currently offer the widest range of products to serve this market. We believe that our long-standing reputation for quality and innovation and our excellent relationships with leading cardiovascular surgeons worldwide position us to capture growth opportunities in the expanding congestive heart failure market. We also develop and sell products that are used by physicians and hospitals for vascular and diagnostic applications which include vascular grafts and blood coagulation testing and skin incision devices. We conduct business both domestically and internationally.

THE MERGER WITH THERMO CARDIOSYSTEMS

On February 14, 2001, we completed our Merger with TCA. Pursuant to the Merger agreement between Thoratec and TCA dated October 3, 2000, we issued 32,226,074 shares of our common stock to the shareholders of TCA in exchange for all the outstanding common stock of TCA (38,594,281 shares outstanding as of February 14, 2001) at an exchange ratio of 0.835 to 1. Immediately following the transaction, TCA's former shareholders owned 59% of our then outstanding common stock and Thoratec's former shareholders owned the remaining shares of our common stock. Thermo Electron, the majority shareholder of TCA prior to the Merger, received 19,312,959 shares of the 32,226,074 newly issued shares. Immediately following the Merger, Thermo Electron owned approximately 35% of our then outstanding shares of common stock. As of the date of this report, Thermo Electron owns approximately 14% of our total outstanding shares.

The Merger was accounted for under the purchase method of accounting and was treated as a reverse acquisition because the shareholders of TCA owned the majority of our common stock after the Merger. TCA was deemed the acquirer for accounting and financial reporting purposes. Accordingly, all financial information prior to 2001 included in this report reflects TCA's results.

Due to the nature of the reverse acquisition, Thoratec's assets and liabilities were recorded based upon estimated fair values at the date of acquisition. As of December 29, 2001, $309.1 million of the purchase price of $346.2 million has been allocated to goodwill and other purchased intangible assets. As a result of the Merger, $76.9 million relating to in-process research and development was expensed upon completion of the Merger. Through the end of 2001, goodwill and other intangibles were amortized over their estimated useful lives of six to twenty years. Beginning in 2002, we adopted Statement of Financial Accounting Standards, or SFAS, No. 142, "Goodwill and Other Intangible Assets." SFAS No. 142 requires companies to cease amortizing goodwill that existed at June 30, 2001 and also establishes a new method of testing goodwill for impairment on an annual basis or on an interim basis if an

event occurs or circumstances change that would reduce the fair value of a reporting unit below its carrying value. As such, at the beginning of 2002, we stopped amortizing goodwill and began testing goodwill for impairment under the new standard. If impairment occurs, such impairment could harm our future results of operations. We expect that the adoption of SFAS No. 142 will result in a decrease in goodwill amortization of approximately $5.0 million in 2002.

Pursuant to the terms of a Registration Rights Agreement between us and Thermo Electron dated October 3, 2000, we filed a Registration Statement on Form S-3 with the SEC, which became effective on June 15, 2001, to register for resale 4,828,240 shares of our common stock held by Thermo Electron. Subsequent to that filing, Thermo Electron sold substantially all of the 4,828,240 registered shares from which we received no proceeds. We filed another Registration Statement on Form S-3 with the SEC to register 1,055,000 newly issued shares of our common stock and to register for resale 5,945,000 shares of our common stock held by selling shareholders, of which 5,825,000 shares were held by Thermo Electron. This Registration Statement became effective on February 12, 2002 and all shares registered were sold on February 15, 2002. We received $16.1 million, net of underwriting fees and discounts, but before other expenses of the offering, from the sale of the 1,055,000 newly issued shares. In addition the underwriters exercised a 30-day option to purchase from Thermo Electron 1,050,000 shares of our common stock to cover any over-allotments. We received no proceeds from the sale of shares by selling shareholders or from the sale of the over-allotment shares. As of the date of this report, Thermo Electron owns approximately 14% of our total outstanding common stock.

RESTRUCTURING PLAN

In June 2001, we approved a plan to consolidate all of our VAD manufacturing operations to our manufacturing facilities and headquarters in Pleasanton, California, which we call the Restructuring Plan. The restructuring initiatives, which have already commenced, are related to our desire to provide maximum value to customers through achievement of operating efficiencies. We estimate that annual savings of approximately $2.0 million will result upon completion of the Restructuring Plan. The Restructuring Plan specifically provides for the reduction of approximately 90 of our manufacturing and related workforce at our Woburn and Chelmsford, Massachusetts facilities. We notified the affected employees during the second quarter of 2001 both through direct personal contact and written notification. The Chelmsford facility was closed in February 2002. Our HeartMate family of products, which are currently manufactured at the Woburn facility, will be transitioned to the Pleasanton facility. The restructuring activities are estimated to take 18 months because of FDA certification requirements for the relocated manufacturing operations in Pleasanton. Through December 29, 2001, we have accrued $1.1 million of restructuring charges, in accordance with Emerging Issues Task Force (EITF) Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity," and Staff Accounting Bulletin (SAB) No. 100, "Restructuring and Impairment Charges." These charges represent estimated severance costs and stock option acceleration charges. As of December 29, 2001, we have paid approximately $0.1 million in severance payments to 2 employees related to the restructuring. We expect to pay out the remaining accrued restructuring charges by the end of 2002.

RESULTS OF OPERATIONS

The following table sets forth selected consolidated statements of operations data for the years indicated as a percentage of total product sales:

	FISCAL YEAR		
	2001	2000	1999
Product sales	100%	100%	100%
Cost of product sales	47	42	42
Gross profit	53	58	58
OPERATING EXPENSES /			
Selling, general & administrative	29	28	28
Research & development	19	20	21
Amortization of goodwill and purchased intangible assets	14	—	—
In-process research and development	68	—	—
Merger, restructuring and other costs	6	2	—
Total operating expenses	136	50	49
Income (loss) from operations	(83)	8	9
Interest and other income — net	2	6	5
Income (loss) before income taxes and extraordinary item	(81)	14	14
Income tax expense (benefit)	(3)	5	4
Income (loss) before extraordinary item	(78)	9	10
Extraordinary item — net of tax	—	—	2
Net income (loss)	(78%)	9%	12%

FISCAL YEARS 2001 AND 2000

PRODUCT SALES / Product sales in 2001 were $113.4 million compared to $83.4 million in 2000, an increase of $30.0 million or 36%. This increase was primarily attributable to the addition of Thoratec product sales of $34.7 million as a result of our Merger and an increase in other medical equipment sales of $1.2 million. The increase was partially offset by a $5.9 million reduction in sales of HeartMate products due primarily to significant distractions and uncertainties among TCA's sales force during the first and second quarters of 2001 while the Merger was being closed and the companies were being integrated.

The impact of the reduction in HeartMate sales was principally in the VAD domestic market because we use employees to sell these products domestically compared to the international markets where distributors are primarily used. Domestic sales of the HeartMate in 2001 were $7.4 million lower than the previous year, partially offset by a $1.5 million increase in sales of the HeartMate internationally. The decrease in domestic HeartMate sales in 2001 was also attributable, in part, to fluctuations in the ventricular assist device market as customers used existing inventories to address their implantation needs.

The increase in sales of other medical equipment of $1.2 million was primarily due to increases in sales of our ProTime products of $1.4 million and coagulation products of $0.5 million, partially offset by a decrease in sales of our skin incision products of $0.7 million.

GROSS PROFIT / Gross profit in 2001 was $60.5 million, or 53% of product sales, compared to $48.6 million, or 58% of product sales, in 2000. This decrease in gross profit as a percentage of sales was primarily due to a lower proportion of domestic sales to total product sales as our products that are sold in the United States generally have a higher gross profit than those sold in the rest of the world. In addition, production costs for the HeartMate product line were higher in 2001 due to $1.4 million of employee retention and plant relocation costs and $0.4 million of write-offs of product inventory related to the HeartMate pneumatic driver, which was discontinued in the second half of 2001.

In addition, approximately 1% of our decrease in gross profit as a percentage of sales was attributable to a lower gross profit on our other medical equipment product line. This decrease was primarily due to lower average selling prices of our skin incision products because of increased market competition.

SELLING, GENERAL AND ADMINISTRATIVE / Selling, general, and administrative expenses in 2001 were $32.3 million, or 29% of product sales, compared to $23.6 million, or 28% of revenues, in 2000, an increase of $8.7 million, or 37%. This increase resulted from the addition of Thoratec's selling, general and administrative expenses of $12.0 million as a result of our Merger, offset by lower employee related expenses due to personnel reductions primarily in the sales and marketing areas since the Merger.

RESEARCH AND DEVELOPMENT / Research and development expenses in 2001 were $22.1 million, or 20% of product sales, compared to $16.2 million, or 19% of product sales, in 2000, an increase of $5.9 million, or 36%. This increase resulted from the addition of Thoratec's research and development expenses of $8.0 million as a result of our Merger, offset by a decrease in clinical trial and other costs related to the TLC-II, Aria graft and REMATCH trials and various other research and development projects.

AMORTIZATION OF GOODWILL AND PURCHASED INTANGIBLE ASSETS / Amortization of goodwill and purchased intangible assets in 2001 was $15.7 million, or 14% of product sales. As of December 29, 2001, goodwill of $99.5 million and intangible assets of $209.6 million have been recorded as a result of our Merger and are being amortized over their estimated useful lives of six to twenty years. Beginning in 2002, we have stopped amortizing goodwill in accordance with SFAS No. 142, which requires companies to cease amortizing goodwill that existed as of June 30, 2001 and begin evaluating goodwill for impairment. We expect that the adoption of SFAS No. 142 will result in a decrease in goodwill amortization of approximately $5.0 million in 2002.

IN-PROCESS RESEARCH AND DEVELOPMENT COSTS / In-process research and development expense in 2001 was $76.9 million, or 68% of product sales, and represents the one-time write-off of nonrecurring charges associated with our Merger in February 2001 for technology that had not reached technological feasibility, had no alternative future use and for which successful development was uncertain.

The valuation of intangibles related to the Merger was based upon our management's estimates of after tax net cash flow using discount rates ranging from 42% to 48%. The valuation gave consideration to the following: (i) comprehensive due diligence concerning all potential intangibles; (ii) the value of developed and core technology, ensuring that the relative allocation to core technology and in-process research and development was consistent with the contribution of each to the final products; and (iii) the allocation to in-process research and development based upon a calculation that only considered the efforts completed as of the date of the Merger, and only the cash flows associated with the completion or acceleration of existing products. The valuations were performed by an independent valuation group and were deemed reasonable in light of all the quantitative and qualitative information available.

There have been no significant developments subsequent to the Merger related to the current status of any of the in-process research and development, or IPR&D, projects that would result in material changes to the assumptions or resulting valuation performed at the time of the Merger. Development of IPR&D products continues and while the timing of completion of these projects may vary due to the highly regulatory and technical nature of our products, current estimates remain materially consistent with our initial estimates. The current status of each IPR&D project follows:

Thoratec VAD (Discharge and Therapeutic Recovery) / We continue to participate in various studies designed to demonstrate the Thoratec VAD's role to provide ventricular assistance in patients after they have been discharged from the hospital and as a support to recovery of the heart from open-heart surgery, acute cardiac failure and various infections of the heart muscle. Cost projections for this project are consistent with initial estimates. At the time of the Merger, the estimated cost to complete the studies was approximately $2.3 million. We hope to complete these studies and obtain approval from the FDA in 2002.

TLC-II Driver / The TLC-II Driver received FDA approval in 2001.

IVAD / Conditional approval to start IVAD clinical trials in the U.S. has been received from the FDA and cost projections are consistent with initial estimates. At the time of the Merger, the estimated cost to complete this project was approximately $2.5 million. We hope that the IVAD will be approved by the FDA in 2003.

Aria Graft / Clinical trials for the Aria graft are ongoing and cost projections are consistent with initial estimates. At the time of the Merger, the estimated cost to complete the Aria graft was approximately $4.7 million. We hope that the Aria graft will be completed and approved by the FDA in 2004.

There can be no assurances that we will be able to complete the development of these products on a timely basis. Failure to complete these projects could have an adverse impact on our financial condition or results of operations.

MERGER, RESTRUCTURING AND OTHER COSTS / Merger, restructuring and other charges in 2001 were $7.1 million, or 6% of product sales, compared to $1.8 million, or 2% of product sales, in 2000, an increase of $5.3 million, or 290%. The $7.1 million of merger, restructuring and other charges included merger related costs consisting mainly of employee severance of $2.8 million, executive waiver agreement costs of $0.7 million and consulting, accounting and legal expenses of $1.8 million, restructuring costs of $1.1 million, representing estimated severance costs related to the consolidation of VAD manufacturing operations, and costs of $0.7 million related to the events of September 11, 2001. Merger, restructuring and other costs for 2000 consisted of pre-merger retention costs for TCA employees of $1.8 million.

INTEREST AND OTHER INCOME—NET / Interest and other income—net in 2001 was $2.4 million, or 2% of product sales, compared to $5.0 million, or 6% of product sales, in 2000, a decrease of $2.6 million, or 52%. This decrease was due to a $2.5 million reduction in interest income caused by both lower cash balances and a reduction in interest rates.

INCOME TAXES / Our effective tax benefit rate was 4% in 2001 compared to an effective tax provision rate of 39% in 2000. Our effective tax benefit rate for 2001 differed from the statutory federal income tax rate primarily due to the impact on the reported net loss of nondeductible expenses related to our Merger with TCA, including the write-off of IPR&D costs, the amortization of goodwill and other nondeductible merger transaction costs. For 2000, the effective tax provision rate exceeded the federal statutory income tax rate primarily due to the impact of state income taxes.

