CERUS CORP Form 424B5 June 09, 2003

QuickLinks -- Click here to rapidly navigate through this document

Filed Pursuant to Rule 424(b)(5) Registration No. 333-67286

PROSPECTUS SUPPLEMENT

(To Prospectus dated December 17, 2001)

6,000,000 Shares

COMMON STOCK

Cerus Corporation is offering 6,000,000 shares of its common stock.

Our common stock is quoted on the Nasdaq National Market under the symbol "CERS." On June 5, 2003, the reported last sale price of our common stock on the Nasdaq National Market was \$10.70 per share.

Investing in our common stock involves risks. See "Risk Factors" beginning on page S-5 of this prospectus supplement.

PRICE \$9.63 A SHARE

	Price to Public	Underwriting Discounts and Commissions	Proceeds to Cerus Corporation
Per Share	\$9.63	\$.58	\$9.05
Total	\$57,780,000	\$3,480,000	\$54,300,000

We have granted the underwriter the right to purchase up to an additional 900,000 shares of common stock to cover over-allotments.

The Securities and Exchange Commission and state securities regulators have not approved or disapproved these securities, or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Morgan Stanley & Co. Incorporated expects to deliver the shares to purchasers on June 11, 2003.

MORGAN STANLEY

June 5, 2003

TABLE OF CONTENTS

PROSPECTUS

Prospectus Supplement Summary	S-3	About this Prospectus	1
Risk Factors	S-5	About Cerus	1
Special Note Regarding Forward-		The Securities We May Offer	1
Looking Statements	S-16	Risk Factors	3
Use of Proceeds	S-17	Special Note Regarding Forward-	
Dilution	S-17	Looking Statements	13
Underwriter	S-18	Use of Proceeds	13
Description of Common Stock	S-19	Ratio of Earnings to Fixed Charges	13
Legal Matters	S-19	Description of Debt Securities	14
Where You Can Find More Information	S-19	Description of Capital Stock	28
		Plan of Distribution	32
		Legal Matters	34
		Experts	34
		Where You Can Find More Information	34

Unless stated otherwise, references in this prospectus supplement and the accompanying prospectus to "Cerus," "we," "us," or "our" refer to Cerus Corporation, a Delaware corporation.

This document is in two parts. The first part is this prospectus supplement, which describes the terms of the offering of common stock and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into the accompanying prospectus. The second part is the accompanying prospectus, which gives more general information, some of which may not apply to the common stock. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or any document incorporated by reference therein, on the other hand, the information in this prospectus supplement shall control.

You should rely only on the information contained in this prospectus supplement and contained, or incorporated by reference, in the accompanying prospectus. We have not authorized anyone to provide you with information that is different. We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus supplement and contained, or incorporated by reference, in the accompanying prospectus is accurate only as of the respective dates thereof, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus, or of any sale of the common stock. It is important for you to read and consider all information contained in this prospectus supplement and the accompanying prospectus, including the documents incorporated by reference therein, in making your investment decision. You should also read and consider the information in the documents we have referred you to in "Where You Can Find More Information" below.

S-2

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. This summary does not contain all of the information that you should consider before deciding to invest in our common stock. You should read this entire prospectus supplement and the accompanying prospectus carefully including the "Risk Factors" section contained in this prospectus supplement and our financial statements and the related notes and the other documents incorporated by reference in the accompanying prospectus.

We are developing medical systems and therapeutics based on our proprietary Helinx® technology for controlling biological replication. Our most advanced programs are focused on systems to enhance the safety of blood products used for transfusion. The INTERCEPT Blood System, based on our Helinx technology, is designed to inactivate viruses, bacteria, other pathogens and white blood cells. We also are pursuing therapeutic applications of Helinx technology to treat and prevent serious diseases.

We are developing the INTERCEPT Blood System for platelets, plasma and red blood cells with our development and commercialization partner, Baxter Healthcare Corporation. The INTERCEPT Blood System targets and inactivates blood-borne pathogens, such as HIV and hepatitis B and C, as well as harmful white blood cells, while leaving intact the therapeutic properties of the blood components. The INTERCEPT Blood System inactivates a broad array of pathogens and has the potential to reduce the risk of transmission of pathogens for which testing is not completely effective or is not currently performed. We believe that the INTERCEPT Blood System also has the potential to inactivate new pathogens before they are identified and before tests are developed to detect their presence in donated blood. An estimated four million units of platelets, seven million units of plasma and 37 million units of red blood cells are transfused annually in the United States,

Western Europe and Japan.

In 2002, the INTERCEPT Blood System for platelets received CE Mark approval and was commercially launched in Europe. The system also received approval for use with buffy coat platelets in Canada in 2002. We and Baxter have submitted regulatory applications seeking marketing approval in Australia and have begun the regulatory submission process to obtain approval in the United States. The companies are in late stage development of the INTERCEPT Blood System for plasma and red blood cells.

We believe that our Helinx technology may have applications beyond inactivating pathogens in blood products, both in modifying T-cells to improve clinical outcomes of cellular therapies and in producing a vaccine for Epstein-Barr Virus (EBV)-associated lymphoma. Our allogeneic cellular immune therapy (ACIT) program, designed to improve the outcome of bone marrow transplantation procedures through use of T-cells treated with the Helinx technology, and EBV cellular vaccine program are in Phase I clinical trials. In addition to plans to pursue the therapeutic potential of our Helinx technology, we also plan to expand our product candidate pipeline by exploring other development areas where we can address large, unmet medical needs.

We are conducting product development and commercialization activities with Baxter pursuant to agreements for the development, manufacturing and marketing of the INTERCEPT Blood System. These agreements provide for Baxter and us to generally share development expenses, for Baxter's exclusive right and responsibility to market the systems worldwide and for us to receive a share of the gross profits from the sale of the systems. We are also collaborating with the U.S. Armed Forces on several initiatives intended to improve the safety and availability of the military's blood supply. We intend to continue to develop our products together with partners that can provide direct funding and manufacturing, marketing and distribution resources and expertise.

We were incorporated in California in 1991 and reincorporated in Delaware in 1996. Our principal executive offices are located at 2411 Stanwell Drive, Concord, California 94520, and our telephone number is (925) 288-6000. Our web site address is *www.cerus.com*. The information contained on our web site is not

S-3

incorporated by reference into this prospectus. We have included our web site address in this prospectus supplement only as an inactive textual reference and do not intend it to be an active link to our web site.

Helinx is a United States Registered trademark of Cerus. INTERCEPT and INTERCEPT Blood are trademarks of Baxter International, Inc. This prospectus supplement also includes trademarks or trade names owned by other parties.

THE OFFERING

Common stock offered by Cerus	6,000,000 shares
Common stock to be outstanding after the offering	22,002,043 shares
Use of proceeds	For research and development activities and continuing clinical trials,
	general administrative support, capital expenditures, working capital,
	the repayment of debt, possible acquisitions and general corporate
	purposes. See "Use of Proceeds" on page S-17.
Nasdaq National Market symbol	CERS

The information above is based on 16,002,043 shares of common stock outstanding as of April 30, 2003. It does not include the following shares of common stock as of April 30, 2003:

3,089,865 shares of common stock issuable upon the exercise of stock options outstanding at a weighted average exercise price of \$32.91 per share;

1,633,369 shares of common stock reserved for future awards under our 1999 Equity Incentive Plan;

54,727 shares of common stock reserved for future issuance under our 1998 Non-Officer Stock Option Plan;

59,721 shares of common stock reserved for future issuance under our 1996 Equity Incentive Plan;

66,962 shares of common stock reserved for future issuance under our Employee Stock Purchase Plan; and

332,700 shares of common stock issuable upon conversion of all of our Series B preferred stock.

