

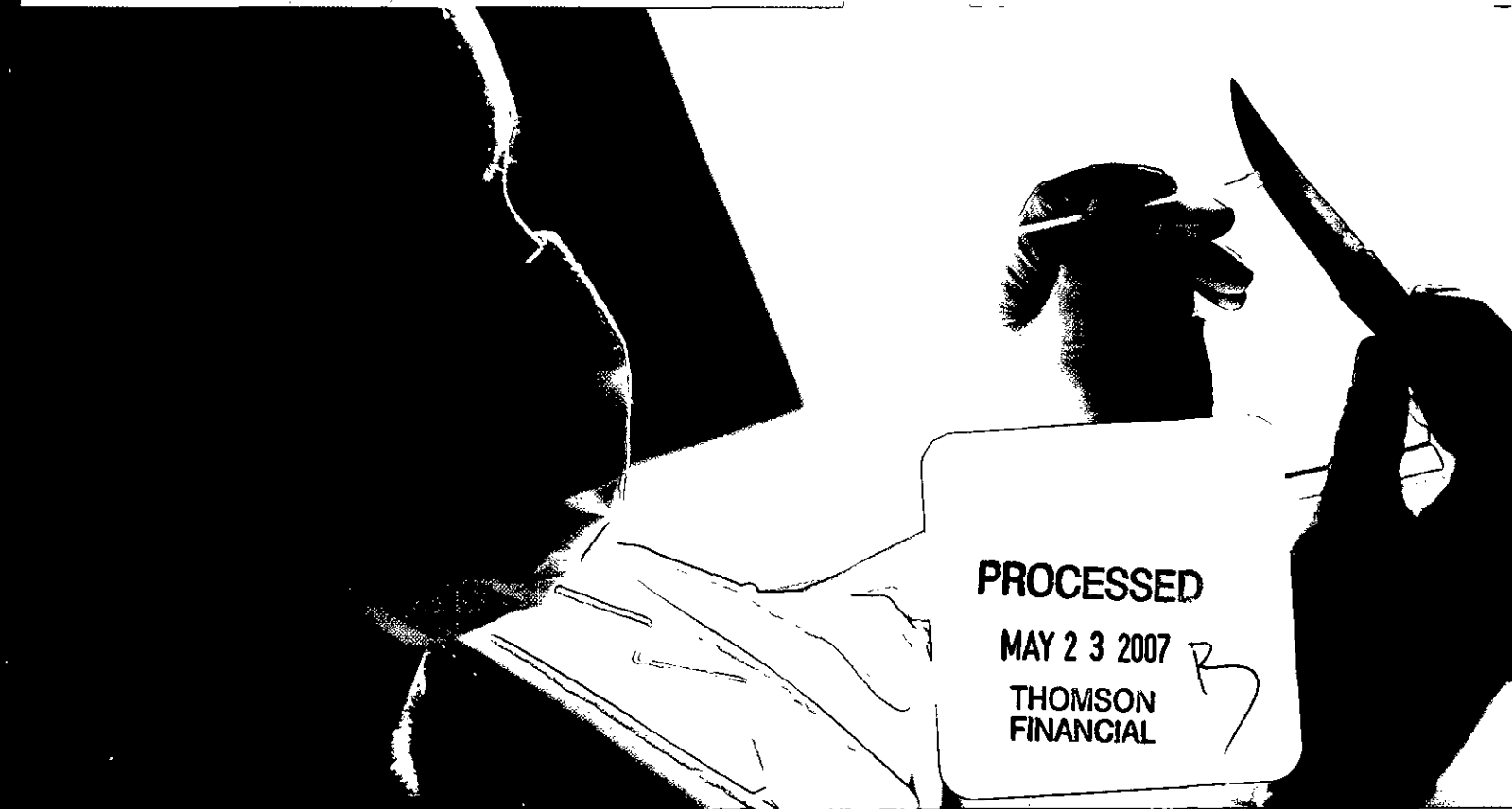


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# ORCHID CELLMARK

EXPERIENCE THE POWER OF DNA

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Annual Report 2006

# CORPORATE PROFILE

Orchid Cellmark is a leading provider of human identity DNA testing services primarily for forensic and family relationship applications. Orchid Cellmark is one of the largest providers of forensic DNA testing services and its DNA laboratory results are used by the police and the criminal justice system to assist with the identification of perpetrators and the exclusion of suspects, as well as for the exoneration of individuals who may have been wrongfully convicted. Orchid Cellmark provides DNA family relationship testing to public and private child services organizations and to individuals seeking to verify parentage. The company also serves immigration and security authorities for DNA testing as an important tool for verifying the identification of individuals seeking entry to, or residence in, our geographic markets. Orchid Cellmark's strong market positions in these segments reflect the reputation for quality and customer service that the company's accredited laboratories have built in its two decades of operations.



# TO OUR STOCKHOLDERS

2006 was a challenging year that we believe marked the start of Orchid Cellmark's turnaround. After a tough start to the year, we made good progress in addressing our operations and we believe we are now well positioned to build our business and capitalize on market opportunities. We have sized our facilities well, have significantly improved the way we approach business in North America and we have demonstrated that we can successfully pursue new U.K. forensic business on a direct basis. With these operational advances and our strengthened cash position, we are now in a position to explore potential acquisition opportunities. Moving forward, we intend to further improve our business and operations with the goal of achieving sustainable profitability.

In 2006, full-year revenues dropped by approximately eight percent and our operating loss increased from 2005. These disappointing results were in large part a reflection of the poor results in the first, and to a lesser degree, the second quarter of the year. However, we are very encouraged by the fact that the weak start is in sharp contrast to the improving position of the company in the last two quarters of 2006. Early in the year, the combination of pricing issues, production difficulties in consolidating the former Germantown, Maryland facility into our new Dallas, Texas operation and unacceptable below-the-line costs resulted in large losses. In particular, our operating loss in the first quarter of 2006, which comprised over half of the full year operating loss, greatly impacted results for the remainder of the year. Despite reducing operating loss by over a third in the second quarter, the first half of the year still accounted for over 85% of our total 2006 operating loss. As expected, our gross margins showed the effects of these losses — the gross margin of 19% recorded in the first quarter limited our full year 2006 gross margins to 30%, down from

39% in 2005. However, the decisions we implemented gained traction and the second quarter 2006 gross margin increased to 27%, and the third and fourth quarter gross margins increased to 36%. We are pleased with the trend of our financial results.

The condition of the business in the early part of the year mandated strong measures, and we focused our initial turnaround efforts on analyzing each of our operations, cutting what we identified to be non-justifiable costs, instituting cost controls and implementing plans to strengthen and/or right size operations as appropriate. Fixing the Dallas, Texas forensic DNA facility was a priority. We concentrated our efforts on improving its operational efficiencies and addressing our sizeable backlog. The Dallas facility has since shown good operating and financial progress with a steady improvement in gross margin quarter over quarter since the first quarter of 2006. We believe we are now in a position to leverage the full range of capabilities at this well-equipped and fully staffed facility.

Our forensic DNA facility in Nashville, Tennessee was also a priority. We enhanced Nashville's operations primarily by improving the way we process Combined DNA Index System (CODIS)-samples, the high volume work of developing DNA profiles that are uploaded to federal and state criminal justice databases. Strengthened operations were accompanied by a more systematic approach to bidding, which helped us record a very good year for new CODIS business, in terms of both testing volume and revenues, and at higher average prices relative to 2005.

2006 was a challenging year for our Dayton, Ohio paternity testing facility, largely as a result of lower volume and reduced federal reimbursement matching rates for the government paternity business that we service at this facility.

We believe our U.S. forensic operations will continue to be a key source of revenue and growth, as the market demand for forensic DNA testing services continues to increase.

We believe the situation is in the process of stabilizing — in the fourth quarter of 2006 we entered into contracts for new government paternity testing business and have other potential business pending for this facility. We are cautiously optimistic about the prospects for our paternity testing business going into 2007.

We believe our East Lansing, Michigan facility, where we process both private and government paternity samples, is a model of efficiency with rapid sample turnaround time and good operating margins.

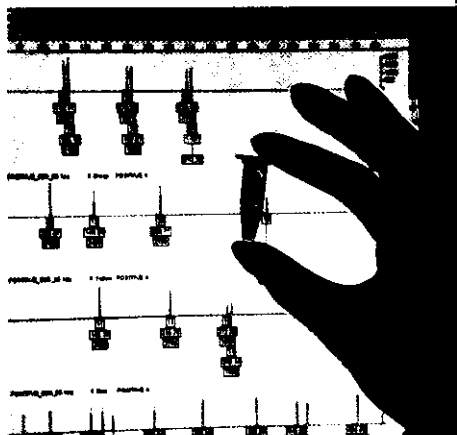
In the second quarter of the year, we also took a hard look at how we run our business overall, and in doing so, we quickly moved to lower our Princeton corporate headquarters overhead.

We believe our U.S. forensic operations will continue to be a key source of revenue and growth, as the market demand for forensic DNA testing services continues to increase. There are important factors already in place that we believe will help drive this growth. On the national front, the President's DNA Initiative is now fully funded at approximately \$175 million per year through 2009. In addition, the 2006 federal Violence Against Women Act requires DNA samples to be collected from all federal arrestees and immigrant detainees in addition to federal convicted felons, which is estimated to total about 1.4 million potential samples per year. This legislation is awaiting funding but federal authorities have already begun the rule-making process for program implementation.

Similarly, states are also expanding their DNA forensic testing programs. While the majority of states currently only secure DNA profiles from convicted felons, a growing number of states are expanding the pool to all arrestees. Today, forty-four states require DNA samples to be collected and tested from all convicted felons, not just violent criminals, and six of these states now require DNA sample collection from all arrestees. In addition, we believe that twenty-three states will introduce all arrestee initiatives in 2007, either through the legislative process or via direct voter ballot proposals.

Each of these developments has the potential to greatly expand the volume of DNA forensic testing, yet we believe few governmental entities will have the resources to manage this growing workload on their own. Orchid Cellmark's two decades of leadership in providing forensic DNA testing, our ongoing commitment to technology and service innovation and our recent moves to overhaul and strengthen our operations make us well positioned to capitalize on these new market opportunities.

We recently reported a high profile success that is a good example of how we intend to selectively partner with law enforcement agencies to promote the use of our services.



Working with police chiefs in Washington State, we helped obtain funding for a pilot program that ensures the analysis of DNA evidence from rape cases in less than thirty days, rather than the six months to a year typically required. In the program's very first case involving the sexual assault of an eleven year old girl, we helped Olympia police identify and arrest a suspect within days of the crime, while at the same time exonerating an innocent man who had initially been jailed for the assault.

While forensic DNA testing is a focus, we believe other markets in which we compete also have growth potential. We are currently evaluating targeted and cost effective marketing programs to grow our high margin private paternity business.

We are optimistic about the prospects for our U.K. operations. While overall 2006 revenues in the U.K. decreased primarily as a result of lower prices in some market segments, we anticipate growth in 2007 and are investing in and building this business accordingly. In 2006, we began our program to market and sell our services directly to U.K. police forces and we are very pleased with the results to date. In 2006, we added major new customers such as the Kent, Sussex and City of London police forces, and in December we submitted a bid for the South West, North West and Wales Regional Forensic Sciences Group Tender that comprises DNA testing services for fourteen U.K. police forces. Additionally, we are preparing to bid on the National Procurement Plan, which consists of contracts covering several additional U.K. police forces. We believe these are significant opportunities available to our U.K. business.

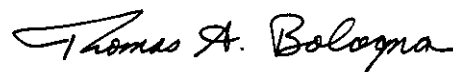
Our U.K. scrapie genotyping business scored another success this year when we were awarded a two-year extension of our scrapie genotyping contract on an exclusive basis, a good indication of the strength and credibility of our U.K. operations.

In late 2006, we strengthened our financial position by raising approximately \$14 million in a common stock private equity financing on favorable terms. This enhanced capital position will enable us to pursue acquisitions with the goal of further growing our business and increasing shareholder value.

All in all, I believe we have and will continue to make good progress on many fronts. During 2007, we intend to judiciously invest in our marketing and sales infrastructure, as evidenced by our recent hiring of Bruce Basarab to oversee North American sales and marketing. We plan to continue to move forward in a targeted and systematic way to further improve our business and operations over the remainder of 2007.

I would like to thank our stockholders who continued to support the company through the challenges faced in 2006. I would also like to thank our customers, whose confidence enables us to continue to provide high quality DNA testing services, and our employees, whose commitment, hard work and dedication to excellence are fundamental to sustaining and strengthening our leadership in the expanding and growing markets for identity DNA testing.

In conclusion, after accepting the position of President and Chief Executive Officer of Orchid Cellmark in the spring of 2006 and having led the company through this turnaround, I sincerely believe that our company, yours and mine, is well positioned to provide high value-added services to our customers. We offer services that benefit many individuals today and will benefit many more in the future. By doing so, we expect to turn our leadership in these markets into value for our shareholders.



Thomas A. Bologna  
President and Chief Executive Officer

## SELECTED FINANCIAL DATA

(In thousands, except per share data)	Year ended December 31				
	2006	2005	2004	2003	2002
<b>Consolidated statements of operations data:</b>					
Total revenues	\$ 56,854	\$ 61,609	\$ 62,499	\$ 50,627	\$ 50,425
Operating expenses:					
Cost of service revenues	39,705	37,496	34,963	29,014	25,957
Cost of product revenues	-	-	-	-	1,690
Research and development	1,228	1,616	1,632	3,193	21,006
Marketing and sales	6,766	8,744	7,041	6,087	8,701
General and administrative	18,980	20,383	22,360	23,517	32,967
Impairment of assets	-	255	393	837	20,771
Restructuring	437	2,514	1,130	76	6,880
Amortization of intangible assets	1,765	1,763	1,785	1,807	3,039
Total operating expenses	68,881	72,771	69,304	64,531	121,011
Operating loss	(12,027)	(11,162)	(6,805)	(13,904)	(70,586)
Total other income (expense), net	899	2,069	(103)	1,218	(1,085)
Loss from continuing operations before income taxes	(11,128)	(9,093)	(6,908)	(12,686)	(71,671)
Income tax benefit (expense)	(143)	(346)	(1,121)	(1,645)	577
Loss from continuing operations	(11,271)	(9,439)	(8,029)	(14,331)	(71,094)
Loss from discontinued operations	-	-	(783)	(9,237)	(9,003)
Net loss	(11,271)	(9,439)	(8,812)	(23,568)	(80,097)
Dividends to Series A preferred stockholders	-	-	(14)	(534)	-
Accretion of Series A redeemable convertible preferred stock discount resulting from conversions	-	-	(1,129)	(2,645)	-
Beneficial conversion feature of Series A redeemable convertible preferred stock	-	-	-	(744)	-
Net loss allocable to common stockholders	\$(11,271)	\$(9,439)	\$(9,955)	\$(27,491)	\$(80,097)
Basic and diluted net loss per share allocable to common stockholders	\$ (0.45)	\$ (0.39)	\$ (0.46)	\$ (2.14)	\$ (7.42)
Shares used in computing basic and diluted net loss per share allocable to common stockholders	24,892	24,284	21,828	12,831	10,800

	Year ended December 31				
	2006	2005	2004	2003	2002
<b>Consolidated balance sheet data:</b>					
Cash, cash equivalents and short-term investments	\$ 24,144	\$ 23,198	\$ 30,486	\$ 9,938	\$ 9,985
Working capital	29,973	22,835	33,047	7,540	9,475
Total assets	60,850	61,669	75,622	59,429	70,434
Long-term debt, less current portion	-	-	-	415	2,299
Series A redeemable convertible preferred stock	-	-	-	3,897	-
Total stockholders' equity	50,906	45,477	58,250	31,147	38,693

The following transactions had a material effect on the comparability of the data presented in the consolidated financial data above: the sale of our common stock in February and March 2002, the decision to discontinue the Life Sciences instrumentation business including the sale of assets in 2002, the line of credit entered into in 2002, the sale of Series A redeemable convertible preferred stock in March 2003, the decision in 2003 to realign the GeneShield business and the decision in 2002 to sell the Diagnostics business. The results of the Diagnostics business have been classified as discontinued operations and the related assets and liabilities are included as held for sale in 2003 and 2002.

This Management's Discussion and Analysis of Financial Condition and Results of Operations as of December 31, 2006 and for the years ended December 31, 2006, 2005 and 2004 should be read in conjunction with our Consolidated Financial Statements and related Notes thereto and the Selected Financial Data included elsewhere in this Annual Report.

## OVERVIEW

We are engaged in the provision of DNA testing services that generate genetic profile information by analyzing an organism's unique genetic identity. We focus our business on DNA testing primarily for human identity and to a lesser extent agricultural applications. In the human identity area, we provide DNA testing services for forensic, family relationship and security applications. Forensic DNA testing is primarily used to establish or maintain databases of individuals convicted of crimes or, in some instances, arrested in connection with crimes, confirm that a suspect committed a particular crime or to exonerate an innocent person. Family relationship DNA testing is used to establish whether two or more people are genetically related. Recently, DNA testing has been used by individuals and employers in security applications by seeking to establish a person's genetic identity and store it for identification purposes in the event of an emergency or accident. In agricultural applications, we provide DNA testing services for food safety and selective trait breeding. We have operations in the US and in the UK, and the majority of our current customers are based in these two countries. Over the past few years, we have completed our transformation from a technology development organization to a DNA laboratory testing company, with multiple service offerings in the US and the UK.

On November 21, 2006, we entered into definitive agreements with certain new and existing institutional investors to raise approximately \$14.0 million in gross proceeds (\$13.2 million in net proceeds after direct transaction costs) in a common stock private placement. Pursuant to the agreements, we sold approximately 4,875,000 shares of common stock at \$2.88 per share. The transaction closed on November 21, 2006. We filed a registration statement on Form S-1 covering the resale of the shares of common stock sold in the transaction, which was declared effective by the SEC on December 29, 2006.

