

SECURITIES & EXCHANGE COMMISSION EDGAR FILING

Form: 10-K

Date Filed: 2012-03-29

Corporate Issuer CIK: 1091596

=

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-K

(Mark One)

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Fiscal Year Ended December 31, 2011

- OR
TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Transition Period from _____ to _____

Commission File Number 001-32518



CYTOMEDIX, INC.

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

(Exact Name of Registrant as Specified in Its Charter)

23-3011702
(I.R.S. Employer
Identification No.)

**209 Perry Parkway, Suite 7
Gaithersburg, MD 20877**

(Address of Principal Executive Offices) (Zip Code)

(240) 499-2680

(Registrant's Telephone Number, Including Area Code)

Securities registered under Section 12(b) of the Exchange Act: **None**

Securities registered under Section 12(g) of the Exchange Act:

Common Stock, par value \$.0001

(Title of class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.
Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes
No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "accelerated filer, large accelerated filer", and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large Accelerated Filer Accelerated Filer Non-accelerated Filer Smaller Reporting Company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes
 No

The aggregate market value of the voting stock (Common stock) held by non-affiliates of the registrant as of the close of business on June 30, 2011 was approximately \$11.5 million based on the closing sale price of the Common stock on the OTC Bulletin Board on that date. The registrant does not have any non-voting common equity.

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date. 70,644,027 shares of Common stock, par value \$.0001, outstanding as of March 16, 2012.

[TABLE OF CONTENTS](#)

CYTOMEDIX, INC.

TABLE OF CONTENTS

	Page
PART I	
Item 1. Business	1
Item 1A. Risk Factors	14
Item 1B. Unresolved Staff Comments	22
Item 2. Properties	22
Item 3. Legal Proceedings	22
Item 4. Mine Safety Disclosures	22
PART II	
Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	23
Item 6. Selected Financial Data	23
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations	24
Item 7A. Quantitative and Qualitative Disclosures About Market Risk	31
Item 8. Financial Statements and Supplementary Data	32
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	71
Item 9A. Controls and Procedures	71
PART III	
Item 10. Directors, Executive Officers and Corporate Governance	72
Item 11. Executive Compensation	77
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	80
Item 13. Certain Relationships and Related Transactions, and Director Independence	83
Item 14. Principal Accountant Fees and Services	84
PART IV	
Item 15. Exhibits and Financial Statement Schedules	86
Signatures	87

FORWARD LOOKING STATEMENTS

This Annual Report on Form 10-K (the "Annual Report") (including the section regarding Management's Discussion and Analysis of Financial Condition and Results of Operations) contains certain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, as well as information relating to Cytomedix, Inc. that is based on management's exercise of business judgment and assumptions made by and information currently available to management. Although forward-looking statements in this Annual Report reflect the good faith judgment of management, such statements can only be based on facts and factors currently known by the Company. Consequently, forward-looking statements are inherently subject to risks and uncertainties and actual results and outcomes may differ materially from the results and outcomes discussed in or anticipated by the forward-looking statements. When used in this document and other documents, releases and reports released by the Company, the words "anticipate," "believe," "estimate," "expect," "intend," "the facts suggest" and words of similar import, are intended to identify any forward-looking statements. You should not place undue reliance on these forward-looking statements. These statements reflect the Company's current view of future events and are subject to certain risks and uncertainties as noted in this Annual Report. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results could differ materially from those anticipated in these forward-looking statements. Actual events, transactions and results may materially differ from the anticipated events, transactions or results described in such statements. Although the Company believes that its expectations are based on reasonable assumptions, it can give no assurance that the expectations will materialize. Many factors could cause actual results to differ materially from these forward looking statements including those set forth in Item 1A of this Annual Report. Other unknown, unidentified or unpredictable factors could materially and adversely impact future results. The Company undertakes no obligation and does not intend to update, revise or otherwise publicly release any revisions to its forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of any unanticipated events.