Unless otherwise indicated, all information in this prospectus supplement assumes no exercise of the underwriter's over-allotment option to purchase up to 900,000 shares of common stock.

S-4

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the following risk factors and all other information contained in this prospectus supplement and the accompanying prospectus and incorporated by reference into the accompanying prospectus before purchasing our common stock. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties that we are unaware of, or that we currently deem immaterial, also may become important factors that affect us. If any of the following risks occur, our business, financial condition or results of operations could be materially and adversely affected. In that case, the trading price of our common stock could decline, and you may lose some or all of your investment.

Risks Related to Our Business

If our pre-clinical and clinical trials are not successful or the data are not considered sufficient by regulatory authorities to grant marketing approval, Baxter and we will be unable to commercialize our products and generate revenue.

Except for the INTERCEPT Blood System for platelets, which is approved for sale in Europe and Canada, we have no products that have received regulatory approval for commercial sale. Our product candidates are in various stages of development, and we face the risks of failure inherent in developing medical devices and biotechnology products based on new technologies. Our products must satisfy rigorous standards of safety and efficacy before the United States Food and Drug Administration and international regulatory authorities can approve them for commercial use. Our INTERCEPT Blood System and stem cell transplantation programs are undergoing clinical testing. We must provide the FDA and foreign regulatory authorities with pre-clinical, clinical and manufacturing data that demonstrate our products are safe, effective and in compliance with government regulations before the products can be approved for commercial sale.

In 2002, the INTERCEPT Blood System for platelets received CE Mark approval in Europe. Our development and marketing partner, Baxter Healthcare Corporation, will need to complete validation studies and obtain reimbursement approvals in some individual European countries to market our products in those countries. In certain countries, including the United Kingdom, France and Germany, the system must be approved for purchase or use by a specific governmental or non-governmental (such as the Paul Ehrlich Institute in Germany) entity or entities in order for it to be adopted by a specific customer. The level of additional product testing varies by country, but could take more than a year to complete after CE Mark approval. We completed our Phase III clinical trial of the INTERCEPT Blood System for platelets in the United States in March 2001 and have submitted data from this trial, along with several other modules of our pre-market approval application, to the FDA. We plan to perform additional analyses of the clinical trial data and conduct an additional clinical trial to provide supplemental data. Data from the additional analyses and supplemental clinical trial will need to be submitted to the FDA before we can complete our regulatory submission. We have completed Phase IIIa and Phase IIIb clinical trials of the INTERCEPT Blood System for plasma in the United States and are conducting a Phase IIIc clinical trial. We are conducting Phase III clinical trials of INTERCEPT red blood cells in the United States. Our allogeneic cellular immune therapy (referred to as ACIT) program, designed to improve the outcome of bone marrow transplantation procedures through use of T-cells treated with the Helinx technology, is in Phase I clinical trials in the United States. Last, our Epstein-Barr virus (referred to as EBV) cellular vaccine program is in a Phase I clinical trial in the United States. We will have to conduct significant additional research and pre-clinical (animal) and clinical (human) testing before we can file additional applications for product approval with the FDA and foreign regulatory authorities. Clinical trials in particular are expensive and have a high risk of failure. In addition, to compete effectively, our products must be easy to use, cost-effective and economical to manufacture on a commercial scale. Any of our product candidates may fail in the testing phase or may not attain market acceptance, which could prevent us from achieving profitability.

It may take us several years to complete our clinical testing, and failure can occur at any stage of testing. We cannot rely on interim results of trials to predict their final results, and acceptable results in early trials might not be repeated in later trials. Any trial may fail to produce results satisfactory to the FDA or foreign regulatory authorities. Pre-clinical and clinical data can be interpreted in different ways, which could delay, limit or prevent regulatory approval. Negative or inconclusive results from a pre-clinical study or clinical trial or adverse medical events during a clinical trial could cause a pre-clinical study or clinical trial to be repeated, require other studies to be performed or cause a program to be terminated, even if other studies or trials relating to a program are successful.

We may fail to complete our clinical trials on time or be unable to complete the trials at all.

Significant clinical trial delays would impair our ability to commercialize our products and could allow competitors to bring products to market before we do. Some of our clinical trials involve patient groups with rare medical conditions, which has in the past made, and may continue to make, it difficult to identify and enroll a sufficient number of patients to complete the trials on time. Our Phase III clinical trials of the INTERCEPT Blood System for red blood cells involve patient groups that include a significant percentage of children, which has made, and may continue to make, it difficult to obtain consent to enroll these patients in our trials. Other factors, including the unavailability of blood products or delays in the supply of clinical product material, could also delay our clinical trials. Clinical trials of our ACIT and EBV vaccine programs are sponsored by other organizations, which will further reduce our ability to control the progress of these trials. Our product development costs will increase if we have additional delays in testing or approvals.

We are using prototype components in our pre-clinical studies and clinical trials and have not completed the components' commercial design.

If we fail to develop commercial versions of the systems on schedule, our potential revenue would be delayed or diminished and our competitors may be able to bring products to market before we do. The system disposables and instruments we use in our pre-clinical studies and clinical trials are prototypes of those to be used in the final products. As a result, we plan to perform studies, both pre-clinical and clinical, to demonstrate the acceptability of the commercial configuration and the equivalence of the prototype and the commercial design. However, regulatory authorities may require us to perform additional studies, both pre-clinical and clinical, using the commercial versions of the systems, which may increase our expenses and delay the commercialization of our products.

In addition, the design and engineering effort required to complete the final commercial product is substantial and time-consuming. As with any complex development effort, we expect to encounter design, engineering and manufacturing issues. Such issues have previously arisen, sometimes unexpectedly, and solutions to these issues have not always been readily forthcoming. For example, in the system for plasma, fluid leakage was discovered in some components during the scale-up process for commercial manufacturing, resulting in a delay in expected commercialization. The solution to this issue remains under study, and the time required to identify and implement a solution remains uncertain. Additional unforeseen design, engineering and manufacturing issues may arise in the future, which could increase the development cost and delay commercialization of our products.

Because our product candidates have not been manufactured on a commercial scale, we face manufacturing uncertainties that could limit their commercialization. If our third-party manufacturers fail to produce our compounds and other product components satisfactorily and in sufficient quantities, we may incur delays, shortfalls and additional expenses.

Our product candidates, including many of the components, have never been manufactured on a commercial scale. We intend to use third-party manufacturers to produce commercial quantities of the chemical compounds and other components to be used in our products. These compounds and other

S-6

components have never been produced in commercial quantities. We have an agreement with a manufacturer to produce commercial quantities of amotosalen, which is the compound used in our platelet and plasma systems. We currently do not have any other third-party manufacturing agreements in place for commercial production of other compounds or components. Any additional commercial manufacturer will need to develop new methods and processes to manufacture these compounds on a commercial scale and demonstrate to us, the FDA and foreign regulatory authorities that its commercial scale manufacturing processes comply with government regulations. It may be difficult or impossible to economically manufacture our products on a commercial scale.

