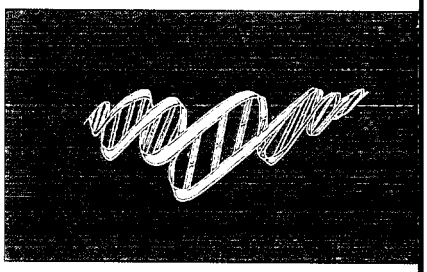


MAKING SENSE OUT OF LIFE

ILLUMINA ANNUAL REPORT 2001

As scientists continue to unravel the human genome, it has become increasingly clear that life at the molecular level is a remarkable combination of variation and complexity. Within these strands of DNA, RNA and the proteins they produce lie the secrets to understanding human growth and development, predisposition to disease and response to therapeutics. Until now, scientists have simply not had the ability to fully understand the role of these molecules in health and disease.

Illumina is providing the tools that will help researchers begin to make sense out of life. We are developing integrated systems that are capable of performing the billions of scientific tests required to understand genetic variation and function.

Illumina's BeadArray™ technology will provide the cost efficiency and throughput required to transform genetic information into medically valuable knowledge and ultimately, help usher in the era of personalized medicine.

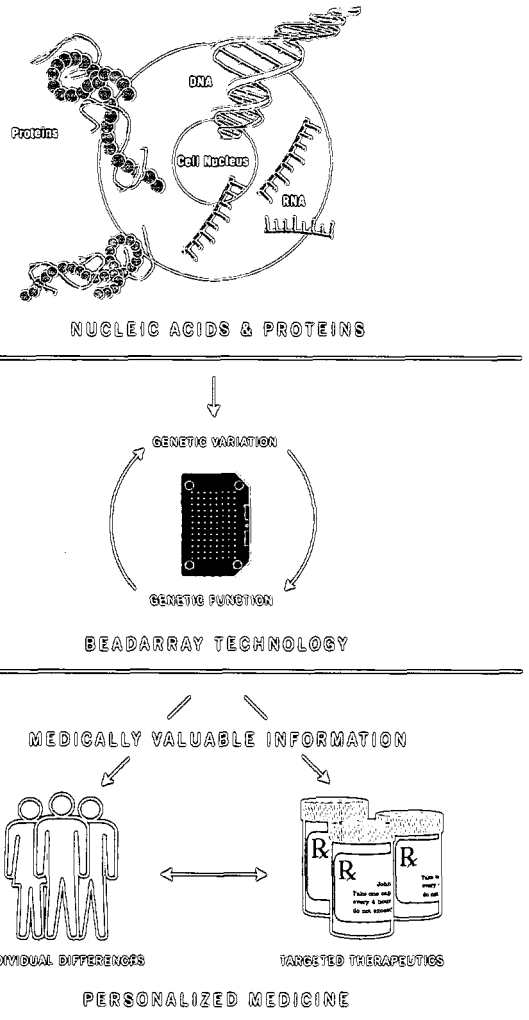


DIAGRAM 1 | PERSONALIZED MEDICINE

In the post-genome era, scientists are seeking powerful tools to study genetic variation and function. Illumina's BeadArray technology will yield information to enable the development of medicine at a personal level – a level resulting in improved diagnostics and more effective therapeutic treatments that recognize the genetic differences between individuals.

COMMERCIALIZING OUR TECHNOLOGY

To gain a sufficiently deep understanding of genetic variation and function, life science researchers will need to integrate data derived from three major application areas: single nucleotide polymorphism (SNP) genotyping, gene expression profiling, and proteomics. Unlike other platforms, Illumina's BeadArray technology can support all three applications. We've developed and are now executing a powerful commercialization strategy involving the introduction of products and services into each of these application areas.

Our strategy centers on introducing new assays and arrays both in product forms and as service offerings. This flexible approach makes our technology equally accessible to customers who wish to build in-house capabilities for genetic analysis and to those customers who prefer to take advantage of the extensive automation and scale that we've already put in place in our services organization.

