

Dear Sanguine Shareholders,

Monday, December 4, 2006

It has been sometime since we last communicated with you. Please let me take this opportunity to bring you up to date with the many programs that we have been working on during this last year. It has been a very important time for our Company.

As you know, Sanguine Corporation was formed by Thomas C. Drees, PhD, MBA, to develop an updated synthetic oxygen carrier for medical use. The resultant product, PHER-O2, has several possible indications, including organ (pancreas and kidney), tissue and cell preservation for transplantation; enhancing transplanted islet cell engraftment; acting as an adjunct to high risk angioplasty; enhancing tumor radio sensitivity; blood substitution and hundred other medical uses including military, ambulance and emergency room.

The use of PHER-O2 for pancreas and/or islet cell preservation in treating diabetes (the fastest growing disease in the world) is particularly attractive because the product is used ex-vivo (outside the body), which should simplify the regulatory process. The indications listed above, other than preservation, would likely require the product to be approved as a drug product. FDA approval of drug products requires considerably more time and is generally more costly and clinically difficult than clearance or approval to market a medical device. When considering Sanguine's regulatory strategy for PHER-O2, a conservative development path would therefore be as a device. Indeed, PHER-O2, when used for pancreas and/or islet cell preservation, has recently been designated by the FDA as a device. This development path will presumably allow quicker revenue flow as, in parallel, the Company decides to develop the product for other indications.

Toward developing PHER-O2 as a preservative for organs and tissues to be transplanted, Sanguine has contracted as consultant a world-renowned surgeon from the University of Edmonton, Alberta, Canada, James Shapiro, MD. Dr. Shapiro is a world-renowned expert in islet cell isolation (manufacture) and transplantation surgery. Dr. Shapiro is a principal scientist in the islet cell transplantation effort known as the Edmonton Protocol.

The Edmonton Protocol is a process for treatment of patients with Type 1 diabetes and unstable control. Since the completion of their initial studies on seven patients with Type 1 diabetes published in the New England Journal of Medicine (NEJM) in March, 2000, the protocol has expanded internationally to nine sites with islet transplantations

performed on 36 patients (NEJM Sep 2006). In most cases, patients so treated have been insulin-free for a year or more.

PHER-O2 will be used to help maintain oxygen in and around pancreata(SP?) and islet cells isolated from donors for the purpose of transplantation into diabetic recipients. Dr. Shapiro and his colleagues have found that by using PHER-O2 for preservation prior to transplantation, they have been able to significantly extend pancreas and islet cell viability. This is very good news since the competing products used to transport transplant organs have remained virtually unchanged for many years.

Additionally, Sanguine has received inquiries from other scientists and academic institutions interested in using PHER-O2 for their experiments. One such team is currently negotiating a confidentiality agreement with Sanguine, a necessary formality before proceeding with related studies. Preliminarily, it looks as if this team can bring its own funding to the study of PHER-O2 if Sanguine provides the product. Two government (non-regulatory) agencies have also approached Sanguine with interest in PHER-O2, but any further indications must necessarily await sufficient supply of the product.

Toward that end, Sanguine has contracted a manufacturing firm located in Europe that is experienced in emulsion technology and concomitant development and drug manufacturing with the necessary equipment under good manufacturing practices. Formulation studies aimed at improving PHER-O2 manufacturability and stability are currently underway.

As alluded to above, Sanguine had requested a designation for PHER-O2 from the FDA. Understanding how the product is categorized and what office of the FDA will review the submission is critical in defining the necessary development studies. In response to our request, the FDA assigned the product to the Center for Biologics Evaluation and Research (CBER), Office of Cellular, Tissue and Gene Therapies, and designated the indication as a device. Therefore, PHER-O2 used for preservation will be reviewed under the medical device provisions of the Food, Drug and Cosmetic Act. CBER was chosen because they have been intimately involved with islet cell “manufacturing”.

Understanding the above, we have requested a pre-Investigational Device Exemption Meeting with the FDA. This meeting is a means of presenting the development plan, asking questions and getting sign-off from the FDA before actually submitting the Investigational Device Exemption (IDE). An approved IDE basically allows Sanguine to

perform clinical studies with an unapproved device. The meeting is scheduled for November 30, 2006.

Jumping ahead, once the development and clinical studies are completed, and PHER-O2 is shown to fill a necessary clinical need, Sanguine will submit a Premarket Approval Application (PMA) to the FDA. This document details the results of the development and clinical studies and describes how the company intends to label the product. The approval of the PMA by the FDA will allow Sanguine to market PHER-O2 for the preservation indication in the United States.

