

Spherix Business Update/2Q Financial Results Conference Call
Thursday, August 18, 2011
12:00 p.m. Eastern Time

Kim Golodetz

Thank you. This is Kim Golodetz with Lippert/Heilshorn and Associates.
Thank you all for participating in today's call.

Joining me this morning from Spherix are Dr. Claire Kruger, Chief Executive Officer; Robert Clayton, Chief Financial Officer; and Dr. Robert Lodder, the company's President.

Last week, Spherix issued a press release reporting its second quarter 2011 financial results and business highlights. If you have not received this news release or if you would like to be added to the company's distribution list, please call Lippert/Heilshorn in New York at 212-838-3777 and speak with Carolyn Curran.

As we begin, I would like to caution that comments made during this conference call by management will contain forward looking statements regarding the operations and future results of Spherix. These forward looking statements involve risks and uncertainties that include, without limitation; risk that product candidates may fail in the clinic or may not be successfully marketed or manufactured; that Spherix may lack financial resources to complete development of D-tagatose and/or SPX-106; that the FDA may interpret the results of the studies differently than management's

interpretation; that competing products may be more successful; that demands for new pharmaceutical products may decrease; that the biopharmaceutical industry may experience negative market trends; that the company's continuing efforts to develop D-tagatose and/or SPX-106 may be unsuccessful; that its common stock could be de-listed from the NASDAQ capital market and other risks detailed in the company's filings with the U.S. Securities and Exchange Commission.

I encourage you to review these filings including the company's Forms 10-K and 10-Q, which identify specific factors that may cause actual results or events to differ materially from those described in the forward looking statements.

Importantly, the content of this conference call contains time-sensitive information that is accurate only as of the date of the live call, today August 18, 2011. The company undertakes no obligation to revise or update any statements to reflect events or circumstances after the date of this call.

With that, I would like to turn the call over to Claire Kruger. Dr. Kruger.

Claire Kruger

Thank you, Kim. And my thanks to each of you for participating in this call.

As you probably are aware, Spherix consists of two subsidiaries: Spherix Consulting, our health sciences consulting division, which is responsible for

our revenues; and Biospherics, which is our development subsidiary that accounts for all the R&D expense.

Today Dr. Robert Lodder and I will review our accomplishments and our growth strategy; and as we did a few months ago, will provide our upcoming milestones so that you may measure our progress going forward.

Let me start with a few words on our Health Sciences Consulting business. As you are aware, this wholly-owned subsidiary accounts for almost all the revenues of the company. We performed work on behalf of 15 customers this year, compared with 14 customers in the same period last year. Our scientists regularly publish and present at major trade and professional shows and conferences and we've listed some of them in the press release that we issued last week. Importantly, this division is responsible for overseeing the research work of Biospherics, our pharmaceutical-development subsidiary.

Today, we will discuss the progress we are making in our business development strategy of in-licensing IP to continue portfolio diversification. Before I discuss these plans and the expectations for our in-licensed compound SPX-106 in the treatment of dyslipidemias alone and with D-tagatose, I'll turn the call over to Robert Clayton, who will review our recent financial results with you.

Robert.

Thanks Claire.

The net loss for the second quarter of 2011 was \$1.0 million or \$0.40 per share, compared with a net loss for the second quarter of 2010 of \$2.6 million or \$1.49 per share. The narrowing of the net loss was attributed mainly to lower research and development (R&D) expense.

R&D expense for the second quarter of 2011 was \$0.4 million, a decrease of \$1.1 million from R&D expense of \$1.5 million in the prior year's second quarter. The decrease in R&D was attributed to lower spending following completion of a Phase 3 clinical trial and a Phase 2 dose-ranging trial to develop D-tagatose for the treatment of Type 2 diabetes. Second quarter 2011 R&D expense is related to the Company's preclinical trials for the use of both D-tagatose and SPX-106 in lowering triglyceride levels.

