SAFEGUARD SCIENTIFICS INC
Form 10-K
March 19, 2009

Table of Contents

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
Form 10-K
ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the Fiscal Year Ended December 31, 2008
Commission File Number 1-5620
Safeguard Scientifics, Inc.
(Exact name of Registrant as specified in its charter)

Pennsylvania	**23-1609753**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer ID No.)*
435 Devon Park Drive Building 800 Wayne, PA	**19087**
(Address of principal executive offices)	*(Zip Code)*

(610) 293-0600
(Registrant s telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	**Name of Each Exchange on Which Registered**
Common Stock ($.10 par value)	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No þ

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes o No þ

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes þ No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. þ

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o	Accelerated filer þ	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No þ

As of June 30, 2008, the aggregate market value of the Registrant s common stock held by non-affiliates of the registrant was $149,773,608 based on the closing sale price as reported on the New York Stock Exchange.

The number of shares outstanding of the Registrant s Common Stock, as of March 16, 2009 was 121,839,293.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement (the Definitive Proxy Statement) to be filed with the Securities and Exchange Commission for the Company s 2009 Annual Meeting of Shareholders are incorporated by reference into Part III of this report.

SAFEGUARD SCIENTIFICS, INC.
FORM 10-K
DECEMBER 31, 2008

PART I

PART II

PART III

PART IV

Table of Contents

PART I

Cautionary Note concerning Forward-Looking Statements

This Annual Report on Form 10-K contains forward-looking statements that are based on current expectations, estimates, forecasts and projections about Safeguard Scientifics, Inc. (Safeguard or we), the industries in which we operate and other matters, as well as management s beliefs and assumptions and other statements regarding matters that are not historical facts. These statements include, in particular, statements about our plans, strategies and prospects. For example, when we use words such as projects, expects, anticipates, intends, plans, believes estimates, should, would, could, will, opportunity, potential or may, variations of such words or o convey uncertainty of future events or outcomes, we are making forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Our forward-looking statements are subject to risks and uncertainties. Factors that could cause actual results to differ materially, include, among others, managing rapidly changing technologies, limited access to capital, competition, the ability to attract and retain qualified employees, the ability to execute our strategy, the uncertainty of the future performance of our partner companies, acquisitions and dispositions of companies, the inability to manage growth, compliance with government regulation and legal liabilities, additional financing requirements, labor disputes and the effect of economic conditions in the business sectors in which our partner companies operate, all of which are discussed in Item 1A. Risk Factors. Many of these factors are beyond our ability to predict or control. In addition, as a result of these and other factors, our past financial performance should not be relied on as an indication of future performance. All forward-looking statements attributable to us, or to persons acting on our behalf, are expressly qualified in their entirety by this cautionary statement. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. In light of these risks and uncertainties, the forward-looking events and circumstances discussed in this report might not occur.

Item 1. *Business*

Business Overview

Safeguard s charter is to build value in growth-stage technology and life sciences businesses. We provide capital as well as a range of strategic, operational and management resources to our partner companies. Safeguard participates in expansion financings, corporate spin-outs, management buy-outs, recapitalizations, industry consolidations and early-stage financings. Our vision is to be the preferred catalyst for creating great technology and life sciences companies.

We strive to create long-term value for our shareholders by helping our partner companies in their efforts to increase market penetration, grow revenue and improve cash flow in order to create long-term value. We concentrate on companies that operate in two categories:

Technology including companies focused on providing software as a service (SaaS), technology-enabled services and vertical software solutions for healthcare information technology, the financial services sector and internet-based businesses; and

Life Sciences including companies focused on molecular and point-of-care diagnostics, medical devices, regenerative medicine and specialty pharmaceuticals.

In 2008, our management team executed against the following objectives, to:

- *Deploy* capital in companies within our strategic focus;
- *Build* value in our partner companies with strong management teams using organic and acquisitive growth to position our partner companies for liquidity at premium valuations;
- *Realize* the value of select partner companies through selective, well-timed exits to maximize risk-adjusted value; and
- *Provide* the tools needed for investors to fully recognize the shareholder value that has been created by our efforts.

Table of Contents

To meet these strategic objectives during 2008, Safeguard focused on, and will continue to focus on:

- finding opportunities to deploy our capital in additional partner company holdings;
- helping to achieve additional market penetration, revenue growth, cash flow improvement and growth in the long-term value of our partner companies; and
- realizing value in our partner companies if and when we believe doing so will maximize value for our shareholders.

We incorporated in the Commonwealth of Pennsylvania in 1953. Our corporate headquarters is located at 435 Devon Park Drive, Building 800, Wayne, Pennsylvania 19087.

Significant 2008 Highlights

We are proud of the following key accomplishments that occurred during 2008:

