PSERS PRIVATE INVESTMENT PROGRAM

Recommendation for Investment in Quaker BioVentures II, L.P.

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Quaker BioVentures II, L.P.

INTRODUCTION

Quaker BioVentures II, L.P. is a $300 - $400 million offering. Fund II is a follow-on fund to Quaker BioVentures, L.P., its parallel funds – Quaker BioVentures Tobacco Fund, L.P. and Garden State Life Sciences Venture Fund, L.P. – and another fund managed by Quaker BioVentures, BioAdvance Ventures, L.P., which together represent $280 million in venture capital funds under management (collectively referred to as “Fund I”). The first closing for Fund I occurred in February 2003, with a final closing in August 2004.

Quaker BioVentures was founded in February 2002 by its three managing partners, Ira Lubert, Brenda Gavin and P. Sherrill Neff. Today, Quaker BioVentures is led by its five partners: Ira Lubert, Brenda Gavin, P. Sherrill Neff, Richard Kollender, and Matt Rieke (together, the “Managers”), who have been responsible for managing Fund I since its inception. Dr. Gavin (also, a "Key Person") will devote substantially all of her business time to Fund II until her retirement, which will occur no earlier than January 1, 2010 (after her retirement, Dr. Gavin will still be available to consult on Fund II business at the reasonable request of the General Partner). The Quaker BioVentures investment team represents a broad range of investment, transaction, strategic, financial, medical, scientific, and managerial skills.

As of March 9, 2006, approximately $119 million has been invested or contractually committed from Fund I into 16 different portfolio companies. Including capital reserved for these portfolio companies, Fund I has invested and committed approximately 75% of its aggregate capital commitments.

BUSINESS STRATEGY

Key elements of the Fund’s strategy include the following:

1. **Attractive Market Opportunity** – Quaker BioVentures is pursuing a distinctive investment strategy for both Fund I and Fund II. In Fund I, the Managers invested in many of the best healthcare companies located in the region between New York and North Carolina. In Fund II, the Managers expect to build a portfolio of life science companies based primarily in the Mid-Atlantic region, augmented by opportunistic investment in the Southeastern region. The Mid-Atlantic and Southeastern regions are substantially underserved by high quality life science venture investors, and provide Quaker BioVentures with significant investment opportunities.

There are several compelling reasons to concentrate a significant portion of the Fund II investment efforts in the Mid-Atlantic region: (i) a significant concentration of large pharmaceutical, biotechnology and medical device companies in the region; these companies develop and seek out new technologies and will continue to create investment and exit opportunities; (ii) an extraordinary pool of senior management talent to fill executive, research and development, clinical development, and commercialization functions in portfolio companies; (iii) explosive growth of new life science companies; and (iv) the presence and growth of preeminent academic medical research centers with which the Fund has strong relationships and which the Fund believes will generate investment opportunities.

Despite these clear advantages, substantially more life science venture capital funding goes to the West Coast and Boston area. The imbalance between the strong and growing regional advantage, on the one hand, and the relative lack of focused, high quality life science venture capital, on the other, is a compelling reason for Quaker BioVentures to remain committed primarily to the Mid-Atlantic region.

In addition to the continuing primary emphasis on the Mid-Atlantic region, the Managers also expect to make selected investments in the Southeastern region in Fund II. Many of the advantages of the Mid-Atlantic region are also present in the Southeast, albeit at an earlier stage of commercialization and development. Yet, there are far fewer venture capital investments into healthcare companies in the Southeastern region, and many fewer venture capital funds focused on the region. Quaker BioVentures plans to establish a presence in the Southeast, and to help catalyze the development of the region through selective investments from Fund II.

2. **Investment Focus** – The Fund's objective is to achieve a substantial long-term rate of return for its Limited Partners. Consistent with the strategy of Fund I, the Fund II portfolio will be diversified in several key respects:

- **Healthcare Sector** – Human Therapeutics, including traditional small molecule pharmaceuticals, large molecule biologicals, novel therapeutics, drug/device combinations and platforms; Medical Devices; Clinical Diagnostics; and Healthcare Information Technology and Services.

- **Round of Investment** – First institutional rounds, mid-stage investments, late-stage investments, recapitalizations, and Private Investments in Public Entities (PIPES).

- **Therapeutic Area** – Cardiovascular, Dermatology, Gastrointestinal, Infectious Disease, Metabolic Disease, Oncology, etc.

- **Stage of Product Development** – Pre-clinical, early and late stage clinical products, and marketed products.