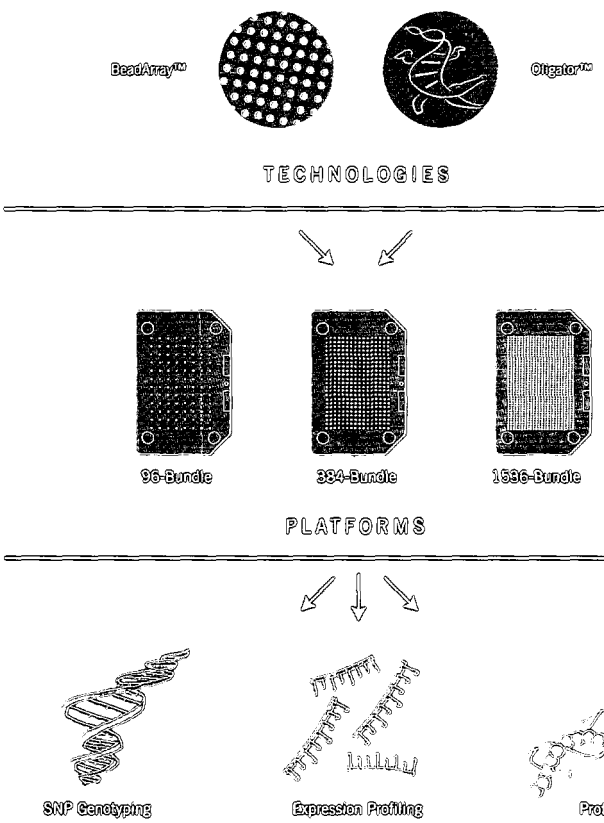


DIAGRAM 2 | COMMERCIALIZATION MODEL

Our core BeadArray and Oligator technologies will be deployed across high-throughput, "open" platforms that will support multiple assays and drive product and service development in genotyping, gene expression profiling, and proteomics.

BUILDING
OUR SERVICES BUSINESS

In June 2001, Illumina announced a commercial genotyping services agreement with GlaxoSmithKline, a world leader in the deployment of new technologies for accelerated drug discovery. This agreement marked our first foray into the services business and an important proving ground for BeadArray technology.

We have since scaled our capacity to over one million genotypes per day in a highly multiplexed, automated environment. We believe that Illumina now provides the highest throughput and lowest cost points available, making feasible large-scale genotyping studies for the first time in the industry.

In 2002, we plan to add a second application to our service offerings. Over time, we will launch additional applications on our BeadArray platform and begin to offer customers the ability to integrate data from genotyping, gene expression, and proteomics experiments.