- In May 2008, we consummated the sale of five legacy partner companies: Acsis, Inc., Alliance Consulting Group Associates, Inc., Laureate Pharma, Inc., Neuronyx, Inc. and ProModel Corporation. Safeguard received gross proceeds of approximately $74.5 million as a result of this transaction. In addition, Safeguard was released from an aggregate of $31.5 million in debt guarantees involving certain of the companies which were sold.
- In July 2008, Safeguard deployed $3.35 million in a Series C financing for **Swaptree.com**, an internet-based service that leverages a proprietary technology to enable users to swap books, CDs, DVDs and video games for free. Based in Boston, Massachusetts, Swaptree is using the financing for continued technological and operational development, marketing support and senior management recruitment.
- In September and December 2008, Safeguard deployed $3.5 million in a $12 million Series A financing with Oxford Bioscience Partners for **Molecular Biometrics, Inc.** The metabolomics company s lead product, ViaMetrics-E , is a diagnostic procedure designed to help identify the most viable embryos with the greatest reproductive potential for in vitro fertilization (IVF). Molecular Biometrics is utilizing the financing to launch its patented technology in Europe, Japan and Australia in 2009.
- In October 2008, Safeguard deployed $7.5 million in a $21 million Series C financing for **Tengion, Inc**., a clinical stage regenerative medicine company focused on the development of neo-organs and neo-tissues. The funding is primarily being utilized to support phase II clinical trials for the Tengion Neo-Bladder® Augment and Neo-Bladder® Conduit. These will be the first products to utilize the body s own regenerative cells and harness them to develop and complete regeneration of the bladder.
- In November 2008, Safeguard deployed $2.5 million in a $10.4 million Series AA financing for **Garnet BioTherapeutics, Inc**., a clinical stage regenerative medicine company targeting the acceleration of healing and reduced scarring associated with surgical procedures and other dermatologic conditions. Garnet Biotherapeutics is using the financing to support research and Phase II clinical trials for its proprietary human adult bone marrow-derived cells, along with manufacturing and development.
- We augmented our Technology and Life Sciences Advisory Boards with key new members and leveraged these boards to provide critical and timely analysis and guidance regarding Safeguard, our partner companies and a variety of deal opportunities.

Table of Contents

Our Strategy

We focus on companies that address the strategic challenges facing businesses today and the opportunities they present. We believe these challenges have five general themes:

Maturity Many existing technologies, solutions and therapies are reaching the end of their designed lives or patent protection; the population of the U.S. is aging; and many businesses based on once-novel technologies are now facing consolidation and other competitive pressures. The IT infrastructure is maturing and the sectors are consolidating.

Migration Many technology platforms are migrating to newer technologies and facing changing cost structures; many medical treatments are moving toward earlier stage intervention; and many business models are migrating toward different revenue-generation models integrating technologies and services.

Convergence Many technology and life sciences businesses are intersecting in fields like medical devices and targeted diagnostics for targeted therapies. Within life sciences itself, devices, diagnostics and therapeutics are converging.

Compliance Regulatory compliance is driving buying behavior in technology and life sciences. HIPPA, Sarbanes-Oxley, the FDA, the Patriot Act and the SEC are all telling businesses how to spend their money.

Cost containment The importance of cost containment grows as healthcare costs and IT infrastructure maintenance costs grow and as a recessionary dynamic weakens sectors of the economy.

These themes tend to drive growth and attract entrepreneurs who need capital support and strategic guidance. Safeguard deploys capital along with management expertise, process excellence and marketplace insight designed to provide tangible benefits to our partner companies.

Our corporate staff (28 employees at December 31, 2008) is dedicated to creating long-term value for our shareholders by helping our partner companies build value and by finding additional acquisition opportunities.

Table of Contents

Identifying Opportunities

Safeguard s go-to-market strategy, including marketing and sourcing activities, is designed to generate a large volume of high-quality opportunities to acquire majority or primary shareholder stakes in partner companies. Our principal focus is on acquiring such stakes in growth-stage companies that have attractive growth prospects within the technology and life sciences industries. Generally, we prefer candidates:

- operating in large and/or growing markets;
- with barriers to entry by competitors, such as proprietary technology and intellectual property, or other competitive advantages;
- with capital requirements between $5 million and $50 million; and
- with a compelling strategy for achieving growth.

We target our sourcing efforts on the Eastern U.S., however, our in-bound deal sourcing leads generate candidate opportunities throughout the U.S. and southeastern Canada. Our in-bound deal sourcing comes from a variety of sources, including investment bankers, syndication partners, existing partner companies and advisory board members.

Our Technology Group currently targets companies with the following business models and vertical markets:

Our Life Sciences Group currently targets companies with the following business models and vertical markets:

We believe there are many opportunities within these business models and vertical markets, and our sourcing activities are focused on finding candidate companies and evaluating how well they align with our criteria. However, we recognize we may have difficulty identifying candidate companies and completing transactions on terms we believe appropriate. As a result, we cannot be certain how frequently we will enter into transactions with new, or for that matter, existing partner companies.

Table of Contents

Competition. We face intense competition from other companies that acquire, or provide capital to, technology and life sciences businesses. Competitors include venture capital and, occasionally, private equity investors, as well as companies seeking to make strategic acquisitions. Many providers of growth capital also offer strategic guidance, networking access for recruiting and general advice. Nonetheless, we believe we are a preferable capital provider to potential partner companies because our strategy and capabilities offer:

- responsive operational assistance, including strategy design and execution, business development, corporate development, sales, marketing, finance, risk management, human resources and legal support;
- the flexibility to structure minority or majority transactions with or without debt;
- occasional liquidity opportunities for founders and existing investors;
- a focus on maximizing *risk-adjusted* value growth, rather than *absolute* value growth within a narrow or predetermined time frame;
- interim c-level management support, as needed;
- opportunities to leverage Safeguard s balance sheet for borrowing and stability; and
- a record of building revenue growth in our partner companies.

Helping Our Partner Companies To Build Value

We offer operational and management support to each of our partner companies through our experienced professionals. Our employees have expertise in business and technology strategy, sales and marketing, operations, finance, legal and transactional support. We provide hands-on assistance to the management teams of our partner companies to support their growth. We believe our strengths include:

- applying our expertise to support a company s introduction of new products and services;
- leveraging our market knowledge to generate additional growth opportunities;
- leveraging our business contacts and relationships; and
- identifying and evaluating potential acquisitions and providing capital to pursue potential acquisitions to accelerate growth.