Fund II expects to invest $15 to $20 million into each company, with initial investments ranging between $2 to $10 million. The Managers expect Fund II will be invested in approximately 20 companies. In life sciences venture investing, it is typical to participate in multiple rounds of financing, with increasing commitments of capital for portfolio companies. As companies mature and meet development objectives, the Managers expect to invest in subsequent financing rounds, and will hold significant reserves for such follow-on financings.

It is also typical in life science venture investing to divide larger committed rounds into several "tranches." For example, a group of venture investors may contractually commit to $30 million in a financing, but only $10 million will be funded initially; the balance will be released in tranches that are contingent upon the company's achievement of pre-determined milestones. Finally, it is the practice in our industry to syndicate financings with other life science venture investors. In Fund I, syndicate partners have committed $3.50 for every $1.00 committed from Quaker BioVentures.

3. **Diversification by Healthcare Sector** - The Fund will consider investment opportunities across various sectors of the life science industry. Consistent with its diversified deal flow and regional focus, Quaker BioVentures is opportunistic and broad in its industry interests. The Managers anticipate the majority of investment dollars will be allocated to portfolio companies developing human therapeutic products.

- **Human Therapeutics** – Human Therapeutics includes traditional small molecule drugs, large molecule biologicals, drug/device combinations, and novel targeted therapies. Annual healthcare expenditures in the United States currently exceed $2 trillion and are expected to outpace the growth of the general economy for the foreseeable future. A significant portion of this spending is related to human therapeutics, and sales are projected to be $660 billion, or 17.5% of healthcare spending, by 2015.

- **Medical Devices** – The U.S. medical devices market was estimated to be $86 billion in 2005, and is expected to grow at an annual rate of approximately 8% over the next five years. This growth is fueled in part by the aging U.S. population. Advances in technology lead to investment opportunities in companies developing products for device-dependent specialties such as cardiology and orthopedic surgery. Medical devices that offer less invasive treatment options, with better clinical outcomes and shorter recovery times, are expected to create substantial value in the next several years.

- **Human Diagnostics** – The diagnostics market in the U.S. was estimated to be $16 billion in 2005 and is expected to grow at an annual rate of approximately 6% over the next five years. Diagnostics play a critical role in the trend toward personalized medicine as pharmaceutical and biotechnology companies look for ways to speed the approval of new drugs and with the increased pressure from managed care to reduce drug spending through appropriate utilization of drugs. Outbreaks in new infectious diseases, such as Severe Acute Respiratory Syndrome (SARS), and the burgeoning field of pharmacogenomics will also create investment opportunities and drive future growth in this market.

- **Healthcare Information Technology and Services** – Many of the participants in the healthcare industry, primarily hospitals and pharmaceutical companies, are outsourcing administrative services, such as billing, record keeping and management information systems, as well as non-core services such as laboratory testing and radiology. Independent companies that provide these outsourced services provide investment opportunities for the Fund.

INVESTMENT PROCESS – Quaker BioVentures has developed an investment process that leverages the experience and skill sets of the Managers. This process focuses on (i) developing and maintaining strong deal flow, (ii) due diligence, (iii) leading and syndicating transactions, and (iv) active engagement with portfolio companies to create shareholder value.

A. **Proprietary Deal Flow**

The Managers have individually and collectively developed an extensive transaction referral network, which includes the following sources:

- Venture capital firms
- Successful entrepreneurs
- Senior managers at large pharmaceutical, biotechnology and medical device companies, who are responsible for out-licensing technologies
- Technology transfer offices at academic research institutions
- Leading life science and healthcare lawyers
- Investment banks
- Economic development agencies
- High net worth individuals

However, the best opportunities are sourced directly, and the firm generally does not compete in auctions led by investment bankers. Through its referral network, they will identify attractively priced investment opportunities.

B. **Due Diligence**

The Managers have completed due diligence reviews on a wide range of life science companies and transactions. Quaker BioVentures' professionals actively manage the due diligence process and directly perform a substantial portion of the analysis. Independent technical, clinical, regulatory, legal, and industry experts supplement this process and bolster Quaker BioVentures' abilities. Each investment opportunity is subject to careful due diligence focusing on core technology, intellectual property, clinical development and regulatory matters, operations, facilities, management, financial status and exit opportunities. The transaction team prepares a comprehensive analysis of the investment opportunity.

Management talent and commitment are the single greatest determinants of success in any investment. Consequently, the Managers spend significant time evaluating the capabilities of each management team. A transaction team performs extensive due diligence to assess integrity, motivation, leadership skills and commitment to the business. The Managers carefully and creatively structure incentive compensation to align management and shareholder interest.