The Company files reports with the Securities and Exchange Commission ("SEC" or "Commission"). It makes available on its website (<http://www.cytomedix.com>) free of charge its Annual Report, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports as soon as reasonably practicable after electronic filing of such materials with or furnishing of them to the SEC. Information appearing at the Company's website is not a part of this Annual Report. You can also read and copy any materials filed by the Company with the Commission at its Public Reference Room at 100 F Street, NE, Washington, DC 20549. You can obtain additional information about the operation of the Public Reference Room by calling the Commission at 1-800-SEC-0330. In addition, the Commission maintains an Internet site (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the Commission, including Cytomedix.

The Company's corporate headquarters are located at 209 Perry Parkway, Suite 7, Gaithersburg, MD 20877. Its phone number is (240) 499-2680. Its fiscal year begins on January 1, and ends on December 31, and any references herein to "Fiscal 2011" mean the year ended December 31, 2011, and references to other "Fiscal" years mean the year ending December 31 of the year indicated.

The Company owns or has rights to various copyrights, trademarks and trade names used in its business. This Annual Report also includes discussions of or references to other trademarks, service marks and trade names of other companies. Other trademarks and trade names appearing in this Annual Report are the property of the holder of such trademarks and trade names.

The Company obtained statistical data, market data and other industry data and forecasts used in this Annual Report from publicly available information. While it believes that the statistical data, industry data, forecasts and market research are reliable, the Company has not independently verified the data, and does not make any representation as to the accuracy of that information.

PART I

ITEM 1. Business

Corporate Overview

Informatix Holdings, Inc. was incorporated in Delaware in 1998. In 1999, Autologous Wound Therapy, Inc. (“AWT”), an Arkansas Corporation, merged with and into Informatix Holdings, Inc. and the name of the surviving corporation was changed to Autologous Wound Therapy, Inc. In 2000, AWT changed its name to Cytomedix, Inc. (“Cytomedix” or the “Company”). In 2001, the Company filed bankruptcy under Chapter 11 of the United States Bankruptcy Code, after which Cytomedix was authorized to continue to conduct its business as debtor and debtor-in-possession. The Company emerged from bankruptcy in 2002 under a Plan of Reorganization. At that time, all of the Company’s securities or other claims against or equity interest in the Company were canceled and of no further force or effect. Holders of certain claims or securities were entitled to receive new securities from Cytomedix in exchange for their claims or equity interests prior to bankruptcy. All known and allowed claims and equity interests have been satisfied and resolved as of the filing of this Annual Report. In September 2007, the Company received 510(k) clearance for the AutoloGel™ System (“AutoloGel™”) from the Food and Drug Administration (“FDA”). In April 2010, the Company acquired the Angel® Whole Blood Separation System (“Angel®”) and activAT® Autologous Thrombin Processing Kit (“activAT®”) (together, the “Angel® Business”) from Sorin Group USA, Inc (“Sorin”). In February 2012, the Company acquired Aldagen, Inc., a privately held cell therapy company located in Durham, NC. Aldagen, Inc. is now a wholly-owned subsidiary of Cytomedix. The Company’s principal offices are located in Gaithersburg, Maryland.

NYSE Amex Delisting — Quotation on the OTC Bulletin Board

In January 2011, NYSE Amex (the “Exchange”) notified the Company that the Company’s common stock would cease trading on the Exchange with the open of trading on January 26, 2011. The Company’s common stock began being quoted on the OTC Bulletin Board on January 26, 2011 under the new trading symbol of “CMXI”.

Financial Information about Segments and Geographic Regions

Through December 31, 2011, Cytomedix had only one operating segment. Cytomedix primarily operates in the United States. Operations outside the United States currently represent less than 10% of the business and are not separately presented in this report. See Item 8, Financial Statements and Supplementary Data.