EXTRAORDINARY ITEM / We recorded an extraordinary gain of $0.2 million as a result of our purchase of a portion of our 4.75% subordinated convertible debentures. There was no extraordinary item in 2001.

FISCAL YEARS 2000 AND 1999

PRODUCT SALES / Product sales in 2000 were $83.4 million compared to $78.6 million in 1999, an increase of $4.8 million, or 6%. VAD revenues increased to $43.1 million in 2000 from $39.8 million in 1999, due to an increase in revenues from our HeartMate products, principally due to higher demand. Product sales from blood coagulation testing and skin incision devices increased to $40.3 million in 2000 from $38.8 million in 1999 due to a $2.0 million increase in revenues from blood coagulation testing systems due to increased demand and the introduction of new products, offset in part by a decrease in revenues from skin incision devices due to lower demand caused by competitive pricing pressures.

GROSS PROFIT / Gross profit in 2000 was $48.6 million, or 58% of product sales, compared to $45.3 million, or 58% of product sales in 1999. An increase in the average sales price for the HeartMate and improved overhead absorption were offset by a decrease in gross profit margin for blood coagulation testing and skin incision devices during 2000.

SELLING, GENERAL AND ADMINISTRATIVE / Selling, general, and administrative expenses in 2000 were $23.6 million, or 28% of product sales, compared to $22.0 million, or 28% of revenues, in 1999, an increase of $1.6 million, or 7%. This increase was due to an increase in selling and marketing expenses in support of increased product sales.

RESEARCH AND DEVELOPMENT / Research and development expenses in 2000 were $16.2 million, or 20% of product sales, compared to $16.0 million, or 21% of product sales, in 1999, an increase of $0.2 million, or 1%. This increase was due to increased expenses relating to ventricular assist products for the development of the HeartMate II and continuing expenses related to the REMATCH trial.

MERGER, RESTRUCTURING AND OTHER COSTS / Merger, restructuring and other charges in 2000 were $1.8 million, or 2% of product sales. All merger, restructuring and other charges were due to employee retention costs in connection with the Merger. There were no such charges in 1999.

INTEREST AND OTHER INCOME—NET / Interest and other income — net in 2000 was $5.0 million, or 6% of product sales, compared to $4.0 million, or 5% of product sales, in 1999, an increase of $1.0 million, or 25%. Interest income increased to $7.6 million in 2000 from $7.1 million in 1999, due to an increase in interest rates. Interest expense decreased to $2.9 million in 2000 from $3.6 million in 1999, due to the purchase of $15.2 million principal amount of our 4.75% subordinated convertible debentures due 2004.

INCOME TAXES / The effective tax rate in 2000 was 39% compared to 26% in 1999. Our effective tax rate exceeded the statutory federal income tax rate in 2000 due to the impact of state income taxes. Our effective tax rate was lower than the statutory federal income tax rate in 1999 as a result of a favorable resolution of our claim for prior-year research and development tax credits. The effect of the credit decreased the tax provision recorded in 1999 by $1.5 million.

EXTRAORDINARY ITEM / We recorded extraordinary gains of $0.2 million and $1.2 million in 2000 and 1999, respectively, resulting from the purchase of a portion of our 4.75% subordinated convertible debentures.

LIQUIDITY AND CAPITAL RESOURCES

At the end of 2001, we had working capital of $135.9 million compared with $149.2 million at the end of 2000, a decrease of $13.3 million. Cash and cash equivalents at the end of 2001 were $91.7 million compared to $128.9 million at the end of 2000, a decrease of $37.2 million. The 2001 statement of cash flows was prepared by combining TCA's balance sheet as of December 2000 with Thoratec's balance sheet as of the Merger date of February 14, 2001, and comparing it to the consolidated balance sheet as of December 29, 2001, which included both entities.

Cash used by operating activities was $3.1 million in 2001, compared with cash provided of $8.7 million in 2000 and $6.7 million in 1999. The decrease in operating cash flows was due to higher accounts receivable and lower accounts payable and other liabilities balances as a result of the addition of Thoratec's operations as of the Merger date.

Cash provided by investing activities was $55.3 million in 2001, compared with cash provided of $23.4 million in 2000 and cash used of $37.3 million in 1999. The increase in cash flows was due to the sale and maturity of $52.8 million in short-term investments and cash acquired in the Merger of $16.2 million, offset by transaction costs of $5.8 million capitalized in conjunction with the Merger and capital expenditures of $7.9 million. Cash used for capital expenditures in 2001 increased to $7.9 million from $2.4 million in 2000 and $2.5 million in 1999. The higher level of capital expenditures in 2001 was due primarily to the acquisition of a new enterprise resource planning system and research and development equipment.

Cash provided by financing activities was $9.4 million in 2001, compared to cash used of $2.3 million in 2000 and $11.0 million in 1999. The increase in cash flows in 2001 was due to cash received from the exercise of stock options of $11.1 million, offset by stock repurchases of $1.7 million. In 2000 and 1999, we repurchased $2.8 million and $10.0 million in principle of our subordinated convertible debentures. No subordinated convertible debentures were repurchased in 2001.

During 2001, we made cash payments of $11.8 million for merger, restructuring and other costs. These payments consisted mainly of employee retention and severance costs, legal, banking and accounting costs related to the Merger. During 2001, prior to the Merger, TCA incurred $5.8 million of merger costs, consisting principally of banking, legal and accounting costs, which were paid and capitalized in the purchase consideration (now a component of goodwill).

On April 12, 2001, we announced a stock repurchase program under which up to $20 million in market value of our common stock may be acquired in the open market or in privately negotiated transactions. The number of shares to be purchased and the timing of purchases is based on several conditions, including the price of our stock, general market conditions and other factors. Through December 29, 2001, $1.7 million in common stock was repurchased, representing 192,700 shares. These repurchased shares were subsequently retired.

Pursuant to the terms of a Registration Rights Agreement between us and Thermo Electron dated October 3, 2000, we filed a Registration Statement on Form S-3 with the SEC, which became effective on June 15, 2001, to register for resale 4,828,240 shares of our common stock held by Thermo Electron. Subsequent to that filing, Thermo Electron sold substantially all of the 4,828,240 registered shares from which we received no proceeds. We filed another Registration Statement on Form S-3 with the SEC to register 1,055,000 newly issued shares of our common stock and to register for resale 5,945,000 shares of our common stock held by selling shareholders, of which 5,825,000 shares were held by Thermo Electron. This registration statement became effective on February 12, 2002 and all shares registered were sold on February 15, 2002. We received $16.1 million, net of underwriting fees and discounts, but before other expenses of the offering, from the sale of the 1,055,000 newly issued shares. In addition the underwriters exercised a 30-day option to purchase from Thermo Electron 1,050,000 shares of our common stock to cover any over-allotments. We received no proceeds from the sale of shares by selling shareholders or from the sale of these over-allotment shares. As of the date of this report, Thermo Electron owns approximately 14% of our total outstanding common stock.

On January 23, 2002, we announced a plan to redeem at par value all outstanding 4.75% convertible subordinated debentures due 2004, which were originally issued by TCA. We completed the redemption on March 11, 2002 using our restricted cash and cash equivalents of $45.9 million and cash of $9.8 million. We will record an extraordinary loss in the first quarter of 2002 related to the write-off of capitalized debt issuance costs associated with the initial issuance of the debentures, which were being amortized over the life of the debentures. As of December 29, 2001, the remaining balance of capitalized debt issuance costs was $0.5 million.

We believe that cash on-hand, proceeds from our stock offering and expected cash flows from operations will be sufficient to fund our operations and capital requirements for the foreseeable future. We expect that our operating expenses will increase in future periods as we spend more on product manufacturing, marketing, and research and development of new product lines as well as incur substantial costs associated with the consolidation of our VAD manufacturing operations.

The impact of inflation on our financial position and the results of operations was not significant during either 2001 or 2000.

CRITICAL ACCOUNTING POLICIES

We have identified the policies below as critical to our business operations and the understanding of our results of operations. The impact and any associated risks related to these policies on our business operations is discussed below. For a more detailed discussion on the application of these and other accounting policies, see the Notes to the Consolidated Financial Statements included in this Annual Report. The preparation of financial statements in accordance with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amount of assets, liabilities, revenue and expenses and the disclosure of contingent assets and liabilities. There can be no assurance that actual results will not differ from those estimates.

MERGER ACCOUNTING / On February 14, 2001, Thoratec completed its Merger with TCA. Pursuant to the Merger agreement between Thoratec and TCA, Thoratec issued new shares of its common stock to the shareholders of TCA in exchange for all the outstanding common stock of TCA. Immediately following the transaction, TCA's shareholders owned 59% of the then outstanding common stock of Thoratec and the former Thoratec shareholders owned the remaining shares of Thoratec common stock. The Merger was treated as a reverse acquisition because the shareholders of TCA owned the majority of Thoratec common stock after the Merger. TCA was considered the acquiror for accounting and financial reporting purposes. The Merger was accounted for under the purchase method of accounting. Under that method, the fair market value of the outstanding Thoratec common stock, determined using volume-weighted average stock trading prices beginning two days before and ending two days after the announcement of the Merger, was used to establish the purchase price for accounting purposes. Due to the reverse acquisition, Thoratec's assets and liabilities were recorded based upon their estimated fair values at the date of acquisition. The fair value of Thoratec's net assets have been estimated for purposes of allocating the purchase price. The purchase price is also allocated to intangible assets, including goodwill. As of December 29, 2001, approximately $309.1 million of the total purchase price of $346.2 million has been allocated to goodwill and other purchased intangible assets. The determination of the value of such intangible assets requires management to make estimates and assumptions that affect our consolidated financial statements. The amounts allocated to goodwill and other intangible assets will affect the amount of amortization expense we recognize in future periods and could result in a possible impairment expense if at some future date such assets were determined to be impaired.

As a result of the Merger, $76.9 million relating to IPR&D has been expensed in the first quarter of 2001. The write-off of IPR&D related to projects that were in development, had not reached technological feasibility, had no alternative future use and for which successful development was uncertain. There have been no significant developments subsequent to the Merger related to the current status of any of the IPR&D projects that would result in material changes to the assumptions or resulting valuation performed at the time of the Merger. Development of IPR&D projects continues and while the timing of completion of these projects may vary due to the highly regulatory and technical nature of our products, current estimates remain materially consistent with our initial estimates.

REVENUE RECOGNITION / We recognize revenue from product sales provided persuasive evidence of an arrangement exists, title has passed (generally upon shipment) or services have been rendered, the selling price is fixed or determinable and collectibility is reasonably assured. Estimated contractual warranty obligations are recorded when related sales are recognized. Sales to distributors are recorded when title transfers upon shipment. One distributor has certain limited product return rights. A limited number of other distributors have certain rights of return upon termination of their distribution agreement. A reserve for sales returns is recorded for these customers applying reasonable estimates of product returns based upon significant historical experience in accordance with SFAS No. 48, "Revenue Recognition When Right of Return Exists". No other direct sales customers or distributors have return rights or price protection.

Sales of certain Cardiovascular segment products to first-time customers are recognized when it has been determined that the customer has the ability to use such products. These sales frequently include the sale of products and training services under multiple element arrangements. For most customers, training is not essential to the functionality of the products as the customers already possess sufficient expertise and experience to use the products. In these situations, training is provided as a best practice to optimize the use and success of the products. The amount of sales under these arrangements allocated to training is based upon fair market value of the training, performed principally by third party providers. The amount of sales allocated to the Cardiovascular segment products is done on a residual method basis. Under this method, the total value of the arrangement is allocated first to the undelivered training element based on the fair market value, with the remainder being allocated to the Cardiovascular segment products. The amount of sales allocated to training is recorded as deferred revenue and is recognized when the training is completed.

Certain judgments affect the application of our revenue recognition policies. Revenue results and product returns are difficult to predict, and any shortfall in revenue or delay in recognizing revenue could cause our operating results to vary significantly from quarter to quarter and could result in future operating results.

RESERVES / We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make payments owed to us for product sales. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

We write down our inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions. If actual market conditions are less favorable than those projected by our management, additional inventory write-downs may be required.

Accrued merger costs recorded during 2001 and 2000 principally consisted of employee severance, pre-merger employee retention costs, and outside consulting, accounting and legal expenses associated with our Merger. Early in 2000, Thermo Electron announced its intent to sell TCA. In conjunction with this announcement, TCA put in place an employee retention plan, which offered a bonus to certain key employees to continue employment with TCA through the completion of the sale of the company. Management estimated the accrual for employee severance and employee retention costs based upon amounts to be paid as specified in agreements with the employees and anticipated turnover rates. Management estimated the accrual for outside consulting, accounting and legal expenses based on estimated fees from the third parties. The ultimate amount of merger costs to be paid is dependent upon the completion of all merger-related activities and could differ from the amounts originally estimated.