The net loss for the first two quarters of this year was \$1.2 million or \$0.50 per share, compared with a net loss for the six months ended June 30, 2010 of \$4.7 million or \$2.74 per share. R&D expense for the first half of 2011 was \$0.8 million, down from \$2.9 million in the comparable prior year period due to completion of the aforementioned clinical trial.

The Company had cash and cash equivalents of \$5.6 million and working capital of \$5.6 million as of June 30, 2011, compared with \$5.6 million and \$4.9 million, respectively, as of December 31, 2010. The Company raised

\$2.5 million, net of offering costs, in a registered direct offering of common stock and warrants during the first quarter of 2011.

We regained compliance with our Nasdaq listing during the quarter, owing to a one-for-ten reverse stock split effected in May.

With that, I'll turn the call back to Claire.

Claire Kruger

Thanks Robert.

For those of you who are new to Spherix, I'll very briefly review our experience with D-tagatose as a treatment for diabetes. As a reminder, D-tagatose was originally developed as a low-calorie sweetener and its safety in humans was established in 2001 when it received the designation as Generally Recognized As Safe, or GRAS, for use in foods by the U.S. Food and Drug Administration.

You might recall that D-tagatose showed a statistically significant reduction in HbA1c levels in our Phase 3 double-blind placebo controlled trial in patients with Type 2 diabetes. The reduction was 0.4 percent in the intent-to-treat global population at 10 months, and a 1.1 percent reduction in the U.S. per-protocol population at 10 months, which we believe may be due to differences not only in patient compliance between the populations, but

also due to differences in adiposity, as reflected in this study by body mass index, or BMI.

We continue to believe that D-tagatose is sufficiently effective to support continued development in diabetes, and because the cost for continued development is beyond our means, we continue to have discussions with potential partners, who could fund the additional studies required by the FDA to market D-tagatose as a diabetes drug.

In addition, we believe the use of D-tagatose as an ingredient in functional foods holds promise and we continue to remain open to opportunities in this product space. Given our expertise in food safety honed through our work in the health sciences consulting side of our business, Spherix is uniquely positioned to understand the role that D-tagatose may play as a functional food ingredient, and we may be able to benefit from the strength of our contacts in the food industry.

As I indicated previously, we have been actively engaged in pursuing an in-licensing strategy to bolster and diversify our pipeline. As you are aware, we have in-licensed preclinical cardiovascular and metabolic drug candidates from the University of Kentucky, and Rob Lodder will update you on this progress shortly. We are also currently evaluating numerous additional opportunities, including those in the orphan drug space, as exciting and achievable targets. We are investigating opportunities to in-license drug candidates currently in Phase 1 or Phase 2. Our objective is to choose the opportunities best suited to our business goals based on financial considerations, achievable clinical milestones and development

potential that will enhance our shareholder value. Our in-house scientific expertise and long-term experience in execution of drug development plans, including successful completion of Phase 2 and 3 clinical diabetes trials, has been cited as very attractive during our discussions with potential targets. Additionally, our NASDAQ listing positions the company as an attractive platform for private companies whose products require access to capital for further development.

In particular, our attention to the orphan drug market is important because the benefits of orphan drugs for the developer and marketer are numerous. First, the pathway to approval tends to be shorter, because by definition these patients have unmet medical needs and the regulatory authorities are anxious to provide solutions. Orphan drugs are granted seven years of additional exclusivity to encourage their development by providing this financial incentive. In addition, these drugs typically may be marketed by fewer sales representatives, and often prices for the drugs are set at a premium.

We have engaged a financial advisor who is charged with identifying drug candidates, including orphan drug candidates, in clinical development that may be available to us.

I'd like to turn the call over to Dr. Robert Lodder now to go over our progress with our preclinical programs in both D-tagatose and our licensed product SPX-106.

Rob?

Thanks Claire.

As Claire mentioned, SPX-106 is in preclinical development in combination with other agents, including D-tagatose, for the prevention and treatment of atherosclerosis, hypertriglyceridemia and related dyslipidemias.