Our Business

Cytomedix seeks to develop and commercialize autologous regenerative biotherapies that facilitate the body’s natural healing processes for enhanced healing and tissue repair. We currently have a growing commercial operation, and a robust clinical pipeline seeking to exploit large market opportunities with unmet medical needs. Our current commercial offerings are centered around our platelet rich plasma (“PRP”) platform technology, and primarily include the Angel® Whole Blood Separation System (“Angel®”) and the AutoloGel™ System (“AutoloGel”). Our clinical pipeline primarily involves the ALDH^{br} cell-based therapies, acquired from Aldagen, Inc., a privately held biopharmaceutical company, in February 2012, and the expansion of the Angel® System for use in other clinical indications.

Our commercial operations primarily address the areas of wound care, infection control, and orthopedic surgery. Approximately 94% of our sales are in the United States, where we sell our products through a combination of direct sales representatives and independent sales agents. Combined, we have approximately 20 sales professionals operating throughout the United States. In April 2011, we added a Director of National Accounts to focus on large chains, managed care organizations, and commercial reimbursement matters, as well as providing leadership for the overall sales effort. In Europe, the Middle East, and Canada, we have a network of distributors covering several major markets. Until November 2009, we licensed certain of our patents to surgical medical device suppliers in the United States; these license agreements and the revenue streams associated therewith, have since terminated as the underlying patents have expired.

TABLE OF CONTENTS

The Angel® Whole Blood Separation System

The Angel® Whole Blood Separation System, acquired from Sorin in April 2010, is designed for single patient use at the point of care, and provides a simple yet flexible means for producing quality PRP and platelet poor plasma (“PPP”) clinical blood components. The system is easy to set up and maintain and is capable of processing up to 180 ml of whole blood. In surgical procedures, the PRP can be mixed with bone graft material prior to application. Growth factors released by platelets present in the PRP have been shown to control infection and aid in the healing process.

We have grown worldwide sales of Angel® each quarter since acquiring the product line in April 2010 and expect this trend to continue. After acquiring Angel® from Sorin in 2010, we successfully worked to ensure that we did not experience any net attrition of sales and any major supply chain interruptions, and our integration and transition efforts are now complete. Looking forward, our focus will be on growing sales in both the U.S. and Europe, and seeking efficiencies in the supply chain. We expect that future sales growth of these products will be driven through a combination of a more focused marketing effort, strengthened distributor relationships, expanded indications, and direct sales. We expect our international distributors to drive increased sales in the coming quarters. In the long term, we expect new technology applications for Angel® and expansion into other surgical and orthopedic applications will provide future growth opportunities.

The Angel product line also includes ancillary products such as phlebotomy and applicator supplies, and activAT®. activAT® is designed to produce autologous thrombin serum from platelet poor plasma and is sold exclusively in Europe and Canada, where it provides a safe alternative to bovine-derived products. It currently represents approximately 1% of our total sales revenue.

Market

Angel® was cleared by the FDA in August 2005 and is used primarily in surgical settings, for separation of whole blood into red cells, platelet poor plasma and platelet rich plasma. We are currently selling primarily to perfusionists and hospitals, that primarily use our products in the cardiovascular, and to a lesser extent orthopedic, surgical markets. Perfusionists are increasingly expanding their clinical reach into areas such as wound management where their expertise in the management of blood and the oxygenation of tissue has become more valuable with the introduction of new therapeutic interventions such as PRP. We are also pursuing opportunities for the application of Angel® into other markets such as veterinary applications, sports injuries, tissue sealant, and stem cell therapy.

According to GlobalData’s May 2010 report, “Platelet Rich Plasma: Market Snapshot”, the current estimated market in the U.S. for PRP in surgical applications is estimated to be approximately \$75 million. It is projected to grow at 14% annually over the next several years.