Our operations in the UK provided all of our agricultural testing services, in addition to a portion of our paternity and forensic DNA testing services, and accounted for 48% and 47% of our total revenues for 2006 and 2005, respectively. For the years ended December 31, 2006 and 2005, 66% and 78%, respectively, of our UK revenues were derived through agreements with two contractors, which were the Department for Environment, Food and Rural Affairs, or DEFRA and Forensic Alliance Ltd., or FAL. We expect our UK operations to continue to be a significant part of our business.

We perform forensic testing services for several police forces throughout the UK through our agreement with FAL. Revenues derived through the FAL agreement accounted for approximately 23% and 29% of our total revenues and approximately 48% and 60% of our UK revenues for the years ended December 31, 2006 and 2005, respectively. In 2005, FAL was acquired by LGC Ltd., or LGC, a provider of analytical and diagnostic services, including DNA testing services, and to that extent LGC is in a position to compete for the business we currently conduct through the FAL agreement. On July 7, 2006, we received from FAL notice of termination of this agreement, effective July 15, 2007. As a result of our receipt of the notice of termination, we are in discussions with LGC regarding the transitioning of services we provide to UK police forces, including addressing the provision of services to police forces whose contract with FAL extends beyond the termination of our contract with FAL. We have been and are implementing plans to enable us to directly provide our services to UK police forces and extend our offerings of forensic services. To date, we have successfully bid, in competitive bidding processes, on forensic contracts with three different UK police forces. Additionally, in December 2006, we submitted another bid to provide forensic services to multiple police forces in the UK. We expect a decision with respect to this bid will be announced in the spring of 2007.

In October 2006, our contract with DEFRA was extended through December 2008. Under the terms of the agreement extension, we will now become the exclusive supplier of genotyping services offered to sheep farmers under the UK government's National Scrapie Plan, or NSP, for Great Britain, which is designed to help British farmers breed sheep with reduced genetic susceptibility to the disease.

## Operating Highlights

Our revenues are predominately generated from DNA testing services provided to our customers. Our costs and expenses include costs of service revenues, research and development expenses, marketing and sales expenses, general and administrative expenses and other income and expense. Costs of service revenues consist primarily of salaries and related personnel costs, laboratory supplies, fees paid for the collection of samples and facility expenses. Research and development expenses consist primarily of salaries and related costs, fees paid to consultants and outside service providers for development, laboratory supplies and other expenses related to the design, development, testing and enhancement of our services. Marketing and sales expenses consist of salaries and benefits for marketing and sales personnel within our organization and all related costs of selling and marketing our services. General and

administrative expenses consist primarily of salaries and related expenses for executive, finance and administrative personnel, professional fees and other corporate expenses.

Our operating results declined for 2006 as compared to 2005. Overall, for the year ended December 31, 2006, as compared to 2005, total revenues decreased by 8%, and gross margin decreased to 30% as compared to 39% in the comparable period in 2005. The decline in revenues and gross margin was primarily a result of declines in revenues from our US government paternity testing services, UK forensic testing services and UK agricultural testing services and increased laboratory personnel costs. The decline in revenues and gross margin was partially offset by increased revenues from our UK contracted government paternity testing services and US forensics testing services. For the year ended December 31, 2006, our operating expenses, other than cost of service revenues, decreased by 17% as compared to 2005, primarily as a result of decreased marketing and sales, general and administrative and research and development expenses due to our focus on cost containment, as well as a decrease in restructuring expenses.

## RESULTS OF OPERATIONS

### Years ended December 31, 2006 and 2005

The following table sets forth a year-over-year comparison of the components of our net loss for the years ended December 31, 2006 and 2005:

(In thousands)	2006	2005	\$ Change	% Change
Total revenues	\$56,854	\$61,609	\$ (4,755)	(8)%
Cost of service revenues	39,705	37,496	2,209	6
Research and development	1,228	1,616	(388)	(24)
Marketing and sales	6,766	8,744	(1,978)	(23)
General and administrative	18,980	20,383	(1,403)	(7)
Impairment of assets	--	255	(255)	(100)
Restructuring	437	2,514	(2,077)	(83)
Amortization of intangible assets	1,765	1,763	2	0
Interest income	(617)	(522)	(95)	18
Interest expense	-	81	(81)	(100)
Other (income) expense	(282)	(1,628)	1,346	(83)
Income tax expense	143	346	(203)	(59)
Net loss	(11,271)	(9,439)	(1,832)	19

## Revenues

Total revenues for the year ended December 31, 2006 of \$56.9 million represented a decrease of approximately \$4.8 million, or approximately 8%, as compared to revenues of \$61.6 million for 2005.

Our US service revenues for the year ended December 31, 2006 of \$29.0 million declined by \$2.2 million, or approximately 7%, as compared to \$31.2 million for 2005, primarily due to declines in pricing and volume for our government paternity testing services. We are experiencing severe pricing pressure in our government funded paternity services as the federal government recently reduced the reimbursement percentage of the cost of paternity testing to the states from 90% to 66%. We expect this pricing pressure to continue. This decline was slightly offset by increased volume for our US forensic testing services.

Revenues from our UK-based testing services declined by \$1.6 million, or approximately 6%, to \$27.6 million during the year ended December 31, 2006, as compared to \$29.2 million for 2005. Specifically, our UK-based testing services declined due to reduced volume and pricing in non-violent crime testing services and reduced volume in scrapie testing services, with such declines partially offset by increased revenues from government paternity testing due to increased volume and pricing. For the year ended December 31, 2006, as compared to the same period in 2005, our UK revenues were favorably impacted by approximately 1%, as a result of the exchange rate movement of the British Pound as compared to the US dollar. The significant percentage of our revenue derived from our UK operations makes us vulnerable to future fluctuations in the exchange rate, and while there is currently no material adverse impact to our financial results, future material adverse exchange rate movements would have an unfavorable translation impact on our consolidated financial results.

Our operations in the UK provided a portion of our forensic and paternity DNA testing services, in addition to all of our agricultural testing services, and accounted for approximately 48% and 47% of our total revenues for the years ended December 31, 2006 and 2005, respectively. As discussed above, for the years ended December 31, 2006 and 2005, approximately 66% and 78%, respectively, of our UK revenues were derived through agreements with two contractors, which were DEFRA and FAL.

Revenues derived through the FAL agreement accounted for approximately 23% and 29% of our total revenues and approximately 48% and 60% of our UK revenues for the years ended December 31, 2006 and 2005, respectively. FAL has notified us that our agreement with them will terminate effective July 15, 2007. Although we have taken steps to market our services historically provided through FAL directly to police forces in the UK, there can be no assurances that we



will successfully transition to a direct service provider after the termination of the FAL agreement. If we are unsuccessful in making this transition, future revenues could be negatively impacted. We have been and are implementing plans to enable us to directly provide our services to UK police forces and extend our offerings of forensic services. To date, we have successfully bid, in competitive bidding processes, on forensic contracts with three different UK police forces. Additionally, in December 2006, we submitted another bid to provide forensic services to multiple police forces in the UK. We expect a decision with respect to this bid will be announced in the spring of 2007. We expect our UK operations to continue to be a significant part of our business.

In October 2006, our contract with DEFRA was extended through December 2008. Under the terms of the agreement extension, we will now become the exclusive supplier of genotyping services offered to sheep farmers under the UK government's NSP, which is designed to help British farmers breed sheep with reduced genetic susceptibility to the disease. Although we became the exclusive supplier of genotyping services under the NSP, we expect revenues under our contract with DEFRA to decline for the year ending December 31, 2007 as compared to the year ended December 31, 2006 due to lowered pricing.

During the year ended December 31, 2006, we recognized \$0.3 million in other revenues, specifically license and grant revenues, as compared to \$1.2 million for 2005. The decline in other revenues is principally due to lower royalties received on our microfluidic technology during the year ended December 31, 2006. Our microfluidic technology patents do not relate to our business of DNA testing services. Effective September 1, 2005, Motorola, Inc., or Motorola, converted its exclusive license to our microfluidic technology to a non-exclusive license agreement. Under the exclusive license, Motorola paid us a minimum annual fee of \$1.0 million, while the non-exclusive license payments are 4% of sales of products incorporating our technology by Motorola.

#### **Cost of Service Revenues**

Cost of service revenues were \$39.7 million, or approximately 70% of total revenues, for the year ended December 31, 2006, compared to \$37.5 million, or approximately 61% of total revenues, for 2005. The increase in cost of service revenues and cost of service revenues as a percentage of total revenues primarily reflects declines in pricing and volumes for our US government paternity testing services and UK non-violent crime testing services, as well as increased laboratory personnel costs.

#### **Research and Development Expenses**

Research and development expenses for the year ended December 31, 2006 were \$1.2 million, a decrease of \$0.4 million from \$1.6 million for 2005. The decrease was primarily a result of spending reductions following the closure of our former Germantown, Maryland facility in September 2005.

#### **Marketing and Sales**

Marketing and sales expenses for the year ended December 31, 2006 were \$6.8 million, as compared to \$8.7 million for 2005. The decrease in marketing and sales expenses of \$2.0 million was primarily due to decreased personnel costs, travel costs and spending in radio advertising related to our marketing and sales programs in our private paternity testing business.

#### **General and Administrative**

General and administrative expenses for the year ended December 31, 2006 were \$19.0 million, a decrease of \$1.4 million, as compared to \$20.4 million for the comparable period of the prior year. The decrease in general and administrative expenses for the year ended December 31, 2006 included decreases in travel, recruiting, rent, depreciation and personnel costs, due to our focus on cost containment. The decreases were partially offset by increases in consulting expenses and stock-based compensation recorded in accordance with Statement of Financial Accounting Standards, or SFAS, No. 123(R), *Share-Based Payment*, or SFAS 123(R).

#### **Restructuring**

Restructuring expenses for the year ended December 31, 2006 were \$0.4 million, a decrease of \$2.1 million, as compared to \$2.5 million for the comparable period of the prior year. The restructuring costs in 2006 primarily consisted of employee severance costs resulting from workforce reductions in our Princeton, New Jersey corporate office and for facility obligation costs for our former Germantown, Maryland and Dallas, Texas facilities. The restructuring costs in 2005 were primarily for employee severance costs related to workforce reductions in our corporate office and the Germantown, Maryland facility, as well as for other costs related to the closure of the Germantown, Maryland facility.

#### **Amortization of Intangible Assets**

During each of the years ended December 31, 2006 and 2005, we recorded \$1.8 million of amortization expense.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (continued)

### Total Other Income, Net

Interest income for the year ended December 31, 2006 was \$0.6 million, compared to \$0.5 million during the same period of the prior year.

We did not incur any interest expense in 2006, as our outstanding long-term debt was paid in full during the third quarter of 2005. Interest expense for the year ended December 31, 2005 was \$0.1 million.

Other income for the year ended December 31, 2006 was \$0.3 million, which primarily consisted of non-cash gains resulting from the reversal of certain non-operating accounts payable and accrued expenses and a reduction in the fair value of a lease guarantee liability, partially offset by an accrual of a penalty payment associated with our February 2004 private placement equity offering, losses on disposal of fixed assets and an impairment charge on available-for-sale securities that were determined to be other-than-temporarily impaired.

Other income for the year ended December 31, 2005 was \$1.6 million, which primarily consisted of a non-cash gain on the acquisition of treasury stock in connection with the settlement of escrow claims and the return of treasury shares associated with our December 2001 acquisition of Lifecodes Corporation, or Lifecodes.

### Income Tax Expense

During the years ended December 31, 2006 and 2005, we recorded income tax expense of \$0.1 million and \$0.3 million, respectively. For the year ended December 31, 2006, we recognized current foreign tax expense of \$1.1 million, primarily for our profitable business in the UK, and \$0.2 million of deferred foreign tax benefit, primarily for our profitable businesses in the UK and Canada. In 2006, we reversed \$0.2 million of a tax reserve, with the impact included in the above current foreign tax expense amount, for tax return positions taken on our UK subsidiary tax return filings with respect to intercompany transactions due to the closing of the statute of limitations for our 2004 UK tax return. In addition, we recorded a tax benefit of \$0.7 million associated with the sale of some of our state NOL carryforwards.

For the year ended December 31, 2005, we recognized a current foreign tax expense of \$1.1 million and \$0.1 million of deferred foreign tax benefit, primarily for our profitable business in the UK. Prior to 2005, we had recorded tax reserves for tax return positions taken on our UK subsidiary tax return filings

with respect to intercompany transactions. In 2005, we reversed \$1.5 million of this tax reserve, with the impact included in the above current foreign tax expense amount, due to the closing of the statute of limitations for our 2002 UK tax return and an assessment of our remaining tax position with respect to tax return positions taken on our 2003 and 2004 UK subsidiary tax return filings. In addition, we recorded a tax benefit of \$0.7 million associated with the sale of some of our state NOL carryforwards.

### Net Loss

For the year ended December 31, 2006, we reported a net loss of \$11.3 million, which represented an increase of 19% as compared to a net loss of \$9.4 million for the year ended December 31, 2005.

### Years ended December 31, 2005 and 2004

The following table sets forth a year-over-year comparison of the components of our net loss for the years ended December 31, 2005 and 2004:

(In thousands)	2005	2004	\$ Change	% Change
Total revenues	\$61,609	\$62,499	\$ (890)	(1)%
Cost of service revenues	37,496	34,963	2,533	7
Research and development	1,616	1,632	(16)	(1)
Marketing and sales	8,744	7,041	1,703	24
General and administrative	20,383	22,360	(1,977)	(9)
Impairment of assets	255	393	(138)	(35)
Restructuring	2,514	1,130	1,384	>100
Amortization of intangible assets	1,763	1,785	(22)	(1)
Interest income	(522)	(243)	(279)	>100
Interest expense	81	141	(60)	(43)
Other (income) expense	(1,628)	205	(1,833)	>(100)
Income tax expense	346	1,121	(775)	(69)
Loss from discontinued operations (1)	-	(783)	783	(100)
Net loss	(9,439)	(8,812)	(627)	7
Net loss allocable to common stockholders	(9,439)	(9,955)	516	(5)

(1) Our Diagnostics business unit was reflected as a discontinued operation for the year ended December 31, 2004. Accordingly, the results of operations of our Diagnostics business unit have been reflected in discontinued operations for that period. We completed the sale of certain assets and liabilities related to our Diagnostics business unit in January 2004.

## Revenues

Total revenues for the year ended December 31, 2005 of \$61.6 million represented a decrease of \$0.9 million, or 1% as compared to revenues of \$62.5 million for 2004. The decrease was primarily due to a decline in our testing volumes related to our US forensic casework services, which was substantially offset by the increases in testing volumes for our US CODIS and UK forensic businesses. The decline in our US forensic casework volumes was primarily due to lower than anticipated production capacity in our Dallas facility as a result of the transition of work from our former Germantown, Maryland facility, which closed in September 2005, and lower than expected DNA analyst staffing levels. In addition, we continued to see delays in the timing of the release of bids by states and municipalities for outsourced forensic DNA testing under fiscal year 2004 NIJ funding. Revenues from our UK-based service business grew to \$29.2 million during the year ended December 31, 2005 as compared to \$26.1 million during the year ended December 31, 2004, driven primarily by increased forensics volume.

Our operations in the UK provided a portion of our forensic and paternity DNA testing services, in addition to all of our agricultural testing services, and accounted for approximately 47% and 42% of our total revenues for the years ended December 31, 2005 and 2004, respectively. For the year ended December 31, 2005 as compared to the same period in 2004, our revenues were unfavorably impacted by 1% as a result of the exchange rate movement of the British Pound as compared to the US dollar. Excluding the unfavorable impact of the exchange rate movement, the growth rate in UK revenues for the year ended December 31, 2005 was 13%.

During the year ended December 31, 2005, we recognized \$1.2 million in other revenues, specifically license and grant revenues, as compared to \$1.5 million during the comparable period of the prior year. The decline in other revenues is principally due to lower royalties received during the year ended December 31, 2005.

## Cost of Service Revenues

Cost of service revenues was \$37.5 million, or 61% of total revenues, for the year ended December 31, 2005 compared to \$35.0 million, or 56% of total revenues, for the comparable period of the prior year. Our gross margin for 2005 as compared to the same period in 2004 was negatively impacted by lower pricing and the amount of sample testing required per test result for some of our lines of business, the physical relocation in November 2005 of our US forensic casework operations to a new facility in Dallas, Texas and the increases in testing volumes for CODIS testing services, which have lower average gross margins than some of our other lines of business. In addition, the implementation of new processes and systems in the

fourth quarter of 2005, designed to create future operational efficiencies, had a negative impact on gross margin during the implementation phase.

## Research and Development

Research and development expenses for the year ended December 31, 2005 were \$1.6 million, which was virtually unchanged from the prior year.

## Marketing and Sales

Marketing and sales expenses for the year ended December 31, 2005 were \$8.7 million as compared to \$7.0 million during the comparable period of the prior year. The increase in these expenses of \$1.7 million was primarily related to the addition of the business development group in the fourth quarter of 2004 that was subsequently eliminated in 2005, the expansion of our US field sales team and radio advertising for our private paternity testing services in 2005.

## General and Administrative

General and administrative expenses for the year ended December 31, 2005 were \$20.4 million, a decrease of \$2.0 million, as compared to \$22.4 million for the comparable period of the prior year. General and administrative expenses for the year ended December 31, 2004 included \$3.0 million of professional fees related to capital restructuring, equity financing and related other corporate activities which did not recur in 2005. In addition, we recorded an additional expense of \$0.2 million for the amortization of deferred stock compensation in 2004 as compared to 2005, as the deferred compensation became fully amortized in the first quarter of 2004. Due to our focus on reducing corporate overhead, we were able to reduce 2005 spending in insurance and employee related costs. These declines were offset by increases in general and administrative expenses in professional fees, franchise taxes, recruiting of personnel, travel, rent, bad debt expense and repairs and maintenance expense.