A limited number of suppliers manufacture our inactivation compounds for our use in product development, including clinical trials. We are pursuing contracts with manufacturers to produce intermediates to our S-303 compound, which is used in our red blood cell system, and to produce S-303 itself. If any of these manufacturers cannot produce our compounds in the required quantities or to the required standards, we may face delays and shortfalls before we are able to identify alternate or additional manufacturers to meet these requirements. Contracts have not

yet been signed for the long-term supply in commercial quantities of the compounds used in our red blood cell system. While alternative suppliers for the inactivation compounds exist, any new manufacturer will have to prove both to us and to the FDA and foreign regulatory authorities that its manufacturing process complies with government regulations. Identifying and qualifying such new suppliers could be expensive and time-consuming.

Baxter is responsible for manufacturing and assembling our pathogen inactivation systems. Baxter intends to rely on third parties to manufacture and assemble some of the system components, many of which are customized and have not been manufactured on a commercial scale. Baxter has not produced the pathogen inactivation systems in commercial quantities and may not be able to manufacture and assemble them, or do so economically. In the United States, studies related to the platelet system disposable and compound manufacturing need to be completed and included in FDA submissions before the FDA would consider the applications for approval. Efforts to modify the design for manufacturing of our plasma system continue, and the timing of our regulatory submission for the plasma system is dependent on the successful completion of this design, which is uncertain.

Baxter has advised us that it intends to purchase certain key components of the pathogen inactivation systems from a limited number of suppliers. Contracts for the long-term supply of certain components have not yet been signed. While we believe there are alternative suppliers for these components, it would be expensive and time-consuming to establish additional or replacement suppliers for these components. If Baxter were unable to find adequate suppliers for these components, we may be required to redesign the systems, which could lead to additional testing and clinical trials. If we were required to redesign the products, our development costs would increase, and our programs could be delayed significantly.

We will need to establish a sufficient shelf life for the components of our products before the FDA will approve our products for sale.

Product stability studies to establish the shelf life of our system disposables have not yet demonstrated a sufficient shelf life. Certain platelet and plasma system disposables and packaging are being redesigned, and product stability will need to be validated through additional studies, which are expensive and time consuming. If sufficient shelf life cannot be demonstrated, the products may not achieve customer acceptance and may not receive regulatory approval in the United States.

S-7

Our products may not achieve acceptance in, or be rapidly adopted by, the health care community.

Even if our product candidates receive regulatory approval for commercial sale, physicians, patients and healthcare payors may not believe that the benefits of using our systems justify their additional cost, because the blood supply has become safer or for other reasons. Baxter's ability to successfully commercialize our products will depend in part on the availability of adequate reimbursement for product costs and related treatment of blood components from governmental authorities and private health care insurers (including health maintenance organizations), which are increasingly attempting to contain health care costs by limiting both the extent of coverage and the reimbursement rate for new tests and treatments. In addition, our products do not inactivate all known pathogens, and the inability of our systems to inactivate certain pathogens may inhibit their acceptance. For logistical and financial reasons, the transfusion industry has not always integrated new technologies into their processes, even those with the potential to improve the safety of the blood supply. Our products may require significant changes to our potential customers' space and staffing requirements and require significant capital investment. If our products fail to achieve market acceptance, we may never become profitable.

We will need to develop and test additional configurations of our pathogen inactivation systems to address the entire market.

In the United States, our efforts to develop our systems to inactivate viruses, bacteria and other pathogens in platelets have focused almost entirely on apheresis platelets collected on Baxter's automated collection platform. Apheresis platelets are platelets that are collected from a single donor using an automated collection machine. Currently, we estimate that the majority of platelets used in the United States are collected by apheresis, with the remainder prepared from pooled random donor platelets. Blood centers in the United States preparing random donor platelets may be reluctant to switch to apheresis collection, and the FDA may require us to make our systems to inactivate viruses, bacteria and other pathogens in platelets compatible with random donor platelets. In order to develop a platelet pathogen inactivation system compatible with random donor platelets, we will need to perform additional product development and testing, including clinical trials. These development activities would increase our costs significantly, and may not be successful. In addition, FDA regulations limit the time from pooling to transfusion to four hours to minimize the proliferation of bacterial contamination in the pooled product. As a result, most pooling occurs in hospitals. Our platelet system is designed for use in blood centers, not at hospitals, and is intended to permit storage and transfusion of treated platelets for up to five days after pooling. The FDA's time limit between pooling and transfusion currently precludes the use of our system with pooled random donor platelets. Although our system is designed to reduce the risk of bacterial contamination, we cannot predict whether the FDA would remove this process time constraint to allow our system to be used with pooled random donor platelets, and we have not yet made a formal request for the FDA to do so.

Baxter is one of three primary manufacturers of equipment for the collection of apheresis platelets in the United States. The equipment, design and materials used to collect the platelets vary from manufacturer to manufacturer. We have conducted our pre-clinical and clinical studies in the United States for apheresis platelets collected using only Baxter's equipment and materials. Under an agreement with Haemonetics Corporation, Baxter has agreed to provide Haemonetics with a platelet storage solution proprietary to Cerus and Baxter, with the objective that platelets collected on certain future Haemonetics apheresis collection equipment may be directly treated using our platelet system. Baxter and we also are adapting our platelet system to allow compatibility with other manufacturers' equipment. Such adaptations will require additional product development and testing, including clinical trials. These development activities will increase our costs significantly, and may not be successful. Market acceptance of the platelet system in the United States may be delayed until the system receives regulatory approval for use on such other equipment.

S-8

In Europe, platelets also are typically prepared from several units of whole blood using a semi-automated process known as the buffy coat process. For platelets prepared by the buffy coat process, our platelet system is approved for use only with Baxter's platelet collection and pooling materials. As a result, market acceptance in Europe of our platelet system for platelets prepared by the buffy coat process will depend on market acceptance of Baxter's platelet collection and pooling sets or on our ability to develop products compatible with other manufacturers' platelet collection and pooling sets. Our platelet system is also approved in Europe for use with Baxter's apheresis collection equipment as well as the apheresis collection equipment of two other manufacturers through the use of preparation kits.

In Canada, our platelet system is approved for use with platelets prepared by the buffy coat process. Blood centers in Canada currently use the platelet rich plasma and single donor collection methods, and do not use the buffy coat process. The primary difference between the methods is the centrifugation process for separating the component from whole blood to obtain a therapeutic dose of platelets. Baxter and we intend to apply for the license to use the platelet system in Canada with single-donor platelets. We will not have product sales in Canada unless we apply for and receive approval for our system in Canada for use with single-donor platelets or Canadian blood centers implement the buffy coat method.

Fresh frozen plasma and red blood cells are also collected by different methods and equipment and in different volumes. Our systems for plasma and red blood cells being developed and tested will not be suitable for all methods, equipment and volumes used to collect these blood components. We will need to develop and test additional configurations of these systems in order to address the entire market.

A small number of customers will determine market acceptance of our pathogen inactivation systems.