Product Development

We continue to make progress on our efforts to obtain FDA clearance for additional indications for Angel®, specifically bone marrow aspirate processing. We are aware that Angel has been used effectively in this indication, giving us the confidence to proceed. Bone marrow is a rich source of stem cells used in regenerative procedures. Stem cells have the ability to grow and differentiate into specific tissues making them a critical component for tissue regeneration in addition to growth factors and other signal molecules. In August 2011, we filed a 510(k) submission with the FDA for bone marrow aspirate processing, and are currently in discussions with FDA regarding these types of applications.

Competition

We believe Angel® has several competitive advantages over other products with similar indications. Specifically, it has a high degree of flexibility regarding platelet concentrations, hematocrit levels, and volumes. Furthermore, its output is highly consistent, aseptic, and the touch screen interface provides for ease of use by the clinician. However, a number of our competitors are much larger companies, with established market share and significantly greater resources to expand sales and marketing efforts. The primary companies with competing systems include, Harvest Technologies (a subsidiary of Terumo), Biomet, Artericyte, and Arthrex.

The AutoloGel™ System

The AutoloGel™ System is a device for the production of autologous PRP gel. AutoloGel™ is cleared by the FDA for use on a variety of exuding wounds and is currently marketed to the chronic wound market. In October, 2011, the Company entered into an option agreement with a top 20 global pharmaceutical company granting the potential partner an exclusive option period through June 30, 2012 regarding license of the AutoloGel™ System. During the option period, the potential partner may conduct further commercial market analysis, and the parties could negotiate an exclusive license and supply agreement for the AutoloGel™ System. In exchange for this period of exclusivity, to date we have received non-refundable fees totaling \$4.5 million. Any final agreement is expected to include a modest incremental upfront license payment, a significant product development milestone payment related to the second-generation AutoloGel separation device, and a profit-sharing arrangement on future U.S.-based sales of the AutoloGel System in the chronic wound care market. We believe diligence on the part of our potential partner is complete and all necessary corporate approvals to proceed are in place.

Market

The market for products addressing chronic wounds in the U.S. is estimated to be \$2.3 billion annually, with six million wounds (primarily diabetic foot ulcers, venous leg ulcers, and pressure ulcers). Of this market, PRP treatment currently represents only a small fraction. We continue to focus our sales efforts on sub-markets with established payment pathways for AutoloGel such as Long-Term Acute Care Hospitals ("LTAC"), Veterans Administration Facilities, and certain state Medicaid Agencies. There are over 400 individual LTAC facilities in the U.S. accredited by the Joint Commission on the Accreditation of Healthcare Organizations and there are over 900 LTAC healthcare providers in the U.S. according to the American Hospital Association. There are approximately 1,300 VA facilities and it is estimated that the VA, Department of Defense, and Workers Compensation Programs represent nearly 10% of the total national healthcare expenditures. The broader market, comprised of outpatient wound care centers, doctor's offices, and others, is our longer range target which we plan to address after securing broad commercial reimbursement by Medicare and commercial third party payors.

Internationally, the estimate of chronic wounds is 18 million annually.

In July 2011, we also officially launched AutoloGel™ in the surgical hair restoration market. We completed an evaluation with a leading surgeon in this area, and we expect to leverage this early experience to further penetrate this market in the coming quarters.

Competition

AutoloGel™ remains the only PRP system cleared by the FDA for the management of chronic wounds. We believe the formulation is optimized to increase the benefits when used on chronic wounds. Specifically, it produces a PRP with a physiologically relevant concentration of platelets at 1.3x baseline, which we believe is the optimal concentration for wound management. All other PRP systems produce platelet concentrates at 3 – 14x baseline. Furthermore, it has a very rapid spin time of approximately 60 seconds and is ideal for use as a point-of-care therapy. AutoloGel™ acts as a biologic healing stimulant to restart non-healing wounds. Non healing ulcers are the most frequent cause of amputation. A randomized controlled trial (RCT) with AutoloGel™ demonstrated 81% complete healing in common sized diabetic foot ulcers. Over the past few years, multiple additional data sets have been published in peer-reviewed journals and numerous poster and oral presentations have been presented at leading wound care conferences. However, we face a challenging competitive environment.