**Impairment of Assets**

During the year ended December 31, 2005, we recorded \$0.3 million of charges for the impairment of assets, as compared to \$0.4 million during the year ended December 31, 2004. During the year ended December 31, 2005, the impairment charges were recorded in connection with the closure of our former Germantown, Maryland and Dallas, Texas facilities and consolidation into our new Dallas, Texas facility. The impaired assets consisted primarily of leasehold improvements and some laboratory equipment. During the year ended December 31, 2004, we continued to strategically realign our business and evaluated potential future market segments and growth strategies for this initiative. In connection with this evaluation, we recorded impairment charges of \$0.4 million related to various fixed assets, consisting primarily of laboratory equipment.

**Restructuring**

Restructuring expenses for the year ended December 31, 2005 were \$2.5 million, as compared to \$1.1 million in the comparable period of 2004. During 2005, we recognized \$1.6 million in restructuring charges, primarily for employee severance costs related to workforce reductions in the corporate office, as well as \$0.9 million in restructuring charges related to facility closure costs for our former Germantown, Maryland and Dallas, Texas facilities.

During the year ended December 31, 2004, we recognized \$1.1 million in restructuring charges related to one of our former operating facilities in Princeton, New Jersey. The charge was a result of a change in our estimate as to when we expected to sublease this facility and the estimated impact associated with such a sublease arrangement.

**Amortization of Intangible Assets**

During the year ended December 31, 2005, we recorded \$1.8 million of amortization expense, which was virtually unchanged from the prior year.

**Total Other Income, Net**

Interest income for the year ended December 31, 2005 was \$0.5 million, as compared to \$0.2 million during the same period of the prior year. This increase was primarily due to interest received on higher cash equivalent and short-term investment balances in 2005 than in 2004.

Interest expense for each of the years ended December 31, 2005 and 2004 was \$0.1 million. Our outstanding long-term debt was paid in full during the third quarter of 2005.

Total other income for the year ended December 31, 2005 was \$1.6 million, as compared to other expense of \$0.2 million during the prior year. This increase in other income was primarily

attributable to a non-cash gain on the acquisition of treasury stock in connection with the settlement of escrow claims and the return of treasury shares associated with our December 2001 acquisition of Lifecodes.

**Income Tax Expense**

During the years ended December 31, 2005 and 2004, we recorded income tax expense of \$0.3 million and \$1.1 million, respectively. For the year ended December 31, 2005, we recognized current foreign tax expense of \$1.1 million and \$0.1 million of deferred foreign tax benefit, primarily for our business in the UK. Prior to 2005, we had recorded tax reserves for tax return positions taken on our UK subsidiary tax return filings with respect to intercompany transactions. In 2005, we reversed \$1.5 million of this tax reserve, with the impact included in the above current foreign tax expense amount, due to the closing of the statute of limitations for our 2002 UK tax return and an assessment of our remaining tax position with respect to tax return positions taken on our 2003 and 2004 UK subsidiary tax return filings. As a result of completing our assessment, we determined that it is probable that we will sustain the tax benefit taken on the 2003 and 2004 UK tax return filings relating to certain portions of intercompany transactions with our UK subsidiary. We utilized a study performed by outside consultants to assist us in reaching this conclusion. In addition, we recorded a tax benefit of \$0.7 million associated with the sale of some of our state NOL carryforwards.

During the year ended December 31, 2004, we recorded net income tax expense of \$1.9 million related to our profitable UK business. This item was partially offset by \$0.7 million of tax benefit associated with the sale of some of our state NOL carryforwards.

**Net Loss and Net Loss Allocable to Common Stockholders**

In 2005, we reported a net loss of \$9.4 million compared to a net loss of \$8.8 million for the comparable period of the prior year. In 2004, all previously outstanding shares of Series A redeemable convertible preferred stock were converted into common stock. In 2004, we recorded dividends and accretion of Series A redeemable convertible preferred stock of \$1.1 million, which was included in our net loss allocable to common stockholders of \$10.0 million for the year ended December 31, 2004.

## LIQUIDITY AND CAPITAL RESOURCES

As of December 31, 2006, we had \$24.1 million in cash and cash equivalents as compared to \$23.2 million as of December 31, 2005. Working capital increased to \$30.0 million at December 31, 2006 from \$22.8 million at December 31, 2005. This increase in working capital was primarily a result of our November 2006 common stock private placement, which is further described below.

### Sources of Liquidity

Our primary sources of liquidity have been issuances of our securities and other capital raising activities.

The following table sets forth a year-over-year comparison of the components of our liquidity and capital resources for the years ended December 31, 2006 and 2005:

	(In thousands)			
	2006	2005	\$ Change	% Change
Cash provided by (used in):				
Operating activities	\$(11,621)	\$(2,328)	\$ (9,293)	>100%
Investing activities	(1,580)	14,327	(15,907)	(>100%)
Financing activities	13,062	(173)	13,235	(>100%)

Net cash used in operations for the year ended December 31, 2006 was \$11.6 million compared with net cash used in operations of \$2.3 million for 2005. The decline in operating cash flows was mainly a result of a higher net loss, an increased paydown in accounts payable and accrued expenses, as well as decreased collections of accounts receivable for the year ended December 31, 2006 as compared to 2005. Investing activities during the year ended December 31, 2006 consisted of \$2.5 million of capital expenditures, partially offset by the release of \$0.8 million of restricted cash. Investing activities during the year ended December 31, 2005 consisted of \$18.5 million in net proceeds from the sales of short-term securities, partially offset by \$4.2 million in capital expenditures. Financing activities during the year ended December 31, 2006 consisted of net proceeds from the issuance of common stock of \$13.2 million, offset by \$0.1 million used to repay patent obligations. Financing activities the year ended December 31, 2005 consisted of \$0.4 million used to repay debt and \$0.1 million used to repay patent obligations, partially offset by \$0.3 million of proceeds from the issuance of common stock.

### November 2006 Private Placement

On November 21, 2006, we entered into definitive agreements with certain new and existing institutional investors to raise \$14.0 million in gross proceeds (\$13.2 million in net proceeds

after direct transaction costs) in a common stock private placement. Pursuant to the agreements, we sold approximately 4,875,000 shares of common stock at \$2.88 per share. The transaction closed on November 21, 2006. We filed a registration statement on Form S-1 covering the resale of the shares of common stock sold in the private placement, which was declared effective by the SEC on December 29, 2006.

### Penalty on February 2004 Private Placement

On February 27, 2004, we issued approximately 3,158,000 shares of our common stock and four-year warrants to purchase an additional approximately 632,000 shares of our common stock in a private placement to 33 investors. The per share purchase price for the shares of common stock was \$9.60 and the warrants have a per share exercise price of \$13.20. We registered the shares of common stock issued in the financing and the shares of common stock issuable upon exercise of the warrants on a registration statement on Form S-3, which was declared effective by the SEC on May 28, 2004. Pursuant to the terms of the securities purchase agreement, we are obligated to pay penalties to investors if the investors were not permitted to sell their shares of common stock received in the financing or upon exercise of the warrants under the registration statement. As a result of our failure to file our Annual Report on Form 10-K for the year ended December 31, 2005 and our Quarterly Report on Form 10-Q for the quarter ended March 31, 2006 by their filing deadlines, the investors were no longer permitted to sell their shares of common stock received in the financing or upon exercise of the warrants under the registration statement. To fulfill our obligations under the securities purchase agreement, on July 10, 2006, we filed a post-effective amendment to the registration statement to convert it from a registration statement on Form S-3 to a registration statement on Form S-1, to enable the investors to sell their shares of common stock issued in the financing and upon exercise of the warrants under an effective registration statement. The SEC declared the post-effective amendment effective on July 20, 2006. As of December 31, 2006, the penalty payment that we are obligated to pay to the investors was \$0.2 million.

### Restricted Cash

As of December 31, 2006, cash restricted under one of our operating leases and a government contract, in the amount of \$1.0 million, is reflected as a long-term asset in the consolidated balance sheet.

### Expected Uses of Liquidity in 2007

Throughout 2007, we plan to continue making substantial investments in our business. We expect the following to be significant uses of liquidity: cost of service revenues, salaries and related personnel costs, laboratory supplies, fees for the collection of samples, facility expenses, marketing expenses and general and administrative costs, which consist primarily of salaries and related expenses for executive, finance and administrative personnel, professional fees, general legal expenses, expenses related to our intellectual property and other corporate expenses. In addition, we may make investments in future acquisitions of businesses or technologies which would increase our capital expenditures.

The amounts and timing of our actual expenditures will depend upon numerous factors, including our development activities, our investments in technology, the amount of cash generated by our operations and the amount and extent of our acquisitions, if any. Actual expenditures may vary substantially from our estimates.

We believe that our existing cash on hand will be sufficient to fund our operations at least through the next twelve months. We do not anticipate the need to raise additional capital in 2007. However, we may need to access the capital markets for additional financing to fund future growth opportunities or to operate our ongoing business activities if our future results of operations fall below our expectations. If so, we may not be able to raise additional funds or raise funds on terms that are acceptable to us. If future financing is not available to us, or is not available on terms acceptable to us, we may not be able to fund our future needs. If we raise funds through equity or convertible securities, our stockholders may experience dilution and our stock price may decline.

We cannot assure you that our business or operations will not change in a manner that would consume available resources more rapidly than anticipated. We also cannot assure you that we will not require substantial additional funding before we can achieve profitable operations. We also may need additional capital if we seek to acquire other businesses or technologies.

### Contractual Obligations and Commercial Commitments:

We maintained multiple contractual commitments as of December 31, 2006 which will support our future business operations. Such commitments relate to noncancelable operating lease arrangements, patent obligations and a lease guarantee. We have identified and quantified the most significant of these commitments in the following table.

(In thousands)	Payment due by period				
	Total	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Contractual obligations:					
Operating lease obligations (1)	\$6,476	\$1,701	\$2,712	\$1,252	\$811
Patent obligation (2)	150	150	-	-	-
Other long-term liabilities (3)	1,004	436	533	35	-
<b>Total contractual obligations</b>	<b>\$7,630</b>	<b>\$2,287</b>	<b>\$3,245</b>	<b>\$1,287</b>	<b>\$811</b>

(1) Such amounts represent future minimum rental commitments for office space and equipment leased under noncancelable operating lease arrangements.

(2) Such amount represents an obligation in conjunction with our acquisition of US Patent No. 5,856,092 and its foreign counterparts from Affymetrix in July 2001.

(3) Such amounts represent an unconditional guarantee related to the lease for the Stamford, Connecticut based laboratory, which was assigned in connection with the sale of our former Diagnostics business unit. We were required to sign this guarantee as a condition of the sale. We reflected the fair value of the guarantee at the time of the sale of the Diagnostics business of approximately \$1.6 million as a reduction to the net realizable value of these assets and liabilities. We valued the guarantee based on the existing terms and conditions of the lease, an estimated vacancy of the space for one year prior to subleasing the space and expected rental income from the sublease of the space. The lease terminates in April of 2010. Minimum remaining rents under the assigned lease total approximately \$1.9 million.

### Limitation on the Use of Our NOL Carryforwards

As of December 31, 2006, our NOL carryforwards were approximately \$242 million and approximately \$167 million for federal and state income tax purposes, respectively. Our federal and state NOL carryforwards begin to expire in 2007. Utilization of our NOLs to offset future taxable income, if any, may be substantially limited due to "change of ownership" provisions in the Act. The Act provides for a limitation on the annual use of NOL carryforwards and research and development credits following certain ownership changes, as defined by the Act, which could significantly limit our ability to utilize these carryforwards and research and development credits. We have determined that an ownership change, as defined by the Act, occurred in 1999. Approximately \$41 million of NOL carryforwards is limited due to this ownership change. We may have experienced other ownership changes, as defined by the

Act, as a result of past financings and may experience others in connection with future financings. Accordingly, our ability to utilize the aforementioned federal NOL carryforwards may be further limited in the future. If our NOL carryforwards are limited or expire, we would not be able to offset future earnings with these NOLs which could negatively impact our liquidity in the future.

### Critical Accounting Policies

Our critical accounting policies are as follows:

- revenue recognition
- stock-based compensation
- valuation of long-lived and intangible assets and goodwill
- income taxes

### Revenue Recognition

We recognize DNA laboratory services revenues at the time test results are completed and reported. Deferred revenues represent the unearned portion of payments received in advance of tests being completed and reported. Unbilled receivables represent revenue which has been earned on completed and reported tests, but has not been billed to the customer. Revenues from license arrangements, including license fees creditable against future royalty obligations of the licensee, are recognized when an arrangement is entered into if we have no significant continuing involvement under the terms of the arrangement. If we have significant continuing involvement under such an arrangement, license fees are deferred and recognized over the estimated performance period. Management has made estimates and assumptions relating to the performance period, which are subject to change. Changes in these estimates and assumptions could affect the amount of revenues from licenses reported in any given period. Revenues from research and development agreements are recognized when related research expenses are incurred and when we have satisfied specific obligations under the terms of the respective agreements.

### Stock-Based Compensation

Effective January 1, 2006, we adopted the provisions of, and account for stock-based compensation in accordance with, SFAS 123(R). Under the fair value recognition provisions of this statement, stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the requisite service period, which is the vesting period. We have applied the modified prospective method of adoption, under which prior periods are not restated for

comparative purposes. Under the modified prospective method, SFAS 123(R) applies to new awards and to awards that were outstanding as of December 31, 2005 that are subsequently modified, repurchased or cancelled. Compensation expense recognized during the year ended December 31, 2006 includes expense for all share-based payments granted prior to, but not yet vested as of, December 31, 2005, based on the grant date fair value estimated in accordance with the provisions of SFAS No. 123, *Accounting for Stock-Based Compensation*, and expense for all share-based payments granted during the year ended December 31, 2006, based on the grant-date fair value estimated in accordance with the provisions of SFAS 123(R). Stock-based compensation is classified within cost of service revenues, research and development, marketing and sales and general and administrative on the consolidated statement of operations.

Stock options granted to employees, which are granted with an exercise price equal to or greater than the fair market value of our common stock at the date of grant, in general vest in four years in equal monthly installments and have a maximum term of ten years. Stock options granted to our Board of Directors in general vest in three years in equal monthly installments and have a maximum term of ten years.

We use the Black-Scholes option pricing model to estimate the fair value of options granted, which requires the input of highly subjective assumptions. These assumptions include estimating the length of time employees will retain their vested stock options before exercising them, the estimated volatility of our common stock price over the expected term, the number of options that will ultimately not vest and the expected dividend yield. Changes in the subjective assumptions can materially affect the estimate of the fair value of stock-based compensation and, consequently, the related amount recognized in the consolidated statements of operations. The expected volatility assumption is based on the daily historical volatility of our stock price, over the expected term of the option. Our stock options are considered "plain vanilla" options based on the guidance in SEC Staff Accounting Bulletin No. 107, *Share-Based Payment*, and as such we have elected to use the "simplified" method, whereby we have assumed that all options will be exercised midway between the vesting date and the contractual term of the option to determine the expected term of the option. We have not paid dividends since our inception, nor do we expect to pay any dividends for the foreseeable future, thus the expected dividend yield assumption is zero. As stock-based compensation expense recognized in the consolidated statement of operations is based on awards ultimately expected to vest, the amount of expense has been reduced for estimated forfeitures. SFAS 123(R) requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures

differ from those estimates. Forfeitures are estimated based on historical experience.

#### Valuation of Long-Lived and Intangible Assets and Goodwill

We assess the impairment of amortizable identifiable intangibles and long-lived assets whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors we consider important which could trigger an impairment review include the following:

- significant underperformance relative to expected historical or projected future operating results;
- significant changes in the manner of our use of the acquired assets or the strategy for our overall business;
- significant negative industry or economic trends; and
- significant decrease in the market value of the assets.

The impairment test is based upon a comparison of the estimated undiscounted cash flows to the carrying value of the long-lived assets. If we determine that the carrying value of long-lived assets may not be recoverable based upon the existence of one or more of the above indicators of impairment, we measure any impairment based on projected discounted cash flows. The cash flow estimates used to determine the impairment, if any, contain management's best estimate using appropriate assumptions and projections at that time. Net amortizable intangible assets and long-lived assets amounted to \$18.2 million as of December 31, 2006.

We assess goodwill for impairment at least annually in the fourth quarter, on a reporting unit basis, or more frequently when events and circumstances occur indicating that the recorded goodwill may be impaired. If the book value of a reporting unit exceeds its fair value, the implied fair value of goodwill is compared with the carrying amount of goodwill. If the carrying amount of goodwill exceeds the implied fair value of goodwill, an impairment loss is recorded in an amount equal to that excess.

#### Income Taxes.

We have generated NOLs for tax purposes since inception. As of December 31, 2006, these NOLs have resulted in NOL carryforwards of approximately \$242 million and \$167 million for federal and state income tax purposes, respectively. In addition, certain charges recorded in the current and prior years were not currently deductible for income tax purposes. These differences result in gross deferred tax assets. We must assess the likelihood that the gross deferred tax assets, net of any deferred tax liabilities, will be recovered from future taxable income. To the extent we believe the recovery is not likely, we have established a valuation allowance.

Significant management judgment is required in determining this valuation allowance. We have recorded a valuation allowance of approximately \$99 million as of December 31, 2006, due to uncertainties related to our ability to utilize some of our net deferred tax assets, primarily consisting of NOL carryforwards, before they expire. The valuation allowance is based on our estimates of taxable income and the period over which the net deferred tax assets will be recoverable.

Conversely, if we are profitable in the future at levels which cause management to conclude that it is more likely than not that we will realize all or a portion of the net deferred tax assets for which a valuation has been recorded, we would record the estimated net realizable value of the net deferred tax asset at that time and would then record income taxes on our US operations at a rate equal to our combined federal and state effective rate of approximately 40%.