In June 2001, we approved a Restructuring Plan to consolidate all of our VAD manufacturing operations to our manufacturing facilities and headquarters in Pleasanton, California. Through December 29, 2001, we have accrued $1.1 million of restructuring charges in accordance with EITF Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity" and SAB No. 100, "Restructuring and Impairment Charges." These charges represent estimated severance costs. The Restructuring Plan is estimated to take 18 months because of FDA certification requirements for the new manufacturing activities in Pleasanton. Substantially all of the milestones related to the relocation that are controllable by us will be completed within 12 months of the date of announcement. Because our products are regulated by the FDA, it is estimated it will take an additional six months to complete the FDA review and certification process before the HeartMate products can be manufactured in Pleasanton. We believe we can make reasonable estimates of the involuntary employee termination benefits since we have specifically identified the employees that will be involuntarily terminated as well as the benefits that each affected employee will receive. We do not believe there are likely to be any developments during the intervening 18 months required to relocate the manufacturing operations which would have a significant impact on our original restructuring cost estimates. Although the Restructuring Plan has been documented in detail, small changes in the timing of specific activities are expected. The impact on the estimate for these changes is not expected to be material.

COMMITMENTS / As of December 29, 2001, we have the following outstanding commitments:

Subordinated Convertible Debt / In May 1997, we issued $70 million worth of 4.75% subordinated convertible debentures due May 2004. Interest is payable semi-annually in November and May of each year. The outstanding debentures are convertible into our common stock at a price of $37.62 per share. To date, no debentures have been exchanged for shares. On January 23, 2002, we announced a plan to redeem all of the outstanding subordinated debentures at par plus accrued interest. We completed the redemption on March 11, 2002 using our restricted cash and cash equivalents of $45.9 million and cash of $9.8 million. We will record an extraordinary loss in the first quarter of 2002 related to the write-off of capitalized debt issuance costs associated with the initial issuance of the debentures, which were being amortized over the life of the debentures. As of December 29, 2001, the remaining balance of capitalized debt issuance costs was $0.5 million.

Leases / The Company leases manufacturing, office, research facilities and equipment under various operating lease agreements. Future minimum lease payments as of the end of 2001 are noted below:

	FISCAL YEAR
2002	$ 1.7 million
2003	1.6 million
2004	1.3 million
2005	1.2 million
2006	1.2 million
Thereafter	9.7 million
Total	$ 16.7 million

Rent expense for all operating leases was $1.8 million in 2001, $0.6 million in 2000 and $0.5 million in 1999.

Included in these leases is a sublease of office and research facilities from Thermo Electron. We are charged for actual square footage occupied at approximately the same rent paid per square foot by Thermo Electron under its prime lease. The sublease expires in February 2004. Our statements of income include expenses from the sublease of $0.2 million for each of 2001, 2000 and 1999, respectively.

Future minimum annual payments due under these noncancellable sublease arrangements at December 29, 2001, are $0.2 million in 2002 and 2003 and $32,000 in 2004.

Purchase Commitments / We had various firm purchase commitments totaling approximately $13.0 million at December 29, 2001.

We purchase metal fabrication products and services from Tecomet, Inc. in connection with the manufacture of the ventricular-assist products we sell. Tecomet was a division of Thermo Electron until November 15, 2001 when it was sold by Thermo Electron to an unrelated third party. We paid $2.9 million, $3.3 million and $3.7 million to Tecomet in 2001, 2000 and 1999, respectively.

Other Commitments / Upon closing the Merger with TCA in February 2001, $45.0 million in cash and cash equivalents was pledged as collateral for a letter of credit guarantee to Thermo Electron Corporation related to Thermo Electron's guarantee of our subordinated debentures. This letter of credit is fully collateralized with cash and cash equivalents, which are recorded in restricted cash and cash equivalents on our 2001 balance sheet. The balance of the restricted cash and cash equivalents as of December 29, 2001 was $45.9 million, which includes interest earnings. In March 2002, all of the subordinated debentures were redeemed using the restricted cash and cash equivalents and $9.8 million of additional cash (see Note 7 to our 2001 Consolidated Financial Statements). As a result of the redemption, the letter of credit guarantee to Thermo Electron was extinguished.

In July 1998, we established an Executive Officer Severance Benefits Plan and an Employee Severance Benefits Plan as part of the employee benefits package. The plans provide severance benefits to certain employees whose employment is terminated, other than for cause. An Executive Officer's standard severance pay benefit is equal to one times annualized base salary. An employee's severance benefit is equal to an amount based on job level and length of service.

RECENT ACCOUNTING PRONOUNCEMENTS

In June 2001, the Financial Accounting Standards Board, or FASB, approved SFAS No. 141, "Business Combinations," and SFAS No. 142, "Goodwill and Other Intangible Assets." SFAS No. 141 prohibits the pooling of interests method of accounting for business combinations initiated after June 30, 2001. SFAS No. 142, which is effective for fiscal years beginning after December 15, 2001, requires companies to cease amortizing goodwill that existed at June 30, 2001 and establishes a new method of testing goodwill and intangibles for impairment. Allocations made to certain intangible assets and goodwill, as well as the useful lives assigned to intangible assets in the TCA merger will be re-assessed. We have adopted SFAS No. 141 and 142 effective the beginning of 2002. We expect that the adoption of SFAS No. 142 will result in a decrease in goodwill amortization of $5.0 million in 2002. Amortization of goodwill was $4.4 million for the year ended December 29, 2001. Amortization of purchased intangibles was $11.3 million for the year ended December 29, 2001.

To test goodwill for impairment under the new standard, we will establish reporting units to which assets, liabilities and goodwill will be allocated. Goodwill will be tested for impairment on an annual basis or on an interim basis if an event occurs or circumstances change that could reduce the fair value of the reporting unit below its carrying amount. Impairment tests will be performed using the lower of cost or market, purchase price allocation two-step approach. The first step requires comparison of the fair value of the reporting unit to its carrying amount. If the fair value of a reporting unit is less than its carrying amount, the second step is performed which requires allocation of the fair value of the reporting unit to the assets, liabilities and goodwill of that unit as if the unit had been acquired in a business combination and the fair value of the reporting unit determined in step 1 was the price paid to acquire the reporting unit. Goodwill is considered to be impaired to the extent that the amount allocated to goodwill in the hypothetical purchase price allocation is below the carrying amount of the goodwill. If an impairment occurs it will be included in income from operations and could have a negative impact on our future results of operations.

In June 2001, the FASB issued SFAS No. 143, "Accounting for Asset Retirement Obligations." SFAS No. 143 addresses *financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and the associated asset* retirement costs, including legal obligations. We are required to adopt SFAS No. 143 at the beginning of fiscal year 2003. We are currently evaluating the impact of the adoption of SFAS No. 143.

In October 2001, the FASB approved SFAS No. 144, "Accounting for the Impairment of Long-Lived Assets." This Statement addresses financial accounting and reporting for the impairment or disposal of long-lived assets. This Statement supersedes FASB Statement No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of," and the accounting and reporting provisions of Accounting Principles Board Opinion No. 30, "Reporting the Results of Operations — Reporting *the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions*," for the disposal of a segment of a business (as previously defined in that Opinion). This Statement also amends Accounting Research Board No. 51, "Consolidated Financial Statements," to eliminate the exception to consolidation for a subsidiary for which control is likely to be temporary. The Company will adopt this Standard at the beginning of fiscal year 2002. We do not expect the adoption of SFAS No. 144 to have a material impact on our financial position, results of operations or cash flows.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

SUBORDINATED DEBENTURES

Our subordinated debentures carry a fixed rate of interest of 4.75% and are currently callable at par value. At December 29, 2001, the fair value of our subordinated debentures was $52.9 million and is estimated based on broker information available to us for debentures with similar terms and remaining maturities. We believe the fair value of our subordinated debentures is below our carrying value due primarily to a lack of liquidity in the market for these types of subordinated debentures and the current price of our common stock being below the stated conversion price of the debentures.

On January 23, 2002, we announced a plan to redeem at par value all outstanding 4.75% convertible subordinated debentures due 2004, which were originally issued by TCA. We completed the redemption on March 11, 2002 using our restricted cash and cash equivalents of $45.9 million and cash of $9.8 million. We will record an extraordinary loss in the first quarter of 2002 related to the write-off of capitalized debt issuance costs associated with the initial issuance of the debentures, which were being amortized over the life of the debentures. As of December 29, 2001, the remaining balance of capitalized debt issuance costs was $0.5 million.

SHORT-TERM INVESTMENTS

We do not use derivative financial instruments for speculative or trading purposes. However, we are exposed to market risk related to changes in interest rates. Our investment portfolio at the end of 2001 consisted of short-term state and municipal government bonds and money market funds that are classified as cash and cash equivalents and have maturities of three months or less. The fair market value of these investments will fall if market interest rates increase. If market interest rates were to increase by 10% from levels at December 29, 2001, the fair market value of our investment portfolio would decline by an immaterial amount.

FOREIGN CURRENCY RATE FLUCTUATIONS

We conduct business in foreign countries. Our international operations consist primarily of sales and service personnel for our ventricular assist products. The employees report into our U.S. sales and marketing group and are internally reported as part of that group. All assets and liabilities of our non-U.S. operations are translated into U.S. dollars at the period-end exchange rates. The resulting translation adjustments are included in comprehensive income. The period-end translation of the non-functional currency balances (the result of foreign sales, foreign expenses, and intercompany transactions) in our wholly-owned subsidiary in the United Kingdom at the period-end exchange rate into the functional currency of our subsidiary results in foreign currency exchange gains and losses. These foreign currency exchange gains and losses are included in interest and other income-net. Net foreign currency exchange loss was approximately $0.1 million for 2001. There were no such gains or losses in 2000 as Thoratec's United Kingdom subsidiary did not become part of our operations until completion of our Merger on February 14, 2001. Currently, we do not expect to be subject to material foreign currency risk with respect to future costs or cash flows from our foreign operations. To date, we have not entered into any significant foreign currency hedging contracts or other derivative financial instruments to hedge the effects of adverse fluctuations in foreign currency exchange, however, we are currently evaluating possible future use of such contracts and instruments.

CONSOLIDATED BALANCE SHEETS

	AS OF FISCAL YEARS	
	2001	2000
	(In thousands)	
ASSETS		
CURRENT ASSETS /		
Cash and cash equivalents	$ 91,726	$ 30,236
Short-term available-for-sale investments at quoted		
market value, amortized cost of $98,743 in 2000	—	98,682
Receivables, net of allowances of $551 in 2001 and $939 in 2000	26,988	15,358
Inventories	25,673	17,381
Deferred tax asset	11,789	3,454
Prepaid expenses and other	788	74
Total current assets	156,964	165,185
Property, plant and equipment, net	22,645	7,084
Restricted cash and cash equivalents	45,884	—
Goodwill	95,209	—
Purchased intangible assets	198,608	—
Long-term deferred tax asset	9,313	2,619
Other assets	1,618	1,797
Total Assets	$530,241	$176,685
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES /		
Accounts payable	$ 8,271	$ 3,972
Accrued compensation	6,481	3,999
Accrued merger and restructuring	1,335	1,708
Estimated liabilities for warranty, legal and other	1,781	1,316
Other accrued liabilities	3,172	4,983
Total current liabilities	21,040	15,978
Subordinated convertible debentures	54,838	54,838
Long-term deferred tax liability and other	81,020	—
Total Liabilities	156,898	70,816
COMMITMENTS		
SHAREHOLDERS' EQUITY /		
Common shares; 100,000 authorized, issued and		
outstanding 56,114 in 2001 and 32,215 in 2000	409,081	49,125
Deferred compensation	(4,555)	(251)
Retained earnings (accumulated deficit)	(31,166)	57,025
ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS) /		
Unrealized loss on investments	—	(39)
Cumulative translation adjustments	(17)	9
Total accumulated other comprehensive loss	(17)	(30)
Total Shareholders' Equity	373,343	105,869
Total Liabilities and Shareholders' Equity	$530,241	$176,685

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF OPERATIONS

	FOR THE FISCAL YEARS ENDED		
	2001	2000	1999
	(In thousands, except per share data)		
Product sales	$113,384	$ 83,396	$ 78,611
Cost of product sales	52,840	34,830	33,326
Gross profit	60,544	48,566	45,285
OPERATING EXPENSES /			
Selling general and administrative	32,346	23,587	22,018
Research and development	22,082	16,190	16,044
Amortization of goodwill and purchased intangible assets	15,674	—	—
In-process research and development	76,858	—	—
Merger, restructuring and other costs	7,134	1,831	—
Total operating expenses	154,094	41,608	38,062
Income (loss) from operations	(93,550)	6,958	7,223
Interest and other income — net	2,359	5,005	4,014
Income (loss) before taxes and extraordinary item	(91,191)	11,963	11,237
Income tax expense (benefit)	(3,325)	4,630	2,865
Income (loss) before extraordinary item	(87,866)	7,333	8,372
Extraordinary item — net of tax	—	191	1,212
Net income (loss)	$ (87,866)	$ 7,524	$ 9,584
Basic and diluted earnings (loss) per share	$ (1.68)	$ 0.23	$ 0.30
SHARES USED TO COMPUTE EARNINGS (LOSS) PER SHARE /			
Basic	52,336	32,193	32,100
Diluted	52,336	32,209	32,132

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	FOR THE FISCAL YEARS ENDED		
	2001	2000	1999
	(In thousands)		
Net income (loss)	$ (87,866)	$ 7,524	$ 9,584
OTHER NET COMPREHENSIVE INCOME (LOSS) /			
Unrealized gain (loss) on securities	39	299	(458)
Foreign currency translation adjustments	(26)	(38)	18
Comprehensive income (loss)	$ (87,853)	$ 7,785	$ 9,144