C. **Leading and Syndicating Transactions**

The Fund expects to invest in companies requiring substantial capital to bring products through FDA approval and onto the market. It is common for companies developing therapeutic products (both human therapeutic and medical device companies) to require $100 million in private capital as they progress from preclinical research to FDA approval. The high capital requirements force investors to collaborate and syndicate.

The process of leading and syndicating venture capital transactions requires substantial time, effort and experience. With Fund I, the Managers quickly developed Quaker BioVentures' reputation as a firm capable of leading transactions. As a lead investor, the Managers establish the terms of transactions, and then support portfolio companies by placing representatives on the Board of Directors.

D. Active Engagement with Portfolio Companies: Creating Shareholder Value

The Fund's post-investment activities typically involve extensive communication with and support of each portfolio company and its management. Each company in which the Fund expects to invest can benefit from third party advice and the counsel provided by the Managers. The Managers typically negotiate a contractual opportunity to join the Board, providing Quaker BioVentures with an on-going ability to impact each investment. The Managers have significant experience advising life science companies, including extensive experience as board members. The Managers often augment Quaker BioVentures' representation on a portfolio company's Board by installing other industry experts with whom they have worked previously. The Managers' oversight role includes regular communications with management, a review of periodic reporting packages, regular Board meetings, and participation at budgeting sessions.
Throughout the investment life cycle, the Fund expects to actively work with the senior management of each portfolio company to enhance and create value by assisting with key business activities such as:

Strategic Guidance – Post-investment, the Fund expects to help management teams develop and implement strategic initiatives aimed at increasing shareholder value. The Managers may assist with evaluating acquisition opportunities, completing follow-on financings, assessing product pipelines, and providing general corporate direction and strategy.

Creating Appropriate Management Incentives – The Fund expects to be directly involved in the development of compensation programs for senior managers. Cash and equity incentives are structured around technical development and business objectives that drive value creation, and align management interest with the Fund.

Building and Strengthening Management Teams – A strong management team is critical to the success of any investment. The Managers continually assess the capabilities of portfolio company management. Through its network of senior executives and relationships with executive recruiting consultants, the Fund expects to successfully identify and recruit managers for key roles within portfolio companies.

Client and Partner Introductions – The Managers have developed extensive professional networks in the region, including value-added industry experts. Quaker BioVentures will continue to spend considerable time accessing its network and making key introductions to portfolio companies, including: senior managers, business development and licensing professionals, industry consultants, Quaker BioVentures Advisory Board members and other professional advisors.

Maximizing Value upon Exit – The Fund's investment process will focus on an evaluation of a transaction's likely exit strategies even before the investment is made. The Managers typically determine if there is a universe of strategic buyers, whether there is a realistic prospect of an initial public offering or whether a return can be achieved by another type of transaction that achieves a successful outcome. Post-investment, the Fund will seek to help its portfolio companies execute exit strategies and maximize returns, independent of strength in the financial markets. The Fund expects to hold portfolio investments for approximately five to seven years before seeking liquidity, although that time may be altered on an opportunistic basis.

KEY PERSONNEL

The Management Company investment team consists of seven investment professionals, including the five Managers, who will be focused on executing and managing Fund II investments. Collectively, the group has extensive experience investing in emerging life science companies. The Managers have extensive experience in structuring and negotiating investments, in advising companies on operational and financial issues, and in the ongoing monitoring of existing investments. The Managers have worked in all sectors of the healthcare industry, including biopharmaceuticals, medical devices, human diagnostics, and healthcare services. The Managers have operational experience with companies in various stages, including private and public companies, and growth, later stage and turnaround situations. Due to their long-term careers in the region, they have developed an extensive network of business relationships that will serve the Fund well in its investment activities.

Ira M. Lubert, Managing Partner

Principal and founder of the Independence Capital Partners fund family: (i) Quaker BioVentures, a life science venture fund; (ii) Lubert-Adler Real Estate, a family of real estate opportunity funds; (iii) LLR Partners, a family of private equity funds; (iv) LEM Mezzanine, a real estate mezzanine fund; (v) Chrysalis Capital Partners, a middle market buyout fund; (vi) Rubenstein Properties, an office-related real estate fund; and (vii) LBC Credit Partners, a structured finance investment fund.

Mr. Lubert was previously Managing director and co-founder of TL Ventures, family of Safeguard Scientifics, Inc. (NYSE: SFE) affiliated early stage venture funds with over $1.0 billion of capital under management. Founder of Radnor Venture Partners, L.P., the first venture fund managed by Safeguard Scientifics. He is former Chairman of the Board and President of CompuCom Systems, a microcomputer reseller that presently generates more than $2 billion in annual revenues. IBM mid-range computer sales, earning numerous awards for superb salesmanship and marketing management, including his selection as President of IBM's prestigious "100% Club".