Of course, there are other indications for PHER-O2. Sanguine intends to also develop PHER-O2 as a drug. The first indication to be explored will be co-infusion of PHER-O2 with islet cells to improve engraftment. This indication is an obvious extension of using PHER-O2 for islet preservation, but it requires the PHER-O2 be injected into the body as a drug. In this case, there are more stringent regulatory requirements. Maintaining oxygenation of the transplanted cells may improve their viability and eventual engraftment. Sanguine intends to confirm feasibility using a rat animal model.

An item of note, Dr. Drees was previously the chief executive officer of Alpha Therapeutics, which developed the first drug blood substitution product of this kind. Their product, Fluosol, was approved for marketing in the US and several other countries. The approved Fluosol indication was for patients with high risk for ischemic complications of coronary angioplasty. Fluosol is no longer marketed, but one of the difficulties of its use was the requirement for reconstitution in the operating theater. Since PHER-O2 is offered as a stable emulsion, no reconstitution is required. PHER-O2 also does not contain some of the excipient compounds in Fluosol found to be less compatible with living tissues. Thus, PHER-O2 may have several advantages over the old Fluosol product, including utility and biocompatibility. Fluosol was unstable at room temperature. The product was required to be kept frozen until its use. PHER-O2 does not.

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### **Meet the Sanguine Development Team**

Sanguine has brought together a professional team of scientists, physicians and developers with the required expertise to bring PHER-O2 through development and the FDA approval process.

1. **Lori J McDonald, Ph.D.**

**Executive Director, Pharmaceutical Sciences and CMC Regulatory Services  
Beckloff Associates, Inc.**

Dr. McDonald, in addition to her consulting responsibilities, is responsible for developing the west coast satellite office of Beckloff Associates, Inc. (BAI), a Cardinal Health Company and an extension of the full range of scientific and regulatory consulting services which are core offerings of the BAI home office in Overland Park, KS. She has over 18 years of experience in research and the pharmaceutical industry, with a specialized focus on solid dosage form development, scale-up and manufacturing.

Prior to joining BAI, Dr. McDonald worked for four years with Cardinal Health Pharmaceutical Development in San Diego, CA (previously Magellan Laboratories), as Senior Director of Pharmaceutical Development and QC Chemistry. In this position, she focused on all chemistry and manufacturing control (CMC) aspects of the pharmaceutical development process, including preformulation and formulation for small molecules. She has worked on over 50 parenteral (small and large volume) drug products and has broad development and commercial experience as well as CMC regulatory. Prior to Cardinal Health, she spent three years at Ligand Pharmaceuticals, San Diego, CA, as Director of Pharmaceutical Development in the Technical Operations Division. With Ligand, Dr. McDonald authored various CMC regulatory dossiers which led to five product approvals and commercial launches. These include Panretin® gel (NDA), Targretin® gel (NDA and MAA), and Targretin® Capsules (NDA and MAA). She also initiated on-site development for topical gels and oral solid dosage forms, including liquid suspensions. She was the team leader for several product site transfer projects, validations and new product launches.

Dr. McDonald worked for eight years with at Abbott Laboratories, North Chicago, IL, where she formulated several oral antibiotics, including various erythromycin products. She was the primary formulator for Biaxin® Tablets, 250 and 500 mg, and Biaxin® Oral Suspension, 125 and 250 mg. She also served as the primary technical support person at the Abbott pharmaceutical plants in Barceloneta, Puerto Rico; North Chicago, IL; and Abbott Park, IL. During her tenure at Abbott, Dr. McDonald was instrumental in writing various CMC sections for New Drug Applications (NDAs). She also implemented several cycle time reduction/cost saving processes for critical unit operations at commercial scale. She has expertise in extrusion technology, particle coating, tablet coating, and with oral soft gel capsules. Dr.

McDonald has experience in the entire pharmaceutical development process, from drug discovery through commercialization, launch, and new line extensions for existing products.

Dr. McDonald holds Ph.D. and Masters degrees in pharmaceutics from the University of Michigan. During her tenure at the University of Michigan, she was a Fellow of the American Foundation for Pharmaceutical Education and was a recipient of American Association of Pharmaceutical Sciences' Award for her research. Dr. McDonald is the author and co-author of several scientific journal publications, patents, and presentations.

2. **John Dillberger, D.V.M., Ph.D.**  
**Diplomate ACVP and ABT, Fellow IATP**

Dr. Dillberger is a preclinical development consultant specializing in the application of pharmacology, toxicology and pathology expertise to the safety evaluation of drugs, devices and biologics. His clients include biopharmaceutical companies in the United States, Korea, Japan, Italy and New Zealand, as well as nonprofit foundations and investment firms with pharmaceutical company portfolios.

