

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS**

**QUARTER AND YEAR ENDED DECEMBER 31, 2009**

**INFORMATION REGARDING FORWARD-LOOKING STATEMENTS**

This report contains forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- the marketing and sales of our products and services;
- the execution of Benten's business plans;
- the declaration and distribution of any future dividends;
- our ability to sustain licensing and other contract-based revenues;
- the value of, and expenses associated with, our intellectual property;
- the impact of our restructuring efforts;
- the requirements of pharmaceutical and biotechnology companies;
- the benefits of knockout mice programs and, in particular, our technologies and products, to the pharmaceutical industry;
- the increasing competition we face in the field of knockout mice from both commercial and government organizations;
- failures in the drug discovery, development and approval processes by our partners and collaborators;
- our ability to successfully execute our business plan and to meet contractual obligations, in view of the Company's limited staff; and
- liquidity and capital resources.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "potential" and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. These forward-looking statements represent our estimates and assumptions only as of the date of this report.

You should read this report completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

**YOU SHOULD READ THE FOLLOWING DISCUSSION AND ANALYSIS IN CONJUNCTION WITH OUR FINANCIAL STATEMENTS AND THE NOTES ACCOMPANYING THE FINANCIAL STATEMENTS.**

## **1. Overview**

Deltagen (or the “Company” or “We”) is a provider of research tools to the biopharmaceutical industry and to the academic research community. Deltagen has generated an inventory of “knockout mice” in which a single gene has been deleted (“knocked out”). The knockout mice have been analyzed to determine the phenotypic changes associated with that gene deletion. This phenotypic data has been organized in an integrated database known as DeltaBase. DeltaBase contains phenotypic data on 750 different knockout mouse lines. In addition to those 750 knockout mouse lines, Deltagen has approximately 150 additional knockout mouse lines that have not been characterized phenotypically. Deltagen also has approximately 450 knockout lines at the embryonic stem (ES) cell stage.

Our customers and partners/collaborators have included some of the world’s largest pharmaceutical companies, including GlaxoSmithKline plc, Merck & Co., Inc., Pfizer Inc., Eli Lilly and Company and Schering-Plough Research Institute.

We have historically generated revenue from our DeltaBase and DeltaOne products and programs.

DeltaBase is our proprietary database that provides information, based on knockout mouse studies, on gene function and validated gene targets for drug discovery. Each knockout mouse underwent a standardized, detailed and extensive analysis in order to determine the function and role that a particular gene plays in the mouse and that gene’s suitability as a drug target.

DeltaOne offers access to our portfolio of knockout mice and/or accompanying phenotypic data, as well as any corresponding intellectual property, on a gene-by-gene basis.

We derive substantially all of our revenues from a narrow and limited range of sources. Substantially all of our revenues are currently derived from the licensing of knockout mouse lines and related phenotypic data to the biopharmaceutical industry and academic institutions under our DeltaOne program. Because of continuing consolidation in the biopharmaceutical industry and the finite number of knockout lines in the Company’s inventory, significant uncertainty exists with respect to the Company’s future revenues.

Our operating results have fluctuated in the past and are likely to do so in the future, and we do not believe that period-to-period comparisons of our operating results are a good indication of our future performance.

## **2. Critical Accounting Policies and Estimates**

The consolidated financial statements of Deltagen for the three-month period and year ended December 31, 2009 are unaudited, but have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”). These consolidated financial statements have been prepared so that they present fairly, in the opinion of management, the Company’s financial position and its results of operations and its cash flows for the period presented.

Under our revenue recognition policy, revenues are recognized when a definitive agreement with a determinable price exists, product delivery and/or invoicing (in each case where there is reasonable assurance of meeting customer-specified criteria) have occurred, and collectability is reasonably assured. A change in our revenue recognition policy or changes in the terms of contracts under which we recognize revenues could have an impact on the amount and timing of our recognition of revenues.

The preparation of consolidated financial statements in conformity with GAAP requires the Company to make estimates and assumptions that affect the amounts that are reported in the consolidated financial statements and accompanying disclosures. Although these estimates are based on the Company’s best knowledge of current events and actions that the Company may undertake in the future, actual results may differ materially from the estimates.

### 3. Results of Operations

The Company's consolidated revenues for the three months and year ended December 31, 2009 totaled \$0.352 million and \$1.357 million, respectively. The revenues in the fourth quarter were attributable primarily to license fees associated with the provision of knockout mice and related phenotypic data pursuant to orders placed by customers under the Company's DeltaOne™ program. Cumulative revenues for the third and fourth quarters of 2009 (\$0.811 million) increased 49% over cumulative revenues for the first and second quarters of 2009 (\$0.546 million). The increase in revenues in the second half of 2009 was associated with a rebound in deal flow following significantly decreased deal flow during the fourth quarter of 2008 and the first quarter of 2009.

The Company had interest income of \$0.002 million and \$0.016 million for the three months and year ended December 31, 2009, respectively.