The chronic wound market is replete with alternative therapies; advanced therapies that directly compete with AutoloGel™, and commodity types of products that have established habitual use patterns and provider contracts to encourage standardized use. Acceptance of new products, like AutoloGel, is generally slow. Also, several suppliers to the chronic wound market have large market share and significant resources to expend on sales and marketing efforts. However, we believe that the positive clinical data amassed to date, a favorable Medicare coverage determination (discussed below), and the resources of the potential license partner described above, could position AutoloGel to significantly increase sales and market penetration.

TABLE OF CONTENTS

Post-Marketing Surveillance Study

In conjunction with the positive clearance decision from the FDA, we agreed to conduct a post-market surveillance program (The AutoloGel™ Post-marketing Surveillance or "TAPS") to further analyze the safety profile of bovine thrombin as used in the AutoloGel™ System. The TAPS program was initiated in 2008 and the Company began enrolling patients in the TAPS program in late 2009. Since the inception of TAPS, the Company has enrolled 120 patients, noting no adverse events. Based on the additional positive safety data, the Company has suspended further enrollment in this surveillance program, pending further discussion with the FDA.

Product Development

We continue to make progress on enhancing the separation of blood components using AutoloGel™ to provide the added convenience and effectiveness that treating clinicians are looking for at the point of care. Importantly, the new device allows for the whole blood collection and the separation of the platelet rich plasma to be accomplished with a single specially designed closed syringe system that maintains an aseptic environment. This streamlines the process, improves safety and ease-of-use and may be more conducive for certain developing orthopedic indications. The sterilization studies are complete. We expect to file a 510(k) application with the FDA upon the completion of platelet characterization and validation studies. A significant development milestone payment associated with the first commercial sale of this enhanced device is expected to be part of any license and supply agreement we may execute with the potential global pharmaceutical partner discussed above.

Medicare Reimbursement

In March 2008, the U.S. Centers for Medicare and Medicaid Services ("CMS") re-affirmed its 2003 decision of non-coverage for all PRP gel products, which includes AutoloGel™, stating that the data available was "suggestive but not adequate." Since then, the Company has collected a significant amount of new data, conducted a systematic review of the scientific literature, and had multiple interactions with CMS in an effort to ultimately secure Medicare coverage for AutoloGel™. In November 2011, CMS formally initiated a reconsideration of its National Coverage Determination for blood-derived products for chronic non-healing wounds to determine whether autologous platelet rich plasma ("PRP") gel is reasonable and necessary under the Medicare program. The action was taken on November 9, 2011 with the initiation of a tracking sheet and the commencement of a 30 day public comment period. CMS is expected to publish a proposed decision memo on or before May 9, 2012.

Our reimbursement initiative is supported by considerable additional data provided to CMS and actions taken by the Company, including, among others:

- the inclusion of 285 wounds from our wound registry in addition to the 40 wounds from our randomized controlled trial included in the previous submission; we have accumulated data on well over 400 wounds since 2008
- a systematic review of all pertinent published journal articles which has yielded a significant amount of new data
- support and participation of key opinion leaders who collaborated with us and were signatories on the official request for reconsideration submitted to CMS
- legislative and advocacy support that did not exist at the time of our previous request

Our coverage request argued that there is sufficient and compelling clinical evidence to validate the use of autologous PRP gel to treat chronic, non-healing pressure ulcers, venous ulcers, and diabetic foot ulcers. The request set out the reasons why PRP gel significantly and reliably improves the rate of complete healing, speed and progress to healing, and quality of life as compared with standard wound care in the Medicare-eligible population. We believe that a potential path forward towards reimbursement could involve CMS' Coverage with Evidence Development ("CED") program. In the official tracking sheet, CMS encouraged the submission of comments that would pertain to clinical studies falling under the CED paradigm. Our request reflected the feedback received from extensive discussions with CMS covering the clinical evidence, and the support for the coverage of autologous PRP gel among key opinion leaders and

TABLE OF CONTENTS

advocacy groups within the broad wound care community. Cytomedix most recently met with CMS via teleconference in late January 2012, whereby we presented additional data accumulated by our Japanese partner.