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

	COMMON STOCK SHARES	COMMON STOCK $	RETAINED EARNINGS (ACCUMULATED DEFICIT)	DEFERRED COMPENSATION	ACCUMULATED OTHER COMPREHENSIVE INC. (LOSS)	TOTAL SHAREHOLDERS' EQUITY
				(in thousands)		
BALANCE, FISCAL YEAR ENDED 1998	32,139	$48,649	$ 39,917	$ —	$ 149	$ 88,715
Exercise of common stock options for cash	7	49				49
Common stock issued under restricted common stock award	56	625		(625)		—
Activity under employees' and directors' stock plans	14	(145)				(145)
Repurchase of common stock	(88)	(925)				(925)
Deferred compensation amortization				104		104
Other comprehensive income:						
Unrealized loss on available-for-sale investments, net of reclassification adjustment					(458)	(458)
Foreign currency translation adjustment					18	18
Net income			9,584			9,584
BALANCE, FISCAL YEAR ENDED 1999	32,128	$48,253	$ 49,501	$ (521)	$ (291)	$ 96,942
Exercise of common stock options for cash	44	266				266
Exercise of common stock warrant for cash	50	350				350
Tax benefit related to employees' and directors' stock plans		319				319
Activity under employees' and directors' stock plans	(5)	19				19
Termination of restricted common stock award	(2)	(82)		82		—
Amortization of deferred compensation				188		188
Other comprehensive income:						
Unrealized gain on available-for-sale investments, net of reclassification adjustment					299	299
Foreign currency translation adjustment					(38)	(38)
Net income			7,524			7,524
BALANCE, FISCAL YEAR ENDED 2000	32,215	$49,125	$ 57,025	$ (251)	$ (30)	$ 106,869
Common stock issued in connection with merger of Thoratec and Thermo Cardiosystems	22,452	306,889		(841)		306,048
Common Stock options granted for Thermo Cardiosystems merger		33,524				33,524
Common stock issued for services	12	136				136
Non-cash compensation for services		166				166
Exercise of common stock options for cash	1,378	11,077				11,077
Tax benefit related to employees' and directors' stock plans		5,402				5,402
Common stock issued under restricted common stock award	250	4,140		(4,140)		—
Repurchase of common stock	(193)	(1,378)	(325)			(1,703)
Amortization of deferred compensation				677		677
Other comprehensive income:						
Unrealized gain on available-for-sale investments, net of reclassification adjustment					39	39
Foreign currency translation adjustment					(26)	(26)
Net Income (Loss)			(87,866)			(87,866)
BALANCE, FISCAL YEAR ENDED 2001	56,114	$409,081	$ (31,166)	$ (4,555)	$ (17)	$ 373,343

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	FOR THE FISCAL YEARS ENDED		
	2001	2000	1999
	(In thousands)		
CASH FLOWS FROM OPERATING ACTIVITIES /			
Net income (loss)	$ (87,866)	$ 7,524	$ 9,584
Adjustments to reconcile net income (loss) to net cash provided by *(used in) operating activities:*			
Depreciation and amortization	19,845	2,840	2,880
Write-off of in-process research and development costs	76,858	—	—
Non-cash compensation expense	303	—	—
Amortization of deferred compensation	677	270	104
Change in net deferred tax liability	(2,993)	—	(780)
Gain on sale of investments	—	(3)	—
Extraordinary item, net of taxes	—	(191)	(1,212)
Changes in assets and liabilities:			
Receivables	(5,892)	(1,000)	(2,132)
Inventories	(560)	(2,444)	(3,012)
Prepaid expenses and other assets	814	(7)	640
Accounts payable and other liabilities	(4,326)	1,745	589
Net cash provided by (used in) operating activities	(3,140)	8,734	6,661
CASH FLOWS FROM INVESTING ACTIVITIES /			
Repayments from affiliate, net	—	13,961	(13,961)
Purchases of short-term available-for-sale investments	—	(120,002)	(160,722)
Sales and maturities of short-term available-for-sale investments	52,838	131,802	139,943
Capitalized transaction costs	(5,838)	—	—
Purchases of equipment and improvements	(7,947)	(2,360)	(2,540)
Cash and equivalents acquired in business acquisition	16,199	—	—
Net cash provided by (used in) investing activities	55,252	23,401	(37,280)
CASH FLOWS FROM FINANCING ACTIVITIES /			
Common stock issued upon exercise of options	11,077	601	193
Payment of withholding taxes related to stock option exercises	—	(47)	(290)
Repurchase of common stock	(1,703)	—	(925)
Repurchase of convertible debentures	—	(2,825)	(9,985)
Net cash provided by (used in) financing activities	9,374	(2,271)	(11,007)
Effect of exchange rate changes on cash and cash equivalents	4	(46)	18
Net increase (decrease) in cash and cash equivalents	61,490	29,818	(41,608)
Cash and cash equivalents at beginning of period	30,236	418	42,026
Cash and cash equivalents at end of period	$ 91,726	$ 30,236	$ 418
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION /			
Cash paid for taxes	$ 470	$ 4,691	$ 4,670
Cash paid for interest	$ 2,604	$ 2,918	$ 3,382
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITIES /			
Issuance of restricted stock for services	$ 4,140	$ —	$ 625
Cash reclassified to restricted cash and cash equivalents	$ 45,884	$ —	$ —
Tax benefit related to stock option exercises	$ 5,402	$ 319	$ —

See notes to consolidated financial statements

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES

Operations / Thoratec Corporation (the "Company") is headquartered in Pleasanton, California and is a leading manufacturer of circulatory support products for use by patients with congestive heart failure. The Company develops, manufactures and markets products that are used by physicians and hospitals for cardiac assist, vascular and diagnostic applications. The Company organizes and manages its business by functional operating entities, which operate in two business segments: ventricular-assist products and grafts ("Cardiovascular," formerly known as "VAD/graft") and Other Medical Equipment. The Company's Cardiovascular segment develops, manufactures and markets proprietary medical devices used for circulatory support and vascular graft applications. The Company's Other Medical Equipment segment develops, manufactures and markets near-patient, whole-blood coagulation testing equipment and related disposables, as well as premium quality, single-use skin incision devices. The Company conducts business both domestically and internationally. In February 2001, the Company merged with Thermo Cardiosystems, Inc. ("TCA") (Note 2). Prior to the merger (the "Merger"), TCA was a subsidiary of Thermo Electron Corporation ("Thermo Electron").

Fiscal Year / The Company reports on a 52-53 week fiscal year, which ends on the Saturday closest to December 31. The fiscal years ended January 1, 2000, ("1999"), December 30, 2000, ("2000"), and December 29, 2001, ("2001"), all included 52 weeks.

Principles of Consolidation / The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates / The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Major Customers and Concentration of Credit Risk / The Company primarily sells its products to large hospitals and distributors in the United States and Europe. For fiscal years 2001, 2000 and 1999, one distributor customer accounted for 12%, 17% and 21% of total product sales, respectively. Accounts receivable for this same distributor customer accounted for 8% and 13% of total accounts receivable as of the end of 2001 and 2000, respectively. No other customer accounted for more than 10% of total product sales in 2001, 2000 or 1999 or had an accounts receivable balance greater than 10% of total accounts receivable at the end of 2001 or 2000.

Credit is extended based on an evaluation of a customer's financial condition and generally collateral is not required. To date, credit losses have not been significant, however, the Company maintains allowances for potential credit losses.

Additionally, the Company is potentially subject to concentrations of credit risk in its investments. To mitigate this credit risk, the Company invests in high-grade instruments, which it places with high quality financial institutions.

Certain Risks and Uncertainties / The Company is subject to certain risks and uncertainties and believes that changes in any of the following areas could have a material adverse effect on the Company's future financial position or results of operations: the ability to achieve or maintain profitability; the integration of TCA, including the ability to complete the relocation of its ventricular assist device ("VAD") manufacturing operations from Woburn, Massachusetts to Pleasanton, California, or any other future acquisitions; the ability to manage current and future growth; stock price volatility due to general economic conditions or future issuances and sales of Company stock; foreign currency fluctuations; new product development and introduction, including Food and Drug Administration ("FDA") approval and market receptiveness; the long and variable sales and deployment cycle of the Company's VAD systems; the ability to protect the Company's proprietary technologies or an infringement of others' patents; competition from other products;

worldwide demand for circulatory support and graft products and blood coagulation testing and skin incision devices; product liability or other claims; the ability to obtain timely deliveries of parts from suppliers; the reliance on specialized suppliers; the ability to manufacture products on an efficient and timely basis and at a reasonable cost and in sufficient volume; the dependence upon distributors; the ability of third party payors to provide appropriate levels of reimbursement for the Company's products; the ability to attract and retain talented employees; the occurrence of natural catastrophic disasters; the ability to realize the full value of our intangible assets; and other risks as detailed from time to time in the Company's filings with the Securities and Exchange Commission ("SEC").

Cash and Cash Equivalents / Cash and cash equivalents include cash on deposit of $5,758,000 and money market securities and municipal government auction bonds of $85,968,000 in 2001 and commercial paper of $29,117,000 in 2000 with original maturities of three months or less. Cash equivalents are carried at cost, which approximates market value.

Short-Term Available-For-Sale Investments / The Company's short-term investments are classified as available-for-sale and reported at fair market value. Net unrealized gains and losses are excluded from earnings and reported as a separate component of shareholders' equity. As of the end of 2000, short-term investments were comprised primarily of government agency securities and corporate bonds having maturity of one year or less from the date of investment.

Inventories / Inventories are stated at the lower of first-in, first-out cost or market.

Property, Plant and Equipment / Property, plant and equipment are stated at cost. Depreciation is computed using the straight-line method based on estimated useful lives of 2 to 30 years. Leasehold improvements are amortized over the lesser of the useful life or the remaining term of the lease. Property, plant and equipment includes certain medical devices rented to customers on a short- or long-term basis. Amortization expense of all rental equipment included in the Company's rental program is recognized ratably over 2 to 4 years and is recorded in cost of product sales.

The Company reviews for the impairment of long-lived assets whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. An impairment loss would be recognized when the sum of the undiscounted future net cash flows expected to result from the use of the asset and its eventual disposal is less than carrying amount.

Capitalized Software Costs / The Company capitalizes the costs of computer software developed or obtained for internal use in accordance with Statement of Position 98-1, "Accounting for the Costs of Computer Software Developed or Obtained for Internal Use." Capitalized computer software costs consist of purchased software licenses, implementation costs and consulting for certain projects that qualify for capitalization. The Company expenses costs related to preliminary project assessment, research and development, re-engineering, training and application maintenance as incurred. Costs capitalized as of 2001 and 2000 were $2,416,000 and nil, respectively. For each of 2001, 2000 and 1999, no depreciation has been charged, as the related computer software systems have not yet been placed into service. The capitalized software costs will be depreciated on a straight-line method over a period of eight years upon being placed in service.

Restricted Cash and Cash Equivalents / Upon closing the Merger with TCA in February 2001, $45,000,000 in cash and cash equivalents was pledged as collateral for a letter of credit guarantee to Thermo Electron related to Thermo Electron's guarantee of the Company's subordinated debentures (Note 7). Accordingly, these cash and cash equivalents have been reclassified to restricted cash and cash equivalents on the Company's 2001 balance sheet. The balance of these restricted cash and cash equivalents as of December 29, 2001 was $45,884,000, which includes interest earnings.

Purchased Intangible Assets and Goodwill / Purchased intangible assets are recorded at their fair market value as of the date of acquisition and amortized on a straight-line basis over their estimated useful lives of up to 20 years. Through 2001, goodwill was amortized on a straight-line basis over its useful life of 20 years. Beginning in 2002, amortization of goodwill was ceased in accordance with Statement of Financial Accounting Standards ("SFAS") No. 142, "Goodwill and Other Intangible Assets." Accumulated amortization on purchased intangible assets and goodwill totaled $15,674,000 and nil at the end of 2001 and 2000, respectively.

Other Assets / Other assets principally include deposits on the Company's building leases and interest earned on those deposits, long-term prepaid software maintenance contracts and patents and trademarks associated with the Company's Other Medical Equipment segment. The patents and trademarks are amortized on a straight-line basis over their estimated useful life of twenty years. At the end of 2001 and 2000, accumulated amortization of the patents and trademarks was $324,000 and $287,000, respectively.

Income Taxes / In accordance with SFAS No. 109, "Accounting for Income Taxes," the Company recognizes deferred income taxes based on the expected future tax consequences of differences between the financial statement basis and the tax basis of assets and liabilities, calculated using enacted tax rates in effect for the year in which the differences are expected to be reflected in the tax return.

Fair Value of Financial Instruments / Financial instruments include cash and cash equivalents, customer receivables, accounts payable, certain other accrued liabilities and subordinated convertible debentures. The fair value of the subordinated convertible debentures was $52,900,000 at December 29, 2001 and is estimated based on broker information available to the Company for debentures with similar terms and maturities. The Company believes the fair value of the subordinated debentures is below the carrying value due primarily to a lack of liquidity in the market for these types of subordinated debentures and the current price of the Company's common stock being below the stated conversation price of the debentures. The carrying amounts of all other items are a reasonable estimate of their fair values.

Foreign Currency Translation / All assets and liabilities of the Company's non-United States operations are translated into United States dollars at period-end exchange rates, and the resulting translation adjustments are included in comprehensive income. Income items are translated at actual or average monthly rates of exchange. Exchange rate fluctuations resulting from the period-end translation of the current portion of the intercompany obligation of the Company's wholly-owned subsidiary into United States dollars are recorded in the statements of operations as foreign currency translation gains or losses and are included in interest and other income-net.