#### Recently Issued Accounting Pronouncements

In February 2006, the Financial Accounting Standards Board, or FASB, issued SFAS No. 155, *Accounting for Certain Hybrid Financial Instruments*, or SFAS 155. SFAS 155 allows fair value remeasurement for any financial instruments that contain an embedded derivative and that otherwise would require bifurcation, at the holders' election. SFAS 155 also clarifies and amends certain other provisions of SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, and SFAS No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities*. SFAS 155 is effective for all financial instruments acquired or issued in fiscal years beginning after September 15, 2006. We do not expect that the adoption of SFAS 155 will have a material impact on our consolidated financial statements.

In July 2006, the FASB issued FASB Interpretation 48, *Accounting for Uncertainty in Income Taxes*, or FIN 48. The intent of FIN 48 is to clarify the accounting for uncertainty in income taxes recognized in an entity's financial statements in accordance with SFAS No. 109, *Accounting for Income Taxes*. This interpretation imposes a recognition threshold and measurement attribute for financial statement disclosure of tax positions taken or expected to be taken on a tax return. This interpretation is effective as of the beginning of the first fiscal year beginning after December 15, 2006. We will be required to adopt this interpretation in the first quarter of 2007. We do not expect that the adoption of FIN 48 will have a material impact on our consolidated financial statements.

In September 2006, the SEC issued Staff Accounting Bulletin No. 108, *Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements*, or SAB 108, which provides interpretive guidance on how the



effects of the carryover or reversal of prior year misstatements should be considered in quantifying a current year misstatement. The cumulative effect from the initial adoption of SAB 108 may be reported as an adjustment to the beginning of year retained earnings with disclosure of the nature and amount of each individual error being corrected in the cumulative adjustment. We began to apply the provisions of SAB 108 during the fourth quarter of 2006. The adoption of SAB 108 did not have a material impact on our consolidated financial statements.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*, or SFAS 157. SFAS 157 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. SFAS 157 is effective as of the beginning of the first fiscal year beginning after November 15, 2007. We will be required to adopt this statement in the first quarter of 2008. Management is currently evaluating the requirements of SFAS 157 and has not yet determined the impact this standard will have on our consolidated financial statements.

#### FORWARD-LOOKING STATEMENTS

This Annual Report contains forward-looking statements. Such statements are based on management's current expectations and are subject to a number of factors and uncertainties that could cause actual results or outcomes to differ materially from those described in such forward-looking statements. These statements address or may address the following subjects:

- our expectation of the amount and timing of future revenues, expenses and other items affecting the results of our operations;
- our expectation that, with the increasing availability of non-human genomic data, improved characteristics in livestock or crops will be produced to protect humans against animal-borne diseases;
- our belief that scientists hope to understand and use DNA molecular level knowledge to transform traditional approaches to medicine, agriculture and other fields;
- our belief that, by identifying sheep that are susceptible to the disease scrapie, the disease may ultimately be bred out of the sheep population;
- our belief that our experience as a reliable provider of services to government agencies is a valued credential that can be used in securing both new contracts and renewing existing contracts;
- our intention to develop and evaluate new technologies to enhance our laboratory processes, including instrumentation, automation and new testing methodologies;
- our expectation that our instrumentation, automation and new testing methodologies will enable us to reduce our costs for and improve the quality of our service offerings;
- our anticipation that forensic DNA testing will grow based on legislation both in the US and the UK, increased federal funding in the US and improved utility of the growing CODIS and NDNAD databases;
- our anticipation that our current facilities should serve our near term capacity needs;
- our anticipation that federal and state governments in the US and national and local governments in the UK will allocate greater resources to support wider use of DNA testing;
- our expectation that the decision with respect to our bid to provide forensic services to multiple police forces in the UK will be announced in the spring of 2007;
- our belief that farmers expect to produce sheep flocks with greatly reduced vulnerability to scrapie and, in turn, decrease the risk of animal diseases disseminating into the food supply;
- our belief that the general concern over animal-borne pathogens entering the human food supply may continue to expand interest in food safety and this concern may lead to a new market opportunity;
- our expectation that there will be new opportunities for us to both develop assays to detect meat qualities, and to perform ongoing agricultural genotyping services for the commercial meat industry;
- our intention to seek and continue to seek patent protection for novel uses of SNPs in the genetic testing field;
- our intention to continue to concentrate on protection of our intellectual property as it relates to our DNA testing services;

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (continued)

- our expectation that our UK operations will continue to be a significant part of our business;
- our expectation that our existing cash on hand will be sufficient to fund our operations at least through the next twelve months;
- our anticipation that a portion of our future growth may be accomplished either by acquiring or merging with existing businesses;
- our plan to continue to market our services to governments, commercial companies and private individuals;
- our intention to continue to vigorously defend ourselves against plaintiff's claims in litigation relating to our May 5, 2000 IPO;
- our belief that litigation claims arising against us from the normal course of business will not have a material effect on our financial position and liquidity, but could have a material impact on our results of operations for any reporting period;
- our expectation to not pay any dividends in the foreseeable future;
- our intention to retain earnings, if any, to finance our growth;
- our expectation that severe pricing pressure in our government funded paternity testing services will continue;
- our expectation that revenues under our contract with DEFRA will decline in 2007 as compared to 2006;
- our plan to continue to make substantial investments in our business;
- our expectation about our significant uses of liquidity;
- our anticipation that we do not need to raise additional capital in 2007;
- our expectation that the adoption of SFAS 155 and FIN 48 will not have a material impact on our consolidated financial statements;
- our expectation that international sales may continue to represent a significant portion of our revenue; and
- our expectation that our disclosure controls and procedures or our internal control over financial reporting will not prevent all error and all fraud.

While management makes its best efforts to be accurate in making forward-looking statements, such statements are subject to risks and uncertainties that could cause actual results to vary materially, including the risks and uncertainties discussed throughout this Annual Report and the cautionary information set forth under the heading "Risk Factors" appearing in Item 1A of our Annual Report on Form 10-K. We disclaim any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

**QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

**Interest Rate Sensitivity**

Our exposure to market risk is principally confined to our cash equivalents, which are conservative in nature, with a focus on preservation of capital. Due to the short-term nature of our investments and our investment policies and procedures, we have determined that the risks associated with interest rate fluctuations related to these financial instruments are not material to our business. As of December 31, 2006, we have no long-term debt obligations.

**Foreign Currency Risk**

Our business derives a substantial portion of its revenues from international operations. We record the majority of our foreign operational transactions, including all cash inflows and outflows, in the local currency, British Pound. We record all of our US operational transactions, including cash inflows and outflows, in US dollars. We expect that international sales may continue to represent a significant portion of our revenue. The significant percentage of our revenue derived from our UK operations makes us vulnerable to future fluctuations in the exchange rate, and while there is currently no material adverse impact to our financial results, future material adverse exchange rate movements would have an unfavorable translation impact on our consolidated financial results. We are prepared to hedge against any fluctuations in foreign currencies should such fluctuations have a material economic impact on us, although we have not engaged in hedging activities to date. We performed a sensitivity analysis assuming a hypothetical 10% change in the value of the British Pound to US dollar currency exchange rate and currently estimate that such a change would have impacted loss before income taxes for the year ended December 31, 2006 by approximately \$0.4 million

**BUSINESS**

We are engaged in the provision of DNA testing services that generate genetic profile information by analyzing an organism's unique genetic identity.

Our business is primarily focused on DNA testing for human identity and to a lesser degree for agricultural applications. In the human identity area, we provide DNA testing services for forensic, family relationship and security applications. Forensic DNA testing is primarily used in the following ways: to establish and maintain DNA profile databases of individuals arrested or convicted of crimes; to analyze and compare evidence from crime scenes with these databases to possibly identify a suspect; and to confirm that

a suspect committed a particular crime or to exonerate a falsely accused or convicted person. Forensic DNA testing can also be used to confirm a victim's identity, particularly in mass disasters. Family relationship DNA testing is used to establish whether two or more people are genetically related. It is most often used to determine if a man has fathered a particular child in a paternity case. It can also be used to confirm a genetic relationship for purposes of immigration and adoption, estate settlement, genealogy and ancestry. Recently, DNA testing has been used by individuals and employers in security applications seeking to establish a person's genetic profile and store it for identification purposes in the event of an emergency or accident. In agricultural applications, we provide DNA testing services for selective trait breeding and traceability applications. We provide agricultural susceptibility testing to enable farmers to breed sheep resistant to scrapie, a fatal, degenerative disease that affects the nervous systems of sheep and goats. We also provide genetic marker analysis in animals that can be used to confirm relationship, trace meat back to the farm of origin and breed animals with particular commercially desirable qualities.

We have operations in the United States, or the US, and in the United Kingdom, or the UK, and the majority of our current customers are based in these two countries. We provide our DNA testing services to various government agencies, private individuals and commercial companies. During the years ended December 31, 2006, 2005 and 2004, we recorded total revenues of \$56.9 million, \$61.6 million and \$62.5 million, respectively, of which \$29.3 million, \$32.4 million and \$36.4 million, respectively, were from our US operations. We recorded international revenues, primarily in the UK, of \$27.6 million, \$29.2 million and \$26.1 million for the years ended December 31, 2006, 2005 and 2004, respectively.

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

### The Board of Directors and Stockholders Orchid Cellmark Inc.:

We have audited the accompanying consolidated balance sheets of Orchid Cellmark Inc. and subsidiaries as of December 31, 2006 and 2005, and the related consolidated statements of operations, cash flows, and stockholders' equity and comprehensive loss for each of the years in the three-year period ended December 31, 2006. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). 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 audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Orchid Cellmark Inc. and subsidiaries as of December 31, 2006 and 2005, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2006, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 2 to the consolidated financial statements, the Company adopted the provisions of Statement of Financial Accounting Standards No. 123(R), *Share-Based Payment*, effective January 1, 2006.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Orchid Cellmark Inc.'s internal control over financial reporting as of December 31, 2006, based on criteria established in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 15, 2007 expressed an unqualified opinion on management's assessment of, and the effective operation of, internal control over financial reporting.

/s/ KPMG LLP

Princeton, New Jersey  
March 15, 2007

**The Board of Directors and Stockholders  
Orchid Cellmark Inc.:**

We have audited management's assessment, included in Management's Report on Internal Control over Financial Reporting, that Orchid Cellmark Inc. maintained effective internal control over financial reporting as of December 31, 2006, based on criteria established in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Orchid Cellmark Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the

company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assessment that Orchid Cellmark Inc. maintained effective internal control over financial reporting as of December 31, 2006, is fairly stated, in all material respects, based on criteria established in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Also, in our opinion, Orchid Cellmark Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2006, based on criteria established in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Orchid Cellmark Inc. and subsidiaries as of December 31, 2006 and 2005, and the related consolidated statements of operations, cash flows, and stockholders' equity and comprehensive loss for each of the years in the three-year period ended December 31, 2006, and our report dated March 15, 2007 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP  
Princeton, New Jersey  
March 15, 2007

## CONSOLIDATED BALANCE SHEETS

(In thousands, except share and per share data)	December 31,	
	2006	2005
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 24,144	\$ 23,198
Restricted cash	-	566
Accounts receivable, net of allowance of \$822 and \$1,506 as of December 31, 2006 and 2005, respectively	11,837	10,693
Inventory	1,072	1,054
Prepays and other current assets	1,751	1,904
<b>Total current assets</b>	<b>38,804</b>	37,415
Fixed assets, net	8,469	9,096
Goodwill	2,321	2,177
Other intangibles, net	9,755	11,358
Restricted cash	958	1,170
Other assets	543	453
<b>Total assets</b>	<b>\$ 60,850</b>	\$ 61,669
<b>Liabilities and Stockholders' Equity</b>		
Current liabilities:		
Accounts payable	\$ 2,417	\$ 3,466
Accrued expenses and other current liabilities	4,904	9,077
Income taxes payable	1,013	1,212
Deferred revenue	497	825
<b>Total current liabilities</b>	<b>8,831</b>	14,580
Accrued restructuring, less current portion	-	329
Other liabilities	1,113	1,283
<b>Total liabilities</b>	<b>9,944</b>	16,192
Commitments and contingencies		
Stockholders' equity:		
Preferred stock; authorized 5,000,000 shares		
Series A redeemable convertible preferred stock; \$0.001 per share par value;		
designated 5 shares; no shares issued or outstanding	-	-
Series A junior participating preferred stock; designated 1,000,000 shares;		
no shares issued or outstanding	-	-
Common stock; \$0.001 par value; authorized 150,000,000 shares; issued 29,481,480 and		
24,494,649 shares at December 31, 2006 and December 31, 2005, respectively	29	24
Additional paid-in capital	366,080	351,553
Accumulated other comprehensive income	3,408	1,240
Treasury stock at cost, 163,259 common shares at December 31, 2006 and December 31, 2005	(1,587)	(1,587)
Accumulated deficit	(317,024)	(305,753)
<b>Total stockholders' equity</b>	<b>50,906</b>	45,477
<b>Total liabilities and stockholders' equity</b>	<b>\$ 60,850</b>	\$ 61,669

See accompanying notes to consolidated financial statements.

## CONSOLIDATED STATEMENT OF OPERATIONS

(In thousands, except per share data)	Years ended December 31,		
	2006	2005	2004
<b>Revenues:</b>			
Service revenues	\$ 56,566	\$ 60,440	\$ 60,970
Other revenues	288	1,169	1,529
Total revenues	56,854	61,609	62,499
<b>Operating expenses:</b>			
Cost of service revenues	39,705	37,496	34,963
Research and development	1,228	1,616	1,632
Marketing and sales	6,766	8,744	7,041
General and administrative	18,980	20,383	22,360
Impairment of assets	-	255	393
Restructuring	437	2,514	1,130
Amortization of intangible assets	1,765	1,763	1,785
Total operating expenses	68,881	72,771	69,304
Operating loss	(12,027)	(11,162)	(6,805)
<b>Other income (expense):</b>			
Interest income	617	522	243
Interest expense	-	(81)	(141)
Other income (expense)	282	1,628	(205)
Total other income (expense), net	899	2,069	(103)
Loss from continuing operations before income taxes	(11,128)	(9,093)	(6,908)
Income tax expense	(143)	(346)	(1,121)
Loss from continuing operations	(11,271)	(9,439)	(8,029)
<b>Discontinued operations:</b>			
Loss from discontinued operations	-	-	(783)
Net loss	(11,271)	(9,439)	(8,812)
Dividends to Series A preferred stockholders	-	-	(14)
Accretion of Series A redeemable convertible preferred stock discount resulting from conversions	-	-	(1,129)
Net loss allocable to common stockholders	\$(11,271)	\$ (9,439)	\$ (9,955)
<b>Basic and diluted loss from continuing operations per share</b>			
allocable to common stockholders	\$ (0.45)	\$ (0.39)	\$ (0.42)
<b>Basic and diluted loss from discontinued operations per share</b>			
	-	-	(0.04)
Basic and diluted net loss per share allocable to common stockholders	\$ (0.45)	\$ (0.39)	\$ (0.46)
<b>Shares used in computing basic and diluted net loss per share</b>			
allocable to common stockholders	24,892	24,284	21,828

See accompanying notes to consolidated financial statements.

## CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)	Years ended December 31,		
	2006	2005	2004
<b>Cash flows from operating activities:</b>			
Net loss	\$ (11,271)	\$ (9,439)	\$ (8,812)
Loss from discontinued operations	-	-	783
Adjustments to reconcile net loss to net cash used in operating activities:			
Non-cash gain on escrow settlement	-	(1,587)	-
(Gain) loss on sale of short-term investments	(7)	(117)	185
Non-cash compensation expense	1,320	104	212
Depreciation and amortization	5,105	5,824	5,861
Impairment of assets	259	255	393
Bad debt expense	329	315	226
(Gain) loss on sale of assets	254	38	(60)
Changes in assets and liabilities:			
Accounts receivable	(1,473)	3,091	(4,349)
Inventory	(18)	304	(186)
Prepays and other current assets	153	(357)	1,287
Other assets	(174)	(100)	(266)
Accounts payable	(1,049)	863	(2,165)
Accrued expenses and other current liabilities, including restructuring	(4,502)	(410)	2,070
Deferred revenue	(328)	(158)	(829)
Income taxes payable	(199)	(770)	(469)
Other liabilities	(20)	(184)	308
Net cash used in operating activities of continuing operations	(11,621)	(2,328)	(5,811)
Net cash used in operating activities of discontinued operations	-	-	(383)
Net cash used in operating activities	(11,621)	(2,328)	(6,194)
<b>Cash flows from investing activities:</b>			
Capital expenditures	(2,505)	(4,196)	(3,442)
Decrease in restricted cash	778	-	79
Proceeds from sale of assets	56	51	196
Sales (purchases) of short-term investments	91	18,472	(18,355)
Net cash provided by investing activities of discontinued operations	-	-	1,600
Net cash provided by (used in) investing activities	(1,580)	14,327	(19,922)
<b>Cash flows from financing activities:</b>			
Net proceeds from issuance of common stock	13,212	348	30,495
Repayment of debt	-	(371)	(1,933)
Payments of patent obligation	(150)	(150)	(1,400)
Net cash provided by (used in) financing activities	13,062	(173)	27,162
Effect of foreign currency translation on cash and cash equivalents	1,085	(740)	1,128
Net increase in cash and cash equivalents	946	11,086	2,174
Cash and cash equivalents at beginning of period	23,198	12,112	9,938
Cash and cash equivalents at end of period	\$ 24,144	\$ 23,198	\$ 12,112
<b>Supplemental disclosure of noncash financing and investing activities:</b>			
Issuance of common stock for conversion of the Series A redeemable convertible preferred stock	\$ -	\$ -	\$ 3,897
Beneficial settlements of purchase accounting obligations	-	489	-
Dividends to Series A preferred stockholders issued or issuable in common stock	-	-	(14)
Accretion of Series A redeemable convertible preferred stock discount resulting from conversions and probable redemption	-	-	(1,129)
<b>Supplemental disclosure of cash flow information:</b>			
Cash paid during the year for interest	\$ -	\$ 18	\$ 141
Cash paid during the year for taxes	1,686	1,508	2,447

See accompanying notes to consolidated financial statements.



## CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY AND COMPREHENSIVE LOSS

Years ended December 31, 2006, 2005 and 2004 (In thousands)	Common Stock		Common Stock To Be Issued	Additional Paid-in Capital	Deferred Compensation	Accumulated Other Comprehensive Income	Treasury Stock	Accumulated Deficit	Total Stockholders' Equity
	Number of Shares	Amount							
Balance at January 1, 2004	16,717	\$16	\$149	\$317,055	\$(212)	\$1,641	\$ -	\$(287,502)	\$31,147
Net loss	-	-	-	-	-	-	-	(8,812)	(8,812)
Foreign currency translation adjustment	-	-	-	-	-	1,168	-	-	1,168
Unrealized loss on available-for-sale securities	-	-	-	-	-	(44)	-	-	(44)
Reclassification adjustment for realized loss on available-for-sale securities	-	-	-	-	-	185	-	-	185
Comprehensive loss									(7,503)
Issuance of common stock from exercise of stock options	194	1	-	698	-	-	-	-	699
Issuance of common stock in private placement	3,158	3	-	26,105	-	-	-	-	26,108
Issuance of common stock for conversion of Series A redeemable convertible preferred stock	2,234	2	-	3,895	-	-	-	-	3,897
Amortization of deferred compensation	-	-	-	-	212	-	-	-	212
Issuance of common stock from exercise of warrants	1,639	2	-	3,688	-	-	-	-	3,690
Issuance of common stock from cashless exercise of warrants	69	-	-	-	-	-	-	-	-
Dividends paid and payable in common stock to Series A preferred stockholders	22	-	(149)	149	-	-	-	-	-
Balance at December 31, 2004	24,033	24	-	351,590	-	2,950	-	(296,314)	58,250
Net loss	-	-	-	-	-	-	-	(9,439)	(9,439)
Foreign currency translation adjustment	-	-	-	-	-	(1,699)	-	-	(1,699)
Unrealized gain on available-for-sale securities	-	-	-	-	-	8	-	-	8
Reclassification adjustment for realized gain on available-for-sale securities	-	-	-	-	-	(19)	-	-	(19)
Comprehensive loss									(11,149)
Acquisition of treasury shares from escrow settlement	-	-	-	-	-	-	(1,587)	-	(1,587)
Cancellation of common stock from purchase accounting adjustment	(46)	-	-	(489)	-	-	-	-	(489)
Issuance of common stock from exercise of stock options	79	-	-	348	-	-	-	-	348
Issuance of common stock from cashless exercise of warrants	429	-	-	-	-	-	-	-	-
Compensation expense from modification of stock options	-	-	-	104	-	-	-	-	104
Balance at December 31, 2005	24,495	24	-	351,553	-	1,240	(1,587)	(305,753)	45,477
Net loss	-	-	-	-	-	-	-	(11,271)	(11,271)
Foreign currency translation adjustment	-	-	-	-	-	1,908	-	-	1,908
Unrealized gain on available-for-sale securities	-	-	-	-	-	8	-	-	8
Reclassification adjustment for realized loss on available-for-sale securities	-	-	-	-	-	(7)	-	-	(7)
Reclassification adjustment for impairment charge on available-for-sale securities	-	-	-	-	-	259	-	-	259
Comprehensive loss									(9,103)
Issuance of common stock in private placement	4,875	5	-	13,165	-	-	-	-	13,170
Issuance of common stock from exercise of stock options	12	-	-	42	-	-	-	-	42
Stock-based compensation expense	100	-	-	1,320	-	-	-	-	1,320
Balance at December 31, 2006	29,482	\$29	\$ -	366,080	\$ -	\$3,408	\$(1,587)	\$(317,024)	\$50,906

See accompanying notes to consolidated financial statements.

**(I) Summary of Significant Accounting Policies**

**(a) Organization and Business Activities**

Orchid Cellmark Inc. and its subsidiaries (the Company), is engaged in the provision of DNA testing services that generate genetic profile information by analyzing an organism's unique genetic identity. The Company focuses its business on DNA testing primarily for human identity and to a lesser extent agricultural applications. In the human identity area, the Company provides DNA testing services for forensic, family relationship and security applications. Forensic DNA testing is primarily used to establish or maintain databases of individuals convicted of crimes or, in some instances, arrested in connection with crimes, to confirm that a suspect committed a particular crime or to exonerate an innocent person. Family relationship DNA testing is used to establish whether two or more people are genetically related. In agricultural applications, the Company provides DNA testing services for food safety and selective trait breeding. The Company was organized under the laws of the state of Delaware on March 8, 1995.

**(b) Consolidated Financial Statements**

The accompanying consolidated financial statements include the results of operations of the Company and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

**(c) Cash and Cash Equivalents**

The Company considers all highly liquid investments with an original maturity of three months or less when purchased to be cash equivalents. All cash and cash equivalents are held in commercial paper and money market funds. To date, the Company has not experienced any losses on its cash and cash equivalents. The Company also maintains cash restricted under one of its operating leases and a government contract. As of December 31, 2006 and 2005, \$1.0 million and \$1.7 million of cash, respectively, was restricted, of which \$1.0 million and \$1.2 million, respectively, was classified as a non-current asset on the consolidated balance sheet.

**(d) Accounts Receivable and Credit Risks**

Clinical laboratory testing accounts receivable is primarily comprised of amounts owed by government agencies. The Company performs periodic credit evaluation of its customers' financial condition and generally does not require a deposit from government agencies or private institutions. The Company believes individual private customers for paternity testing represent the most significant credit risk and generally requires a deposit for all or a portion of the services to be rendered.

**(e) Investments**

Investments consist of commercial paper, auction rate securities and certificates of deposit with purchased maturities greater than three months. In accordance with Statement of Financial Accounting Standards (SFAS) No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, the Company classifies its investments as available-for-sale. Available-for-sale securities are recorded at fair value based on quoted market prices. Unrealized gains and losses are recorded as a component of accumulated other comprehensive income.

The Company did not hold any available-for-sale securities at December 31, 2006. As of December 31, 2005 the Company held available-for-sale equity securities with a cost basis of \$343 thousand, gross unrealized losses of \$260 thousand and a fair value of \$83 thousand. The equity securities were included with other assets in the consolidated balance sheet at December 31, 2005.

**(f) Fixed Assets**

Fixed assets, which consist of lab equipment, furniture and fixtures, computers and software, are carried at cost, less accumulated depreciation, which is computed on the straight-line basis over the estimated useful lives of the related assets. Leasehold improvements, which are also included in fixed assets, are recorded at cost, less accumulated depreciation, which is computed on the straight-line basis over the shorter of their estimated useful lives or the lease term. Expenditures for maintenance and repairs are charged to expense as incurred.

The following is a summary of the estimated useful lives of the Company's fixed assets:

	Useful Life
Laboratory equipment	5 years
Computers and software	3 years
Furniture and fixtures	7 years
Leasehold improvements	Life of lease or useful life if shorter

**(g) Inventory**

Inventory is stated at the lower of cost or market. Cost is determined by the first-in, first-out method.

**(h) Goodwill and Intangible Assets**

Goodwill represents the excess purchase price over fair value of tangible net assets acquired in a business combination. In accordance with SFAS No. 142, *Goodwill and Other Intangible Assets* (SFAS 142), goodwill and intangible assets with indefinite useful lives are not amortized, but instead tested for impairment annually, or more frequently as needed when events or changes

have occurred that would suggest an impairment of the asset. Impairment is assessed by determining whether the fair values of the applicable reporting units exceed their carrying values. The evaluation of fair value requires the use of projections, estimates and assumptions as to the future performance of the operations in performing a discounted cash flow analysis, as well as assumptions regarding sales and earnings multiples that would be applied in comparable acquisitions. Intangible assets acquired as a result of a business combination are recorded at their fair value at the acquisition date. Intangible assets acquired individually are recorded at their acquisition cost. Definite lived intangible assets are amortized on a straight-line basis over their estimated useful lives.

#### **(i) Impairment of Long-Lived Assets and Long-Lived Assets to Be Disposed Of**

In accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets* (SFAS 144), the Company reviews long-lived assets and intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the undiscounted future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to dispose.

#### **(j) Income Taxes**

The Company accounts for income taxes in accordance with the asset and liability method prescribed by SFAS No. 109, *Accounting for Income Taxes* (SFAS 109). Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities, and net operating loss (NOL) and credit carryforwards. Deferred tax assets and liabilities are measured using tax rates in effect for the years in which the items are expected to reverse. The measurement of deferred tax assets is reduced, if necessary, by a valuation allowance for any tax benefits which are not expected to be realized. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that such tax rate changes are enacted. In certain situations, a taxing authority may challenge positions that the Company has adopted in the income tax filings. Accordingly, the Company may apply different tax treatment for these selected transactions in filing its tax return than for financial reporting purposes. The Company regularly assesses its position for such transactions and includes reserves for those differences in position, if appropriate. The reserves are utilized or reversed once the statute of limitations has expired or the

matter is otherwise resolved.

#### **(k) Revenue Recognition**

The Company recognizes DNA laboratory services revenues at the time test results are completed and reported. Deferred revenues represent the unearned portion of payments received in advance of tests being completed and reported. Unbilled receivables represent revenue which has been earned on completed and reported tests, but has not been billed to the customer. Revenues from license arrangements, including license fees creditable against future royalty obligations of the licensee, are recognized when an arrangement is entered into if the Company has no significant continuing involvement under the terms of the arrangement. If the Company has significant continuing involvement under such an arrangement, license fees are deferred and recognized over the estimated performance period. Management has made estimates and assumptions relating to the performance period, which are subject to change. Changes in these estimates and assumptions could affect the amount of revenues from licenses reported in any given period. Revenues from research and development agreements are recognized when related research expenses are incurred and when the Company has satisfied specific obligations under the terms of the respective agreements.

#### **(l) Research and Development**

Costs incurred for research and product development, including salaries and related personnel costs, fees paid to consultants and outside service providers, and material costs for prototypes and test units, are expensed as incurred. The Company recognizes research and development expenses in the period incurred and in accordance with the specific contractual performance terms of such research agreements. Costs incurred in obtaining technology licenses and development of software is charged to research and development expense if the technology licensed or the software being developed has not reached technological feasibility.

#### **(m) Use of Estimates**

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States (US) requires the Company to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. The Company bases its estimates on historical experience and on other assumptions that it believes to be relevant under the circumstances, the results of which form the basis for making judgments about the carrying value of assets

and liabilities that are not readily apparent from other sources. In particular, judgment is used in areas such as the allowance for doubtful accounts, impairment of long-lived assets and goodwill, stock-based compensation and income taxes. Actual results could differ from these estimates.

**(n) Financial Instruments**

The carrying amounts of cash and cash equivalents, accounts receivable and accounts payable approximate their fair values because of the short maturity of these instruments. The Company had no long-term debt or capital leases at December 31, 2006.

**(o) Foreign Currency Translation**

The balance sheets of foreign subsidiaries are translated into US dollars at current year-end rates, and the statements of operations are translated at average monthly rates during each monthly period. Net exchange gains or losses resulting from the translation of foreign financial statements and the effect of exchange rate changes on intercompany transactions of a long-term investment nature are accumulated and credited or charged directly to a separate component of stockholders' equity. Any foreign currency gains or losses related to transactions are charged to other income (expense), net.

**(p) Net Loss Per Share**

Net loss per share is computed in accordance with SFAS No. 128, *Earnings Per Share*, by dividing the net loss allocable to common stockholders by the weighted average number of shares of common stock outstanding. The Company has certain options and warrants which have not been used in the calculation of diluted net loss per share allocable to common stockholders because to do so would be anti-dilutive. As such, the numerator and the denominator used in computing both basic and diluted net loss per share allocable to common stockholders for each year presented are equal. For the year ended December 31, 2004, the Company included \$1.1 million relating to dividends and the accretion of the Series A redeemable convertible preferred stock discount in the net loss allocable to common stockholders.

**(q) Recent Accounting Pronouncements**

In February 2006, the Financial Accounting Standards Board (FASB) issued SFAS No. 155, *Accounting for Certain Hybrid Financial Instruments* (SFAS 155). SFAS 155 allows fair value remeasurement for any financial instruments that contain an embedded derivative and that otherwise would require bifurcation, at the holders' election. SFAS 155 also clarifies and amends certain other provisions of SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, and SFAS No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities*. SFAS 155 is effective for all

financial instruments acquired or issued in fiscal years beginning after September 15, 2006. The Company does not expect that the adoption of SFAS 155 will have a material impact on its consolidated financial statements.

In July 2006, the FASB issued FASB Interpretation 48, *Accounting for Uncertainty in Income Taxes* (FIN 48). The intent of FIN 48 is to clarify the accounting for uncertainty in income taxes recognized in an entity's financial statements in accordance with SFAS 109. This interpretation imposes a recognition threshold and measurement attribute for financial statement disclosure of tax positions taken or expected to be taken on a tax return. This interpretation is effective as of the beginning of the first fiscal year beginning after December 15, 2006. The Company will be required to adopt this interpretation in the first quarter of 2007. The Company does not expect that the adoption of FIN 48 will have a material impact on its consolidated financial statements.

In September 2006, the Securities and Exchange Commission (SEC) issued Staff Accounting Bulletin No. 108, *Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements* (SAB 108), which provides interpretive guidance on how the effects of the carryover or reversal of prior year misstatements should be considered in quantifying a current year misstatement. The cumulative effect from the initial adoption of SAB 108 may be reported as an adjustment to the beginning of year retained earnings with disclosure of the nature and amount of each individual error being corrected in the cumulative adjustment. The Company began to apply the provisions of SAB 108 during the fourth quarter of 2006. The adoption of SAB 108 did not have a material impact on the Company's consolidated financial statements.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements* (SFAS 157). SFAS 157 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. SFAS 157 is effective as of the beginning of the first fiscal year beginning after November 15, 2007. The Company will be required to adopt this statement in the first quarter of 2008. The Company is currently evaluating the requirements of SFAS 157 and has not yet determined the impact this standard will have on its consolidated financial statements.

**(2) Stock-based Compensation**

During 1995, the Company established the 1995 Stock Incentive Plan (the 1995 Plan), which provided for the granting of restricted common stock or incentive and nonqualified stock options to the Company's directors, employees and consultants. An aggregate of 700,000 shares of the Company's common stock was authorized for issuance under the 1995 Plan, which expired by its terms on November 28, 2005.

During 2000, the Board of Directors and stockholders of the Company approved the 2000 Employee, Director, and Consultant Stock Incentive Plan (the 2000 Plan) for the issuance of common stock, incentive stock options and nonqualified stock options to the Company's employees, directors and consultants. The Company was originally authorized to issue options for up to 900,000 shares of the Company's common stock under the 2000 Plan. On June 8, 2005, at the Company's Annual Meeting of Stockholders, the stockholders approved the Company's Amended and Restated 2005 Stock Plan (the 2005 Plan). The 2005 Plan amended and restated in its entirety the 2000 Plan. The 2005 Plan authorizes the grant of up to approximately 1,700,000 shares plus the number of additional shares as described in the 2005 Plan, for the issuance of incentive stock options, nonqualified stock options, stock grants and other stock-based awards to the Company's employees, directors and consultants. The 2005 Plan also specifies other terms such as eligibility, annual limits and the grant of awards thereunder. The 1995 Plan and the 2005 Plan provide that in the event of a change in control in the beneficial ownership of the Company, as defined therein, all options may, at the discretion of the compensation committee of the Company's Board of Directors, become fully vested and exercisable immediately prior to the change in control.

Stock options granted under the 2005 Plan are granted at a price equal to or greater than the fair market value of the Company's common stock at the date of grant. Stock options granted to employees in general vest over four years in equal monthly installments and have a maximum term of ten years. Stock options granted to the Company's Board of Directors in general vest over three years in equal monthly installments and have a maximum term of ten years. The Company issues new shares of its common stock upon exercise of stock options.

Prior to January 1, 2006, the Company applied the disclosure-only provisions of SFAS No. 123 *Accounting for Stock-Based Compensation* (SFAS 123). In accordance with the provisions of SFAS 123, the Company applied Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees*, and related interpretations in accounting for its stock-based compensation plans and, accordingly, compensation cost was recorded on the date of issuance or grant only if the market price of the underlying stock exceeded the purchase or exercise price. Any deferred compensation cost was amortized over the respective vesting periods of the equity instruments, if any.

Had the Company determined compensation cost for options based on the fair value method for the years ended December 31, 2005 and 2004 for its stock options under SFAS 123, the Company's net loss allocable to common stockholders and net loss per share allocable to common stockholders would have been increased to the pro forma amounts indicated below (in thousands, except per share data):

	2005	2004
<b>Net loss allocable to common stockholders:</b>		
As reported	\$ (9,439)	\$ (9,955)
Add: Stock-based employee compensation expense included in reported net loss allocable to common stockholders	104	212
Deduct: Total stock-based employee compensation expense determined under the fair value method for all awards	(1,727)	(1,299)
<b>Pro forma under SFAS 123</b>	<b>\$ (11,062)</b>	<b>\$ (11,042)</b>
<b>Basic and diluted net loss per share allocable to common stockholders:</b>		
As reported	\$ (0.39)	\$ (0.46)
<b>Pro forma under SFAS 123</b>	<b>\$ (0.46)</b>	<b>\$ (0.51)</b>

Effective January 1, 2006, the Company adopted the provisions of, and accounts for stock-based compensation in accordance with, SFAS No. 123(R), *Share-Based Payment* (SFAS 123(R)). Under the fair value recognition provisions of this statement, stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the requisite service period, which is the vesting period. The Company has applied the modified prospective method of adoption, under which prior periods are not restated for comparative purposes. Under the modified prospective method, SFAS 123(R) applies to new awards and to awards that were outstanding as of December 31, 2005 that are subsequently modified, repurchased or cancelled. Compensation expense recognized during the year ended December 31, 2006 includes expense for all share-based payments granted prior to, but not yet vested as of, December 31, 2005, based on the grant date fair value estimated in accordance with the original provisions of SFAS 123, and expense for all share-based payments granted during the year ended December 31, 2006, based on the grant date fair value estimated in accordance with the provisions of SFAS 123(R). Stock-based compensation is classified within cost of service revenues, research and development, marketing and sales and general and administrative expense in the consolidated statement of operations. As stock-based compensation expense recognized in the consolidated statement of operations is based on awards ultimately expected to vest, the amount of expense has been reduced for estimated forfeitures. SFAS 123(R) requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Forfeitures are estimated based on historical experience.