Even if our products receive regulatory approval to be commercialized and marketed, due to the intense market concentration, failure to properly market, price or sell our products to any of these large customers could significantly diminish potential product revenue. The market for our pathogen inactivation systems is dominated by a small number of blood collection organizations. In the United States, the American Red Cross collects and distributes approximately 50% of the nation's supply of blood and blood components. Other major United States blood collection organizations include the New York Blood Center and United Blood Services, each of which distributes approximately 6% of the nation's supply of blood and blood components. In many countries of Western Europe and in Japan, various national blood transfusion services or Red Cross organizations collect, store and distribute virtually all of their respective nations' blood and blood components supply. In Europe, the largest markets for our products are in Germany, the United Kingdom and France. Decisions on product adoption are centralized in the United Kingdom and France. In Germany, decision on product adoption is expected to be on a blood center-by-blood center basis. We have not received in-country approvals to market our platelet system in these countries. If we do not receive approvals to market our products in these countries, or if the products are not adopted in these countries, our potential product revenue in Europe will be significantly decreased.

We rely heavily on Baxter for development funding, product engineering, manufacturing, marketing and sales.

We have two development and commercialization agreements with Baxter for our systems to inactivate viruses, bacteria and other pathogens in each of the three commonly transfused blood components: platelets, fresh frozen plasma and red blood cells, and we rely on Baxter for significant financial and technical contributions to these programs. Since the beginning of our relationship with Baxter in 1993 through March 31, 2003, we have received \$46.7 million in equity investments from Baxter and \$25.9 million from Baxter International Inc. and Subsidiaries Pension Trust, a \$50.0 million loan from Baxter Capital Corporation and we have recognized \$30.0 million in revenue from Baxter. Our ability to develop, manufacture and market these products successfully depends significantly on Baxter's performance under these agreements.

We rely on Baxter for engineering, manufacturing and supplying components of our pathogen inactivation systems. Under the terms of our agreements, Baxter is responsible for manufacturing or supplying the disposable units, such as blood storage containers and related tubing, as well as any device associated with the inactivation processes. If these agreements were terminated or if Baxter otherwise failed to design or deliver an adequate supply of components, we would be required to identify other third-party component manufacturers. We cannot assure you that we would be able to identify such manufacturers on a timely basis or enter into contracts with such manufacturers on reasonable terms, if at all. Any delay in the availability of devices or disposables from Baxter could delay the submission of the INTERCEPT Blood System for regulatory approval or the market introduction and subsequent sales of the systems. Moreover, the inclusion of components manufactured by others could require us to seek new approvals from regulatory authorities, which could result in delays in product delivery. We may not receive any such required regulatory approvals.

We rely on Baxter for the marketing, sales and distribution of our pathogen inactivation systems. We currently have a small marketing group that helps support Baxter's marketing organization; however, we do not intend to develop our own independent marketing and sales organization and expect to continue to rely on Baxter to market and sell the INTERCEPT Blood System. If our joint development agreements with Baxter are terminated or if Baxter is unable to market the products successfully, we will be required to find another marketing, sales and distribution partner or develop these capabilities ourselves. We may not be able to find a suitable partner on favorable terms or on a timely basis, if at all. Developing marketing, sales and distribution capabilities ourselves would delay commercialization of our pathogen inactivation systems and increase our costs.

We share control over management decisions. Baxter and we share responsibility for managing the development programs for the pathogen inactivation systems. Management decisions are made by a governance committee, which has equal representation from both Baxter and us. Our interests and Baxter's may not always be aligned. Disagreements with Baxter may be time-consuming to resolve and cause significant delays in the development of our products. If we disagree with Baxter on program direction, a neutral party will make the decision. The neutral party may not decide in our best interest. Under the agreements, Baxter may independently develop a pathogen inactivation system for fresh frozen plasma using a pre-existing technology. Such an effort by Baxter could create conflicts in our joint program for the development of a pathogen inactivation system for fresh frozen plasma.

Baxter can terminate our agreements or fail to perform. Any development program under the agreements may be terminated by either party, with 90 days' notice in the case of the platelet program, or 270 days' written notice in the case of the plasma or red blood cell programs. If Baxter terminates the agreements or fails to provide adequate funding to support the product development efforts, we will need to obtain additional funding from other sources and will be required to devote additional resources to the development of our products. We cannot assure you that we would be able to find a suitable substitute partner in a timely manner, on reasonable terms or at all. If we fail to find a suitable partner, our research, development or commercialization of certain planned products would be delayed significantly, which would cause us to incur additional expenditures.

Our products are subject to extensive regulation by domestic and foreign governments.

Our products under development, and anticipated future products, are subject to extensive and rigorous regulation by United States local, state and federal regulatory authorities and by foreign regulatory bodies. These regulations are wide-ranging and govern, among other things:

product development;

product testing;

product manufacturing;

product labeling;

product storage;

product premarket clearance or approval;

product sales and distribution;

product use standards and documentation;

product advertising and promotion; and

product reimbursement.

The FDA and other agencies in the United States and in foreign countries impose substantial requirements upon the manufacturing and marketing of products such as those we are developing. The process of obtaining FDA and other required regulatory approvals is long, expensive and uncertain. The time required for regulatory approvals is uncertain, and the process typically takes a number of years, depending on the type, complexity and novelty of the product. We may encounter significant delays or excessive costs in our efforts to secure necessary approvals or licenses, or we may not be successful at all.

Even if our product candidates receive approval for commercial sale, their marketing and manufacturing will be subject to continuing FDA and other regulatory requirements, such as requirements to comply with good manufacturing practices. The failure to comply with these requirements could result in enforcement action, which could harm our business. Later discovery of problems with a product, manufacturer or facility may result in additional restrictions on the product or manufacturer, including withdrawal of the product from the market. Regulatory authorities may also require post-marketing testing, which can involve significant expense. The government may impose new regulations that could further delay or preclude regulatory approval of our potential products. We cannot predict the impact of adverse governmental regulation that might arise from future legislative or administrative action.

Distribution of our products outside the United States also is subject to extensive government regulation. These regulations vary by country, including the requirements for approvals or clearance to market, the time required for regulatory review and the sanctions imposed for violations. In addition to CE Mark approval in Europe, we will need to obtain regulatory approvals in individual European countries to market our products. The level of additional product testing varies by country, but could take up to six months or more to complete after CE Mark approval. Failure to obtain necessary regulatory approvals or any other failure to comply with regulatory requirements could result in reduced revenue and earnings. In some countries, we may also need to obtain government approvals for reimbursement in order for our product to be adopted. Reimbursement levels in some countries are determined by annual budgeting processes which, in addition to affecting product adoption, will affect the price we will be able to charge for our products.

To support our requests for regulatory approval to market our product candidates, we have conducted and intend to conduct various types of studies including:

toxicology studies to evaluate product safety;

laboratory and animal studies to evaluate product effectiveness;

human clinical trials to evaluate the safety, tolerability and effectiveness of treated blood components; and

manufacturing and stability studies.

We have conducted many toxicology studies to demonstrate our product candidates' safety, and we plan to conduct additional toxicology studies throughout the product development process. At any time, the FDA and other regulatory authorities may require further toxicology or

other studies to further demonstrate our products' safety, which could delay commercialization. We believe the FDA and other regulatory authorities are likely to weigh the potential risks of using our pathogen inactivation products

S-11

against the incremental benefits, which may be less compelling in light of improved safety in the blood supply. In addition, our clinical development plan assumes that we will not be required to perform human clinical studies to demonstrate our systems' ability to inactivate pathogens. Although we have discussed this plan with the FDA and other regulatory authorities, they may find it unacceptable at any time and may require human clinical trials to demonstrate efficacy in inactivating pathogens. Trials of this type may be too large and expensive to be practical.