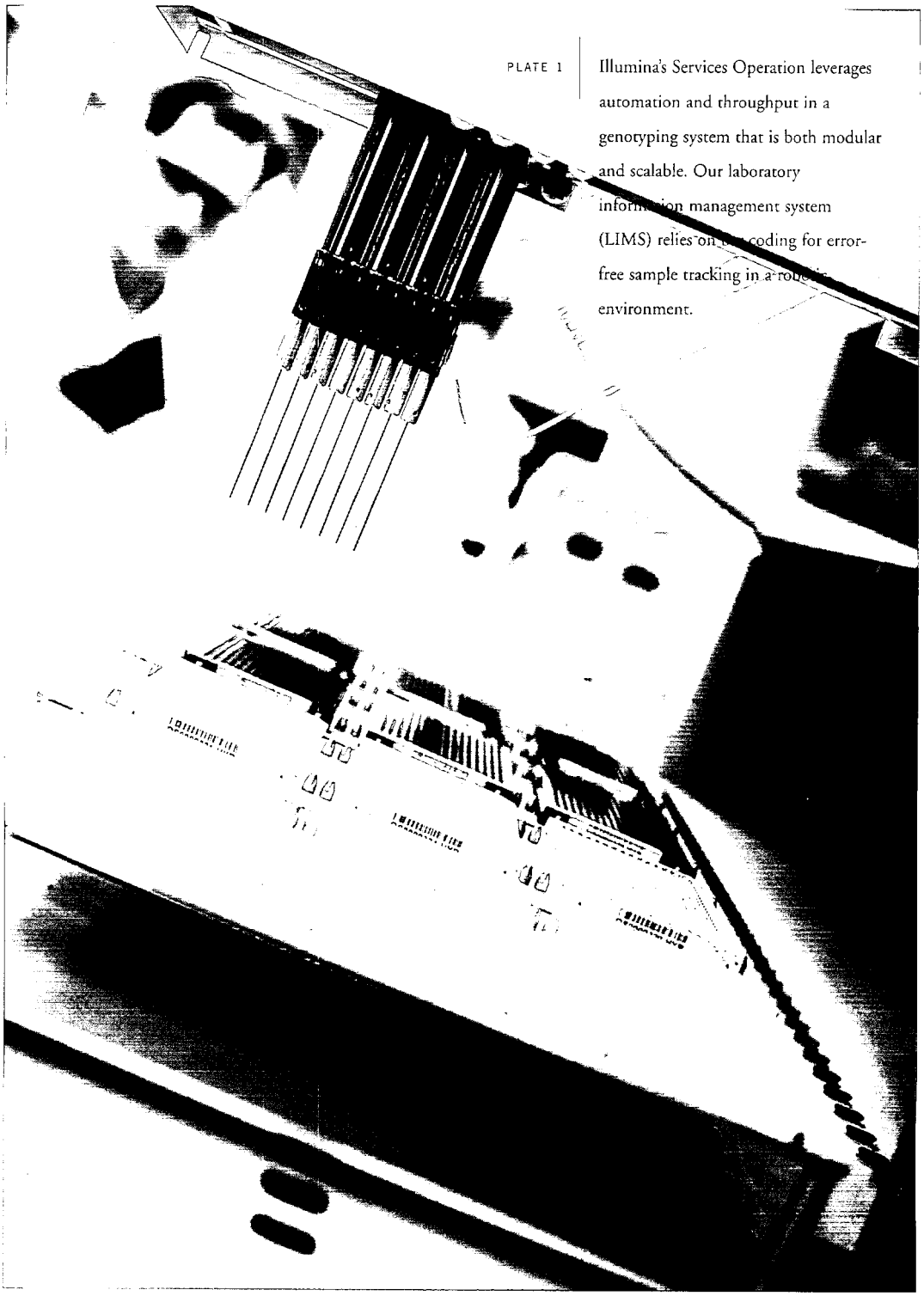


PLATE 1

Illumina's Services Operation leverages automation and throughput in a genotyping system that is both modular and scalable. Our laboratory information management system (LIMS) relies on bar coding for error-free sample tracking in a robotic environment.

SCALING
OUR OLIGATOR FARM

Illumina's entry into the large-scale genotyping market has driven internal oligonucleotide demand and reinforced the strategic importance of our Oligator DNA synthesis technology.

In 2001, we nearly tripled the output of our Oligator farm to a capacity of five million high-purity oligonucleotides (DNA sequences) per year. We've also begun to aggressively market our oligos, taking advantage of inherent throughput, quality, and cost advantages to offer prospective customers what we believe to be the best value in the industry.

We are currently introducing process enhancements that we expect to substantially increase oligo capacity and further improve our cost position, again demonstrating the power of Oligator technology.

PLATE 2 | Illumina's Oligator technology delivers superior quality and val

"PRODUCTIZING" OUR TECHNOLOGY

In mid-2002, we expect to ship our first Sentrix™ array products for large-scale SNP genotyping applications. Sentrix arrays will be part of a complete genotyping solution developed with our partner, Applied Biosystems, and marketed through their well-established sales and distribution channels. Over the past year, Applied Biosystems has been developing an array reader, software, and consumable reagent kits to be marketed with our BeadArray platform.