In November 2005, the FASB issued FASB Staff Position No. 123(R)-3, *Transition Election Related to Accounting for the Tax Effects of Share-Based Payment Awards*. The Company has elected not to adopt the short-cut method to calculate the beginning balance of the hypothetical additional paid-in-capital (APIC) pool

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

of the excess tax benefits upon the Company's adoption of SFAS 123(R). Utilizing the long-haul method, the Company has determined that it has no hypothetical APIC pool that can be utilized to offset future shortfalls that may be incurred.

The Company's option grants include options which qualify as incentive stock options (ISO) for income tax purposes. The treatment of the potential tax deduction, if any, related to ISOs may cause variability in the Company's effective tax rate in future periods. In the period the compensation cost related to ISOs is recorded, a corresponding tax benefit is not recorded as it is assumed that the Company will not receive a tax deduction upon the exercise of such ISOs. The Company may be eligible for tax deductions in subsequent periods to the extent that there is a disqualifying disposition of the common stock underlying the ISO. The Company also receives a tax deduction upon the exercise of nonqualified stock options. In cases where the Company receives a tax deduction, the Company would record a tax benefit through the consolidated statement of operations in an amount not to exceed the corresponding cumulative compensation cost recorded in the consolidated financial statements for the particular option multiplied by the statutory tax rate. Any incremental tax benefit received by the Company in excess of the tax benefit recorded in the consolidated statement of operations would be recorded directly to APIC when realized.

The Company uses the Black-Scholes option pricing model to estimate the fair value of options granted, which requires the input of highly subjective assumptions. These assumptions include estimating the length of time employees will retain their vested stock options before exercising them, the estimated volatility of the Company's common stock price over the expected term and the number of options that will ultimately not vest. Changes in the subjective assumptions can materially affect the estimate of the fair value of stock-based compensation and, consequently, the related amount of compensation expense recognized in the consolidated statement of operations.

The following weighted average assumptions were used in valuing the options granted during the years ended December 31, 2006, 2005 and 2004:

	2006	2005	2004
Risk-free interest rate	4.98%	3.84%	4.75%
Volatility	85%	85%	86%
Expected option term	6 years	5 years	5 years
Expected dividend yield	0%	0%	0%

The risk-free interest rate assumption is based upon the US Treasury yields in effect at the time of grant for a term that approximates the expected term of the option. The expected

volatility assumption is based on the daily historical volatility of the Company's stock price over the expected term of the option. The Company's stock options are considered "plain vanilla" options based on the guidance in SEC Staff Accounting Bulletin No. 107, *Share-Based Payment*, and as such the Company has elected the use of the "simplified" method, whereby the Company has assumed that all options will be exercised midway between the vesting date and the contractual term of the option to determine the expected term of the option. As the Company has not paid dividends since inception, nor does it expect to pay any dividends for the foreseeable future, the expected dividend yield assumption is zero.

Net loss for the year ended December 31, 2006 includes \$1.3 million of compensation costs related to stock-based compensation arrangements, including \$331 thousand related to the grant of 100,000 fully vested shares of common stock to the Company's Chief Executive Officer on December 14, 2006, pursuant to his amended employment agreement. Compensation costs related to stock-based compensation arrangements increased the Company's loss per share by \$0.05 for the year ended December 31, 2006. The Company did not capitalize any of the compensation costs for the year ended December 31, 2006 in fixed assets, inventory or other assets. The Company has not benefited from a tax deduction for stock option exercises due to net losses for the periods during which the options were exercised.

Information with respect to outstanding options under the plans is as follows:

	Shares	Weighted average exercise price	Weighted average remaining contractual term	Aggregate intrinsic value
Options outstanding				
at January 1, 2006	1,233,954	\$12.35		
Granted	947,337	4.38		
Exercised	(12,201)	3.42		
Cancelled	(750,037)	8.60		
Options outstanding				
at December 31, 2006	1,419,053	\$ 9.09	7.91	\$ 134,000
Options exercisable				
at December 31, 2006	660,297	\$13.92	6.46	\$ 86,000

Additional information about the Company's share-based payments is as follows (in thousands, except per share data):

Year ended December 31,	2006	2005	2004
Total intrinsic value of options exercised	\$ 13	\$ 478	\$ 942
Net cash proceeds from the exercise of stock options	42	348	699
Weighted average grant date fair value per share of options granted	3.26	7.10	5.84

As of December 31, 2006, there was \$2.9 million of unrecognized compensation cost related to stock options, which is expected to be recognized over a weighted average period of 2.93 years.

### (3) Inventory

Inventory is comprised of the following at December 31, 2006 and 2005 (in thousands):

	2006	2005
Raw materials	\$ 875	\$ 511
Work in progress	189	523
Finished goods	8	20
	\$ 1,072	\$ 1,054

Raw materials consist mainly of reagents, enzymes, chemicals and plates used in genotyping. Work in progress consists mainly of case work not yet completed and DNA testing kits that are being processed. Finished goods consist mainly of DNA testing kits that have not yet been shipped.

### (4) Fixed Assets

Fixed assets are comprised of the following at December 31, 2006 and 2005 (in thousands):

	2006	2005
Laboratory equipment	\$ 15,445	\$ 16,013
Computers and software	4,995	4,893
Furniture and fixtures	1,615	1,083
Leasehold improvements	\$ 6,460	\$ 4,759
	28,515	26,748
Less accumulated depreciation	(20,046)	(17,652)
	\$ 8,469	\$ 9,096

During the years ended December 31, 2005 and 2004, the Company continued to strategically realign its business and

evaluate potential future market segments and growth strategies. In connection with this evaluation, the Company recorded impairment changes for various fixed assets, primarily laboratory equipment, for \$255 thousand and \$393 thousand in 2005 and 2004, respectively.

Depreciation expense for the Company's fixed assets for the years ended December 31, 2006, 2005 and 2004 amounted to \$3.3 million, \$4.1 million and \$4.1 million, respectively.

### (5) Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities are comprised of the following at December 31, 2006 and 2005 (in thousands):

	2006	2005
VAT and other taxes	\$ 1,743	\$ 2,665
Professional fees	1,243	2,055
Employee compensation	448	1,930
Current portion of		
guarantee obligation	283	283
Restructuring	264	542
Current portion of patent obligations	150	150
Other	773	1,452
	\$ 4,904	\$ 9,077

### (6) Goodwill and Other Intangible Assets

The following table sets forth the activity for goodwill during the years ended December 31, 2006 and 2005 (in thousands):

Balance as of December 31, 2004	\$ 2,789
Purchase accounting adjustment (1)	(489)
Effect of foreign currency translation	(123)
Balance as of December 31, 2005	2,177
Effect of foreign currency translation	144
Balance as of December 31, 2006	\$ 2,321

(1) On December 5, 2001, the Company acquired all of the outstanding equity securities of Lifecodes Corporation (Lifecodes). At the date of acquisition of Lifecodes on December 5, 2001, the Company received and cancelled 45,901 shares of common stock in settlement of a \$635 thousand working capital advance that the Company had extended to Lifecodes prior to the closing of the acquisition. The cancellation of the shares should have been recorded at the acquisition date as a reduction in goodwill and stockholders' equity in the amount of \$489 thousand. Such shares were not accounted for until the fourth quarter of 2005; the adjustment to goodwill and stockholders' equity is reflected in the Company's consolidated balance sheet as of December 31, 2005 and in the Company's statement of stockholders' equity and comprehensive loss for the year ended December 31, 2005, as the amount was not considered material to the prior period consolidated financial statements.

The Company has performed an annual assessment of goodwill as required under the provisions of SFAS 142, and concluded that goodwill was not impaired.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

The following table sets forth the Company's other intangible assets at December 31, 2006 and 2005 (in thousands):

	2006			2005		
	Cost (1)	Accumulated Amortization	Net	Cost (1)	Accumulated Amortization	Net
Base technology	\$ 6,119	\$ (3,616)	\$ 2,503	\$ 6,054	\$ (3,070)	\$ 2,984
Customer list	5,335	(3,280)	2,055	5,197	(2,734)	2,463
Trademark/tradename	4,435	(2,152)	2,283	4,323	(1,738)	2,585
Patents and know-how	4,913	(1,999)	2,914	4,904	(1,578)	3,326
Totals	\$20,802	\$ (11,047)	\$ 9,755	\$20,478	\$ (9,120)	\$ 11,358

(1) Cost includes the cumulative historical effect of foreign currency translation on intangible assets acquired in a prior business combination. This cumulative historical effect of foreign currency translation amounted to \$698 thousand and \$375 thousand as of December 31, 2006 and 2005, respectively.

The Company's expected future amortization expense related to intangible assets over the next five years is as follows (in thousands):

2007	\$ 1,779
2008	1,779
2009	1,779
2010	1,779
2011	1,358

### (7) Restructuring

During the year ended December 31, 2004, the Company recognized \$1.1 million of restructuring charges related to one of the Company's former operating facilities in Princeton, New Jersey. The charge was a result of a change in management's estimate as to when this facility is expected to be subleased and the estimated impact associated with such a sublease arrangement.

During the year ended December 31, 2005, the Company incurred \$2.5 million of restructuring charges. Of these charges, \$1.6 million was primarily related to employee severance costs resulting from workforce reductions in the corporate office and the Company's former operating facility in Germantown, Maryland, and \$918 thousand of the restructuring charges was primarily related to facility closure costs for the Company's former Germantown, Maryland and Dallas, Texas facilities.

During the year ended December 31, 2006, the Company incurred \$437 thousand of restructuring charges. Of these charges, \$424 thousand was primarily related to employee severance costs resulting from workforce reductions in the corporate office and \$143 thousand of the restructuring charges was primarily related to facility costs for the Company's former Germantown, Maryland and Dallas, Texas facilities, offset by \$130 thousand in reductions related to the early termination of the Company's lease at its former Germantown, Maryland facility.

As of December 31, 2006, the Company has \$264 thousand in restructuring accruals outstanding that are related to employee severance costs.

A summary of the restructuring activity is as follows (in thousands):

	Workforce Reduction	Facility Costs	Total
Restructuring liability as of December 31, 2003	\$ 469	\$ 1,565	\$ 2,034
Restructuring charges recorded in 2004	-	1,184	1,184
Cash payments in 2004	(404)	(912)	(1,316)
Other charges (reductions)	(65)	11	(54)
Restructuring liability as of December 31, 2004	-	1,848	1,848
Restructuring charges recorded in 2005	1,596	918	2,514
Cash payments in 2005	(1,569)	(1,922)	(3,491)
Restructuring liability as of December 31, 2005	27	844	871
Restructuring charges recorded in 2006	424	143	567
Cash payments in 2006	(187)	(857)	(1,044)
Other reductions	-	(130)	(130)
Restructuring liability as of December 31, 2006	\$ 264	\$ -	\$ 264



## (8) Discontinued Operations

During the year ended December 31, 2002, the Company made the decision to sell the Diagnostics business unit based upon an internal evaluation of the strategic direction of the Company.

On January 21, 2004, pursuant to the terms of an Asset Purchase Agreement dated as of October 30, 2003, as amended, among the Company, Lifecodes, Tepnel Life Sciences, PLC (Tepnel), Tepnel North America Corporation, a wholly-owned subsidiary of Tepnel, and Tepnel Lifecodes Corporation, a wholly-owned subsidiary of Tepnel North America Corporation, a Business Purchase Agreement dated as of October 30, 2003, as amended, among the Company, Orchid BioSciences Europe Limited, a wholly-owned subsidiary of the Company, Tepnel and Tepnel Diagnostics Limited, a wholly-owned subsidiary of Tepnel, and a Share Purchase Agreement, dated as of October 30, 2003, as amended, among the Company, Lifecodes, Tepnel and Tepnel Diagnostics Limited, Tepnel completed its acquisition of certain assets and liabilities of the Company's Diagnostics business unit. The aggregate purchase price was \$3.5 million in cash, of which \$500 thousand was held in escrow, subject to certain post-closing adjustments. The Company and Tepnel selected a neutral third-party auditor to determine the final sale amount based on the provisions of the sale agreements, and the neutral auditor completed its assessment during the second quarter of 2004. The Company accrued for the amount attributable to the final sale amount based on the neutral auditor's assessment and included those charges in the loss from discontinued operations for the six months ended June 30, 2004. During the third quarter of 2004, the Company and Tepnel reached a final settlement. The settlement included the release of the existing escrow to Tepnel, and an additional cash payment by the Company to Tepnel in the amount of approximately \$400 thousand. The total cash settlement was less than the neutral auditor's assessment, and as a result, the Company recorded income from discontinued operations during the third quarter of 2004. At December 31, 2004, the loss from discontinued operations also included an adjustment recorded in the fourth quarter in connection with a separate shared services agreement between the two parties, as there were no further obligations related to this settlement or the shared services agreement.

In connection with the sale of these assets and liabilities to Tepnel, the Company was required to sign an unconditional guarantee related to the lease for the Stamford, Connecticut based laboratory, which lease was assigned to Tepnel. See Note 18 for further discussion of this matter.

In accordance with the provisions of SFAS 144, the Company has reflected the results of operations of the Diagnostics business as discontinued operations. The losses from discontinued operations for the year ended December 31, 2004 consist of the following (in thousands):

	2004
Revenues	\$ 508
Costs of products and services revenues	616
Gross margin	(108)
Research and development	122
Selling and marketing	126
General and administrative	151
Operating loss	(507)
Other expenses	(276)
Net loss	\$ (783)

## (9) Debt

In December 1998, the Company entered into a \$6.0 million equipment loan line, which was secured by the purchased equipment. In December 2000, the Company amended the loan line and established a new borrowing base of \$8.0 million. In June 2002, the Company obtained a letter of credit in the amount of \$2.7 million as required by the amended line of credit, which was supported by a security deposit. During 2003, the Company's required letter of credit or cash deposit became less than the original \$2.7 million letter of credit established because the Company continued to pay down its monthly obligation in accordance with the original terms of the loan line. This security deposit, which was released to the Company in the first quarter of 2006, amounted to \$251 thousand and was included in other current assets in the Company's consolidated balance sheet as of December 31, 2005. During the third quarter of 2005, the Company paid off the loan in full.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

(10) Income Taxes

The provision for income taxes is based on loss from continuing operations before income taxes reported for financial statement purposes. The components are as follows (in thousands):

	Year ended December 31,		
	2006	2005	2004
United States	\$ (14,750)	\$ (14,402)	\$ (13,216)
Foreign	3,622	5,309	6,308
Loss from continuing operations before income taxes	\$ (11,128)	\$ (9,093)	\$ (6,908)

The components of income tax expense are summarized as follows (in thousands):

	Year ended December 31,		
	2006	2005	2004
Current income tax expense (benefit):			
State	\$ (749)	\$ (718)	\$ (729)
Foreign	1,106	1,114	1,993
Total current expense	357	396	1,264
Deferred foreign tax benefit	(214)	(50)	(143)
Income tax expense	\$ 143	\$ 346	\$ 1,121

During 2006, the Company recognized a tax benefit of \$749 thousand from the sale of a portion of its New Jersey state NOL carryforwards. During 2006, the Company also reversed \$215 thousand of a tax reserve for tax return positions taken on its UK subsidiary tax return filings due to the closing of the statute of limitations for the Company's 2004 UK tax return. In addition, the Company recognized a current foreign tax expense of \$1.3 million, primarily related to its profitable business in the United Kingdom (UK) and \$214 thousand of deferred foreign tax benefit, primarily related to its profitable businesses in the UK and Canada.

During 2005, the Company recognized a tax benefit of \$718 thousand from the sale of a portion of its New Jersey state NOL carryforwards. In addition, the Company recognized a current foreign tax expense of \$2.6 million and \$50 thousand of deferred foreign tax benefit, primarily related to its profitable business in the UK. Prior to 2005, the Company had recorded tax reserves for tax return positions taken on its UK subsidiary tax return filings with respect to intercompany transactions. In the first quarter of 2005, the Company reversed \$535 thousand of this tax reserve due to the closing of the statute of limitations for the Company's 2002 UK tax return. In addition, during the

fourth quarter of 2005, the Company completed an assessment of its remaining exposure with respect to tax return positions taken on its 2003 and 2004 UK subsidiary tax return filing and on an estimate of its planned tax position to be utilized in filing its 2005 UK tax return. As a result of completing its assessment, the Company determined it is probable that it will sustain the majority of the tax benefit taken on the 2003 and 2004 UK tax return filing and with respect to its estimate of such tax benefit for the 2005 UK tax return filing. The Company utilized a study performed by outside consultants to assist it in reaching its conclusions with respect to this matter. Accordingly, in the fourth quarter of 2005, the Company reversed \$1.0 million of tax reserves associated with tax positions taken on its 2003 and 2004 UK income tax returns and 2005 estimated tax return position for such intercompany transactions.

During 2004, the Company recognized a tax benefit of \$729 thousand from the sale of a portion of its New Jersey state NOL carryforwards. In addition, the Company recognized a current foreign tax expense of \$2.0 million and a deferred foreign tax benefit of \$143 thousand, primarily related to its profitable business in the UK.