Regulatory agencies may limit the uses, or indications, for which any of our products are approved. For example, we believe that we will be able to claim the inactivation of particular pathogens only to the extent we have laboratory or animal data to support such claims. After regulatory approval for the initial indications, further clinical trials may be necessary to gain approval for the use of the product for additional indications.

In addition to the regulatory requirements applicable to us and to our products, there are regulatory requirements applicable to our prospective customers, the blood centers that process and distribute blood and blood products. Blood centers and others will likely be required to obtain approved license supplements from the FDA before using products processed with our pathogen inactivation systems. This requirement or FDA delays in approving these supplements may deter some blood centers from using our products. Blood centers that do submit supplements may face disapproval or delays in approval that could provide further delay or deter them from using our products. The regulatory impact on potential customers could slow or limit the potential sales of our products.

Customer adoption of our products will be affected by the availability of reimbursement from governments or other third parties.

Sales of our products may be affected by the availability of reimbursement from governments or other third parties, such as insurance companies. It is difficult to predict the reimbursement status of newly approved, novel medical products. In certain foreign markets, governments have issued regulations relating to the pricing and profitability of medical products and medical products companies. There have been proposals in the United States, at both the federal and state government level, to implement such controls. The growth of managed care in the United States has also placed pressure on the pricing of medical products. These pressures can be expected to continue and may limit the prices Baxter and we can obtain for our products.

We have only a limited operating history, and we expect to continue to generate losses.

We may never achieve a profitable level of operations. To date, we have engaged primarily in research and development. Our development and general and administrative expenses have resulted in substantial losses each year since our inception, including net losses of \$36.0 million in 2000, \$49.4 million in 2001 and \$57.2 million in 2002. As of March 31, 2003, we had an accumulated deficit of approximately \$247.4 million. Except for our platelet system, which is approved for sale in Europe, all of our products are in the research and development stage, and we have not received significant revenue from product sales. We have received substantially all of our revenue from our agreements with Baxter and other development partners and from federal research grants and cooperative agreements. We will be required to conduct significant research, development, clinical testing and regulatory compliance activities for each of these products. We expect our losses to continue at least until our product candidates are commercialized and achieve significant market acceptance.

If we fail to obtain the capital necessary to fund our future operations, we will not be able to develop product candidates in our pipeline.

Our product development programs are capital-intensive. We expect to continue to spend substantial funds for our operations for the foreseeable future. We believe that our existing capital resources, together with anticipated product revenue, funding from Baxter and the United States government and projected

interest income, will support our current and planned operations until at least mid-2004. Our cash, liquidity and capital requirements will depend on many factors, including the development progress and costs of our programs, payments by Baxter and the United States government, costs related to creating, maintaining and defending our intellectual property position, regulatory approval and successful commercialization of our

product candidates, competitive developments and regulatory factors.

We expect to require substantial additional funds for our long-term product development, marketing programs and operating expenses. We do not know if we will be able to raise additional funds on acceptable terms. If we are unable to obtain sufficient additional capital, we may need to delay or cease certain development programs. If we raise additional funds by issuing equity securities, our existing stockholders may experience substantial dilution.

If our competitors develop and market products that are more effective than our product candidates, our commercial opportunity will be reduced or eliminated.

We expect our products to encounter significant competition. Our products may compete with other approaches to blood safety and improving the outcome of stem cell transplantation currently in use, as well as with future products developed by biotechnology and pharmaceutical companies, hospital supply companies, national and regional blood centers and governmental organizations and agencies. Our success will depend in part on our ability to respond quickly to medical and technological changes through the development and introduction of new products. Product development is risky and uncertain, and we cannot assure you that we will develop our products successfully. Competitors' products or technologies may make our products obsolete or non-competitive before we are able to generate any significant revenue. Competitors or potential competitors may have substantially greater financial and other resources than we have. They may also have greater experience in pre-clinical testing, human clinical trials and other regulatory approval procedures. Our ability to compete successfully will depend, in part, on our ability to:

attract and retain skilled scientific personnel;

develop technologically superior products;

develop lower cost products;

obtain patent or other proprietary protection for our products and technologies;

obtain required regulatory approvals for our products;

be early entrants to the market; and

manufacture, market and sell our products, independently or through collaborations.

Several companies are developing technologies that are, or in the future may be, the basis for products that will directly compete with or reduce the market for our pathogen inactivation systems. A number of companies are specifically focusing on alternative strategies for pathogen inactivation in various blood components. In Europe, several companies, including Grifols, Octapharma AG and Maco Pharma International GmbH, are developing or have developed commercial systems to treat fresh frozen plasma.

Other groups are developing synthetic blood product substitutes and products to stimulate the growth of platelets, and new methods of testing blood for specific pathogens have recently been approved by the FDA, including tests for bacteria. Several companies are developing tests for West Nile Virus in blood products, although none have been approved for sale to date. Development of any of these technologies could impair the potential market for our products.

We may not be able to protect our intellectual property or operate our business without infringing intellectual property rights of others.

Our commercial success will depend, in part, on obtaining and maintaining patent protection on our products and successfully defending our products against third-party challenges. Our technology will be

protected from unauthorized use by others only to the extent that it is covered by valid and enforceable patents or effectively maintained as trade secrets. As a result, our success depends in part on our ability to:

obtain patents;

protect trade secrets;

operate without infringing upon the proprietary rights of others; and

prevent others from infringing on our proprietary rights.

As of March 31, 2003, we owned 65 issued or allowed United States patents and 46 issued or allowed foreign patents. Our patents expire at various dates between 2003 and 2018. In addition, we have 26 pending United States patent applications and have filed 17 corresponding patent applications under the Patent Cooperation Treaty, which are currently pending in Europe, Japan, Australia and Canada, and of which seven are also pending in China and five are also pending in Hong Kong. In addition, we are a licensee under a license agreement with respect to two United States patents covering inventions pertaining to psoralen-based photochemical decontamination treatment of whole blood or blood components and four United States patents relating to vaccines, as well as related foreign patents. We cannot be certain that our patents or patents that we license from others will be enforceable and afford protection against competitors. Our patents or patent applications, if issued, may be challenged, invalidated or circumvented. Our patent rights may not provide us with proprietary protection or competitive advantages against competitors with similar technologies. Others may independently develop technologies similar to ours or independently duplicate our technologies. For example, a patent has recently issued to a third-party covering methods to remove psoralen compounds from blood products. We have reviewed the patent and believe our work predates the invention disclosed in that patent. We are continuing to review that patent and will make a determination as to whether any action is necessary. Due to the extensive time required for development, testing and regulatory review of our potential products, our patents may expire or remain in existence for only a short period following commercialization. This would reduce or eliminate any advantage of the patents.

We cannot be certain that we were the first to make the inventions covered by each of our issued patents or pending patent applications or that we were the first to file patent applications for such inventions. We may need to license the right to use third-party patents and intellectual property to continue development and commercialization of our products. We may not be able to acquire such required licenses on acceptable terms, if at all. If we do not obtain such licenses, we may need to design around other parties' patents, or we may not be able to proceed with the development, manufacture or sale of our products.