Strategic Support. By helping our partner companies management teams remain focused on critical objectives through the provision of human, financial and strategic resources, we believe we are able to accelerate their development and success. We play an active role in determining the strategic direction of our partner companies, including:

- defining short- and long-term strategic goals;
- identifying and planning for the critical success factors to reach these goals;
- identifying and addressing the challenges and operational improvements required to achieve the critical success factors and, ultimately, the strategic goals;
- identifying and implementing the business measurements that we and others will apply to measure a company s success; and
- providing capital to drive growth.

Management and Operational Support. We provide management and operational support to our partner companies in order to accelerate their growth. We engage in ongoing planning and assessment of the development of our partner companies and their management teams. Our executives and our Advisory Board members provide mentoring, advice and guidance to develop the management of our partner companies. Our executives serve on the boards of directors of our partner companies, working with them to develop and implement strategic and operating plans. We measure and monitor achievement of these plans through regular operational and financial performance measurements. We believe these services provide our partner companies with significant competitive advantages within their respective markets.

Table of Contents

Realizing Value

In general, we will hold our stake in a partner company as long as we believe the risk-adjusted value of that stake is maximized by our continued ownership and effort. From time to time, we engage in discussions with other companies interested in our partner companies, either in response to inquiries or as part of a process we initiate. To the extent we believe that a partner company s further growth and development can best be supported by a different ownership structure or if we otherwise believe it is in our shareholders best interests, we may sell some or all of our stake in the partner company. These sales may take the form of privately negotiated sales of securities or assets, public offerings of the partner company s securities and, in the case of our publicly traded partner companies, sales of their securities in the open market. We have in the past taken partner companies public through rights offerings and direct share subscription programs, and we will continue to consider these (or similar) programs to maximize the value of our partner companies to our shareholders. We expect to use the proceeds from these sales (and sales of other assets) primarily to pursue opportunities to create new partner company relationships or for other working capital purposes, either with existing partner companies or at Safeguard.

Our Partner Companies

An understanding of our partner companies is important to understanding Safeguard and its value-building strategy. Following are more detailed descriptions of the partner companies in which we owned a stake at December 31, 2008. The indicated ownership percentage is presented as of December 31, 2008 and reflects the percentage of the vote we are entitled to cast based on issued and outstanding voting securities (on a common stock equivalent basis), excluding the effect of options, warrants and convertible debt.

In May, 2008 we completed the sale of our interests in Acsis, Inc., Alliance Consulting Group Associates, Inc., Laureate Pharma, Inc., Neuronyx, Inc. and ProModel Corporation (the Bundle Transaction).

Clarient, Inc. ***(Safeguard Ownership: 60.4%)***

General. Clarient (www.clarientinc.com) is an advanced oncology diagnostics services company that combines innovative technologies, meaningful test results, and world-class expertise to improve the lives of those affected by cancer by bringing clarity to a complex disease.

Opportunity. Safeguard first took an ownership interest in Clarient in 1996, and we have increased our ownership position over time. Shares of Clarient s common stock trade on the Nasdaq Capital Market under the symbol CLRT. We believe that the growing demand for personalized medicine and the continued aging of the world s population, coupled with the higher incidence of cancer among seniors, support an expanding market for Clarient s services. Clarient estimates that the market for advanced cancer diagnostic testing will increase from an estimated $2.0 billion today, to over $3.0 billion by 2012, based upon industry analyst data.

Strategy. Clarient s goal is to position itself within a wide-range of the oncology diagnostics markets, including molecular marker development and molecular marker clinical validation through a technology-empowered laboratory. Clarient has deployed the best available testing platforms, which are connected to its internet-based platform, PATHSiTE®, that delivers critical information to community pathologists, oncologists, and pharmaceutical researchers. Clarient focuses on developing high-value, revenue generating opportunities by connecting its medical expertise and intellectual property with its strong commercial team to commercialize novel diagnostic tests (also referred to as novel markers or biomarkers) which detect characteristics of an individual s tumor or disease that, once identified and qualified, allow for more accurate prognosis, diagnosis, and treatment. In addition, Clarient is working to identify specific partners and technologies where it can assist in the commercialization of third-party developed novel diagnostic tests. Clarient believes that broader discovery and use of novel diagnostic tests will clarify and simplify decisions for healthcare providers and the biopharmaceutical industry.

Services. Clarient provides a wide range of cancer diagnostic and consultative services which include technical laboratory services and professional interpretation; such reports and analyses are provided through its internet-based application, PATHSiTE.

Clarient s anatomic pathology services are focused on the most common types of solid tumors: breast, prostate, lung and colon, representing over 80% of annual diagnosed cases in the United States. Clarient also offers an extensive menu of hematopathology testing for leukemia and lymphoma.

Table of Contents

Clarient s laboratory continues to expand its service offerings as new assays emerge. Clarient also provides a complete complement of commercial services to biopharmaceutical companies and other research organizations, ranging from drug discovery assistance to the development of directed diagnostics through clinical trials. Clarient s menu of specialized technologies used to assess and characterize cancer include: immunohistochemistry (IHC), flow cytometry, molecular/PCR, fluorescent in situ hybridization (FISH), cytogenetics, and histology.

Sales and Marketing. Clarient s primary target market includes community pathology practices and hospitals. The process of selling diagnostic services requires a knowledgeable and skilled diagnostic sales force that can help pathologists understand the mechanisms of targeted therapy and the value of prognostic and predictive testing which Clarient offers. Clarient s sales approach is designed to understand current or potential customers needs and to then provide the appropriate solutions from its expanding range of diagnostic services. Clarient s marketing efforts continued to focus on establishing a strong and distinctive brand identity for diagnostic services, with a core focus of targeting community pathologists. Clarient uses CONTiNUUM , its national and regional seminar and webcast programs to provide a collaborative environment between potential customers and its advisory board and medical staff. Clarient also uses a web-based sales system to optimize customer and territory management.