Sentrix arrays offer unprecedented levels of parallel sample processing along with inherent scalability to even higher levels of throughput.

Since we've taken a "universal" capture probe approach for our array designs, Sentrix arrays can be deployed flexibly and effectively into high-throughput gene expression profiling and proteomics applications now under development.

PLATE 3 | Compatible with standard microtiter plates, Sentrix arrays provide highly parallel sample throughput.

DEVELOPING COMPLETE SOLUTIONS

As Illumina prepares to deploy Sentrix array matrices in a product form to customers, we will also develop and market hardware, software, and related consumables so that target users can access complete BeadArray platform solutions. This product development program represents a critical companion element of our plan to launch gene expression and proteomics applications on our Sentrix arrays and to market complete systems through a global sales and distribution organization.

One of the key components of our offerings is an array scanning system. Illumina has made significant progress in the development of a confocal scanner to acquire data from high-throughput hybridization experiments conducted on our BeadArray platform. Our Sherlock™ scanner will offer the sensitivity, resolution, and broad dynamic range required for the dense geometries of our Sentrix microarray applications.

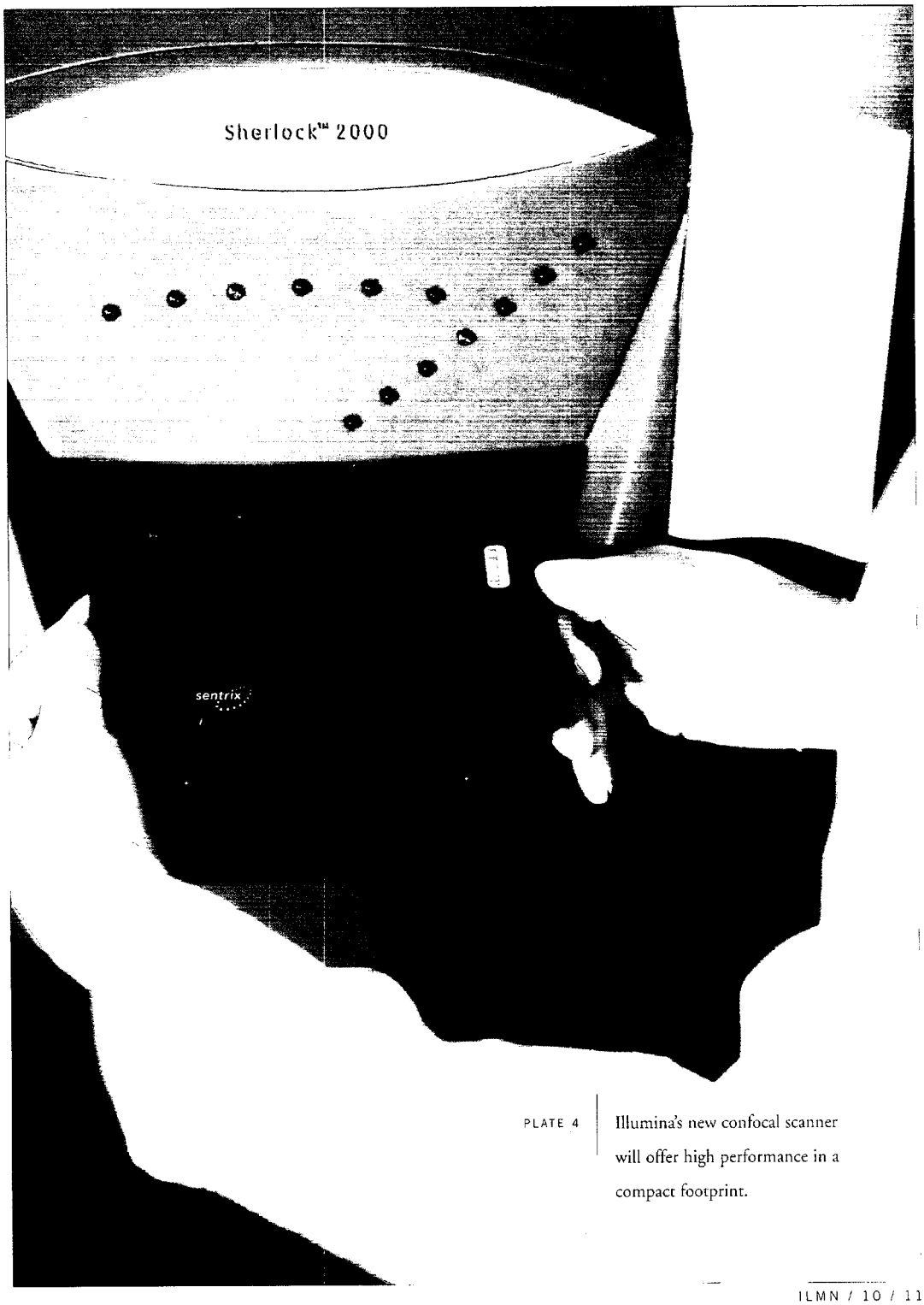


PLATE 4 | Illumina's new confocal scanner will offer high performance in a compact footprint.

TO OUR SHAREHOLDERS

2001 was an exciting year at Illumina, one that included significant accomplishments and the beginning of our commercial operations. We realized the first sales resulting from our BeadArray and Oligator technologies by launching our SNP genotyping service business and our custom oligonucleotides business. In addition, we made excellent progress toward the commercialization of our consumable Sentrix arrays, which we expect to be introduced by Applied Biosystems in mid-2002. We are also in the final

development phase of a high-resolution scanning instrument that we plan to begin shipping before yearend, enabling us to expand into areas of genetic analysis beyond SNP genotyping. And finally, we have continued to build critical pieces of infrastructure – fine-tuning our core technologies, relocating to a new facility, and expanding our very talented workforce.