The tax effects of temporary differences and loss and credit carryforwards that give rise to significant portions of the deferred tax assets and liabilities related to the US operations of the Company at December 31, 2006 and 2005 are presented below (in thousands):

	2006	2005
Deferred tax assets:		
Bad debt allowance and inventory reserve	\$ 307	\$ 156
Stock-based compensation	240	2,021
Deferred revenue	193	180
Net operating loss carryforwards	94,779	93,082
Research and development credits	2,562	2,074
Accrued restructuring expenses	108	922
Accrued expenses	377	716
Amortization and depreciation	1,364	3,650
Investments	308	718
Total gross deferred tax assets	100,238	103,519
Less valuation allowance	(98,509)	(101,666)
Net deferred tax assets	1,729	1,853
Deferred tax liabilities:		
Intangible assets	(1,729)	(1,853)
Net deferred taxes	\$ -	\$ -

At December 31, 2006 and 2005, valuation allowances of \$98.5 million and \$101.7 million, respectively, have been recognized to

offset the net deferred tax assets related to the US operations of the Company, as realization of these assets is uncertain. The net change in the valuation allowance for 2006 and 2005 was a decrease of \$3.2 million and an increase of \$1.2 million, respectively, related primarily to amortization, depreciation and additional NOLs incurred by the Company.

At December 31, 2006 and 2005, the Company's deferred tax asset (not included in the above table) related to its foreign operations totaled \$476 thousand and \$281 thousand, respectively, and is included in other assets. The deferred tax asset is primarily related to depreciable assets and goodwill that is amortized for tax purposes. Although it is not assured, the Company believes it is more likely than not that all of its deferred tax assets related to its foreign operations will be realized.

As of December 31, 2006, the Company has \$242.1 million and \$167.5 million of federal and state NOL carryforwards, respectively, available to offset future taxable income. The Company's federal and state NOL carryforwards begin to expire in 2007. At December 31, 2006, the Company had research and development credit carryforwards for federal and state tax purposes of \$2.6 million, which will begin expiring in 2022 and 2009, respectively. As a result of the Company's acquisitions of GeneScreen, Inc. and Lifecodes, the Company acquired federal NOLs of \$4.5 million and \$1.7 million, respectively. In the event that the Company becomes profitable in the future and is able to utilize these NOLs, the tax benefit from these acquired NOL carryforwards will not be reflected as income tax benefits in the results of operations, but as a reduction of intangible assets and goodwill related to these acquisitions. The Company also may receive tax benefits in the future relating to stock option deductions that will not be reflected in the results of operations.

The Tax Reform Act of 1986 (the Act) provides for a limitation on the annual use of NOL carryforwards and research and development credit carryforwards following certain ownership changes, as defined by the Act, which could significantly limit the Company's ability to utilize these carryforwards. The Company may have experienced other ownership changes, as defined by the Act, as a result of past financings and may experience others in connection with future financings. Accordingly, the Company's ability to utilize the aforementioned NOL carryforwards may be further limited in the future. The Company has determined that an ownership change, as defined by the Act, occurred in 1999. Of the Company's NOL carryforwards, \$41.4 million are limited due to this ownership change.

The Company recorded income tax expense of \$143 thousand, \$346 thousand and \$1.1 million in 2006, 2005 and 2004, respectively. The principal reason for the differences between the expected income tax benefit and the actual recorded tax

expense is tax expense of \$1.1 million, \$1.1 million, and \$1.9 million in 2006, 2005 and 2004, respectively, related to the Company's profitable foreign operations. The Company was also not able to utilize tax benefits relating to NOLs created in 2004 through 2006, as it is unlikely that such tax benefits will be realized in the foreseeable future. Accordingly, the Company increased its valuation allowance for such benefits. Additionally, the Company sold certain state NOLs in accordance with the state of New Jersey's Corporation Business Tax Benefit Certificate Transfer program (the Program) and generated benefits of \$749 thousand, \$718 thousand and \$729 thousand for 2006, 2005 and 2004, respectively.

The Company participates in the Program, which allows certain high technology and biotechnology companies to sell unused NOL carryforwards to other New Jersey corporation business taxpayers. Since New Jersey law provides that NOLs can be carried over for up to seven years, the Company may be able to transfer its New Jersey NOLs from the last seven years. The Program requires that the purchaser pay at least 75% of the amount of the surrendered tax benefit.

During 2006, 2005 and 2004, the Company completed the sale of \$10.0 million, \$9.6 million and \$9.8 million, respectively, of its New Jersey NOL carryforwards.

The Company has made no provision for US taxes on cumulative earnings of foreign subsidiaries as those earnings are intended to be reinvested for an indefinite period of time. The Company's cumulative undistributed earnings of foreign subsidiaries amounted to \$7.1 million at December 31, 2006. Determination of the potential amount of unrecognized deferred US income tax liability related to such reinvested income is not practicable because of numerous assumptions associated with this hypothetical calculation. However, foreign tax credits would be available to reduce some portion of this amount. As of December 31, 2006 and based on tax laws in effect as of this date, it is the Company's intention to indefinitely reinvest the undistributed earnings of foreign subsidiaries.

#### (11) Significant Customers and Geographic Information

During 2006, the Company generated \$18.2 million or 32% of its total revenues through agreements with two customers, representing approximately 23% and 9% of total revenues, respectively. During 2005, the Company generated \$22.7 million or 37% of its total revenues through agreements with these two customers, representing approximately 29% and 8% of total revenues, respectively. During 2004, the Company generated \$19.0 million or 30% of its total revenues through agreements with these two customers, representing approximately 21% and 9% of total revenues, respectively.

The Company has significant international operations, primarily in the UK. During the years ended December 31, 2006, 2005 and 2004, the Company recorded revenues from international customers of \$27.6 million, or 48%, \$29.2 million, or 47%, and \$26.1 million, or 42%, respectively, of total revenues. The two customers noted above represented approximately 66%, 78% and 73% of total international revenues in 2006, 2005 and 2004, respectively.

At December 31, 2006 and 2005, the Company has long-lived assets of \$4.1 million and \$4.9 million located in the US, and \$4.4 million and \$4.2 million located in the UK at December 31, 2006 and 2005, respectively.

### (12) Redeemable Convertible Preferred Stock and Common Stock

#### *Redeemable Convertible Preferred Stock*

On March 31, 2003, the Company completed a private placement of 1,600 units, with each unit consisting of one share of Series A redeemable convertible preferred stock (Series A Preferred Stock) and a warrant to purchase shares of the Company's common stock, which resulted in net proceeds of \$16.0 million. The warrants were exercisable at any time after the first anniversary of the issuance date through the fifth anniversary of the issuance date at an exercise price equal to \$2.25 per share, and were able to be exercised via a cashless exercise from the second anniversary of the issuance date through the fifth anniversary of the issuance date. On April 11, 2005, the holders of the warrants executed via a cashless exercise the warrants outstanding on that date, for which the Company issued approximately 429,000 shares of its common stock.

During the first quarter of 2004, the Company issued a notice of redemption to the then outstanding shareholders of the Series A Preferred Stock. As a result of this redemption notice, the remaining 503 shares of Series A Preferred Stock outstanding were converted into approximately 2,234,000 shares of common stock as of February 6, 2004. The unamortized discount from issuance of the Series A Preferred Stock of \$1.1 million was recorded in the first quarter of 2004 and included in the net loss allocable to common stockholders for the first quarter of 2004.

The Series A Preferred Stock bore cumulative dividends, payable quarterly, at an initial annual rate of 6% for the first nine quarters, payable at the Company's option, in cash or shares of common stock. The Company issued 1,571 shares of common stock as dividends to the holders of Series A Preferred Stock who converted their shares during the three months ended

March 31, 2004. The dividends have been included in the net loss allocable to common stockholders.

#### *Common Stock Offerings*

On November 21, 2006, the Company entered into definitive agreements with certain new and existing institutional investors to raise \$14.0 million in gross proceeds (\$13.2 million in net proceeds after direct transaction costs) in a common stock private placement. Pursuant to the agreements, the Company sold approximately 4,875,000 shares of common stock at \$2.88 per share. The transaction closed on November 21, 2006. The Company filed a registration statement on Form S-1 covering the resale of the shares of common stock sold in the private placement, which was declared effective by the SEC on December 29, 2006.

On February 26, 2004, the Company entered into definitive agreements with new and existing institutional investors to raise \$30.3 million in gross proceeds (\$26.1 million in net proceeds after direct transaction costs) in a common stock private placement. Pursuant to the agreements, the Company sold approximately 3,158,000 shares of common stock at \$9.60 per share and granted the investors four-year warrants to purchase an additional approximately 632,000 shares of the Company's common stock at an exercise price of \$13.20 per share, all of which were outstanding at December 31, 2006. The transaction closed on February 27, 2004. As discussed in Note 16, the securities issued in this transaction were registered on a Form S-1, which was declared effective on July 20, 2006. The Company determined that the securities purchase agreement does not expressly provide that the shares issued upon the exercise of the warrants must be registered and there are no express or implied remedies to the warrant holders that would indicate that the Company is required to net-cash settle the warrants in the event of delivery of unregistered shares in settlement of the contract. In accordance with the guidance in FASB's Emerging Issues Task Force Issue No. 00-19, *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock*, the Company has accounted for the warrants issued in this transaction as part of permanent equity.

### (13) Stockholder Rights Plan

On May 16, 2001, the Company's Board of Directors adopted a Stockholder Rights Plan (Rights Plan), which is designed to protect the Company's stockholders in the event of any takeover offer. On May 16, 2001, the Company's Board of Directors declared a dividend of one preferred stock purchase right (a Right) for each outstanding share of the Company's common stock to stockholders of record at the close of business on May 31, 2001 (the Record Date). Each Right entitles the registered holder to purchase from the Company one one-hundredth of

a share of Series A junior participating preferred stock, \$0.001 par value per share, at an initial purchase price of \$40.00 in cash, subject to adjustment.

Initially, the Rights will be attached to all common stock certificates representing shares then outstanding, and no separate Rights certificates will be distributed. The Rights will separate from the common stock and a Distribution Date, as defined in the Rights Plan, will occur if certain events as described below transpire. Rights will also be attached to all shares of common stock issued following the Record Date but prior to the Distribution Date. The Rights are not exercisable until the Distribution Date and will expire at the close of business on May 16, 2011, unless earlier redeemed by the Company. The Distribution Date has not occurred as of December 31, 2006.

In the event that a person or a group of affiliated or associated persons becomes the beneficial owner of more than 15% of the then outstanding shares of common stock (except pursuant to an offer for all outstanding shares of common stock which the Board of Directors determines to be fair to, and otherwise in the best interests of, the Company and its stockholders), each holder of a Right will thereafter have the right to receive, upon exercise, that number of shares of common stock (or, in certain circumstances, cash, property or other securities of the Company) which equals the exercise price of the Right divided by one-half of the current market price (as defined in the Rights Plan) of the common stock at the date of the occurrence of the event. However, Rights are not exercisable following the occurrence of any of the events set forth above until such time as the Rights are no longer redeemable by the Company. In the event that the Company is acquired in a merger or other business combination transaction in which the Company is not the surviving corporation, or, more than 50% of the Company's assets or earning power is sold or transferred, each holder of a Right shall thereafter have the right to receive, upon exercise, that number of shares of common stock of the acquiring company which equals the exercise price of the Right divided by one-half of the current market price (as defined in the Rights Plan) of such common stock at the date of the occurrence of the event. In March 2003, the Company amended the Rights Plan to prevent the issuance and sale of its Series A Preferred Stock and associated warrants (see Note 12) from being a triggering event that would allow the holders of the Rights to exercise the Rights.

#### **(14) Employee Stock Purchase Plan**

During the year ended December 31, 2003, the Company's stockholders approved the 2003 Employee Stock Purchase Plan

(the ESPP), although the ESPP has not yet been implemented and there are no plans to implement the ESPP at this time. Employees who own more than 5% of our stock may not participate in the ESPP. At the beginning of an offering period, as defined in the ESPP document, each participant receives an option to purchase shares of common stock at the end of each accumulation period, at an exercise price equal to the lesser of 85% of (i) the fair market value of the common stock on the last trading day before the start of the applicable offering period, or (ii) the fair market value of the common stock on the last trading day of the accumulation period. The maximum number of shares that may be purchased by any participant in the ESPP in an accumulation period is 25,000 shares. No participant may purchase shares having an aggregate fair market value greater than \$25 thousand in any calendar year. A total of 600,000 shares of the Company's common stock are reserved for issuance under the ESPP as of December 31, 2006. The number of shares authorized under the ESPP is subject to adjustment for stock splits and other similar events. In addition, as of January 1 each year, beginning January 1, 2005 and ending January 1, 2007, the number of shares of common stock reserved for issuance under the ESPP will be increased automatically by the lesser of: (i) 2% of the total number of shares of common stock then outstanding; or (ii) 50,000 shares. The ESPP may be amended, suspended or terminated at any time by the Board of Directors. Amendments affecting any increase in the number of shares available under the ESPP and any other amendment to the extent required by applicable law or regulation shall be subject to the approval of the Company's stockholders.

#### **(15) Employee Benefit Plan**

The Company sponsors a defined contribution 401(k) savings plan (the 401(k) Plan) covering all employees of the Company. Participants can contribute up to 15% of their pretax annual compensation to the 401(k) Plan, subject to certain limitations. The Company matches 50% of the participant's contribution, up to 4% of compensation. For the years ended December 31, 2006, 2005 and 2004, the Company's contributions amounted to \$169 thousand, \$185 thousand and \$211 thousand, respectively, in accordance with the terms of the 401(k) Plan.

**(16) Penalty on February 2004 Private Placement**

On February 27, 2004, the Company issued approximately 3,158,000 shares of its common stock and four-year warrants to purchase an additional approximately 632,000 shares of the Company's common stock in a private placement to 33 investors. The per share purchase price for the shares of common stock was \$9.60 and the warrants have a per share exercise price of \$13.20. Pursuant to the terms of the securities purchase agreement for the private placement, the Company registered the shares of common stock issued in the financing and the shares of common stock issuable upon exercise of the warrants on a registration statement on Form S-3, which was initially declared effective by the SEC on May 28, 2004. Pursuant to the terms of the securities purchase agreement, the Company must use its best efforts to keep the registration statement continuously effective for a period of five years or until all shares registered thereon have been sold. In addition, the securities purchase agreement provides that the Company is obligated to pay penalties to investors if the investors were not permitted to sell their shares of common stock received in the financing or upon exercise of the warrants under the registration statement for five or more trading days, whether or not consecutive. As a result of the Company's failure to file its Annual Report on Form 10-K for the year ended December 31, 2005 and its Quarterly Report on Form 10-Q for the quarter ended March 31, 2006 by their filing deadlines, the investors were no longer permitted to sell their shares of common stock received in the financing or upon exercise of the warrants under the registration statement. This penalty was payable as of April 7, 2006 and on each monthly anniversary thereof while such shares of common stock were not permitted to be sold under an effective registration statement. The penalty totaled 1% of the aggregate purchase price of the shares of common stock issued on February 27, 2004 that remained unsold by the investors as of April 7, 2006 for the first month and 2% for each additional month thereafter. To fulfill its obligations under the securities purchase agreement, on July 10, 2006, the Company filed a post-effective amendment to the registration statement to convert it from a registration statement on Form S-3 to a registration statement on Form S-1, to enable the investors to sell their shares of common stock issued in the financing and upon exercise of the warrants under an effective registration statement. The SEC declared the post-effective amendment effective on July 20, 2006. The penalty payment that the Company is obligated to pay to the investors of \$216 thousand is included in accrued expenses and other current liabilities in the Company's consolidated balance sheet as of December 31, 2006.

**(17) Landlord Lease Incentives**

In August 2005, the Company entered into a lease agreement with a landlord which specified terms for the design and construction of tenant improvements for the Company's Dallas, Texas facility. As an incentive for the Company to enter into the lease agreement, the landlord agreed to contribute up to \$422 thousand towards tenant improvements. The Company recorded the full cost of the Dallas, Texas facility tenant improvements as an asset and the landlord incentive as deferred rent (current portion included in accrued expenses and other current liabilities and the long-term portion classified as other liabilities in the consolidated balance sheets) in accordance with FASB Technical Bulletin 88-1, *Issues Related to Accounting for Leases (FTB 88-1)*. Amortization of the deferred rent will be recorded as a reduction of rent expense over the remaining lease term and will be classified as an operating activity in the consolidated statement of cash flows.

In November 2005, the Company entered into a lease amendment with a landlord which specified terms for the renovation of the Company's Princeton, New Jersey corporate headquarters. As an incentive for the Company to enter into the lease amendment, the landlord agreed to contribute up to \$103 thousand towards tenant improvement costs. The Company recorded the full cost of the Princeton, New Jersey renovation project as an asset and the landlord incentive as deferred rent (current portion included in accrued expenses and other current liabilities and the long-term portion classified as other liabilities in the consolidated balance sheets) in accordance with FTB 88-1. Amortization of the deferred rent will be recorded as a reduction of rent expense over the remaining lease term and will be classified as an operating activity in the consolidated statement of cash flows.

**(18) Commitments and Contingencies**

The Company leases office and laboratory facilities and certain equipment under noncancelable operating lease arrangements. Future minimum rental commitments required by such leases as of December 31, 2006 are as follows (in thousands):

2007	\$	1,701
2008		1,501
2009		1,211
2010		820
2011		432
Thereafter		811
	<u>\$</u>	<u>6,476</u>

Rent expense amounted to \$1.7 million in 2006, \$2.3 million in 2005 and \$2.7 million in 2004.

In connection with the Company's acquisition of certain patents in 2002 and 2001, the Company assumed obligations to pay specified amounts over future years. As of December 31, 2006, the Company's obligation for these patents amounted to \$150 thousand, which is payable in 2007.

Under the amended terms of a supply agreement with Beckman Coulter, Inc. (BCI), the Company committed to purchase from BCI a minimum amount of materials and supplies in the amount of \$600 thousand during 2003, \$700 thousand during 2004 and \$1.3 million during 2005. If BCI failed to provide the Company with such materials and supplies meeting the specifications under the supply agreement on three consecutive purchase orders or five purchase orders in any 12-month period, the Company had the right to terminate the supply agreement without further payments. In accordance with the agreement, on May 18, 2004, the Company informed BCI that it had terminated the agreement, as BCI had been unable to supply the Company with materials and supplies that met the required specifications. BCI believes that they are not in breach of the agreement, and that the Company remains committed to its minimum purchase obligations. The Company believes it has no existing liabilities owed to BCI relating to any minimum purchase arrangements.