Patents and Proprietary Technology. Clarient is focused on developing an intellectual property portfolio for its laboratory service methodologies which utilizes automated cellular instrumentation, rare event identification, and its proteomic mathematic capabilities. In addition, Clarient holds trademarks to protect the names of its service offerings. To protect its trade secrets and proprietary know-how, Clarient utilizes confidentiality agreements with its employees, consultants, customers, business partners, and other third parties.

In March 2007, Clarient sold its technology business (which developed, manufactured and marketed the ACIS Automated Image Analysis System) and related intellectual property to Carl Zeiss MicroImaging, Inc. (Zeiss) (the ACIS Sale). As part of the ACIS Sale, Clarient transferred its patent portfolio and other intellectual property relating to its technology business to Zeiss. Clarient entered into a license agreement with Zeiss pursuant to which Zeiss granted Clarient a non-exclusive, perpetual, and royalty-free license to certain of the transferred patents, copyrights, and software code for use in connection with image applications (excluding the sales of imaging instruments) and its laboratory services business. Clarient believes this license will be useful in its development of new tests, applications, unique analytical capabilities, and other service offerings, including the development of proprietary tests.

Competition. Competition in the diagnostic services industry is intense and has increased with the rapid pace of technological development. The oncology testing marketplace has been consolidating. The esoteric clinical laboratory business, including flow cytometry, molecular diagnostics, analysis of tumors of unknown origin, and expanded services for IHC and cytogenetics is highly competitive. Clarient s industry is led by two national laboratories: Laboratory Corporation of America Holdings (also known as LabCorp) and Quest Diagnostics Incorporated. Both companies offer a wide test and product menu with significant financial, sales, and logistical resources, and have extensive contracts with a variety of payor groups. Secondary competitors include laboratories that are affiliated with large medical centers or universities, such as Mayo Medical Laboratories and Associated Regional and University Pathologists. New competitors have more recently entered Clarient s market and have further heightened the competitive landscape. Clarient anticipates that additional companies will enter its market and will aggressively compete for market share.

Governmental Regulation. Because Clarient operates a clinical laboratory, many aspects of its business are subject to complex federal, state, and local regulations. In 1988, Congress passed the Clinical Laboratory Improvement Amendments (CLIA) establishing quality standards for all laboratory testing to ensure the accuracy, reliability and timeliness of patient test results regardless of where the test was performed. Under CLIA, a laboratory is defined as any facility which performs laboratory testing on specimens derived from humans for the purpose of providing information for the diagnosis, prevention or treatment of disease, or the impairment of, or assessment of health. CLIA specifies quality standards for proficiency testing, patient test management, quality control, personnel qualifications and quality assurance for laboratories performing non-waived tests. To enroll in the CLIA program, laboratories must register by completing an application, paying fees, being surveyed, if applicable, and becoming certified in the state in which they operate. The State of California Department of Health and Human Services Laboratory Field Services enforces the state s requirements to apply for and maintain licensure, CLIA certification, and proficiency testing. CLIA

accreditation is maintained through regular inspections by the College of American Pathologists. Clarient s facilities have been inspected by these authorities and have been issued licenses to manufacture medical devices and provide laboratory diagnostic services in California. Clarient received its California state licensure with CLIA certification in the fourth quarter of 2004. These licenses must be renewed every year. The State of California could prohibit Clarient s provision of laboratory services if Clarient failed to maintain these licenses.

Facilities. Clarient leases a 78,000 square foot facility in Aliso Viejo, California to accommodate its executive and administrative offices and its diagnostic services laboratory. Clarient currently subleases approximately 14,000 square feet of the space to one subtenant.

Table of Contents

Employees. As of December 31, 2008, Clarient had 269 employees: 165 in laboratory diagnostics, research and development and support positions; 62 in executive, finance, billing, and administrative positions; and 42 in sales and marketing positions. Clarient believes that its relationship with its employees is good. In addition to full-time employees, Clarient utilizes the services of various independent contractors, primarily for certain product development, marketing and administrative activities.

LIFE SCIENCES PARTNER COMPANIES

Advanced BioHealing, Inc. (Advanced BioHealing) ***(Safeguard Ownership: 28.3%)***

General. Advanced BioHealing (www.advancedbiohealing.com), is a leader in the science and clinical application of regenerative medicine. Advanced BioHealing develops and markets cell-based and tissue-engineered products that use living cells to repair or replace body tissue damaged by injury, disease or the aging process. The company s lead product, Dermagraft (www.dermagraft.com), is FDA-approved for the treatment of diabetic foot ulcers, a common affliction of persons with diabetes. Since Safeguard s investment in 2007 and Advanced BioHealing s official re-launch of Dermagraft, Advanced BioHealing has grown its revenue and has increased its workforce to more than 160 employees to match growing demand.

Opportunity. As the U.S. population ages, the payors in our healthcare system are applying pressure to increase effective treatments while reducing costs. Advanced BioHealing helps healthcare providers meet these constraints for wound patients by providing an innovative and value-oriented healthcare product. We believe the market for Advanced BioHealing s products will continue to grow as its treatments are adopted and approved for other indications. Industry analysts estimate the market opportunity in the advanced wound care sector at $4 billion and in Advanced BioHealing s addressable diabetic foot ulcer and intravenous leg ulcer sector at $1 billion.