Raising the Bar for Genotyping Services

In midyear 2001, we introduced our SNP genotyping services business, announcing an agreement with GlaxoSmithKline to validate and genotype specified SNPs against a set of samples. Since then, we have signed six SNP genotyping services agreements and are engaged in negotiations with a number of potential new customers. By the end of 2001, we had put in place what we believe is the highest-throughput, most cost-effective genotyping facility in the industry. This automated, LIMS-controlled operation is the foundation for performing the billions of experiments required to understand genetic variation and function.

Oligator Custom DNA Synthesis – Delivering Strategic Value

We recognized early in our history that the ability to produce large numbers of low-cost oligonucleotides would be a key strategic advantage for our BeadArray applications. The capacity of our Oligator facility has allowed us to meet our internal oligo requirements and to sell oligos to large-scale users as an additional source of revenue. And due to the cost effectiveness of our technology, we have been able to market our oligos with a price leadership strategy. We expect to make further improvements in both cost and capacity during 2002.

Other Corporate Highlights

Over the last year, we made important progress in the fundamental processes required to efficiently manufacture high-quality Sentrix arrays. We continued to increase the scope of our scientific research and development efforts. One metric of success: our intellectual property portfolio. Illumina now has 21 patents issued or allowed and 55 pending.

By the beginning of the fourth quarter, we completed our move to a new 105,000 square-foot facility. The eight-acre property includes a site to construct an additional building, which will allow us to manage our growth into the latter half of this decade without any facilities disruption.

We also continued to invest in human capital. With nearly 180 employees at the end of 2001, we have assembled one of the finest employee teams of any company in our industry. Our corporate culture values intelligence, energy level, integrity, innovation and fun.