Over his 16 years in the pharmaceutical industry, Dr. Dillberger has held positions of increasing responsibility at Marion Merrell Dow, GlaxoWellcome, Triangle Pharmaceuticals and Charles River Laboratories. He has served as Head of U.S. Pathology, Director of U.S.-Based Development Projects, Worldwide Specialist in Oncology Drug Projects for GlaxoWellcome and as Director of Toxicology at Triangle Pharmaceuticals. Dr. Dillberger has prepared safety evaluation packages for numerous clinical trials and marketing applications in the United States and Europe, including the recently approved NDA for the antiretroviral drug Coviracil®.

Dr. Dillberger received his D.V.M. degree from Iowa State University in 1979, completed a three-year residency in Comparative Pathology at the University of Miami School of Medicine and Papanicolaou Cancer Research Institute in 1986, and received a Ph.D. degree in Pathology and Environmental Toxicology from Michigan State University in 1989 for research into the molecular mechanisms of carcinogenesis. He was certified in Veterinary Pathology by the American College of Veterinary Pathologists in 1987 and in Toxicology by the American Board of Toxicology in 1992. In 2001, he became one of a handful of pathologists accepted as a Fellow in the International Academy of Toxicologic Pathology. He is the author of numerous scientific papers and a book chapter entitled "Nonclinical Development of Drugs and Biologics: Pharmacology and Toxicology". He serves as reviewer for

*Antimicrobial Agents and Chemotherapy* and is presently serving a second term on the editorial board of *Veterinary Pathology*.

3. **Steven P. Miller, Ph.D., M.B.A.**  
**Executive Director, Strategic Development**  
**Beckloff Associates, Inc.**

Dr. Miller received his Ph.D. in Human Biological Chemistry and Genetics from the University of Texas Medical Branch in Galveston, TX, and his M.B.A. from Santa Clara University in Santa Clara, CA. He performed postdoctoral fellowships at Scripps Clinic and Research Foundation in La Jolla, CA, and the University of California at Berkeley. He has over two decades of experience in the medical diagnostic, device, and pharmaceutical industries.

Before joining BAI in 2005, Dr. Miller was Senior Director of Business Development for Cardinal Health Pharmaceutical Development, responsible for sales in the Western United States. Prior to joining Cardinal Health, he was the chief executive officer of University Clinical Investigators (UCII), a clinical research and specialty laboratory company dedicated to diabetes treatment and study. Prior to joining UCII, he was the vice president of Research and Development for LXN Corporation, responsible for the development of a hand-held blood glucose and fructosamine monitor for diabetes. Dr. Miller has variously held senior positions in International Marketing and Sales, Research and Development, and Operations at Quidel Corporation, Biotrack (now Ciba Corning), MAST Immunosystems (now Hitachi Chemical Diagnostics, Inc.), and SmithKline Instruments (now Beckman Coulter Inc.).

Dr. Miller is responsible for the introduction of over 30 diagnostic products into the U.S. market and has over 20 scientific publications and four issued patents.

4. **A.M. James Shapiro, M.D., Ph.D., FRCS(Eng.), FRCSC, D.S.c (Hon)**  
**Wyeth-Ayerst Canada/CIHR Clinical Research Chair in Transplantation**  
**Director, Clinical Islet Transplant Program**

Born in Leeds, England, Dr. Shapiro obtained his Medical Degree at the University of Newcastle-upon-Tyne and trained in Surgery at the University of Bristol. He went to Canada in 1993 to train in liver transplantation and hepatobiliary surgery, and continued his research studies in experimental islet transplantation that he began in Newcastle as a medical student. His Ph.D. studies in Edmonton initially involved the screening of new drug combinations for possible testing in islet transplantation. He

then further trained in liver surgery in Vancouver, in living donor liver transplant surgery in Japan, and in whole pancreas transplant surgery at the University of Maryland. In 1998, he was recruited back to the University of Alberta as a talented multiorgan transplant surgeon.

With his strong background in clinical immunosuppression and experimental islet transplantation research, Dr. Shapiro was asked to lead the Clinical Islet Transplant Program team in Edmonton and, together with Drs. Lakey, Ryan, Rajotte, Kneteman and Korbitt, Dr. Shapiro developed and tested a new protocol that used a steroid-free antirejection regimen, coupled with sufficient numbers of transplanted islets. This research has since become known as the “Edmonton Protocol”, and has galvanized research activity in clinical islet transplantation worldwide. Dr. Shapiro also initiated the whole pancreas transplant program at the University of Alberta in 1999, and in the same year performed the first emergency living-related donor liver transplant in Canada in a child with fulminant liver failure.

Dr. Shapiro is the principal investigator of the high-profile, international, multicenter trial of islet transplantation to test the Edmonton Protocol at nine international sites, sponsored by the Immune Tolerance Network. He is also the principal investigator and director of the Juvenile Diabetes Research Foundation (JDRF) Clinical Center for Islet Transplantation, created in 2001, at the University of Alberta. In 2002, Dr. Shapiro was awarded the Canadian Institutes of Health Research/Wyeth Clinical Research Chair in Transplantation at the University of Alberta for his accomplishments in islet transplantation research. He has developed a strong collaborative link with Dr. Chris Larsen of Emory University, and is the principal investigator of an upcoming joint Edmonton-Emory clinical trial of LEA29Y in islet recipients supported by the National Institutes of Health.