Alverix, Inc. (Alverix) ***(Safeguard Ownership: 50.0%)***

General. Alverix (www.alverix.com) is an optoelectronics company that produces low-cost, handheld readers with the accuracy and precision of laboratory instruments. Alverix partners with diagnostic and original equipment manufacturers (OEMs) seeking to increase current test accuracy, improve the portability of existing tests, or develop new assays for use at the point-of-care (POC). Whether at a physicians office, laboratory outreach location, retail clinic or a patient s home, Alverix s POC devices enable central laboratory quality results to be obtained where test information is critical to patient care. Previously, this level of performance required expensive laboratory instrumentation. Alverix is building on 30 years of expertise in optical sensors, image processing, software and signal enhancement algorithms to develop proprietary technologies for low-cost, portable detection devices for medical diagnostics and other applications. Alverix was spun out of Avago Technologies, which itself was spun out of Agilent, Inc. Current applications include testing for drugs of abuse (DOA), cardiac, cancer and infectious disease. Alverix currently has an OEM contract with Chembio Diagnostic Systems.

Opportunity. As we focus our efforts on companies bringing advanced diagnostic technologies to the market, Alverix presents an opportunity to capitalize on two macro trends: first, the demand for improved cost and efficiency of healthcare delivery; and second, greater consumer control of personal healthcare. Both of these trends are increasing demand for rapid POC tests. Alverix s detection devices provide immediate, accurate results in POC venues (such as physicians offices, clinics, retail environments, workplace or home), with the potential for greater functionality and sensitivity. Because of its disruptive technologies, we believe Alverix will be able to exploit significant portions of the fragmented multi-billion dollar POC market. Additionally, Alverix s flexible technology platform will permit future product expansions that increase access to new and existing diagnostic tests, as well as promoting next-generation diagnostics designed for broad use by physicians and patients.

Avid Radiopharmaceuticals, Inc. (Avid) ***(Safeguard Ownership: 13.9%)***

General. Avid (www.avidrp.com) is developing molecular imaging agents to detect neurodegenerative diseases such as Alzheimer s disease (AD), Parkinson s disease (PD) and Dementia with Lewy Bodies (DLB). Avid is conduct clinical trials at more than 25 research centers across the U.S. and initiated Phase III trials in early 2009 for its

amyloid imaging compound, florpiramine F18 (18F-AV-45), which tests for the presence of AD pathology in people with symptoms of cognitive impairment. In the course of these trials, Avid has expanded its pharma collaborations and today has excellent relationships with Lilly, Pfizer and Genentech, as well as with smaller biotech firms.

Table of Contents

Opportunity. Avid is developing a new technology that targets the increasing demand for diagnostics for an aging population. We believe that this demand for effective and value-oriented healthcare products will only increase in the future, and Avid is well-positioned to address the critical need to improve diagnosis and characterization of AD, PD and other chronic neurological disorders. The World Health Organization reports that nearly one billion people worldwide are affected by neurological disorders, and an estimated 6.8 million people die every year as a result of neurological disorders. The addressable market for the diagnosis of Alzheimer s disease alone is estimated at more than $500 million annually. As the global population ages, there is an increasing demand for innovative, accurate solutions to diagnose these diseases. Avid s vision is to develop novel diagnostic imaging agents to enable earlier and more accurate diagnosis, treatment selection and therapeutic monitoring for these significant medical disorders.

Cellumen, Inc. (Cellumen) (Safeguard Ownership: 40.6%)

General. Cellumen (www.cellumen.com) delivers proprietary services and products to support drug discovery and development. By leveraging its cellular systems biology (CSB) technology, Cellumen s objective is to improve the efficacy, decrease the toxicity and optimize patient stratification and treatment for pharmaceutical companies new and existing drugs. The goal of this approach is to obtain accurate measures of efficacy and potential toxicity of these drugs and biologics well before entering expensive clinical testing. Another goal is to improve clinical trial enrollment and increase new drug efficacy by conducting theranostic (predicting response to therapeutics) patient profiling. Cellumen is continuing to develop and commercialize its product catalog and CSB platform. Cellumen s customers include Eli Lilly, Mitsubishi Tanabe Pharma and Roche, as well as the U.S. Environmental Protection Agency, Food and Drug Administration and National Institutes of Health.

Opportunity. Through CSB, Cellumen is striving to be the leading provider of proprietary solutions for pharmaceutical companies, seeking to drive down costs and increasing the efficacy of drug development and clinical trials. Cellumen s breakthrough technology is positioned to tap into an annual $2 billion market opportunity in outsourced pharmaceutical R&D programs by focusing on the pharmaceutical industry s continuous push to improve product development timelines. With the current failure rate in drug development surpassing 90%, there is a clear need within the pharmaceutical industry for more efficient drug discovery methods and technologies. Cellumen has positioned itself to address this need for a lucrative and expanding market.

Garnet BioTherapeutics, Inc. (Garnet) (Safeguard Ownership: 31.2%)

General. Garnet (www.garnetbio.com) is a clinical stage regenerative medicine company targeting the acceleration of healing and reduction of scarring associated with surgical procedures and other dermatologic conditions. Garnet has identified the first in a series of cell products called GBT 009, which is capable of reducing inflammation and promoting healing. These cells are safe, and when applied to a cut or incision, release pro-healing and anti-inflammatory factors that accelerate wound closure and reduce or eliminate scarring. In addition, Garnet has developed proprietary scalable cell expansion technology that can cost-effectively generate a large number of patient doses. Garnet is initially developing its cell-based therapy for cosmetic and dermatologic applications where accelerated healing and reduced scarring are desirable. Garnet expects to initiate Phase II clinical trials for its proprietary human adult bone marrow-derived cells in 2009.