Although there are a number of factors that may support our request, there is no assurance that CMS will ultimately grant coverage.

Other Developments

In September 2009, we entered into a license and distribution agreement with Millennia Holdings, Inc. ("Millennia") for the Company's AutoloGel™ System in Japan. That project continues to progress as Millennia is on track to complete its studies to comply with Japanese regulatory requirements. Thereafter, Millennia will either directly distribute AutoloGel™ for the treatment of a variety of chronic wounds, including diabetic wounds, or assist Cytomedix in securing a partner to address widespread distribution in Japan. Specific commercial terms associated with the sale of products in the Japanese market are to be negotiated in good faith between the parties after certain regulatory milestones are achieved and a further understanding of the market dynamics is obtained. The diabetic population in Japan is estimated to be 22.1 million.

Suppliers

We outsource manufacturing for all of our products. We utilize single suppliers for several products that have a complicated manufacturing process and are critical to the Company — specifically, our Angel® whole blood processing sets and Angel® centrifuge devices. We are in the process of formulating a plan to develop redundant capabilities, but that may not take effect until after 2012. Most of the components of AutoloGel™ are readily available and, therefore, the Company believes that, with one exception, no dependencies exist from its current sourcing practices. The one exception is a reagent, bovine thrombin, available exclusively through Pfizer.

Customer Concentration

In 2011, Cytomedix made sales to approximately 175 customers, including distributors. In 2011, no single customer accounted for more than 5% of total product sales and the top 10 customers represented approximately 1/3 of total product sales.

ALDH^{br} Cell Technology and Development Pipeline

We purchased Aldagen in February 2012 in an all equity transaction valued at approximately \$31 million in up-front and contingent consideration. The Aldagen technology utilizes an intracellular enzyme marker to fractionate essential regenerative cells from a patient's bone marrow. This core technology was originally licensed from Duke University and Johns Hopkins University. This proprietary bone marrow fractionation process identifies and isolates active stem and progenitor cells expressing high levels of the enzyme aldehyde dehydrogenase, or ALDH, which is a key enzyme involved in the regulation of gene activities associated with cell proliferation and differentiation. The selected biologically instructive cells ("ALDH^{br}") have the potential to promote the repair and regeneration of multiple types of cells and tissues, including the growth of new blood vessels, or angiogenesis, which is critical to the generation of healthy tissue.

Preclinical research has shown that ALDH^{br} cells specifically migrate to sites of ischemic damage and induce the formation of new blood vessels at those sites. In clinical trials with ALDH^{br} cells, evidence of improved perfusion in ischemic tissue has been observed. To date, there are more than 250 publications focused on the ALDH^{br} cell technology which cover the mechanism of action of the cells, the homing capacity of the cells to vascular injury, the pro-angiogenic activity of the cells, as well as the pro-inflammatory/inhibitory effects of ALDH^{dim} cells removed during bone marrow fractionation. Additionally, safety has now been demonstrated in more than 70 patient treatments, and positive study results in critical limb ischemia and cardiac ischemia have been published and presented at major medical meetings.

TABLE OF CONTENTS

In addition to its intracellular-based selection approach, there are a number of ways in which we believe the ALDH^{tr} cell therapies are superior to other types of stem cell therapies. For instance, other therapies require expansion of cells that potentially escalate manufacturing and regulatory risk, increase processing costs and may delay treatment by up to several weeks. Aldagen produces well-characterized cell populations with a high level of purity without the need for these additional steps, enabling a rapid turnaround time — typically 36 hours following bone marrow harvest.