We may face litigation to defend against claims of infringement, assert claims of infringement, enforce our patents, protect our trade secrets or know-how or determine the scope and validity of others' proprietary rights. Patent litigation is costly. In addition, we may require interference proceedings declared by the United States Patent and Trademark Office to determine the priority of inventions relating to our patent applications. Litigation or interference proceedings could be expensive and time consuming, and we could be unsuccessful in our efforts to enforce our intellectual property rights.

We may rely, in certain circumstances, on trade secrets to protect our technology. However, trade secrets are difficult to protect. We protect our proprietary technology and processes, in part, by confidentiality agreements with employees and certain contractors. However, these agreements may be breached, we may not have adequate remedies for any breach or our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our employees, consultants or contractors use intellectual property owned by others, disputes may also arise as to the rights in related or resulting know-how and inventions.

S-14

We may be liable if our products harm people.

We are exposed to potential liability risks inherent in the testing and marketing of medical devices and products. We may be liable if any of our products cause injury, illness or death. We maintain product liability insurance, but do not know whether the insurance will provide adequate coverage against potential liabilities. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our products.

We may be liable if hazardous materials used in the development of our products harm the environment, our employees or other people.

Our research and development activities involve the controlled use of hazardous materials, including certain hazardous chemicals, radioactive materials and infectious pathogens, such as HIV and hepatitis viruses. Although we believe that our safety procedures for handling and disposing of hazardous materials comply with regulatory requirements, we cannot eliminate the risk of accidental contamination or injury. If an accident occurs, we could be held liable for any damages that result.

If we do not generate sufficient cash flow through product sales revenue or by raising additional capital, then we may not be able to meet our debt obligation in 2008.

In January 2003, we received a \$50.0 million loan from Baxter Capital Corporation. The interest rate for the loan is 12% per annum. No repayment of principal and interest is due until January 2008. The loan is secured with collateral based on future revenue from sales of the INTERCEPT Blood System for platelets. Our substantial indebtedness will result in a significant amount of interest expense in future periods. Our indebtedness could have significant additional negative consequences, including limiting our ability to obtain additional financing and to plan for, or react to, changes in our business and the industry in which we compete. If we are unable to satisfy our debt obligation, substantial liquidity problems could result, which would negatively impact our future prospects.

Risks Related to Our Common Stock and this Offering

The market price of our stock may be highly volatile.

The market prices for our securities and those of other emerging medical device and biotechnology companies have been, and may continue to be, volatile. For example, during the period from January 1, 2001 to March 31, 2003, the closing sale price of our common stock as quoted on the Nasdaq National Market fluctuated from a low of \$5.59 to a high of \$75.35. Announcements may have a significant impact on the market price of our common stock. Such announcements may include:

biological or medical discoveries;

technological innovations or new commercial services by us or our competitors;

developments concerning proprietary rights, including patents and litigation matters;

regulatory developments in both the United States and foreign countries;

public concern as to the safety of new technologies;

general market conditions;

comments made by analysts, including changes in analysts' estimates of our financial performance; and

quarterly fluctuations in our revenue and financial results.

The stock market has from time to time experienced extreme price and volume fluctuations, which have particularly affected the market prices for emerging biotechnology and medical device companies, and which have often been unrelated to the operating performance of such companies. These broad

market fluctuations may adversely affect the market price of our common stock. In the past, following periods of volatility in the market price of a company's stock, securities class action litigation has occurred against the issuing company. Such litigation could result in substantial costs and a diversion of management's attention and resources, which could have a material adverse effect on our revenue and earnings. Any adverse determination in such litigation could also subject us to significant liabilities.

Management will have broad discretion as to the use of the proceeds from this offering, and we may not use the proceeds effectively.

We have not designated the amount of net proceeds we will use for any particular purpose. Accordingly, our management will have broad discretion as to the application of the net proceeds and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not increase our profitability or our market value.

You will experience immediate dilution in the book value per share of the common stock you purchase.

Because the price per share of our common stock being offered is substantially higher than the book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. Based on the public offering price of \$9.63 per share, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$5.39 per share in the net tangible book value of the common stock. See "Dilution" below for a more detailed discussion of the dilution you will incur in this offering.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference in the accompanying prospectus contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements relate to future events or our future financial performance. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "intend," "expect," "anticipate," "believe," "estimate," "predict," "potential" or "continue" or the negative of such terms or other comparable terminology. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks outlined under "Risk Factors" beginning on page S-5 of this prospectus supplement and elsewhere in this prospectus supplement, that may cause our or our industry's actual results, levels of activity, performance or achievements to differ from those expressed or implied by such forward-looking statements. Before deciding to purchase our common stock, you should carefully consider the risks described in the "Risk Factors" section of this prospectus supplement, in addition to the other information set forth in this prospectus supplement, the accompanying prospectus and in the documents incorporated by reference in the accompanying prospectus.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Except as may be required by law, we do not intend to update any of the forward-looking statements for any reason after the date of this prospectus supplement to conform such statement to actual results or if new information becomes available.

S-16

USE OF PROCEEDS

We estimate that the net proceeds we will receive from this offering will be approximately \$54.0 million, after deducting the underwriting discount and commissions and estimated offering expenses. If the underwriter's over-allotment option is exercised in full, we estimate the aggregate net proceeds to us will be approximately \$62.1 million. We intend to use the net proceeds from this offering for research and development activities and continuing clinical trials, general administrative suport, capital expenditures, working capital and general corporate purposes. We may also use the proceeds to repay a \$50.0 million loan outstanding under a revolving credit facility with Baxter Capital Corporation. The interest rate on the loan is 12% per annum, with no repayment of principal or interest due until January 2008. Amounts drawn down from this credit facility are held in investment securities and may be used for research and development. A portion of the proceeds may be used to acquire or invest in complementary businesses products or technologies although we are not currently in negotiations concerning any such acquisition or investments.

We have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds from this offering. Pending application of the net proceeds as described above, we intend to invest the net proceeds of the offering in short-term, investment-grade, interest-bearing securities.

DILUTION

If you purchase our common stock in this offering, your interest will be diluted to the extent of the difference between the public offering price per share and the net tangible book value per share of our common stock after this offering. We calculate net tangible book value per share by dividing the net tangible book value, tangible assets less total liabilities, by the number of outstanding shares of our common stock.

Our net tangible book value at March 31, 2003, was \$39.2 million, or \$2.45 per share, based on 15,978,519 shares of our common stock outstanding. After giving effect to the sale of 6,000,000 shares of common stock by us at a public offering price of \$9.63 per share, less the underwriting discounts and commissions and our estimated offering expenses, our net tangible book value at March 31, 2003, would be \$93.2 million, or \$4.24 per share. This represents an immediate increase in the net tangible book value of \$1.79 per share to existing stockholders and an immediate dilution of \$5.39 per share to investors in this offering. The following table illustrates this per share dilution:

Public offering price per share			\$	9.63
Net tangible book value per share as of March 31, 2003	\$	2.45		
Increase per share attributable to new investors		1.79		
	_			
Net tangible book value per share after this offering				4.24
			-	
Dilution per share to new investors				5.39
S-17				

UNDERWRITER

Under the terms and subject to the conditions set forth in the underwriting agreement dated the date of this prospectus supplement, Morgan Stanley & Co. Incorporated as underwriter has agreed to purchase, and we have agreed to sell, 6,000,000 shares of our common stock.