A Strong Financial Position

In 2001, we reported revenue of $2.5 million and a net loss of $24.8 million, or $0.83 per share, compared to a net loss of $18.6 million, or $0.76 per share in 2000. We expanded significantly our investments in research and development to commercialize our technologies, spending $20.7 million in 2001 versus $13.6 million in 2000. Cash and investments at yearend totaled nearly $94 million.

2002 and Beyond

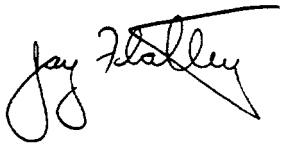
With our services and oligo businesses launched, we are now focusing on the commercialization of our consumable array

products and our new scanning instrument. By mid-2002, we expect to be supplying Sentrix 96-bundle arrays to Applied Biosystems as part of a jointly developed, high-throughput genotyping system which they will market and distribute. Equally important, we plan to follow with new BeadArray applications – through direct sales and distribution channels as well as through our services business – in gene expression profiling and proteomics. Now under development, our confocal scanner will be a key component of the new offerings.

Integral to our system launch plans is the establishment of direct sales, distribution and service channels. By Q4 of 2002, we will have expanded our North American resources and, starting in Europe, begun geographical build-out of a global sales and support organization.

It's exciting to be at the forefront of a new era of scientific exploration, ushering in innovations that are changing the face of molecular biology. Thanks to a remarkable employee team and technology platform, I'm proud to say that what used to take months now takes days, and what was once impossible is now eminently feasible.

Thank you for your ongoing support of Illumina and for sharing our vision of a future where medicine becomes truly personal.



JAY FLATLEY

PRESIDENT AND CHIEF EXECUTIVE OFFICER

Illumina's new eight-acre facility will accommodate growth for the foreseeable future.

MAKING SENSE OUT OF WORK

We have set some very challenging goals at Illumina for both the short and the long term. The fundamental driver to achieving those goals is our talented pool of employees. We pride ourselves on hiring the highest-quality people, providing them the tools they need to work effectively, and creating a culture that allows them to succeed.

CORPORATE DIRECTORY

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President and Chief Executive Officer

John R. Stuelpnagel, D.V.M.
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Vice President and Chief Financial Officer

Arnold Oliphant, Ph.D.
Vice President of Scientific Operations

John Stuelpnagel, D.V.M.
Vice President of Business Development

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Legal Counsel
Brobeck, Phleger &
Harrison LLP
San Diego, California

Form 10-K
Included with this report is a copy of the Company's Form 10-K filed with the Securities and Exchange Commission. Additional copies are available by contacting Illumina's Investor Relations Department.

Website – www.illumina.com

E-mail – investor@illumina.com

Phone – +1.858.202.4750.

Annual Meeting
The Company's Annual Meeting of Shareholders will be held at the Company's corporate headquarters at 10:00 a.m. PST on Thursday, May 23, 2002.

Selected Common Stock Data

The Company's common stock, par value $.01, has been traded under the symbol ILMN since July 28, 2000 on the National Association of Securities Dealers Automated Quotation (Nasdaq) National Market System.

As of March 29, 2001, there were approximately 203 record holders of the Company's common stock. The Company has not paid any cash dividends since its inception and does not anticipate paying any cash dividends in the foreseeable future.

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: this release may contain forward-looking statements that involve risks and uncertainties. Among the important factors which could cause actual results to differ materially from those in the forward-looking statements are Illumina's ability to fully develop its BeadArray technologies, our partner Applied Biosystem's ability to deliver system components on a timely basis, the Company's ability to develop and deploy new genomics applications for its platform technology, the ability to manufacture Sentrix arrays and other consumables in a manner sufficient to compel market trial and purchase, the ability to develop the Sherlock scanner into a commercial product, and other factors detailed in the Company's filings with the Securities and Exchange Commission including its recent filings on Forms 10-K and 10-Q or in information disclosed in public conference calls, the date and time of which are released beforehand. Illumina disclaims any intent or obligation to update these forward-looking statements beyond the date of this report.

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