This technology has been well-vetted by the FDA. To date, six Investigational New Drugs, or INDs, have been cleared involving the technology and manufacturing processes. Our facility in Durham is a Good Manufacturing Practices, or GMP, compliant manufacturing facility with validated standard operating procedures for manufacturing, product release testing and product shipping.

We have a development program that has attracted the interest of key opinion leaders in each of the indications we are pursuing, each of which represents large market opportunities of unmet medical need. Each of the products in development is comprised of autologous ALDH^{tr} cells harvested from bone marrow.

Our lead product candidate, ALD-401, is for the treatment of ischemic stroke. ALD-401 is currently being evaluated in the RECOVER-Stroke clinical study, an ongoing 100-patient, double-blind, placebo-controlled Phase 2 study in patients with unilateral, cerebral ischemic stroke with an NIH stroke scale score of between 7 and 22. In this study ALD-401 is delivered via the carotid artery, and the infusion is administered 13 to 19 days post the ischemic event. The trial will be conducted at up to 10 – 15 sites in the U.S. The primary endpoint of the trial is safety and the efficacy endpoint is neural function based on the modified Rankin Scale at three months post treatment. Currently, we are in the initial safety stage involving the sequential enrollment of the first 10 patients. Thereafter, the Data Safety Monitoring Board will review the initial data following enrollment of the first 30 and 60 patients. We expect to complete enrollment over the coming year and to have top-line data four months following completion of enrollment.

An additional product candidate, ALD-301, is in clinical development for critical limb ischemia (“CLI”). We have completed a Phase I/II study of ALD-301 in CLI. The results showed improvement in limb perfusion as well as improvements in key parameters measuring CLI severity, and was published in the medical journal *Catheterization and Cardiovascular Interventions*. FDA clearance has been received to begin a 150-patient, double-blind, placebo-controlled Phase 2 study of Rutherford Category 4 or 5 patients who are not candidates for blood flow restoration procedures.

We have also completed a Phase I study with ALD-201 to treat end-stage heart failure. In this study, ALD-201 was well-tolerated and the trial provided initial evidence of improved blood flow and improved clinical status. A paper detailing the clinical data has been accepted for publication in the *American Heart Journal*.

Our current development strategy involves seeking partners to further advance the ALD-301 and ALD-201 programs. We expect additional trials, funded by third parties, to start in 2012. These studies leverage our data and positive clinical experiences in CLI and stroke, and involve peripheral arterial disease and another neurological condition.

Patents, Licenses, and Property Rights

Cytomedix relies on a combination of patents, trademarks, trade secrets, and copyright laws, as well as confidentiality procedures, contractual provisions, and other similar measures, to establish and protect its intellectual property.

Historically, the Company has been party to certain royalty agreements relating to its intellectual property under which it pays certain fees, and has acquired additional royalty agreements as part of the acquisition of Aldagen. Currently, the Company is paying royalties under the following agreements:

- Mr. Charles Worden is entitled to receive a royalty equal to 5% of gross profits on revenues generated from reliance on the Worden Patents (U.S. patents 6,303,112 and 6,524,568), patents covering the formulation of AutoloGel™, subject to a \$6,250 minimum payment per month and a limit of \$600,000 during any calendar year. This agreement also provides Mr. Worden with a

TABLE OF CONTENTS

security interest and lien on the patents as well as a reversionary interest if the Company discontinues substantially all efforts to commercialize the underlying patents. This agreement terminates with the expiration of the patents in 2019.