The underwriter is offering the shares of common stock subject to its acceptance of the shares from us. The underwriting agreement provides that the obligations of the underwriter to pay for and accept delivery of the shares of common stock offered by this prospectus supplement and accompanying prospectus are subject to the approval of certain legal matters by its counsel and to other conditions. The underwriter is obligated to take and pay for all of the shares of common stock offered by this prospectus supplement if any such shares are purchased. However, the underwriter is not required to take or pay for the shares covered by the underwriter's over-allotment described below.

The underwriter initially proposes to offer part of the shares of common stock directly to the public at the public offering price listed on the cover page of this prospectus supplement and part to certain dealers at a price that represents a concession not in excess of \$.35 a share under the public offering price. After the initial offering of the shares of common stock, the offering price and other selling terms may from time to time be varied by the underwriter.

We have granted to the underwriter an option, exercisable within 30 days from the date of this prospectus supplement, to purchase up to an aggregate of 900,000 additional shares of common stock at the public offering price set forth on the cover page of this prospectus supplement, less underwriting discounts and commissions. The underwriter may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with the offering of the shares of common stock offered by this prospectus supplement and the accompanying prospectus. If the underwriter's option is exercised in full, the total price to the public would be \$66,447,000, the total underwriter's discounts and commissions would be \$4,002,000 and total gross proceeds to us would be \$62,445,000.

The underwriter has informed us that it does not intend sales to discretionary accounts to exceed five percent of the total number of shares of common stock offered by it.

Our common stock is quoted on The Nasdaq National Market under the symbol "CERS."

The estimated offering expenses payable by us are approximately \$300,000, not including the underwriting discounts and commissions, which includes legal, accounting and printing costs and various other fees associated with registering and listing the common stock.

We and our executive officers and directors have agreed that, without the prior written consent of Morgan Stanley & Co. Incorporated, we will not, during the period ending 90 days after the date of this prospectus supplement:

offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock; or

enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of common stock,

whether any transaction described above is to be settled by delivery of common stock, or such other securities, in cash or otherwise.

The restrictions described in the immediately preceding paragraph do not apply to:

transactions relating to shares of common stock or other securities acquired in open market transactions after the completion of the offering;

S-18

sales by our officers and directors pursuant to plans established in accordance with Section 10b5-1 of the Securities Exchange Act of 1934 with a minimum limit order of \$30;

transfers of shares of common stock or any security convertible into or exercisable or exchangeable for common stock as a bona fide gift or gifts; and

transfers of shares of common stock or any security convertible into or exercisable or exchangeable common stock to affiliates (as defined in Rule 405 under the Securities Act of 1933).

provided that in the case of any transfer or distribution, such donee or distributee shall execute and deliver to Morgan Stanley & Co. Incorporated an agreement to be bound by the restrictions set forth above.

In order to facilitate the offering of the common stock, the underwriter may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriter may sell more shares than it is obligated to purchase under the underwriting agreement, creating a short position. A short sale is covered if the short position is no greater than the number of shares available for purchase by the underwriter under the over-allotment option. The underwriter can close out a covered short sale by exercising the over-allotment option or purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriter may also sell shares in excess of the over-allotment option, creating a naked short position. The underwriter must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriter is concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in the open market to stabilize the price of the common stock. These activities may raise or maintain the market price of the common stock above independent market levels or prevent or retard a decline in the market price of the common stock. The underwriter is not required to engage in these activities, and may end any of these activities at any time.

We have agreed to indemnify the underwriter and its affiliates against certain liabilities, including liabilities under the Securities Act of 1933.

DESCRIPTION OF COMMON STOCK

Transfer Agent and Registrar

Wells Fargo Shareowner Services is the transfer agent and registrar for our common stock.

LEGAL MATTERS

The validity of the shares of common stock we are offering will be passed upon for us by Cooley Godward LLP of San Francisco, California. Davis Polk & Wardwell of Menlo Park, California, is representing the underwriter.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement (of which this prospectus supplement and accompanying prospectus form a part) on Form S-3 with respect to the common stock being offered by this prospectus supplement. This prospectus supplement and accompanying prospectus do not contain all of the information set forth in the registration statement and the exhibits thereto. For further information with respect to us and the shares of common stock offered hereby, reference is made to the registration statement, including the exhibits thereto. Statements contained in this prospectus supplement as to the contents of any contract or other document referred to herein are not necessarily complete and, where any contract is an exhibit to the registration statement, each statement with respect to the contract is qualified

S-19

in all respects by the provisions of the relevant exhibit, to which reference is hereby made. You may read and copy any document we file at the Public Reference Section of the Securities and Exchange Commission, 450 Fifth Street, N.W., Room 1024, Washington, D.C. 20549. You may call the SEC at 1-800-SEC-0330 for further information about the operation of the public reference rooms.

We are subject to the information and reporting requirements of the Securities Exchange Act of 1934 and, in accordance therewith, file periodic reports, proxy statements and other information with the SEC.

The SEC maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the SEC's website is http://www.sec.gov.

The SEC allows us to incorporate into this prospectus supplement information that we file with the SEC in other documents, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus supplement. Any statement contained in a document which is incorporated by reference is automatically updated and superseded if such information is contained in this prospectus supplement, or information that we later file with the SEC, modifies and replaces such information. We incorporate by reference the following documents we have filed with the SEC:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2002 and filed with the SEC on March 28, 2003;

our Quarterly Report on Form 10-Q for the quarter ended March 31, 2003 and filed with the SEC on May 15, 2003);

our Current Reports on Form 8-K, filed with the SEC on June 5, 2003, June 4, 2003, April 28, 2003 and February 2, 2003;

our Definitive Proxy Statement for our 2003 Annual Meeting of Stockholders, filed with the SEC on April 30, 2003; and

the description of our common stock set forth in our registration statement on Form 8-A and filed with the SEC on January 8, 1997.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to Cerus Corporation, Attention: Investor Relations Officer, 2411

Stanwell Drive, Concord, California 94520, telephone: (925) 288-6000.

S-20

PROSPECTUS

\$300,000,000

CERUS CORPORATION

DEBT SECURITIES COMMON STOCK

From time to time, we may offer and sell common stock and/or debt securities.

We will describe in one or more prospectus supplements the securities we are offering and selling, as well as the specific terms of the securities. You should read this prospectus and any prospectus supplements carefully before you invest. This prospectus may not be used to offer or sell any securities unless accompanied by a prospectus supplement.

Our common stock is quoted on the Nasdaq National Market under the symbol "CERS." On December 14, 2001, the last reported sale price for our common stock on the Nasdaq National Market was \$48.30 per share.

INVESTING IN OUR DEBT SECURITIES OR COMMON STOCK INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE 3.