Opportunity. Cosmetic applications such as breast augmentation, abdominoplasty and facelifts represent a market opportunity of more than $1 billion worldwide. Garnet believes that the cell-based therapy may also be applicable for treatment of burns, auto-immune disorders such as psoriasis, and in other conditions where inflammation or scar formation plays an important role in disease pathology. Garnet is well positioned within the regenerative medicine field, which is already yielding the next generation of significant and differentiated medical products.

Molecular BioMetrics, Inc. (Molecular Biometrics) (Safeguard Ownership: 37.8%)

General. Molecular Biometrics (www.molecularbiometrics.com) is a metabolomics company developing novel clinical tools for applications in personalized medicine to more accurately characterize biologic function in health and disease. Currently focused on reproductive health, Molecular Biometrics lead product, ViaMetrics-E , is the first, and only, non-invasive diagnostic procedure designed to help identify the most viable embryos with the greatest

reproductive potential for in vitro fertilization (IVF), while reducing multiple births. Current techniques used to determine reproductive potential of embryos are not as effective as they should be in today s era of personalized medicine. Molecular Biometrics objective is to improve upon today s IVF success rate, which range between 25-35% worldwide, and help shift the medical practice away from multiple embryo transfer, thereby reducing the likelihood of multiple births.

Table of Contents

Opportunity. The availability of Molecular Biometrics ViaMetrics-E will be revolutionary for the 7.3 million people in the United States, and the millions of others worldwide, who are affected by infertility. This technology will fulfill an unmet medical need and is well positioned to tap into the $4 billion global IVF market. ViaMetrics-E is intended to provide increased accuracy when assessing the viability of an embryo for implantation through IVF. ViaMetrics-E may hold significant potential to increase IVF success rates, while minimizing the number of IVF cycles and/or the number of embryos required to achieve a live birth. ViaMetrics-E could also provide physicians with a procedure that may reduce the incidence, costs, and medical risk associated with multiple births, which constitute more than one-third of births under current IVF methods. Currently, the annual number of assisted reproductive technologies (ART) cycles, with the majority being IVF, exceeds 1 million worldwide. Each IVF cycle in the U.S. costs between $10,000 and $15,000. The ability to reduce the number of IVF cycles and the complications associated with multiple births could result in substantial savings to the overall healthcare system.

NuPathe, Inc. (NuPathe) (Safeguard Ownership: 23.5%)

General. NuPathe (www.nupathe.com) is a specialty pharmaceutical company developing innovative therapeutic products for the treatment of neurological and psychiatric diseases, including migraine and Parkinson s disease. NuPathe initiated phase III clinical trials in early 2009 for Zelrix™, the first and only migraine patch that delivers Sumatriptan through NuPathe s proven and proprietary SmartRelief technology, intended to reduce negative side effects such as nausea and/or vomiting. Development continues for NuPathe s NP201 Parkinson s Disease LAD™, which represents a potentially superior alternative to existing options by providing consistent drug levels over a prolonged period. Pre-clinical proof-of-concept studies for NP201 are underway.

Opportunity. Patients clearly need better options for acute migraine. Triptans, the gold standard in treatment today, can be quite efficacious, but are inadequate for many migraine sufferers in their current forms. Many patients experience difficulty taking their medication due to nausea that accompanies their migraine and many experience troublesome side effects from current medications. Phase I clinical trials demonstrated that Zelrix delivers sumatriptan in a rapid, predictable and consistent manner. Migraine represents a more than $3 billion market affecting more than 28 million people annually in the U.S.

Rubicor Medical, Inc. (Rubicor) (Safeguard Ownership: 44.6%)

General. Rubicor (www.rubicor.com) has developed and is commercializing medical devices for minimally invasive breast biopsy and tissue removal. Rubicor s mission is to redefine breast care and to change the way physicians diagnose and treat breast cancer and benign breast disease. Rubicor has three FDA approved breast care devices in the U.S. for biopsy and removal of breast tissue and lesions. During 2008, Rubicor halted operations and furloughed and terminated employees while it sought additional funding. Rubicor is in active negotiations now with parties to fund the company to enable it to launch its three products in 2009. It is anticipated that a new management team and new board representatives will be brought in along with new capital partners .

Opportunity. The U.S. market for breast biopsy and therapeutic procedures exceeds an estimated $500 million annually, with approximately 1.5 million biopsies performed annually. Rubicor s devices represent attractive alternatives to existing procedures and technology for breast lesion biopsy and removal, resulting in a more accurate assessment of the sample.

Tengion, Inc. (Tengion) (Safeguard Ownership: 4.5%)

General. Tengion (www.tengion.com) is a clinical stage regenerative medicine company that is focused on developing, manufacturing and commercializing human neo-organs and neo-tissues using its Autologous Organ Regeneration Platform . Tengion s mission is to transform the lives of patients in need of an organ transplant or augmentation. Tengion uses biocompatible materials and a patient s own (autologous) cells to create a functional neo-organ or neo-tissue that is designed to catalyze the body s innate ability to regenerate. Phase II trials are underway for Tengion s bladder treatments.

Opportunity. Tengion s patented technology is the first product to utilize the body s own regenerative cells and harness them to develop and complete regeneration of the bladder. This technology represents a tremendous opportunity to

help shape the future of regenerative medicine and expand upon the convergence of biotechnology and medical devices. Tengion s progress represents a growing trend towards regenerative medicine, a field anticipated to become the source of significant innovation and medical products over the next decade. Tengion s addressable market is estimated at more than $1 billion in the U.S. and up to $3 billion worldwide.