Dr. Shapiro maintains an active immunology/transplant research laboratory focused on the aspects of tolerance induction relating to islet transplantation with emphasis on costimulatory blockade and chimerism, with translational potential to clinical islet recipients. In early 2004, Dr. Shapiro was awarded an Alberta Heritage Foundation for Medical Research Scholarship to support his ongoing tolerance research.

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## **Additional Sanguine Management and Medical Board Members**

Sanguine has brought together a professional team of scientists, physicians and developers with the required expertise to bring PHER-O2 through development and the FDA approval process. The company management and advisory board consists of the following members:

### **Dr. Thomas C. Drees, M.B.A., Ph.D. Founder, President and CEO; Board Chairman**

Dr. Drees founded Sanguine Corporation, having worked at the forefront of the blood substitute business for over thirty-four years with Abbott, Lilly and Alpha Therapeutics. Dr. Drees was the President and CEO of Alpha Therapeutics, the only company to obtain FDA approval for a blood substitute product for human use. He has many years of experience with FDA approval, and the development, marketing and management of artificial blood products. Dr. Drees is one of the most experienced individuals in the field of blood substitutes. He has published many articles and a book on the subject of blood substitutes, and has consulted worldwide for the blood industry through Drees International, Inc. He was an officer and Director of the American Blood Resources Association and Blood Commission.

Dr. Drees' role in the Company is to drive the business technical and regulatory development of PHER-O2. He also holds four patents on fluorocarbon synthetic red blood cells. Dr. Drees earned his MBA and Ph.D. from Pacific Western University.

### **L. Cass Terry, MD, Ph.D., Pharm.D Medical Advisory Board Member**

Dr. Terry currently serves in a number of important academic and clinical appointments. Dr. Terry was most recently the Chairman of the Department of Neurology, Medical College of Wisconsin; Chief of Staff, Froedtert Memorial Lutheran Hospital; Professor of Neurology, Medical College of Wisconsin; and a Professor of Physiology, Medical College of Wisconsin.

Dr. Terry has a critical array of contacts in both the medical and academic communities, which will greatly enhance the development of Sanguine's technology. Sanguine will utilize his strong clinical background in anti-aging research to promote PHER-O2's development.

Dr. Terry has lead an extensive number of studies, funded by over \$6.9 million in research grants over the past twenty years. These studies have lead to authorship or co-authorship of well over a hundred publications.

**Herbert J. Meiselman, Sc.D.**

**Medical and Applications Advisory Board Member**

Dr. Herbert Meiselman is a professor of Physiology and Biophysics at the University of Southern California School of Medicine and an authority on blood rheology and biosurfactants. His background will be particularly needed in determining in vivo fluid dynamics of PHER-O2 and the dynamics of manufacturing the product.

Dr. Meiselman has published extensively. A few notable articles are:

- *Hemorheological Effects of a Nonionic Copolymer Surfactant*, Clinical Hemorheology, 1992.
- *Effects of Cellular Morphology on the Viscoelastic Behavior of High Hematocrit Red Blood Cell Suspensions*, 26 Biorheology 154, 1989.
- *Osmality-mediated Fahraeus and Fahraeus-Lindquist Effects for Human Red Blood Cell Suspensions*, 254 American Journal of Physiology H238, 1988.

Dr. Meiselman's background and direction are pivotal in the technical development of PHER-O2.

**Robert Kwun, M.D.**

**Medical and Applications Advisory Board Member**

Dr. Robert Kwun, a board certified retina surgeon, who has been retained to evaluate the use of PHER-O2 in ophthalmic surgery and other medical applications.

Dr Kwun received his undergraduate degree from Harvard University and his Doctor of Medicine degree from Columbia University in New York, New York. Dr. Kwun's clinical training includes Columbia University's Manhattan Eye Ear and Throat Hospital, Los Angeles Children's - USC Medical Center, the Doheny Eye Institute, and New York's St. Vincent's Hospital. Dr. Kwun has received numerous honors and awards in retinal surgery in addition to having authored or co-authored many articles in the area of macular degeneration and other areas ophthalmic surgery.

**Craig Morrison, M.D.**

**Medical Board Member, Vice President of Surgical Applications**

Dr. Morrison is a surgeon practicing in the Utah County, Utah area. Dr. Morrison is a practicing physician and surgeon, and pioneering shareholders in the finance and development of Sanguine Corporation. Dr. Morrison will support the activities of the Medical Advisory Board, and development of PHER-O2 based on his long experience.