The securities may be sold directly by us to investors, through agents designated from time to time or to or through underwriters or dealers. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution." If any underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such underwriters and any applicable commissions or discounts will be set forth in a prospectus supplement. The net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

December 17, 2001

TABLE OF CONTENTS

Page

ABOUT THIS PROSPECTUS	1
ABOUT CERUS	1
THE SECURITIES WE MAY OFFER	1
RISK FACTORS	3
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	13
USE OF PROCEEDS	13
RATIO OF EARNINGS TO FIXED CHARGES	13
DESCRIPTION OF DEBT SECURITIES	14
DESCRIPTION OF CAPITAL STOCK	28
PLAN OF DISTRIBUTION	32
LEGAL MATTERS	34

EXPERTS	34
WHERE YOU CAN FIND MORE INFORMATION	34

This prospectus is part of a registration statement we filed with the Securities and Exchange Commission. You should rely only on the information we have provided or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with additional or different information. We are not making an offer of these securities in any jurisdiction where the offer is not permitted. You should assume that the information in this prospectus or any prospectus supplement is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference.

ABOUT THIS PROSPECTUS

This prospectus is part of a Registration Statement on Form S-3 that we filed with the Securities and Exchange Commission using a "shelf" registration process. Under this shelf process, we may offer from time to time any combination of securities described in this prospectus in one or more offerings up to a total amount of \$300,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we use this prospectus to offer securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplements may also add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with additional information described below under the heading "Where You Can Find More Information."

ABOUT CERUS

Cerus Corporation is developing medical systems and therapeutics that provide safer and more effective treatment options to patients. Cerus' product candidates are based on its proprietary Helinx technology for controlling biological replication. Cerus' most advanced programs are focused on systems to enhance the safety of the world's blood supply. These INTERCEPT Blood Systems, based on the Helinx technology, are designed to inactivate viruses, bacteria, other such pathogens and harmful white blood cells. Cerus is also pursuing therapeutic applications of the Helinx technology to treat and prevent serious diseases.

Cerus was incorporated in California in 1991 and reincorporated in Delaware in 1996. Our principal executive offices are located at 2411 Stanwell Drive, Concord, California 94520, and our telephone number is (925) 288-6000. In this prospectus, "Cerus," "we," "us" and "our" refer to Cerus Corporation, unless the context otherwise requires.

Helinx is a trademark of Cerus Corporation. INTERCEPT Blood System, INTERCEPT Platelet System, INTERCEPT Plasma System and INTERCEPT Red Blood Cell System are trademarks of Baxter International, Inc. This prospectus also includes trademarks or trade names owned by other parties.

THE SECURITIES WE MAY OFFER

We may offer shares of our common stock and one or more series of debt securities with a total value of up to \$300,000,000 from time to time under this prospectus at prices and on terms to be determined by market conditions at the time of offering. Each time we offer securities, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

maturity;

redemption terms;

interest rate;

Page

listing on a securities exchange;

sinking fund terms;

amount payable at maturity;

currency of payments; and

conversion or exchange rights.

1

The prospectus supplement also may add, update or change information contained in this prospectus or in documents we have incorporated by reference. This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

We may sell the securities directly to or through agents, underwriters or dealers. We, and our agents or underwriters, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities through agents or underwriters, we will include in the applicable prospectus supplement:

the names of those agents or underwriters;

applicable fees, discounts and commissions to be paid to them; and

the net proceeds to us.

Common Stock. We may issue shares of our common stock from time to time. Holders of common stock are entitled to one vote per share on all matters submitted to a vote of stockholders. Subject to any preferences of outstanding shares of preferred stock, holders of common stock are entitled to dividends when and if declared by the board of directors.

Debt Securities. We may offer debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. The senior debt securities will rank equally with any other unsecured and unsubordinated debt. The subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner described in the instrument governing the debt, to all of our senior indebtedness. Convertible debt securities will be convertible into our common stock. Conversion may be mandatory or at the holder's option and would be at specified conversion rates.

The debt securities will be issued under one or more documents called indentures, which are contracts between us and a national banking association, as trustee. In this prospectus, we have summarized certain general features of the debt securities. We urge you, however, to read the prospectus supplements related to the series of debt securities being offered, as well as the complete indentures that contain the terms of the debt securities. Indentures have been filed as exhibits to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of debt securities being offered will be filed as exhibits to the registration statement or will be incorporated by reference from reports we file with the SEC.

RISK FACTORS

You should carefully consider the following risk factors, in addition to other information included or incorporated by reference in this prospectus and any prospectus supplement, before making an investment decision. Cerus' business faces significant risks. If any of the events or

circumstances described in the following risks actually occur, our business may suffer, the trading price of our common stock could decline and you may lose all or part of your investment.

Our products are in development; if our pre-clinical and clinical trials are not successful, we will be unable to commercialize our products and generate revenue.

We have no products that have received regulatory approval for commercial sale. Our product candidates are in various stages of development, and we face the risks of failure inherent in developing medical devices and biotechnology products based on new technologies. Our products must satisfy rigorous standards of safety and efficacy before the United States Food and Drug Administration and international regulatory authorities can approve them for commercial use. Our platelet, fresh frozen plasma, red blood cell and stem cell transplantation programs are undergoing clinical testing. We must provide the FDA and foreign regulatory authorities with pre-clinical and clinical data that demonstrate our products are safe and effective before they can be approved for commercial sale.

We have completed our European Phase III (CE Mark) clinical trial of the INTERCEPT Platelet System with random donor platelets. which are platelets prepared from several units of whole blood pooled together in a manual process, and we submitted a CE Mark application for marketing approval in Europe in December 2000. We are conducting a 20-patient ancillary clinical trial in Europe to qualify the commercial configuration of the system. We must complete this trial before the system can receive marketing approval in Europe. We are also conducting a 40-patient ancillary clinical trial in Europe to extend qualification of the system to platelets collected by our development and marketing partner, Baxter Healthcare Corporation's, apheresis collection system, which is a system to collect platelets from a single donor using an automated collection machine. We completed our U.S. Phase III clinical trial of the INTERCEPT Platelet System in March 2001, but we have not yet completed submission of our pre-market approval application with the FDA. We have completed Phase IIIa and Phase IIIb clinical trials of the INTERCEPT Plasma System in the United States and are conducting a Phase IIIc clinical trial. We have completed a Phase Ic clinical trial of the INTERCEPT Red Blood Cell System in the United States and obtained concurrence from the FDA to proceed into Phase III clinical trials. Our allogeneic cellular immune therapy (referred to as ACIT) program, designed to improve the outcome of bone marrow transplantation procedures through use of T-cells treated with the Helinx technology, is in Phase I clinical trials in the United States. Last, our source plasma pathogen inactivation system and Epstein-Barr Virus cellular vaccine program are in pre-clinical development. We will have to conduct significant additional research and pre-clinical (animal) and clinical (human) testing before we can file applications for product approval with the FDA and foreign regulatory agencies. Clinical trials in particular are expensive and have a high risk of failure. In addition, to compete effectively, our products must be easy to use, cost-effective and economical to manufacture on a commercial scale. Any of our product candidates may fail in the testing phase or may not attain market acceptance, which could prevent us from achieving profitability.

It may take us several years to complete our clinical testing, and failure can occur at any stage of testing. We cannot rely on interim results of trials to necessarily predict their final results, and acceptable results in early trials might not be repeated in later trials. Any trial may fail to produce results satisfactory to the FDA or foreign regulatory authorities. Pre-clinical and clinical data can be interpreted in different ways, which could delay, limit or prevent regulatory approval. Negative or inconclusive results from a pre-clinical study or clinical trial or adverse medical events during a clinical trial could cause a pre-clinical study or clinical trial to be repeated or a program to be terminated, even if other studies or trials relating to a program are successful.

3