Table of Contents

TECHNOLOGY PARTNER COMPANIES
MINORITY HOLDINGS

Advantedge Healthcare Solutions, Inc. (AHS) (Safeguard Ownership: 37.7%)
General. AHS (www.ahsrcm.com) is a healthcare information technology (HCIT) company that provides medical billing software and services to healthcare providers on an outsourced basis. AHS employs a web-based technology platform and continuous business process improvement methods to increase the operating efficiencies of medical billing and to improve results for its physician customers.
Opportunity. AHS competes in a fragmented outsourced revenue cycle management market of approximately $4 billion in annual revenue. AHS plans to grow primarily via acquisition and by employing its proprietary platform and services. AHS management has significant experience acquiring revenue cycle management companies. AHS acquired Professional Billing & Management Services, Inc. (PBMS), a premier and long-standing anesthesia billing company located in Chambersburg, Pennsylvania in 2007, and Staten Island University Hospital (SIUH) s existing physician billing division, Regency Alliance Services in early 2009. The company is actively pursuing additional acquisition opportunities.

Authentium, Inc. (Authentium) (Safeguard Ownership: 20.0%)
General. Authentium (www.authentium.com) provides anti-malware and identity protection software that is used by leading software providers, including Google, Microsoft and Symantec. In 2008, Authentium launched an industry-shifting identity theft prevention product called SafeCentral (www.safecentral.com). SafeCentral significantly reduces the risk of consumers having their personal information stolen while using internet services such as online banking, tax filing, etc. (which are significant sources of identity theft).
Opportunity. The rapid proliferation of viruses and malware has spawned an enormous anti-malware market expected to reach over $7 billion in 2009. Authentium s new product, SafeCentral, is a next generation anti-malware solution that is gaining traction with customers such as First Trade and offers a tremendous growth opportunity in 2009 and beyond. Identity theft is becoming an increasingly common problem with over eight million US adults affected in 2007.

Beyond.com, Inc. (Beyond) (Safeguard Ownership: 37.1%)
General. Beyond (www.beyond.com) is an internet-based business that provides career services and technology to job seekers and employers throughout the United States and Canada. Beyond is the largest niche and local career network, comprised of more than 15,000 online communities. The Beyond network of websites accounts for over five million resumes and powers career portals for some of the internet s best known career brands, media publishers and well-established career portals.
Opportunity. Beyond is a leader in the transition from print to online recruitment, a field where online job listings are projected to reach $12 billion by 2012. Already one of the industry s leading career platforms, Beyond is well positioned for growth by expanding its partner network and generating more revenue opportunities from targeted niche and local job advertisements.

Bridgevine, Inc. (Bridgevine) (Safeguard Ownership: 20.8%)
General. Bridgevine (www.bridgevine.com) is an internet marketing company that enables online consumers to shop for special offers as well as compare and purchase digital services and products such as internet, phone, VoIP, TV, wireless, music, entertainment and more. Bridgevine leverages its proprietary technology platform to acquire leads through numerous sources, including search, e-tail and retail, and then offers an optimized bundle of products and services from its growing base of participating merchants, which now totals over 100. Founded to capitalize on a fragmented and confusing online services marketplace, Bridgevine supplies a simplified shopping experience coupled with unique content and promotions, education and comparison services to end-users through its network of websites. Bridgevine s advertising partners include Comcast, AT&T, Charter, Real Networks, Dlink, Vonage, Netflix, Qwest, Time Warner and Verizon.

Opportunity. Bridgevine s technology platform provides consumers with one stop shopping for digital services (as opposed to goods which are sold on websites such as Amazon.com). Bridgevine participates in the large and growing customer generation segment of the market for digital services in the U.S., which has been projected to grow to $10 billion by 2014. As additional services migrate to the digital domain, Bridgevine will be well positioned to take advantage of broader market opportunities.

Table of Contents

GENBAND, Inc. (GENBAND) (Safeguard Ownership: 2.3%)

General. GENBAND (www.genband.com) provides media gateway, IP security and session border gateway technology to telecommunications providers. NextPoint Networks, Inc. merged with GENBAND in September 2008. NextPoint Networks, Inc. was formed in 2007 through the merger of Safeguard s partner company NexTone Communications and Reef Point Systems. Over the past five years, GENBAND has secured business with more than half of the world s top 100 network service providers, partnered with seven of the world s largest telecom equipment manufacturers, extended its global reach to more than 80 countries, executed four acquisitions, and expanded its employee base from 80 to 500.

Opportunity. GENBAND competes in a market estimated at $12 billion and is aggressively developing products that enable telecommunications and mobile networks to provide enhanced voice and data services such as VOIP and internet video. GENBAND will benefit from its aggressive product development path aimed at the integration of emerging technologies like femto base stations, security, control and packet inspection.

Kadoo, Inc. (Kadoo) (Safeguard Ownership: 14.0%)

General. Kadoo (www.kadoo.com) was established to enable online users to post, manage and securely share large volumes of digital photos, videos and other files. Kadoo effectively ceased operations in February 2009 as it was unable to raise additional funding.

Portico Systems, Inc. (Portico) (Safeguard Ownership: 46.8%)

General. Portico (www.porticosys.com) is a HCIT company that is pioneering the next generation of healthcare payor software solutions. Portico s integrated provider management solution offers a suite of solutions that helps health plans address challenges such as growing healthcare costs, quality, consumerism, competition and regulatory changes while creating an agile infrastructure that lays a foundation for efficiency and flexibility. The Portico Provider Platform streamlines provider network processes and accelerates new revenue streams, enhancing employee effectiveness and optimizing provider relationships.