Repurchases of Common Stock / On April 12, 2001 the Company's board of directors authorized a stock repurchase program under which up to $20,000,000 of the Company's common stock may be acquired in the open market or in privately negotiated transactions. The number of shares to be purchased and the timing of purchases is based on several conditions, including the price of Thoratec stock, general market conditions and other factors. For each share repurchased, the Company reduces common stock by the average value per share reflected prior to the repurchase with the excess allocated to retained earnings. The Company retires all shares repurchased.

Revenue Recognition and Product Warranty / The Company recognizes revenue from product sales provided persuasive evidence of an arrangement exists, title has passed (generally upon shipment) or services have been rendered, the selling price is fixed or determinable and collectibility is reasonably assured. Estimated contractual warranty obligations are recorded when related sales are recognized.

Sales to distributors are recorded when title transfers upon shipment. One distributor has certain limited product return rights. A limited number of other distributors have certain rights of return upon termination of their distribution agreement. A reserve for sales returns is recorded for these customers applying reasonable estimates of product returns based upon significant historical experience in accordance with SFAS No. 48, "Revenue Recognition when Right of Return Exists." No other direct sales customers or distributors have return rights or price protection.

Sales of certain Cardiovascular segment products to first-time customers are recognized when it has been determined that the customer has the ability to use such products. These sales frequently include the sale of products and training services under multiple element arrangements. For most customers, training is not essential to the functionality of the products as the customers already possess sufficient expertise and experience to use the products. In these situations, training is provided as a best practice to optimize the use and success of the products. The amount of revenues under these arrangements allocated to training is based upon fair market value of the training, performed principally by third party providers. The amount of revenues allocated to the Cardiovascular segment products is done on a residual method basis. Under this method, the total value of the arrangement is allocated first to the undelivered training element based on the fair market value, with the remainder being allocated to the Cardiovascular segment products. The amount of revenues allocated to training is recorded as deferred revenue and is recognized when the training is completed. As of the end of 2001, $1,093,000 of products have been delivered and recorded as product sales for customers that were determined to be able to use those products, but for which training had not yet been completed. The amount of revenue deferred related to this training not yet completed was $38,000 at the end of 2001. As of the end of 2000 and 1999, all training related to product sales had been completed.

The Company also rents certain medical devices to customers on a month-to-month or as-used basis. Rental income is based on utilization and is included in product sales as earned. Included in product sales for 2001, 2000 and 1999 are $3,456,000, $2,724,000 and $1,958,000, respectively, of income earned from the rental of these medical devices.

Revenues and profits on long-term research and development contracts are recognized using the percentage-of-completion method and recorded as interest and other income — net. Revenues recorded under the percentage-of-completion method were nil, $306,000 and $479,000 in 2001, 2000 and 1999, respectively. The percentage-of-completion is determined by relating the actual costs incurred to date to management's estimate of total costs to be incurred on each contract. If a loss is indicated on any contract in process, a provision is made currently for the entire loss. Contracts generally provide for the billing of customers on a cost-plus-fixed-fee basis as costs are incurred.

Accounting for Stock-Based Compensation / The Company accounts for stock-based awards to employees using the intrinsic value method in accordance with Accounting Principals Board Opinion No. 25, "Accounting for Stock Issued to Employees." Proforma disclosures of net earnings and earnings per share consistent with the method of SFAS No. 123, "Accounting for Stock-Based Compensation" are included in Note 9.

Earnings (Loss) Per Share / Basic earnings (loss) per share is computed by dividing net income (loss) by the weighted average number of common shares outstanding during the period. Diluted earnings (loss) per share reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock. Diluted loss per share for 2001 excludes any effect from such securities as their inclusion would be antidilutive (Note 16). Therefore, diluted loss per share is the same as basic loss per share for 2001.

Comprehensive Income (Loss) / Comprehensive income (loss) includes net income (loss) and is defined as the change in net assets during the period from non-owner sources, including unrealized gains and losses on investments and foreign currency translation adjustments.

Recently Issued Accounting Standards / The Company adopted SFAS No. 133, "Accounting for Derivative Instruments and for Hedging Activities," in the first quarter of fiscal 2001. SFAS No. 133, as amended, requires the Company to recognize all derivative instruments on the balance sheet at fair value. The gains or losses resulting from changes in the fair value of derivative instruments are recognized in current earnings. The Company's adoption of SFAS No. 133, as amended, did not have any impact on its consolidated financial position, results of operations or cash flows.

In June 2001, the Financial Accounting Standards Board ("FASB") approved SFAS No. 141, "Business Combinations," and SFAS No. 142, "Goodwill and Other Intangible Assets." SFAS No. 141 prohibits the pooling of interests method of accounting for business combinations initiated after June 30, 2001. SFAS No. 142, which is effective for fiscal years beginning after December 15, 2001, requires companies to cease amortizing goodwill that existed at June 30, 2001 and establishes a new method of testing goodwill and intangibles for impairment. The Company has adopted SFAS No. 141 and 142 effective the beginning of 2002 and expects that the adoption of SFAS No. 142 will result in a decrease in goodwill amortization of approximately $5,000,000 in 2002. Amortization of goodwill was $4,353,000 for the year ended December 29, 2001. Amortization of purchased intangibles was $11,321,000 for the year ended December 29, 2001.

To test goodwill for impairment under the new standard, the Company will establish reporting units to which assets, liabilities and goodwill will be allocated. Goodwill will be tested for impairment on an annual basis or on an interim basis if an event occurs or circumstances change that could reduce the fair value of the reporting unit below its carrying amount. Impairment tests will be performed using the lower of cost or market, purchase price allocation two-step approach. The first step requires comparison of the fair value of the reporting unit to its carrying amount. If the fair value of a reporting unit is less than its carrying amount, the second step is performed which requires allocation of the fair value of the reporting unit to the assets, liabilities and goodwill of that unit as if the unit had been acquired in a business combination and the fair value of the reporting unit determined in step 1 was the price paid to acquire the reporting unit. Goodwill is considered to be impaired to the extent that the amount allocated to goodwill in the hypothetical purchase price allocation is below the carrying amount of the goodwill. If an impairment occurs it will be included in income from operations.

In June 2001, the FASB issued SFAS No. 143, "Accounting for Asset Retirement Obligations." SFAS No. 143 addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and the associated asset retirement costs, including legal obligations. The Company is required to adopt SFAS No. 143 at the beginning of fiscal year 2003. The impact of the adoption of SFAS No. 143 is currently being evaluated by the Company.

In October 2001, the FASB approved SFAS No. 144, "Accounting for the Impairment of Long-Lived Assets." This Statement addresses financial accounting and reporting for the impairment or disposal of long-lived assets. This Statement supersedes FASB Statement No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of," and the

accounting and reporting provisions of Accounting Principles Board ("APB") Opinion No. 30, "Reporting the Results of Operations - Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions," for the disposal of a segment of a business (as previously defined in that Opinion). This Statement also amends Accounting Research Board No. 51, "Consolidated Financial Statements," to eliminate the exception to consolidation for a subsidiary for which control is likely to be temporary. The Company will adopt this Standard at the beginning of fiscal year 2002. The Company does not expect the adoption of SFAS No. 144 to have a material impact on its financial position, results of operations or cash flows.

Presentation / Certain 2000 and 1999 amounts have been reclassified to conform to the presentation in the 2001 financial statements.

2. MERGER OF THORATEC AND TCA

On February 14, 2001, Thoratec completed its Merger with TCA. Pursuant to the Merger agreement between Thoratec and TCA dated October 3, 2000, Thoratec issued 32,226,074 new shares of its common stock to the shareholders of TCA in exchange for all the outstanding common stock of TCA (38,594,281 shares outstanding as of February 14, 2001) at an exchange ratio of 0.835 shares of Thoratec stock for each share of TCA stock. Immediately following the transaction, TCA's shareholders owned 59% of the then outstanding common stock of Thoratec and the former Thoratec shareholders owned the remaining shares of Thoratec common stock. Thermo Electron, the majority shareholder of TCA prior to the Merger, received 19,312,959 shares of the 32,226,074 newly issued shares. Immediately following the Merger, Thermo Electron owned 35% of the then outstanding common stock of Thoratec. Pursuant to the terms of a Registration Rights Agreement between the Company and Thermo Electron dated October 3, 2000 ("Registration Rights Agreement"), the Company filed a Registration Statement on Form S-3 with the SEC, which became effective on June 15, 2001, to register for resale 4,828,240 shares of the Company's common stock held by Thermo Electron. Subsequent to that filing, Thermo Electron sold substantially all of the 4,828,240 registered shares. The Company filed another Registration Statement on Form S-3 with the SEC to register 1,055,000 newly issued shares of its common stock and to register for resale 5,945,000 shares of the Company's common stock held by selling shareholders, of which 5,825,000 shares were held by Thermo Electron. This registration statement became effective on February 12, 2002 and all shares registered were subsequently sold. The Company received $16,120,000, net of underwriting fees and discounts, but before other expenses of the offering, from the sale of the 1,055,000 newly issued shares. In addition, the underwriters exercised a 30-day option to purchase from Thermo Electron 1,050,000 additional shares of the Company's common stock to cover any over-allotments. The Company received no proceeds from the sale of shares by selling shareholders or from the sale of the over-allotment shares. Subsequent to the sale of these shares, Thermo Electron owned approximately 14% of the Company's total outstanding common stock.

The Merger was accounted for under the purchase method of accounting and was treated as a reverse acquisition because the shareholders of TCA owned the majority of Thoratec common stock after the Merger. TCA was considered the acquiror for accounting and financial reporting purposes. Due to the reverse acquisition, Thoratec's assets and liabilities were recorded based upon their estimated fair values at the date of acquisition. The consolidated financial information for 2000 and 1999 includes the results of

operations of TCA. The operating results of Thoratec have been included in the accompanying consolidated financial statements from the date of acquisition forward. All reported amounts of outstanding common shares and common share equivalents (stock options and convertible debentures) prior to the Merger have been adjusted to reflect the exchange ratio of 0.835 to 1. As of December 29, 2001, approximately $309,076,000 of the total purchase price of $346,193,000 has been allocated to goodwill and other purchased intangible assets.

As a result of the Merger, $76,858,000 relating to in-process research and development ("IPR&D") was expensed in the first quarter of 2001. The write-off of IPR&D related to projects that were in development, had not reached technological feasibility, had no alternative future use and for which successful development was uncertain. There have been no significant developments subsequent to the Merger related to the current status of any of the IPR&D projects that would result in material changes to the assumptions or resulting valuation performed at the time of the Merger. Development of IPR&D projects continues and while the timing of completion of these projects may vary due to the highly regulatory and technical nature of the Company's products, current estimates remain materially consistent with the Company's initial estimates.

The current status of each IPR&D project follows:

Thoratec VAD (Discharge and Therapeutic Recovery) / The Company continues to participate in various studies designed to demonstrate the Thoratec VAD's role to provide ventricular assistance in patients after they have been discharged from the hospital and as a support to recovery of the heart from open-heart surgery, acute cardiac failure and various infections of the heart muscle. Cost projections for this project are consistent with initial estimates. At the time of the Merger, the estimated cost to complete the studies was approximately $2,300,000. The Company hopes to complete these studies and obtain approval from the FDA in 2002.

TLC-II Driver / The TLC-II Driver received FDA approval in 2001.

IVAD / Conditional approval to start IVAD clinical trials in the U.S. has been received from the FDA and cost projections are consistent with initial estimates. At the time of the Merger, the estimated cost to complete this project was approximately $2,500,000. The Company hopes that the IVAD will be approved by the FDA in 2003.

Aria Graft / Clinical trials for the Aria graft are ongoing and cost projections are consistent with initial estimates. At the time of the Merger, the estimated cost to complete the Aria graft was approximately $4,700,000. The Company hopes that the Aria graft will be completed and approved by the FDA in 2004.

There can be no assurances that the Company will be able to complete the development of these products on a timely basis. Failure to complete these projects could have an adverse impact on the Company's financial condition or results of operations.

In connection with the Merger, five-year warrants to purchase 164,400 shares of Thoratec stock issued in 1996 were canceled pursuant to the original terms of the warrants.

The fair value of Thoratec's net assets have been estimated for purposes of allocating the purchase price. The purchase price and allocation of purchase price as of December 29, 2001 are summarized as follows (in thousands):

PURCHASE PRICE /	
Common stock	$ 306,889
Stock options	33,524
Transaction costs	5,780
Total purchase price	$ 346,193
ALLOCATION OF PURCHASE PRICE /	
Tangible assets acquired (primarily cash and cash equivalents, receivables, inventory, and property, plant and equipment)	$ 41,018
Fair market valuation of property lease	2,285
Deferred tax asset	4,332
Deferred compensation	841
Intangible net assets acquired:	
Patents, trademarks and tradenames, purchased technology and assembled workforce	209,572
Goodwill	99,504
In-process research and development	76,858
Liabilities assumed	(10,824)
Deferred tax liability	(77,393)
Total	$ 346,193

The unaudited consolidated results of operations on a pro forma basis as if the Merger had occurred as of the beginning of the periods presented are as follows (in thousands):

	FISCAL YEAR		
	2001	2000	1999
Revenue	$ 116,908	$ 113,825	$101,119
Net loss (a)	$ (90,902)	$ (8,341)	$ (4,438)
Net loss per share—basic and diluted	$ (1.65)	$ (0.15)	$ (0.08)

(a) Included in 2001 and 2000 are $7,753,000 and $6,000,000 of merger and restructuring costs, respectively (Note 15). Included in each of 2001, 2000 and 1999 is $17,877,000 of amortization of goodwill and purchased intangibles. Included in 2001 only is $76,858,000 of write-off of in-process research and development.