In connection with the sale of assets and liabilities of the Diagnostics business to Tepnel, the Company was required to sign an unconditional guarantee related to the lease for the Stamford, Connecticut based laboratory, which was assigned to Tepnel. The Company reflected the fair value of the guarantee of \$1.6 million at the time of the sale of the Diagnostics business as a reduction to the net realizable value of these assets and liabilities. The fair value of the guarantee amounted to \$1.0 million and \$1.4 million, respectively, of which \$721 thousand and \$1.1 million, respectively is included in other long-term liabilities in the accompanying consolidated balance sheet as of December 31, 2006 and December 31, 2005. The Company included \$412 thousand of income in other income (expense) for the year ended December 31, 2006, which represents the change in the fair value of the outstanding liability. The Company valued the guarantee based on the existing terms and conditions of the lease, an estimated vacancy of the space for one year prior to subleasing the space, and expected rental income from the sublease of the space. The lease terminates in April of 2010. Minimum remaining rents under the assigned lease totaled \$1.9 million as of December 31, 2006.

#### (19) Accumulated Other Comprehensive Income

The accumulated balances for each classification of items within accumulated other comprehensive income are as follows (in thousands):

	Foreign currency translation	Unrealized gains (losses) on securities	Accumulated other comprehensive income
Balance at January 1, 2004	\$ 2,031	\$ (390)	\$ 1,641
Foreign currency translation adjustment	1,168	-	1,168
Unrealized holding loss on available-for-sale securities	-	(44)	(44)
Reclassification adjustment for realized loss on available-for-sale securities	-	185	185
Balance at December 31, 2004	3,199	(249)	2,950
Foreign currency translation adjustment	(1,699)	-	(1,699)
Unrealized holding gain on available-for-sale securities	-	8	8
Reclassification adjustment for realized gain on available-for-sale securities	-	(19)	(19)
Balance at December 31, 2005	1,500	(260)	1,240
Foreign currency translation adjustment	1,908	-	1,908
Unrealized holding gain on available-for-sale securities	-	8	8
Reclassification adjustment for realized gain on available-for-sale securities	-	(7)	(7)
Reclassification adjustment for impairment charge on available-for-sale securities (1)	-	259	259
Balance at December 31, 2006	\$ 3,408	\$ -	\$ 3,408

(1) The Company performed an evaluation to determine whether its investment in certain available-for-sale securities was other than temporarily impaired, based upon the Company's ability and intent to hold for a reasonable period of time sufficient for a forecasted recovery of fair value, as of March 31, 2006. As a result of this evaluation and the absence of sufficient evidence to support a recovery of fair value within a reasonable period of time, the Company considered the investment in the available-for-sale securities to be other than temporarily impaired and recorded an impairment loss of \$259 thousand related to these securities during the year ended December 31, 2006. This impairment loss is included in other income (expense) in the consolidated statement of operations.

**(20) Legal Proceedings**

On or about November 21, 2001, a complaint was filed in the United States District Court for the Southern District of New York naming the Company as a defendant, along with certain of its former officers and underwriters. An amended complaint was filed on April 19, 2002. The complaint, as amended, purportedly was filed on behalf of persons purchasing the Company's stock between May 4, 2000 and December 6, 2000, and alleges violations of Sections 11, 12(a)(2) and 15 of the Securities Act of 1933, as amended, and Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, as amended, and Rule 10b-5 promulgated thereunder. The amended complaint alleges that, in connection with the Company's May 5, 2000 initial public offering (IPO), the defendants failed to disclose additional and excessive commissions purportedly solicited by and paid to the underwriter defendants in exchange for allocating shares of the Company's stock to preferred customers and alleged agreements among the underwriter defendants and preferred customers tying the allocation of IPO shares to agreements to make additional aftermarket purchases at pre-determined prices. Plaintiffs claim that the failure to disclose these alleged arrangements made the Company's registration statement on Form S-1 filed with the SEC in May 2000 and the prospectus, a part of the registration statement, materially false and misleading. Plaintiffs seek unspecified damages. The Company believes that the allegations are without merit and has, and intends to continue to, vigorously defend itself against plaintiffs' claims. In this regard, on or about July 15, 2002, the Company filed a motion to dismiss all of the claims against it and its former officers. On October 9, 2002, the court dismissed without prejudice only the Company's former officers, Dale R. Pfost and Donald R. Marvin, from the litigation in exchange for the Company entering into a tolling agreement with plaintiffs' executive committee. On February 19, 2003, the Company received notice of the court's decision to dismiss the Section 10(b) claims against the Company. Plaintiffs and the defendant issuers involved in this IPO securities litigation, including the Company, have agreed in principal on a settlement that, upon a one-time surety payment by the defendant issuers' insurers, would release the defendant issuers and their individual officers and directors from claims and any future payments or out-of-pocket costs. On March 10, 2005, the court issued a memorandum and order (i) preliminarily approving the settlement, contingent on the parties' agreement on modifications of the proposed bar order in the settlement documents, (ii) certifying the parties' proposed settlement classes, (iii) certifying the proposed class representatives for the purposes of the settlement only, and (iv) setting a further hearing for the purposes of (a) making a final determination

as to the form, substance, and program of notice of proposed settlement and (b) scheduling a public fairness hearing in order to determine whether the settlement can be finally approved by the court. On April 24, 2006, the court held a fairness hearing but has not ruled on the motion for final approval of the settlement.

The Company is a defendant in litigation pending in the Southern District of New York entitled Enzo Biochem, Inc. et al. v. Amersham PLC, et al, filed in October 2002. By their complaint, plaintiffs allege that certain defendants (i) breached their distributorship agreements by selling certain products for commercial development (which they allege was not authorized), (ii) infringed plaintiffs' patents through the sale and use of certain products, and (iii) are liable for unfair competition and tortious interference with contractual relations. The Company did not have a contractual relationship with plaintiffs, but is alleged to have purchased the product at issue from one of the other defendants. The Company has sold the business unit that was allegedly engaged in the unlawful conduct. As a result, there is no relevant injunctive relief to be sought from the Company. The complaint seeks damages in an undisclosed amount. Most of the fact discovery in the case has been taken, and a Markman hearing to construe the patent claims was conducted in early July 2005. On July 17, 2006, the Court ruled in the Company's favor on its construction of the patents asserted against the Company, and the co-defendants, including the Company, moved for summary judgment in January 2007. A hearing on the defendant's motions for summary judgment is scheduled to occur in June 2007.

Additionally, the Company has certain other claims against it arising from the normal course of its business. The ultimate resolution of such matters, including those cases disclosed above, in the opinion of management, will not have a material effect on the Company's financial position and liquidity, but could have a material impact on the Company's results of operations for any reporting period.



## (21) Quarterly Financial Data (Unaudited)

The following tables represent certain unaudited consolidated quarterly financial information for each of the quarters in 2006 and 2005. In the opinion of the Company's management, this quarterly information has been prepared on the same basis

as the annual consolidated financial statements and include all adjustments (consisting only of normal recurring adjustments, except as disclosed below) necessary to present fairly the information for the periods presented (in thousands, except per share data):

	Quarters ended			
	March 31, 2006	June 30, 2006	September 30, 2006	December 31, 2006
Total revenues	\$ 12,595	\$ 13,613	\$ 15,734	\$ 14,912
Gross margin	2,391	3,694	5,710	5,354
Loss before income taxes	(6,428)	(4,020)	(502)	(178)
Net income (loss)	(6,599)	(4,230)	(1,327)	885
Basic and diluted net income (loss) per share allocable to common stockholders	\$ (0.27)	\$ (0.17)	\$ (0.05)	\$ 0.03

	Quarters ended			
	March 31, 2005	June 30, 2005	September 30, 2005	December 31, 2005
Total revenues	\$ 14,665	\$ 15,837	\$ 16,424	\$ 14,683
Gross margin	5,641	6,795	6,897	4,780
Income (loss) before income taxes	(1,633)	434	(2,813)	(5,081)
Net loss	(1,652)	(182)	(3,768)	(3,837)
Basic and diluted net loss per share allocable to common stockholders	\$ (0.07)	\$ (0.01)	\$ (0.15)	\$ (0.16)

Included in the Company's results of operations for the fourth quarter of 2006 are adjustments that relate to 2001 and 2002. The adjustment related to 2001, included in income tax expense, is to record a deferred tax asset totaling \$174 thousand that was incorrectly omitted in a prior year. The adjustment related to 2002, included in other income (expense), is a reversal of an accrued expense obligation totaling \$200 thousand that was incorrectly recorded in a prior year. The impact of these adjustments with respect to the Company's full year 2006 and prior year consolidated financial statements is immaterial.

Also included in the Company's results of operations for the fourth quarter of 2006 is an additional adjustment that relates to 2002 and 2003. The adjustment, included in other income (expense), is a reversal of accounts payable obligations totaling \$255 thousand that the Company now believes are unlikely to require payment.

## CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable

## MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Our internal control system is a process designed by, or under the supervision of, our Chief Executive Officer and Principal Financial Officer and effected by our Board of Directors, management and other personnel to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external reporting purposes in accordance with generally accepted accounting principles.

Our internal control over financial reporting includes policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and disposition of assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with the authorization of our management and directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

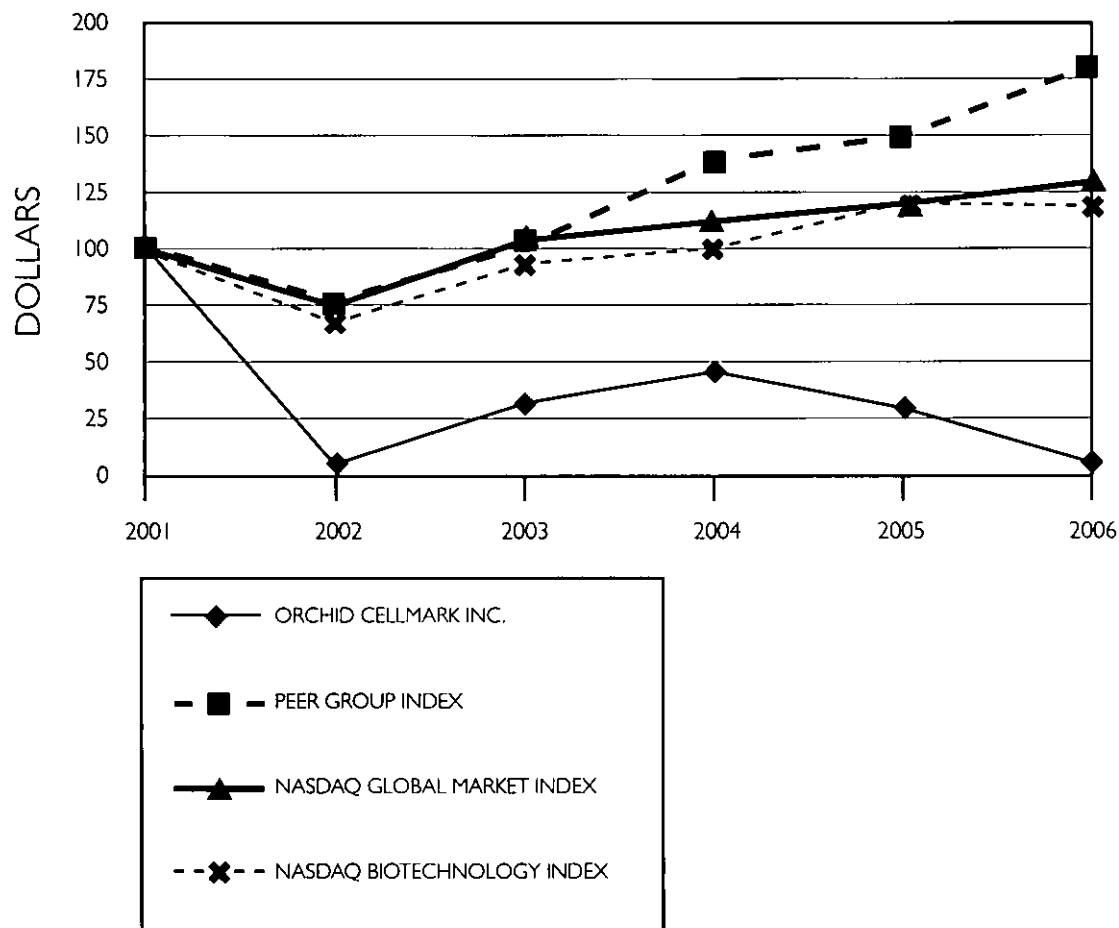
Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2006. In making this assessment, they used the control criteria framework of the Committee of Sponsoring Organizations, or COSO, of the Treadway Commission published in its report entitled *Internal Control-Integrated Framework*. Based on this evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2006.

KPMG LLP, the Company's independent registered public accounting firm, has issued an auditors' report on management's assessment of the Company's internal control over financial reporting, which is included on page 19 of this Annual Report.

## STOCK PERFORMANCE GRAPH

The following graph compares the annual percentage change in our cumulative total stockholder return on our common stock during a period commencing on January 1, 2002 and ending December 31, 2006 (as measured by dividing (A) the sum of the cumulative amount of dividends for the measurement period, assuming dividend reinvestment, and the difference between our share price at the end and the beginning of the measurement period; by (B) our share price at the beginning of the measurement period) with the cumulative total return of the Nasdaq Global Market Index, Nasdaq Biotech Index and the peer issuers during such period. The comparison assumes \$100 invested at the per share closing price on the Nasdaq Global Market of our common stock and each of the indices since January 1, 2002. We have not paid any dividends on our common stock, and we do not include dividends in the representation of our performance. The stock price performance on the graph below does not necessarily indicate future price

performance. This graph is not "soliciting material," is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference in any of our filings under the Securities Act of 1933 or the Securities Exchange Act of 1934 whether made before or after the date hereof and irrespective of any general incorporation language in any such filing. We obtained the information used on the graph from Hemscott, Inc., a source believed to be reliable, but we are not responsible for any errors or omissions in such information.



Note: The companies used in the comparison are: Laboratory Corporation of America, Quest Diagnostics, VCA Antech Inc. and Bio-Reference Laboratories. Comparison companies are different from last year's graph because two companies merged with other companies and no longer exist or are no longer publicly traded.

### Market Information

Our common stock is traded on the Nasdaq Global Market under the symbol "ORCH". The following table sets forth, for the periods indicated, the high and low closing prices for our common stock as reported by Nasdaq:

	Common Stock	
	High	Low
<b>2006:</b>		
First Quarter	\$ 8.12	\$ 5.66
Second Quarter	5.50	2.30
Third Quarter	2.78	2.05
Fourth Quarter	3.67	2.27
<b>2005:</b>		
First Quarter	\$ 13.91	\$ 11.06
Second Quarter	11.49	8.70
Third Quarter	11.18	8.41
Fourth Quarter	8.90	5.71

On March 8, 2007, the closing sale price of our common stock was \$4.21.

### Stockholders

As of March 8, 2007, there were 315 stockholders of record.

### Dividends

We have not paid dividends to our common stockholders since our inception and do not plan to pay cash dividends in the foreseeable future, as we currently intend to retain earnings, if any, to finance our growth.

# CORPORATE INFORMATION

## BOARD OF DIRECTORS

**George Poste, D.V.M., Ph.D.**

*Chairman, Orchid Cellmark Inc.*

*Director, The Biodesign Institute at Arizona State University*

**James Beery**

*Senior of Counsel*

*Covington & Burling*

**Thomas A. Bologna**

*President and Chief Executive Officer*

*Orchid Cellmark Inc.*

**Sidney M. Hecht, Ph.D.**

*John W. Mallet Professor of Chemistry and*

*Professor of Biology University of Virginia*

**Kenneth D. Noonan, Ph.D.**

*Partner*

*LEK Consulting LLP*

**Nicole S. Williams**

*Retired, Chief Financial Officer*

*Abraxis BioScience Inc.*

## OFFICERS

**Thomas A. Bologna\***

*President and Chief Executive Officer*

**Bruce F. Basarab\***

*Vice President - North American*

*Sales and Marketing*

**John C. Deighan**

*Corporate Controller*

*(Principal Financial & Accounting Officer)*

## CORPORATE HEADQUARTERS

4390 U.S. Route One

Princeton, NJ 08540

(609) 750-2200

## EUROPEAN HEADQUARTERS

Orchid Cellmark Limited

Abingdon Business Park

16 Blacklands Way

Abingdon, Oxfordshire

OX14 1DY

(44) 1235 535090

## STOCK LISTING

The Company's common stock trades on the Nasdaq Global Market under the symbol ORCH

## ANNUAL MEETING

The Company's Annual Meeting of Stockholders will be held on June 21, 2007 at 10:00 am at Homewood Suites by Hilton, 3819 US Route 1 South, Princeton, NJ 08540

## INVESTOR RELATIONS

For additional information, please contact our Investor Relations Department at (609) 750-2324 or [ir@orchid.com](mailto:ir@orchid.com)

## INDEPENDENT AUDITORS

KPMG LLP

Princeton, NJ

## TRANSFER AGENT

American Stock Transfer & Trust

Shareholder Department

40 Wall Street

New York, NY 10005

(800) 937-5449

## CORPORATE WEB SITE

[www.orchid.com](http://www.orchid.com)

## NOTE TO INVESTORS

Except for any historical information presented herein, matters presented in this document are forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are subject to risk and uncertainties that may cause results to differ materially. Please also see page 15, 'Forward Looking Statements,' for more details. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the "Risk Factors" section included in the Company's Annual Report on Form 10-K for the year ended December 31 2006 and other documents filed with the Securities and Exchange Commission.

\* Executive Officer

ORCHID CELLMARK  

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EXPERIENCE THE POWER OF DNA

*END*

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