As we announced in June, SPX-106 achieved statistically significant reductions in triglycerides and cholesterol when administered in combination with D-tagatose for nine weeks to genetically engineered mice prone to dyslipidemia. The animals were dosed twice-daily, and that dose significantly reduced triglycerides by 43 mg/dl compared with control animals having a mean triglyceride level of 118 mg/dl, or a 36% reduction, with a p value of 0.01. The same therapy significantly reduced total cholesterol by 73 mg/dl from a mean level of 378 mg/dl, or a 19% reduction, compared with control animals, again with a p value of 0.01. Results of measurements of atherosclerotic lesions in these animals will be available very soon. The link between triglycerides and atherosclerosis is not well understood. However, a drug to treat hypertriglyceridemia is more interesting if it also reduces atherosclerosis.

Both SPX-106 and D-tagatose alone are able to lower both triglycerides and cholesterol, but the combination (SPX-106T) is believed to be extremely powerful. Our next step with this combination is a test in a

second animal model, the wild-type Syrian golden hamster, which is important because hamsters express CETP (cholesteryl ester transfer protein) as humans do. CETP is a plasma protein that collects triglycerides and cholesteryl esters from very-low-density (VLDL) or low-density lipoproteins (LDL, often called the "bad" cholesterol), and usually exchanges them for the same type of molecules from high-density lipoproteins (HDL, the "good" cholesterol), and vice versa. This hamster study was recently initiated and is expected to provide results by the end of September 2011.

An absorption study now underway of glucose, fructose and tagatose in the gut will help to clarify the mechanism of action of tagatose. Depending upon the results of the absorption study, the absorption study will most likely be followed later in the fall of 2011 by a study of VLDL production in the liver.

An important 4-week safety study of the toxicology of SPX-106 is also presently being conducted. This experiment examines the effect of near normal doses to very high doses of SPX-106 on various organ systems in the rat. Once this study is completed, the Company intends to submit an IND application to the FDA for SPX-106T and begin human trials. Biospherics would then be free to begin a Phase 1 safety study of SPX-106T in humans in early 2012.

Phase 1 studies of SPX-106T would determine safety and dosing over the next year (that is, 2012) and involve perhaps 20-80 healthy volunteers. Phase 2 studies over 2013 and 2014 might involve 100-300 patient

volunteers and would evaluate effectiveness of SPX-106T, as well as look for any side effects. Finally, Phase 3 clinical trials in 2015-2017 in 1,000 to 3,000 patient volunteers would establish efficacy and monitor any adverse reactions from long-term use before an NDA is filed at FDA.

In the meantime, Biospherics will continue to develop its other in-licensed drug candidates to diversify its pipeline.

With this review of the data, I'll turn the call back over to Claire.

Claire Kruger

Thanks Rob.

As we have mentioned in the past, the development pathways for triglycerides and cholesterol-lowering drugs have lower hurdles in terms of study requirements for approval, and thus lower development costs, than for diabetes. Therefore, we have chosen to fund additional research to explore these indications. The market for triglyceride-lowering and cholesterol-lowering drugs is a large and under-served market, with an estimated worldwide treatment market of \$26 billion annually. and exceeds \$3 billion annually in the U.S. alone.

With fully one-third of the population of the U.S. overweight or obese, the market for pharmaceutical products to treat the metabolic syndrome is enormous, and a host of drugs has been fraught with safety problems and

denied approval by the FDA. We hope that SPX-106T will prove to be safe and effective, and ultimately garner very meaningful sales.

However, as Rob mentioned, the path to approval will take a while, so we have elected to pursue an in-licensing strategy, which will provide us with a nearer-term pipeline, and round out our development efforts.

In closing we're very excited about our drug development pipeline. We plan to present at the Rodman and Renshaw conference in September, and hope to provide additional details on our progress then.

In the meantime, I wish you good day.