Opportunity. Portico s exclusive focus on provider operations has allowed the company to design the only modular end-to-end provider platform that streamlines the interactions between payors and their provider networks. Portico s offerings also enable payors to reduce costs by removing duplicative processes within a payor s infrastructure. Portico acquired Ethidium Health Systems in 2008 to enable its payor customers to better collaborate with the growing home health care market. Portico is positioned at the forefront of emerging medical home and pay-for-performance initiatives with its industry-leading integrated provider management platform. Portico addresses a market for U.S. healthcare payor IT spending estimated at $7 billion.

Swaptree, Inc. (Swaptree) (Safeguard Ownership: 29.3%)

General. Swaptree (www.swaptree.com) is an internet-based business that enables users to trade books, CDs, DVDs and video games using its proprietary trade matching software. Swaptree s innovative model has gained significant media attention, which has driven its unique visitors to grow more than 300% since becoming a Safeguard partner company, while its user base has grown over fivefold during the same period.

Opportunity. Swaptree.com has many of the features users have come to expect from other community sites, including discussion forums; the ability to create smaller trading groups around certain interests or types of items; and tools for integrating Swaptree with other e-commerce sites such as Amazon.com and social networks such as Facebook and MySpace. Swapping is the next logical step in internet commerce. First there was e-commerce, then online auctions, and then online classifieds for buying and selling used items. Now there is demand for trading online, driven in no small part by an economy where consumers are spending less, searching for great deals, and a desire to be more environmentally friendly.

FINANCIAL INFORMATION ABOUT OPERATING SEGMENTS

Information on revenue, operating income (loss) and net income (loss) from continuing operations for each operating segment of Safeguard s business for each of the three years in the period ended December 31, 2008 and assets as of

December 31, 2008 and 2007 is contained in Note 20 to the Consolidated Financial Statements.

OTHER INFORMATION

The operations of Safeguard and its companies are subject to environmental laws and regulations. Safeguard does not believe that expenditures relating to those laws and regulations will have a material adverse effect on the business, financial condition or results of operations of Safeguard.

Table of Contents

AVAILABLE INFORMATION

All periodic and current reports, registration statements, and other filings that Safeguard is required to file with the Securities and Exchange Commission (SEC), including our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) of the Exchange Act, are available free of charge from the SEC s website (http://www.sec.gov) or public reference room at 450 Fifth Street N.W., Washington, DC 20549 (1-800-SEC-0330) or through Safeguard s internet website (http://www.safeguard.com). Such documents are available as soon as reasonably practicable after electronic filing of the material with the SEC. Copies of these reports (excluding exhibits) also may be obtained free of charge, upon written request to: Investor Relations, Safeguard Scientifics, Inc., 435 Devon Park Drive, Building 800, Wayne, Pennsylvania 19087.

The internet website addresses for Safeguard and its companies are included in this report for identification purposes. The information contained therein or connected thereto are not intended to be incorporated into this Annual Report on Form 10-K.

The following corporate governance documents are available free of charge on Safeguard s website: the charters of our Audit, Compensation and Nominating & Corporate Governance Committees, our Corporate Governance Guidelines and our Code of Business Conduct and Ethics. Copies of these corporate governance documents also may be obtained by any shareholder, free of charge, upon written request to: Corporate Secretary, Safeguard Scientifics, Inc., 435 Devon Park Drive, Building 800, Wayne, Pennsylvania 19087. We also will post on our website any amendments to or waivers of our Code of Business Conduct and Ethics that relate to our directors and executive officers.

Item 1A. ***Risk Factors***

You should carefully consider the information set forth below. The following risk factors describe situations in which our business, financial condition or results of operations could be materially harmed, and the value of our securities may decline. You should also refer to other information included or incorporated by reference in this report.

Our business depends upon our ability to make good decisions regarding the deployment of capital into new or existing partner companies and, ultimately, the performance of our partner companies, which is uncertain.

If we make poor decisions regarding the deployment of capital into new or existing partner companies, our business model will not succeed. Our success as a company ultimately depends on our ability to choose the right partner companies. If our partner companies do not succeed, the value of our assets could be significantly reduced and require substantial impairments or write-offs and our results of operations and the price of our common stock could decline. The risks relating to our partner companies include:

- most of our partner companies have a history of operating losses or a limited operating history;
- intensifying competition affecting the products and services our partner companies offer could adversely affect their businesses, financial condition, results of operations and prospects for growth;
- inability to adapt to the rapidly changing marketplaces;
- inability to manage growth;
- the need for additional capital to fund their operations, which we may not be able to fund or which may not be available from third parties on acceptable terms, if at all;
- inability to protect their proprietary rights and/or infringing on the proprietary rights of others;
- certain of our partner companies could face legal liabilities from claims made against them based upon their operations, products or work;
- the impact of economic downturns on their operations, results and growth prospects;
- inability to attract and retain qualified personnel; and
- government regulations and legal uncertainties may place financial burdens on the businesses of our partner companies.

Table of Contents

These risks are discussed in greater detail under the caption Risks Related to Our Partner Companies below.

Our partner companies (and the nature of our interests in them) could vary widely from period to period.

As part of our strategy, we continually assess the value to our shareholders of our interests in our partner companies. We also regularly evaluate alternative uses for our capital resources. As a result, depending on market conditions, growth prospects and other key factors, we may at any time:

- change the partner companies on which we focus;
- sell some or all of our interests in any of