The pro forma financial information is presented for informational purposes only and is not indicative of the operating results that would have occurred had the merger been consummated as of the above dates, nor are they necessarily indicative of future operating results.

At the time of the Merger, the Company recorded a liability for the estimated costs associated with evaluating and restructuring its product distribution networks. Negotiations with the distributors were ongoing throughout 2001 and adjustments to the estimated distributor contract restructuring costs have been reflected as adjustments to the purchase price allocation.

3. INVESTMENTS

Short-Term Available-For-Sale Investments / The Company's short-term investments are considered available-for-sale investments in the accompanying balance sheet and are carried at fair value with the difference between cost and fair value, net of related tax effects, recorded in the accumulated other comprehensive items component of the consolidated statements of shareholders' equity. The Company classifies investments that mature in less than one year of purchase date as short-term investments. The accompanying 2000 balance sheet includes $98,237,000 with contractual maturities of one year or less and $445,000 with contractual maturities of more than five years through ten years. Actual maturities may differ from contractual maturities as a result of the Company's intent to sell these securities prior to maturity.

The aggregate market value, cost basis and gross unrealized gains and losses of short-term available-for-sale investments for 2000 by major security type are as follows (in thousands):

	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	FAIR VALUE
FISCAL 2000				
Government-agency securities	$ 92,724	$ 18	$ (98)	$ 92,644
Corporate bonds	4,989	2	—	4,991
Other	1,030	62	(45)	1,047
	$ 98,743	$ 82	$ (143)	$ 98,682

The cost of available-for-sale investments that were sold was based on specific identification in determining realized gains and losses recorded in the accompanying statements of operations. Gains and losses on sale of investments resulted in a net realized gain of $3,000 in 2000 relating to the sale of available-for-sale investments.

4. INVENTORIES

Inventories consist of the following (in thousands):

	FISCAL YEAR	
	2001	2000
Finished goods	$ 15,276	$ 3,177
Work-in-process	4,322	10,261
Raw materials	6,075	3,943
Total	$ 25,673	$ 17,381

5. PROPERTY, PLANT AND EQUIPMENT

Property, plant, and equipment consist of the following (in thousands):

	FISCAL YEAR	
	2001	2000
Land	$ 341	$ 341
Building	2,445	2,445
Building lease	2,285	—
Equipment	20,409	17,518
Rental drivers	4,653	1,762
Leasehold improvements	7,360	1,162
Construction in progress	4,057	539
Total	41,550	23,767
Accumulated depreciation and amortization	(18,905)	(16,683)
	$ 22,645	$ 7,084

Included in construction in progress for 2001 was $2,416,000 related to the purchase of a new Enterprise Resource Planning System.

6. LEASES

The Company leases manufacturing, office, research facilities, and equipment under various operating lease agreements. Future minimum lease payments as of the end of 2001 are noted below (in thousands):

FISCAL YEAR:	
2002	$ 1,677
2003	1,550
2004	1,326
2005	1,229
2006	1,227
Thereafter	9,655
Total	$ 16,664

Rent expense for all operating leases was $1,778,000 in 2001, $623,000 in 2000 and $481,000 in 1999.

7. SUBORDINATED CONVERTIBLE DEBENTURES

In May 1997, the Company issued $70,000,000 worth of 4.75% subordinated convertible debentures due May 2004. Interest is payable semi-annually in November and May of each year. The outstanding debentures are convertible into Company stock at a price of $37.62 per share. To date, no debentures have been exchanged for shares. At the issuance date, $1,972,000 in costs related to the issuance of the debentures was capitalized and is being amortized to interest expense over the life of the debentures.

As of December 29, 2001, the outstanding principal balance of the debentures is $54,838,000 reflecting repurchases in the open market from time to time. During 2001 there were no such repurchases. During 2000, the Company purchased $3,173,000 principal amount of the debentures for $2,825,000 in cash, resulting in an extraordinary gain of $191,000, net of taxes of $117,000.

Upon closing the Merger with TCA in February 2001, $45,000,000 in cash and cash equivalents was pledged as collateral for a letter of credit guarantee to Thermo Electron Corporation related to Thermo Electron's guarantee of the Company's subordinated debentures. This letter of credit is fully collateralized with restricted cash and cash equivalents of $45,884,000 as of December 29, 2001.

On January 23, 2002, the Company announced a plan to redeem all of the outstanding subordinated debentures at par plus accrued interest. The redemption was completed on March 11, 2002 using restricted cash and cash equivalents of $45,884,000 and cash of $9,793,000. An extraordinary loss will be recorded in the first quarter of 2002 related to the write-off of capitalized debt issuance costs associated with the initial issuance of the debentures, which were being amortized over the life of the debentures. As of December 29, 2001, the remaining balance of capitalized debt issuance costs was $530,000. As a result of the redemption, the letter of credit guarantee to Thermo Electron was extinguished.

8. COMMON AND PREFERRED STOCK AND WARRANTS

The Company has authorized 100,000,000 no par common shares, and 2,500,000 shares of preferred stock, of which 540,541 shares have been designated Series A and 500,000 shares designated Series B.

The Series A preferred stock is entitled to cumulative annual dividends of $1.30 per share and has a liquidation preference of $9.25 per share plus cumulative unpaid dividends. The Company may redeem the Series A preferred stock at any time for its liquidation preference. Each share of preferred stock is convertible into one-third of a share of common stock, after adjusting for earned but unpaid dividends. At December 29, 2001, no shares of Series A preferred stock were outstanding.

The Series B preferred stock is senior to the Series A in all preferences. Series B is entitled to cumulative annual dividends of $0.96 per share and has a liquidation preference of $8.00 per share plus cumulative unpaid dividends. The Series B preferred stock is redeemable by the company five years after its issuance for $8.00 per share plus cumulative unpaid dividends. Each share of Series B preferred stock is convertible at any time into three and one-third shares of common stock and has certain anti-dilution provisions. Series B preferred vote on an as-converted basis. At December 29, 2001, no shares of Series B preferred stock were outstanding.

The Company filed a Registration Statement on Form S-3 with the SEC to register for sale 1,055,000 newly issued shares of the Company's common stock and 5,945,000 shares held by selling shareholders, of which 5,825,000 shares were held by Thermo Electron. This Registration Statement became effective February 12, 2002, and all of the registered shares were subsequently sold. The Company received $16,120,000, net of underwriting discounts and fees, but before other expenses of the offering, from the sale of the 1,055,000 newly issued shares. In addition, the underwriters exercised a 30-day option to purchase from Thermo Electron 1,050,000 shares of common stock to cover any over-allotments. The Company received no proceeds from the sale of shares by selling shareholders or from the sale of these over-allotment shares.

In 2001, an award of 250,000 shares of restricted common stock was made to a Company executive under the Company's 1997 Stock Option Plan. The stock award was valued at $4,140,000 and recorded as deferred compensation to be amortized to expense over the restriction lapse period. As of December 29, 2001, none of the restrictions have lapsed for shares issued under this award.

9. STOCK-BASED COMPENSATION

Historically, TCA had a variety of stock-based compensation plans for employees and directors that allowed the granting of options, stock, and stock-based awards. There were no grants under any of TCA's plans during 2001. Pursuant to the terms of the Thoratec and TCA Merger agreement, all TCA stock-based compensation plans were assumed by Thoratec effective February 14, 2001. Moreover, all outstanding options and restrictions on past TCA grants were accelerated and became fully vested as of the Merger date of February 14, 2001 and were converted to 971,222 Thoratec common stock options at the Merger conversion ratio of 0.835 to 1. Although assumed by Thoratec, the TCA stock options remain exercisable upon the same terms and conditions as under the TCA stock option plan pursuant to which it was granted and the applicable option agreement.

TCA's prior stock option plans are summarized below:

Prior to the Merger, TCA maintained stock-based compensation plans for its key employees, directors and others. Two of these plans permitted the granting of non-qualified and incentive stock options. Two other plans permitted the granting of a variety of stock and stock-based awards as determined by the human resources committee of TCA's Board of Directors (the Board Committee). Generally, options granted under these plans were exercisable immediately, but were subject to certain transfer restrictions and the right of TCA to repurchase shares issued upon exercise of the options at the exercise price, upon certain events. The restrictions and repurchase rights generally lapsed ratably over a one- to ten-year period, depending on the term of the option, which ranged from five to twelve years. Nonqualified options were granted at any price determined by the Board Committee, although incentive stock options were granted at not less than the fair market value of the TCA's stock on the date of grant. TCA also had a directors' stock option plan that provided for the grant of stock options to outside directors pursuant to a formula approved by TCA's shareholders. Options awarded under this plan were exercisable six months after the date of the grant and expired three or seven years after the date of the grant. In addition to TCA's stock-based compensation plans, certain officers and key employees also participated in the stock-based compensation plans of Thermo Electron and Thermedics, a subsidiary of Thermo Electron at the time.

In June 1999, TCA awarded 67,000 shares of its restricted common stock to certain key employees. The shares had an aggregate value of $625,000 and vested three years from the date of award, assuming continued employment, with certain exceptions. TCA recorded the fair value of the restricted stock as deferred compensation in 1999 and was amortizing such amount over the vesting period. At the time of the Merger in February 2001, all options became fully vested, all restrictions on the restricted stock awards lapsed and all unamortized deferred compensation was expensed.

Substantially all of TCA's full-time employees were eligible to participate in an employee stock purchase plan program sponsored by TCA and Thermo Electron. Under this program, shares of TCA's and Thermo Electron's common stock were able to be purchased at 85% of the lower of the fair market value at the beginning or end of the period, and shares purchased were subject to a one-year resale restriction. Shares were purchased through payroll deductions of up to 10% of each participating employee's gross wages. During 2000 and 1999, TCA issued 17,800 and 9,100 shares, respectively, of its common stock under this program. The employee stock purchase plan was canceled effective November 2000.

The stock-based compensation plans placed in effect after the Merger and post-merger activity under these plans are summarized as follows:

In 1993, the Directors approved the 1993 Stock Option Plan ("1993 SOP"), which permits the Company to grant options to purchase up to 666,667 shares of common stock. No options were granted under this plan in 2001.

In 1996, the Directors adopted the 1996 Stock Option Plan ("1996 SOP") and the 1996 Non-employee Directors Stock Option Plan ("Directors Option Plan"). The 1996 SOP consists of two parts. Part One permits the Company to grant options to purchase up to 500,000 shares of common stock. During 2001 no options were granted at fair market value under Part One of the 1996 SOP. Part Two related to the Chief Executive Officer ("CEO") and permitted the Company to grant non-qualified options to the CEO to purchase up to 333,333 shares of common stock. During 1996, 333,333 options were granted at fair market value under Part Two of the 1996 SOP. The Directors Option Plan was amended by approval by a vote of the Company's shareholders in May 1999 for all option grants going forward. The amendments include increasing the number of shares granted to the Board of Directors in the initial grants from 10,000 to 15,000 shares (granted in four equal installments, once when elected to the Board then quarterly thereafter), and the annual grants from 5,000 to 7,500 shares (granted in four equal installments after re-election). Provisions were also made for immediate vesting of both initial and annual grants, and for changing the term of the options from ten to five years. In addition, the number of shares reserved for issuance under the Directors Option Plan was increased from 150,000 to 350,000 and the plan administrator has been provided with the discretion to impose any repurchase rights in favor of the Company on any optionee. The Company currently has seven non-employee directors, six of whom are eligible to participate in the Directors Option Plan. During 2001 45,000 options were granted at fair market value under the Directors Option Plan.

In 1997, the Directors adopted the 1997 Stock Option Plan ("1997 SOP"). The 1997 SOP was amended by approval of a vote of the Company's shareholders in February 2001 and amended again by the Board of Directors in December 2001. During 2001, 3,863,112 options were granted at fair market value under this plan. As of December 30, 2000, prior to the February amendment, 365,091 options remained available for grant under this plan. The amendment increased the number of shares of the Company's common stock reserved for issuance of options and share awards granted under this plan by 6,400,000. This increase was to enable the Company to assume the options to purchase shares of TCA common stock that were outstanding upon the closure of the Merger and exchange them for options to purchase Thoratec common stock, as well as to grant additional shares over time after the Merger to an expanded employee base.

Including the 1993 SOP, the 1996 SOP, the Directors Option Plan, the 1997 SOP, and several older plans, the Company had seven common stock option plans with options still outstanding at December 29, 2001. Options may be granted by the Board of Directors at the fair market value on the date of grant. Options generally become exercisable within five years of grant and expire between five and ten years from the date of grant. At December 29, 2001, options to purchase 3,349,916 common shares remain available for grant under all the plans.

Agreements have been entered into with selected consultants whereby options to purchase the Company's common stock were accepted by these consultants as full or partial payment for the services rendered to the Company. The fair market value of the consulting services is the basis for recording the transaction in the Company's financial records and is recognized as the related services are performed. No options were issued under these agreements in 2001.

