



## EXECUTIVE SUMMARY

### **Our Vision**

Prospect Biosystems has developed a broad-range biomarker discovery capability and an instrumentation platform, based upon its Edge™ technology, providing rapid biology-based fractionation of complex tissue homogenate and cell lysate samples. This breakthrough technology enables scientists involved in the discovery and development of pharmaceutical targets, diagnostics and therapeutics to:

- Rapidly characterize differences between diseased and healthy tissue;
- Easily identify and evaluate predictive, diagnostic and prognostic biomarkers;
- Facilitate clinical outcome prediction through the use of surrogate biomarkers, and;
- Develop rapid biomarker tests for clinical diagnosis and management.

These benefits will save the pharmaceutical industry millions of dollars annually by decreasing significantly the number of unsuccessful candidate products and accelerating the speed at which successful products come to market. Benefits will accrue in the operating room also, saving lives by providing on-the-spot tissue analyses in numerous procedures, allowing the physician to assess in real-time the potential outcome of these procedures.

### **The Market and Its Challenges**

Less than one tenth of all drugs that enter Phase 1, ever get registered. Failures arise from improper choice of target, drug safety issues and dosing levels. It is estimated that, on average, taking a new drug to approval and launch takes 7 to 12 years and costs from \$800 million to \$1.7 billion. A significant component of this is the increasing cost and duration of clinical trials. Relative 5-year survival is 90% for colorectal cancer patients when diagnosed at the earliest, most treatable stage. Only 39% of cases are diagnosed at an early stage. Parkinson's disease cases will approach 3.6 million by 2015. By the time symptoms allow a physician to diagnose Parkinson's, 70-80% of dopaminergic neurons are lost.

### **Meeting the Market's Needs**

Elias A Zerhouni, M.D., NIH Director, recently said, "The core challenge is to move medicine from a curative model of today to a preemptive era when we can identify and track a disease process as early as possible. The identification of biomarkers is an essential element for the new era of predictive, preemptive, personalized medicine." Prospect Biosystems' newly introduced Edge Technology and Edge 200 Proteomics Separation System provide a rapid, powerful, and reproducible fractionation method for biomarker discovery and proteomics analysis. Edge Technology rapidly reduces complexity of biological samples 10-20 fold, saving 80-90% of the time required to get to a first analysis. The Company has demonstrated the efficiency of its technology to "follow the biology" to readily discover and identify, not just one, but sets of related biomarkers in analytical, clinical and therapeutic applications.

## Implementation

### Marketing and Distribution Strategy

The initial market niche for Prospect Biosystems' Edge 200 is within the area of Analytical Proteomics and Biomarker Discovery, having an addressable market of \$1 billion. Reagents and consumables in this market contribute an additional \$100M yearly. The Edge™ 200 was introduced in prototype form in June, 2006, with the beta unit introduced in March, 2007. Prospect has commitments for its first 2 beta units. Prospect Edge products are highly complementary to existing proteomics separations or characterization equipment, and will be marketed as the most cost effective use of current or future equipment funding in the marketplace, and as a logical alternative to adding more of existing equipment. Sales of the company's instrumentation/reagent products will be handled initially by one East Coast and one West Coast scientist/salesperson, with sales targeted to areas of highest user concentrations. Alliances with organizations having complementary products will be used to bridge the Company's migration into international markets during this timeframe.

### Manufacturing and Support Strategy

The Edge System's thermoformed housing will be produced by an independent organization, and the chassis with fluidics system will be manufactured and tested by a local subcontractor. The centrifugal system will be manufactured and tested by The Center for Manufacturing Systems at New Jersey Institute of Technology. Prospect will perform final assembly and test. Reagents will be sourced under an OEM agreement, while consumables will be produced under contract by an outside vendor. Support for instrument placements will use a rapid response repair/replacement program in conjunction with Federal Express.

### Financial Strategy

Prospect Biosystems has been self-funded is seeking additional capital of \$1,500,000 to:

- Produce two additional beta units and 10 production units;
- Expand prosecution on its filed patent application and file two additional applications;
- Develop and produce marketing materials;
- Fund continuing development of the company's products;
- Fund a sales program, including the hiring of two sales personnel.

Prospect Biosystems projects reaching break-even in early 2009. The Company expects revenues of \$7.7 million in 2009 with pre-tax income of \$994,000.

### Management

Prospect Biosystems was founded by three colleagues with successful backgrounds in the bioanalytical and diagnostic instrumentation industries. Its President, Marc Horn, Ph.D., is a serial entrepreneur with more than 30 years experience in the bioanalytical instrumentation marketplace, having founded and managed five companies and two new divisions within existing companies. Wendy Lan, Ph.D., VP Research Applications, is an experienced research manager with more than 15 years experience in the biochemistry and protein chemistry marketplace. Derek Scarane, VP Operations, is a seasoned business operations manager with significant experience in clinical and diagnostic instrumentation.

Prospect is strengthened by its Advisors: Michael LaSalle, M.D., F.A.C.S., Surgeon, Clinical Assistant Professor UMDNJ, President and CEO, NJCREF; William J. Sipio, Ph.D., J.D., patent attorney, previously - Partner, Sonnenschein, Nath & Rosenthal LLP, Patent Attorney, Dupont Merck Pharmaceutical, Sr. Research Chemist, E.I. DuPont; and Paul Nix, Ph.D., President and Founder of Princeton Separations, Inc.

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