Total consolidated expenses for the three months and year ended December 31, 2009 were \$0.705 million and \$2.060 million, respectively. The expenses in the fourth quarter (and full-year 2009) were attributable primarily to labor costs and other general and administrative expenses, including \$0.083 million (\$0.408 million) in royalty and commission expenses, expenses of \$0.293 million (\$0.430 million) relating to the Company's December 10, 2009 acquisition and operation of Benten BioServices, Inc. ("Benten Expenses"), and non-recurring expenses of \$0.116 million (\$0.272 million) associated with the prosecution and issuance of patents licensed exclusively to Xenopharm, Inc. ("Xenopharm"), a wholly-owned subsidiary of the Company. In addition, the total expenses in the fourth quarter of 2009 included \$0.057 million in non-cash, stock-based compensation expenses relating to stock options granted by the Company on December 21, 2009 in accordance with Statement of Financial Standards (SFAS 123R). As of December 31, 2009, the Company had paid to Lexicon Pharmaceuticals, Inc. ("Lexicon") an aggregate total of \$4.803 million in royalty payments pursuant to a March 2005 settlement agreement between Lexicon and the Company. Under the settlement, the maximum, aggregate amount of royalty payments due to Lexicon is \$6 million. Accordingly, up to \$1.197 million in contingent royalty payments remained owed to Lexicon as of December 31, 2009.

Consolidated net losses before provision for income taxes for the three months and year ended December 31, 2009 were \$0.350 million and \$0.687, respectively. Excluding Benten Expenses, net losses before provision for income taxes for the three months and year ended December 31, 2009 would have been \$0.057 million and \$0.257 million.

As of December 31, 2009, the Company had \$5.704 million in consolidated cash and cash equivalents (compared to \$5.084 million as of December 31, 2008) and \$0.131 million in accounts receivable.

### 4. Major Events During 2009 and Subsequent Events

#### Acquisition of Benten BioServices:

On December 10, 2009, the Company announced its acquisition of Benten BioServices, Inc. ("Benten"), an emerging Pennsylvania-based contract services organization dedicated to the provision of regulatory-compliant services to support the development and commercialization of biopharmaceutical products. Benten's services are designed to address specific requirements for critical stages in product development, including biosafety testing, raw materials testing, assay and process validation services, cell banking and characterization services, and technology platform-specific R&D support and consulting services.

Deltagen issued 9,126,085 shares of common stock to the former Benten shareholders in exchange for all of Benten's outstanding equity securities. Penn Venture Partners, L.P. and Life Sciences Greenhouse of Central Pennsylvania invested \$1,250,000 and \$250,000, respectively, in the combined company. The transaction valued Deltagen at \$7,000,000 prior to the transaction and the combined company at \$8,500,000 after

the transaction. With a total of 51,714,483 shares outstanding after the closing, the transaction valuation represented approximately \$0.164 per Deltagen share. As a result of the transaction, the former Benten shareholders own 17.65% of Deltagen's outstanding common stock.

Benten plans to lease facilities and operate in Pennsylvania as a wholly-owned subsidiary of Deltagen. Benten's services will be offered worldwide to biopharmaceutical companies, emerging biotechs, government agencies and universities involved in the development of biologicals, recombinant proteins, monoclonal antibodies, cell therapeutics, vaccines and biological devices. Additional details relating to the acquisition and business of Benten are provided in the Company's December 10, 2009 press release.

The Company has entered into a non-binding letter of intent with respect to the prospective leasing of facilities for Benten's operations to be located in Pennsylvania.

### **Issuance of Stock Options:**

In connection with the acquisition of Benten, the Company's Board of Directors approved a grant of stock options to the officers and directors of the combined company. On December 21, 2009, the Company granted the following options to purchase shares of the Company's common stock at an exercise price of \$0.075 per share:

Paula MacDonald – 2,100,000 incentive stock options (“ISOs”)  
Dr. Robert Driscoll – 825,000 ISOs  
Dr. Winston Thomas – 425,000 ISOs  
Dr. Harvey Schlesinger – 300,000 ISOs  
Dr. Constantine Anagnostopoulos – 150,000 nonstatutory stock options (“NSOs”)  
Dr. William Scott – 125,000 NSOs  
Martin Hernon – 125,000 NSOs  
Thomas Penn – 125,000 NSOs

The four-year vesting schedule of the ISOs is as follows: 25% vested on the grant date and, beginning on the first anniversary of the grant date, equal monthly vesting over the subsequent three-year period. The three-year vesting schedule of the NSOs is as follows: 25% vested on the grant date and, beginning on the first anniversary of the grant date, equal monthly vesting over the subsequent two-year period.

### **Xenopharm Patents Issued:**

Xenopharm is an exclusive licensee under certain technologies relating to the metabolism of foreign compounds, known as xenobiotics, invented by Professor Christopher Liddle et al. and assigned to the University of Sydney (“Sydney”). Three Sydney patents were newly granted and issued in December 2009 and January 2010: United States Patent No. 7,638,614 (December 29, 2009); European Patent No. 1,082,437 (December 16, 2009); and Japanese Patent No. 4,446,603 (January 29, 2010).

The patents cover technologies relating to modulating or effecting gene expression and/or formation of human cytochrome P450 CYP3A4 enzyme, an enzyme expressed primarily in the human liver. The CYP3A4-related technologies provide a system for screening potential new drug compounds for susceptibility to metabolic action in human patients and for generally studying the metabolism of xenobiotics in humans, including drug clearance, potential drug toxicity and drug-drug interactions.

## **RISK FACTORS AFFECTING FUTURE OPERATING RESULTS**

There are numerous risks and uncertainties related to both our business and our industry that could cause actual results or events to differ materially from those indicated by forward-looking statements.

For a list of additional risk factors that may affect our future operating results, refer to the “Risk Factors” section of “Management’s Discussion and Analysis of Financial Conditions and Results of Operations” for the year ended December 31, 2005, as posted on the Company’s website ([www.deltagen.com](http://www.deltagen.com)). The risk factors listed there are not the only ones we face and additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair or otherwise affect our business operations.