The Company applies APB Opinion 25 and related Interpretations in accounting for its employee stock-based compensation plans. Accordingly, no accounting recognition is given to stock options granted at fair market value until they are exercised. Upon exercise, net proceeds, including tax benefits realized, are credited to equity. If compensation cost for the Company's stock-based plans had been determined based on the fair value at the grant dates for awards under those plans, consistent with the method of SFAS No. 123, the Company's reported net income (loss) would have been adversely affected, as shown by the pro forma amounts indicated in the following table (in thousands, except per share data):

	FISCAL YEAR		
	2001	2000	1999
NET INCOME (LOSS) /			
As reported	$ (87,866)	$ 7,524	$ 9,584
Pro forma	$ (96,475)	$ 16,187	$ 7,209
BASIC AND DILUTED EARNINGS (LOSS) PER SHARE /			
As reported	$ (1.68)	$ 0.23	$ 0.30
Pro forma	$ (1.84)	$ 0.19	$ 0.22

The fair value of each option granted is estimated at the date of grant using the Black-Scholes option-pricing model with the following assumptions used for grants made:

	FISCAL YEAR		
	2001	2000	1999
Risk-free interest rate	5.08%	4.90%	5.60%
Expected volatility	71%	61%	54%
Expected option life	2.85 years	4.8 years	3.1 years
Dividends	None	None	None

Stock option activity is summarized as follows (in thousands, except per share data):

	NUMBER OF OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE
OUTSTANDING AT FISCAL YEAR END 1998		
(1,222 exercisable at $16.72 weighted average price per share)	1,226	$ 16.75
Granted ($4.56 weighted average fair value per share)	100	11.39
Cancelled & Expired	(96)	20.25
Exercised	(57)	5.40
OUTSTANDING AT FISCAL YEAR END 1999		
(1,173 exercisable at $16.55 weighted average price per share)	1,173	16.55
Granted ($6.40 weighted average fair value per share)	45	11.65
Cancelled & Expired	(208)	20.67
Exercised	(33)	8.30
OUTSTANDING AT FISCAL YEAR END 2000		
(977 exercisable at $15.72 weighted average price per share)	977	15.72
Granted ($5.22 weighted average fair value per share)	2,817	11.02
Cancelled & Expired	(527)	12.35
Exercised	(1,378)	8.04
Options assumed during Merger	3,696	8.09
OUTSTANDING AT FISCAL YEAR END 2001		
(2,615 exercisable at $9.99 weighted average price per share)	5,585	$ 10.51

In conjunction with the Merger, 887,621 options of the 3,696,000 Thoratec options assumed as a result of the Merger became fully vested pursuant to existing change of control agreements at the close of the Merger on February 14, 2001. This acceleration of vesting was provided in the terms of the original Thoratec grants. Of the 887,621 options that accelerated, waiver agreements involving options to purchase 868,750 shares were entered into whereby certain executive option holders agreed not to sell or transfer any of *their shares for a period of up to 18 months and to remain employed at the Company for a period of 12 months after the effective date* of the Merger. In exchange, the options holders received a cash payment on the one-year anniversary of the Merger.

In addition, all options to purchase TCA shares that were outstanding at the date of the Merger were exchanged for options to purchase 971,222 Thoratec shares and became fully vested as of the Merger date. This acceleration of vesting was provided for in the terms of the underlying TCA grants.

The status of options outstanding as of the end of 2001 is summarized as follows:

	OPTIONS OUTSTANDING			OPTIONS EXERCISABLE	
PRICE CATEGORY	NUMBER OUTSTANDING	WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE (IN YEARS)	WEIGHTED AVERAGE EXERCISE PRICE	NUMBER OUTSTANDING	WEIGHTED AVERAGE EXERCISE PRICE
$ 1.14	3,041	0.02	$ 1.14	3,041	$ 1.14
1.41 - 5.00	290,399	4.34	3.99	290,199	3.99
5.25 - 8.25	1,223,471	6.53	7.01	941,894	6.96
8.44 - 11.56	2,587,844	8.54	9.67	695,415	10.17
11.62 - 14.65	743,719	5.95	13.53	436,036	13.49
14.73 - 20.85	662,761	8.06	17.36	174,772	17.48
29.40 - 33.05	73,458	4.28	32.43	73,458	32.43
$ 1.14 - 33.05	5,584,693	7.42	$ 10.51	2,614,815	$ 9.99

10. RELATED PARTIES

Corporate Service Agreement / The Company had a corporate services agreement with Thermo Electron, which terminated upon completion of the Merger. Thermo Electron's corporate staff provided to the Company certain administrative and financial services. The Company paid Thermo Electron an annual amount equal to 0.8% of the Company's revenues for these services. In addition, the Company incurred direct charges that Thermo Electron paid directly on its behalf. In 2001, 2000 and 1999, the Company paid $124,000, $980,000 and $837,000, respectively, for these administrative and financial services and direct charges.

Operating Leases / The Company subleases office and research facilities from Thermo Electron, and is charged for actual square footage occupied at approximately the same rent paid per square foot by Thermo Electron under its prime lease. The sublease expires in February 2004. The accompanying statements of operations include expenses for the sublease of $193,600, $177,000 and $171,000 in 2001, 2000 and 1999, respectively.

The Company subleased a portion of an office and research facility from Thermo Electron and was charged for actual square footage occupied at approximately the same rent paid per square foot by Thermo Electron under its prime lease. The sublease agreement between the Company and Thermo Electron was terminated in May 2000. The Company rented the same space from a third party up until the lease terminated and the Company moved out of this facility in February 2002. The accompanying statements of operations include expenses for the sublease with Thermo Electron of nil, $36,000 and $65,000 in 2001, 2000 and 1999, respectively.

Future minimum annual payments due under these noncancellable lease arrangements at December 29, 2001, are $193,600 in 2002 and 2003 and $32,267 in 2004.

Purchases / The Company purchases metal fabrication products and services from Tecomet, Inc. in connection with the manufacture of the ventricular-assist products sold by the Company. Tecomet was a division of Thermo Electron until November 15, 2001 when it was sold by Thermo Electron to an unrelated third party. The Company paid $2,931,000, $3,283,000 and $3,651,000 to Tecomet in 2001, 2000 and 1999, respectively.

Subordinated Convertible Debentures / The outstanding principal balance of the subordinated convertible debentures as of the end of 2001 and 2002 of $54,838,000 includes $1,500,000 of debentures held by Thermo Electron (Note 7).

11. TAXES ON INCOME

The provisions for income taxes (benefits) and extraordinary items, are as follows (in thousands):

	FISCAL YEAR		
	2001	2000	1999
CURRENT /			
Federal	$ —	$ 3,747	$ 2,702
State	420	352	943
	420	4,099	3,645
DEFERRED /			
Federal	(2,915)	465	(643)
State	662	66	(137)
	(2,253)	531	(780)
	(1,833)	4,630	2,865
Reduction of valuation allowance	(1,492)	—	—
	$ (3,325)	$ 4,630	$ 2,865

The provision for income taxes in the accompanying statements of operations differs from the provision calculated by applying the U.S. federal statutory income tax rate of 35% to income before provision for income taxes and extraordinary item due to the following (in thousands):

	FISCAL YEAR					
	2001		2000		1999	
U.S. federal statutory income tax expense (benefit)	$ (31,916)	(35.0%)	$ 4,187	35.0%	$ 3,933	35.0%
State income tax expense (benefit), net of federal tax expense (benefit)	(794)	(0.9)	272	2.3	524	4.7
Non-deductible amortization of goodwill	1,524	1.7	—	—	—	—
Non-deductible acquired IPR&D	26,900	29.5	—	—	—	—
Non-deductible merger expenses	175	0.2	—	—	—	—
Export benefits	(50)	(0.1)	(134)	(1.1)	(116)	(1.0)
Federal research and development credits	(100)	(0.1)	—	—	(1,508)	(13.4)
Other	936	1.1	305	2.5	32	0.2
	$ (3,325)	(3.6%)	$ 4,630	38.7%	$ 2,865	25.5%

During 1999, the Company received a favorable resolution of a claim for prior-year research and development tax credits, which reduced the tax provision by $1,508,000.

Deferred income taxes reflect the net tax effects of: (a) temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, and (b) operating loss and tax credits carryforwards.

Significant components of the Company's net deferred taxes are as follows (in thousands):

	FISCAL YEAR	
	2001	2000
DEFERRED TAX ASSETS /		
Write-off of acquired technology	$ 1,304	$ 1,427
Reserves and accruals	2,186	2,576
Depreciation and amortization	2,709	1,179
Inventory basis difference	2,361	958
Research and development credit carryforwards	1,609	—
Net operating loss carryovers	10,586	—
State tax loss and credit carryforwards	—	1,492
Other, net	347	(67)
	21,102	7,565
Valuation allowance	—	(1,492)
Net deferred tax assets	21,102	6,073
DEFERRED TAX LIABILITIES /		
Purchased intangibles	(79,697)	—
Net deferred tax assets (liabilities)	$ (58,595)	$ 6,073

The valuation allowance relates to the realizability of state net operating loss ("NOL") carryovers of $2,100,000, which would have expired in 2001 through 2005 and state tax credit carryforwards of $1,290,000, which would have expired in 2001 through 2012. These NOL and tax credit carryforwards were extinguished upon the closing of the Merger.

At the end of 2001, the Company had federal and state NOL carryforwards of approximately $29,000,000, which expire from 2003 through 2021. Use of $7,400,000 of the NOL carryforwards, which arose prior to a greater than 50% change in ownership in 1992, is limited to approximately $440,000 per year.

12. ENTERPRISE AND RELATED GEOGRAPHIC INFORMATION

The Company organizes and manages its business by functional operating entities. The Company's functional entities operate in two segments: (1) Cardiovascular and (2) Other Medical Equipment. The Cardiovascular segment develops, manufactures and markets proprietary medical devices used for circulatory support and vascular graft applications. The Other Medical Equipment segment develops, manufactures and markets near-patient, whole-blood coagulation testing equipment and related disposables, as well as premium quality, single-use skin incision devices. All 2000 and 1999 financial information presented herein represents the results of operations of TCA's Cardiovascular segment and Other Medical Equipment segment. The 2001 financial information presented herein includes the financial results of TCA's segments for the entire fiscal year and the financial results of Thoratec's Cardiovascular segment for only the post-merger period from February 14, 2001 through December 29, 2001.

BUSINESS SEGMENTS (IN THOUSANDS):

	FISCAL YEAR		
	2001	2000	1999
PRODUCT SALES /			
Cardiovascular	$ 71,809	$ 43,049	$ 39,810
Other medical equipment	41,575	40,347	38,801
Total product sales	$ 113,384	$ 83,396	$ 78,611
INCOME (LOSS) BEFORE INCOME TAXES AND EXTRAORDINARY ITEM /			
Cardiovascular	$ (177)	$ 1,499	$ (729)
Other medical equipment	8,953	8,270	8,789
Corporate(a)	(2,660)	(980)	(837)
Amortization of goodwill and purchased intangibles	(15,674)	—	—
In-process research and development	(76,858)	—	—
Merger, restructuring and other costs	(7,134)	(1,831)	—
Total operating income (loss)	$ (93,550)	$ 6,958	$ 7,223
Interest and other income, net	2,359	5,005	4,014
Total income (loss) before taxes and extraordinary item	$ (91,191)	$ 11,963	$ 11,237
TOTAL ASSETS /			
Cardiovascular	$ 57,299	$ 25,136	$ 36,893
Other medical equipment	19,883	15,808	14,801
Corporate(b)	159,242	135,741	118,234
Goodwill and purchased intangible assets	293,817	—	—
Total assets	$ 530,241	$ 176,685	$ 169,928
DEPRECIATION AND AMORTIZATION /			
Cardiovascular	$ 3,634	$ 1,664	$ 1,536
Other medical equipment	1,214	1,446	1,448
Amortization of goodwill and purchased intangible assets	15,674	—	—
Total depreciation and amortization	$ 20,522	$ 3,110	$ 2,984
CAPITAL EXPENDITURES /			
Cardiovascular	$ 6,789	$ 1,243	$ 1,103
Other medical equipment	1,158	1,117	1,437
Total capital expenditures	$ 7,947	$ 2,360	$ 2,540

(a) Primarily represents general and administrative expenses not specifically identified to any particular business segment.

(b) Represents items not specifically identified to any particular business segment.

GEOGRAPHIC AREAS (IN THOUSANDS):

	FISCAL YEAR		
	2001	2000	1999
PRODUCT SALES:			
Domestic	$ 90,678	$ 69,786	$ 65,980
Europe	13,000	8,140	7,259
All other international	9,706	5,470	5,372
Total international	22,706	13,610	12,631
Total	$ 113,384	$ 83,396	$ 78,611

13. COMMITMENTS

The Company had various firm purchase commitments totaling approximately $13,000,000 at December 29, 2001.

In July 1998, the Company established an Executive Officer Severance Benefits Plan and an Employee Severance Benefits Plan as part of the employee benefits package. The plans provide severance benefits to certain employees whose employment is terminated, other than for cause. An Executive Officer's standard severance pay benefit is equal to one times annualized base salary. An employee's severance benefit is equal to an amount based on job level and length of service.

14. RETIREMENT SAVINGS PLAN

Substantially all of the Company's full-time employees are eligible to participate in a 401(k) retirement savings plan. As of the date of the Merger and continuing through June 30, 2001, two retirement savings plans were in effect, representing the pre-merger plan of Thoratec and a new plan set in place as of the Merger date. Prior to February 14, 2001, TCA participated in Thermo Electron's retirement savings plan. Effective July 1, 2001, the two plans were combined into a new savings plan (the "Retirement Plan"). Under the Retirement Plan, employees may elect to contribute up to 15% of their eligible compensation to the Retirement Plan, subject to certain limitations. In 2001 the Company match was 50%, up to the first 6% of eligible employee plan compensation. Employees vest under the Retirement Plan at the rate of 25% per year, with full vesting after four years of service with the Company. For 2001, 2000 and 1999, the Company made contributions to the Retirement Plan of approximately $674,000, $804,000 and $726,000, respectively.