Mr. Lubert holds a B.S. in Human Development from Pennsylvania State University. Mr. Lubert formerly served on the Board of Trustees of Pennsylvania State University for five years, was past Chairman of the United Way Campaign of Philadelphia and is an active recruiter for United Way Alexis de Tocqueville Society.

Brenda Gavin, Managing Partner

She is a founding Partner of Quaker BioVentures. Former President of S.R. One, Limited, GlaxoSmithKline's life science venture capital investment company. Former General Partner of EuclidSR Partners, an independent venture capital limited partnership focused on healthcare and information technology. She was an active investor in companies such as Adolor, Inhale, Nektar, Sepracor and Versicor.

She also was the Director of Business Development for SmithKline Beecham Animal Health Products and a former Epidemiologist at the Centers for Disease Control and Prevention. She holds a B.S. in Biology from Baylor University, a Doctor of Veterinary Medicine from the University of Missouri and an M.B.A. from the University of Texas - San Antonio.

P. Sherrill Neff, Managing Partner

Founding Partner of Quaker BioVentures. Mr. Neff holds a B.A. in Religious Studies from Wesleyan University and a J.D. magna cum laude from University of Michigan Law School.

He was the former President, Chief Operating Officer, and Director of Neose Technologies, Inc., a publicly traded life science company (NASDAQ: NTEC). Responsible for raising over $150 million including IPO. Before that was the Senior Vice President, Corporate Development at U.S. Healthcare, Inc. (Aetna), a leading publicly traded health maintenance organization and the former Managing Director in the investment banking division of Alex. Brown & Sons. Prior to that was an Attorney at Morgan, Lewis & Bockius.

Mr. Neff previously served as Chairman of the Greater Philadelphia Venture Group, was the Previous President of the Pennsylvania Biotechnology Association and also served as Chairman of the Venture Capital Committee for BIO 2005 in Philadelphia.

Richard S. Kollender, Partner

Joined Quaker BioVentures as a Principal in early 2003 and promoted to Partner in 2005. Mr. Kollender worked Five years in sales, marketing and worldwide business development at GlaxoSmithKline (GSK). He also served as Investment manager at S.R. One, Limited (S.R. One), GSK's life science venture capital investment company. Prior to that he was Brand manager at GSK with pre-launch and post-launch product management responsibilities.

Mr. Kollender was a Founding member of GSK's eMarketing Group, which leverages the Internet as well as other emerging technologies in pursuit of innovative and commercially viable marketing channels. He also served six plus years in public accounting at KPMG Peat Marwick and Rudolph Palitz in Philadelphia, with emphasis on the healthcare and emerging businesses sectors.

Matt Rieke, Partner

Founding principal of Quaker BioVentures in 2001 and promoted to Partner in 2005. He was a former Principal at PA Early Stage, a $250 million family of venture capital funds investing in early stage life science and information technology companies. He also created new companies based on faculty inventions while working for the University of Pennsylvania Center for Technology Transfer. Prior to that, Mr. Rieke was a Management consultant with CSC Healthcare, helping physician practices and hospitals implement best-practice disease management protocols. He also conducted clinical and laboratory research at Cedars-Sinai Medical Center on plasma-based therapeutics and bone marrow transplantation.

Mr. Rieke serves as an advisor to BIOVenture Forum East, Biotechnology and Life Sciences Advisory Committee for Ben Franklin Technology Partners of Southeastern Pennsylvania, and Life Sciences Greenhouse of Central Pennsylvania. He holds a B.A. in Political Science from Colgate University, is a graduate from Bryn Mawr College, Post-Baccalaureate Pre-Medical Program and a Doctor of Medicine from the University of Pennsylvania School of Medicine. Mr. Rieke also holds an M.B.A. in Healthcare Management from the Wharton School of the University of Pennsylvania and is licensed in Internal Medicine.

CONCLUSION/RECOMMENDATION

Based upon the successful track record and experience of the principals and the recommendation of PSERS' consultant, Portfolio Advisors, staff recommends that the Board invest an amount equal to 25% of the committed capital, but not to exceed $100 million plus reasonable normal investment expenses, in Quaker BioVentures II, L.P. in accordance with the recommendation of Charles J. Spiller, Director of Alternative Investments, dated April 27, 2006. The final terms and conditions of the investment must be satisfactory to the Investment Office, the Office of Chief Counsel, and the Executive Director.