15. MERGER, RESTRUCTURING AND OTHER COSTS

During 2001 and 2000, the following merger, restructuring and other costs were recorded in expense (in thousands):

	FISCAL YEAR	
	2001	2000
Merger	$ 5,326	$ 1,831
Restructuring	1,093	—
Other	715	—
Total	$ 7,134	$ 1,831

No merger, restructuring and other costs were recorded in 1999.

Merger Costs / Merger costs recorded during 2001 and 2000 principally consisted of employee severance, pre-merger employee retention costs, and outside consulting, accounting and legal expenses associated with the Merger. Early in 2000, Thermo Electron announced its intent to sell TCA. In conjunction with this announcement, TCA put in place an employee retention plan, which offered a bonus to certain key employees to continue employment with TCA through the completion of the sale of the company. Upon closure of the Merger between TCA and Thoratec, certain Thoratec executives' stock options accelerated per the original terms of the stock option agreements. In exchange for a waiver of their rights to immediately exercise these options and to sell the related stock, the Company put in place a bonus plan to serve as compensation to these executives for that waiver.

The following table reflects the activity in accrued merger costs for 2001 and 2000 (in thousands):

	FISCAL YEAR	
	2001	2000
ACCRUED MERGER COSTS /		
Beginning balance	$ 1,708	$ —
ADD /		
Pre-merger retention accrual	—	1,831
Executive waiver agreement accrual	684	—
Employee severance accrual	2,825	—
LESS /		
Payments of pre-merger retention	(1,708)	(123)
Payments of employee severance	(2,825)	—
Payments of waiver agreement	(212)	—
ENDING BALANCE	$ 472	$ 1,708

Certain 2001 merger costs were recorded directly to expense and did not pass through accrued merger costs. These expenses consisted primarily of legal, audit, consulting and other professional fees related to the Merger and totaled $1,817,000 for 2001.

Restructuring Costs / In June 2001, the Company approved a restructuring plan (the "Restructuring Plan") to consolidate all of its VAD manufacturing operations to its manufacturing facilities and headquarters in Pleasanton, California. The restructuring initiatives, which have already commenced, are related to the Company's desire to provide maximum value to shareholders through achievement of operating efficiencies. The Company estimates that substantial savings will result upon completion of the Restructuring Plan. The Restructuring Plan specifically provides for the reduction of approximately 90 of the Company's manufacturing and related workforce at its Woburn and Chelmsford, Massachusetts facilities. The Company notified the affected employees during the second quarter of 2001, both through direct personal contact and written notification. The Chelmsford facility was closed in February 2002. The Company's HeartMate® family of products, which are currently manufactured at the Woburn facility, will be transitioned to the Pleasanton facility. The Restructuring Plan is estimated to take 18 months because of FDA certification requirements for the new manufacturing activities in Pleasanton. Substantially all of the milestones related to the relocation that are controllable by the Company will be completed within 12 months of the date of announcement. Because the Company's products are regulated by the FDA, it is estimated it will take an additional six months to complete the FDA review and certification process before the HeartMate

products can be manufactured in Pleasanton. The Company believes it can make reasonable estimates of the involuntary employee termination benefits since it has specifically identified the employees that will be involuntarily terminated as well as the benefits that each affected employee will receive. Management does not believe there are likely to be any developments during the intervening 18 months required to relocate the manufacturing operations, which would have a significant impact on Thoratec's original restructuring cost estimates. Although the relocation plan has been documented, in detail, small changes in the timing of specific activities are expected. The impact on the estimate for these changes is not expected to be material. Through December 29, 2001, the Company has accrued $995,000 of restructuring charges in accordance with Emerging Issues Task Force Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity" and Staff Accounting Bulletin No. 100, "Restructuring and Impairment Charges." These charges represent estimated severance costs. As of December 29, 2001, the Company has paid approximately $132,000 in severance payments to 2 employees related to the restructuring. The following is a summary of the Company's accrued restructuring costs activity in 2001 and 2000 (in thousands):

	FISCAL YEAR	
	2001	2000
ACCRUED RESTRUCTURING COSTS		
Beginning balance	$ —	$ —
Employee severance accrual	995	—
Payments of employee severance	(132)	—
ENDING BALANCE	$ 863	$ —

In addition to the employee severance, estimated restructuring costs includes $98,000 of expense related to the estimated fair value of options granted to the employees to be severed in the Restructuring Plan, which were accelerated upon the Merger.

Other Costs / Other costs of $715,000 were incurred in the third quarter of 2001 related to the events of September 11, 2001. As of December 29, 2001, the total amount of these other costs were paid.

16. EARNINGS (LOSS) PER SHARE

Although Thoratec is the surviving legal entity after the Merger, the Merger is treated as an acquisition of Thoratec by TCA for accounting and financial reporting purposes. The weighted average number of common shares previously reported by TCA has been adjusted for all periods to reflect the exchange ratio of 0.835 to 1.

Basic earnings (loss) per share are computed by dividing net income (loss) by the weighted average number of common shares outstanding during the period. Diluted earnings per share reflect the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock. Options to purchase 5,584,693 shares of common stock were not included in the computations of diluted loss per share for 2001 as their inclusion would be antidilutive. Options to purchase 774,000 and 1,191,000 shares of common stock were not included in the computations of diluted earnings per share for 2000 and 1999 because their effect would have been antidilutive due to the options' exercise prices exceeding the average market price for the common stock. In addition, the computation of diluted earnings per share for each period presented excluded the effect of assuming the conversion of the Company's 4.75% subordinated convertible debentures, convertible at $37.62 per share, because their effect would have been antidilutive.

Basic and diluted earnings (loss) per share were calculated as follows (in thousands, except per share data):

	PRODUCT SALES:		
	2001	2000	1999
Net income (loss) before extraordinary item	$ (87,866)	$ 7,333	$ 8,372
Extraordinary item — net of taxes	—	191	1,212
Net income (loss)	$ (87,866)	$ 7,524	$ 9,584
Weighted average number of common shares-basic	52,336	32,193	32,100
Dilutive effect of employee stock options	—	16	32
Weighted average number of common shares-diluted	52,336	32,209	32,132
Basic and diluted earnings (loss) per common share before extraordinary item	$ (1.68)	$ 0.23	$ 0.26
Basic and diluted earnings (loss) per common share	$ (1.68)	$ 0.23	$ 0.30

17. EXTRAORDINARY ITEM

During 2000, the Company repurchased $3,173,000 principal amount of its 4.75% subordinated convertible debentures, convertible at $37.62 per share, for $2,825,000 in cash, resulting in an extraordinary gain of $191,000, net of taxes of $117,000.

During 1999, the Company repurchased $11,989,000 principal amount of its 4.75% subordinated convertible debentures for $9,985,000 in cash, resulting in an extraordinary gain of $1,212,000, net of taxes of $743,000.

18. QUARTERLY RESULTS OF OPERATIONS (UNAUDITED)

The following is a summary of the unaudited quarterly results of operations for the fiscal years 2001 and 2000:

	FIRST	SECOND	THIRD	FOURTH
	(In thousands, except per share data)			
FISCAL YEAR 2001				
Product sales	$ 21,480	$ 28,218	$ 28,666	$ 35,020
Gross profit	11,440	15,573	15,062	18,469
Net income (loss)	(82,180)	(3,103)	(2,968)	385
Basic and diluted earnings (loss) per share	$ (1.88)	$ (0.06)	$ (0.05)	$ 0.01
FISCAL YEAR 2000				
Product sales	$ 19,929	$ 22,609	$ 19,391	$ 21,467
Gross profit	11,769	13,209	11,092	12,496
Net income	1,770	2,639	1,494	1,621
Basic and diluted earnings per share	$ 0.05	$ 0.08	$ 0.05	$ 0.05

INDEPENDENT AUDITORS' REPORT

TO THE SHAREHOLDERS AND BOARD OF DIRECTORS OF THORATEC CORPORATION:

We have audited the accompanying consolidated balance sheet of Thoratec Corporation and subsidiaries (the "Company") as of December 29, 2001 and the related consolidated statements of operations, comprehensive income (loss), shareholders' equity and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of Thoratec Corporation and subsidiaries (formerly Thermo Cardiosystems, Inc.) for the two-year period ended December 30, 2000 were audited by other auditors whose report, dated February 5, 2001, expressed an unqualified opinion.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Thoratec Corporation and subsidiaries as of December 29, 2001 and the results of their operations and their cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Deloitte & Touche LLP

San Francisco, California
February 21, 2002
(March 11, 2002 as to Note 7)

MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Our common stock is traded on the NASDAQ National Market under the symbol "THOR". The following table sets forth, for the periods indicated, the high and low closing sales price per share of our common stock, as reported by the NASDAQ National Market. As of March 8, 2002 there were 57,229,146 shares of our common stock outstanding with approximately 931 holders of record, including multiple beneficial holders at depositories, banks, and brokerages listed as a single holder in the "street" name of each respective depository, bank, or broker.

	HIGH	LOW
FISCAL YEAR 2000:		
First quarter	$ 19.88	$ 8.50
Second quarter	$ 18.63	$ 8.50
Third quarter	$ 24.75	$ 15.13
Fourth quarter	$ 20.56	$ 7.75
FISCAL YEAR 2001:		
First quarter	$ 12.88	$ 7.09
Second quarter	$ 15.55	$ 6.56
Third quarter	$ 20.02	$ 13.77
Fourth quarter	$ 20.85	$ 15.67

We have not declared or paid any dividends on our common stock and we anticipate that for the foreseeable future we will continue to retain our earnings for use in our business.

CORPORATE DIRECTORY

OFFICERS

D. Keith Grossman
President,
Chief Executive Officer
and Director

M. Wayne Boylston
Senior Vice President,
Chief Financial Officer

David J. Farrar, Ph.D.
Vice President,
Research and Development

Bradley D. Goskowicz
Vice President,
Sales and Marketing

Jeffrey C. Mack
Vice President, Finance

Donald A. Middlebrook
Vice President,
Regulatory Affairs and
Quality Assurance

Joseph G. Sharpe
Vice President,
Operations

Beth A. Taylor
Vice President,
Human Resources

Lawrence Cohen
President,
International Technidyne
Corporation

BOARD OF DIRECTORS

J. Donald Hill, M.D.
Chairman of the Board,
Director, Heart Failure, Transplants,
Artificial Heart & Circulatory Support
Systems, California Pacific Medical Center
San Francisco, California

Howard E. Chase
President,
The Hollandbrook Group, L.L.C
Somerset, New Jersey

J. Daniel Cole
General Partner,
Spray Venture Fund
Boston, Massachusetts

D. Keith Grossman
President, Chief Executive Officer

William M. Hitchcock
President,
Avalon Financial, Inc.
Houston, Texas

George W. Holbrook, Jr.
Managing Partner,
Bradley Resources Company
Southport, Connecticut

Theo Melas-Kyriazi
Chief Financial Officer,
Thermo Electron Corporation
Waltham, MA

Daniel M. Mulvena
Founder and Owner,
Commodore Associates
Marblehead, Massachusetts

ANNUAL MEETING

The Company's annual meeting
of shareholders will be held at
9:00 A.M. May 31, 2002
at Company headquarters.

ADDITIONAL INFORMATION

For more information please write to:
Corporate Secretary
Thoratec Corporation
6035 Stoneridge Drive
Pleasanton, California 94588
www.thoratec.com

GENERAL COUNSEL

Heller Ehrman White & McAuliffe LLP
Menlo Park, California

PUBLIC ACCOUNTING FIRM

Deloitte & Touche LLP
San Francisco, California

STOCK TRANSFER AGENT

Computershare Trust Company, Inc.
Golden, Colorado

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The statements in this document that relate to future plans, events or performance are forward-looking statements. Investors are cautioned that all such statements involve risks and uncertainties, including risks related to the success of new products, FDA regulatory approval processes and healthcare reimbursement coverage policies. These factors, and others, are discussed more fully under the heading "Risk Factors" in Thoratec's 10-K for the fiscal year ended December 29, 2001, and other filings with the Securities and Exchange Commission. Actual results, events or performance may differ materially. These forward-looking statements speak only as of the date hereof. Thoratec undertakes no obligation to publicly release the results of any revisions to these forward-looking statements that may be made to reflect events or circumstances after the date hereof, or to reflect the occurrence of unanticipated events.

DESIGN: Artemis Creative, Inc. www.artemis-creative.com

IN MEMORY OF

Thomas E. Burnett, Jr.

May 29, 1963 - September 11, 2001

Senior Vice President and Chief Operating Officer of Thoratec Corporation

Conscripted suddenly by the events of September 11, 2001, he willingly gave his life in order to thwart a catastrophic act of war and terror against the citizens and government of the United States. Ever known to his friends and colleagues for his decisiveness, intelligence, fairness, strength of leadership and good humor, he is now known to his countrymen for the bravery and heroism of his final hour. His example of courage and sacrifice helped stiffen the spine and quicken the step of an entire nation, and has restored our faith in the indefatigable American spirit.

"We're going to do something."

TOM BURNETT, TO HIS WIFE DEENA, FROM ABOARD FLIGHT #93

"Where there is a brave man, there is the thickest of the fight, there is the post of honor."

HENRY DAVID THOREAU

THORATEC®
CORPORATION

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