- Under our license agreement, as amended, with Johns Hopkins University (“JHU”), JHU has granted us an exclusive, worldwide license, under its patents relating to flow sorting of stem cell populations based on a fluorescent ALDH substrate (the “JHU Patents”). Under the terms of the JHU license agreement, as amended, we are obligated to pay a 3% royalty on revenues relating to therapeutic products based on the JHU Patents, and up to 7% on revenues relating to other products based on the JHU patents, subject to an annual minimum of \$10,000. We must also pay up to \$222,500 in the aggregate upon the satisfaction of specified development milestones. The Company bears all costs to maintain the patents. This agreement terminates with the expiration of the patents in 2016.
- Under our license agreement with Duke University (“Duke”), Duke has granted us an exclusive, worldwide license under its patents and applications that relate to methods for isolating and manufacturing ALDHbr cell populations (the “Duke Patents”). Under the terms of the Duke license agreement, we are obligated to pay up to a 1% royalty to Duke on all revenues relating to the Duke Patents, subject to an annual minimum of \$5,000 (which will increase to \$25,000 upon the achievement of specified development and commercialization milestones). The Company bears all costs to maintain the patents. This agreement terminates with the expiration of the patents in 2018.

Cytomedix’s patent strategy, designed to maximize value, seeks to (i) assist the Company in establishing significant market positions for its products, (ii) attract strategic partners for collaborative research, development, marketing, distribution, or other agreements, which could include milestone payments to the Company, and (iii) generate revenue streams through out-licensing agreements.

Including the recently acquired Aldagen patents, Cytomedix’s current patent portfolio consists of domestic and international patents that generally fall into the following families:

- Process, formulation, and methods for utilizing platelet releasates to heal damaged tissue
- Design patents relating to our devices
- Biomarkers for wound healing treatment efficacy
- Peptides with anti-inflammatory properties
- Peptides with angiogenic properties
- Process and methods for methods for isolating and manufacturing ALDHbr cell populations
- Specific chemistries for isolating and manufacturing ALDHbr cell populations

The above patent families encompass the Company’s Angel®, ActivAT®, and AutoloGel™ products, as well as the CT-112 anti-inflammatory peptide, homologous growth factors, wound-healing biomarkers, ALCH^{br} cell populations, and several other potential therapies. Cytomedix is continually assessing new opportunities to create or in-license other intellectual property assets. These patents have expiration dates ranging from 2013 to 2027. In 2011, the Company filed several new provisional patent applications covering new inventions or improvements to existing patents.

Government Regulation

Government authorities in the United States, Canada, the European Union, and other countries extensively regulate pharmaceutical products, biologics, and medical devices. The Company’s products and product candidates are subject to clearance and monitoring by the governing bodies prior to and during the marketing and distribution of product. Regulatory requirements apply to, but are not limited to, research and development, safety and efficacy, clinical studies, manufacture, labeling, distribution, marketing, and the import and export of products. Before a product candidate is approved by the governing bodies for commercial marketing, rigorous preclinical and human clinical testing is conducted to test the safety and effectiveness of the product. If the Company fails to comply with the applicable laws and regulations at any

TABLE OF CONTENTS

time during the product development process, approval process, or during commercialization, it may become subject to administrative and/or judicial sanctions. These sanctions may include, but are not limited to, refusal to approve pending applications, withdrawals of approvals, clinical holds, warning letters, product recalls, product seizures, total or partial suspension of the Company's operations, injunctions, fines, civil penalties and/or criminal prosecution. Any enforcement action could have a material adverse effect on the Company.

Medical Device Regulation

The Company currently manufactures and distributes the AutoloGel™ and Angel® Whole Blood Separation Systems. As such, these and future products manufactured and/or distributed by the Company may be subject to regulations by the appropriate governing bodies, including but not limited to, the U.S. Food and Drug Administration, Health Canada, the European Medicines Agency, and other regulatory agencies. The Company currently has modest operation and business development initiatives outside of the United States. Each of the governing bodies, noted above, serve a similar function as FDA. As such, the Company and its product are subject to the regulations enforced by the outside governing bodies. These regulations include, but are not limited to, product clearance, documentation requirements, good manufacturing practices and medical device reporting. It should be noted that labeling and promotional activities are also subject to regulation by the U.S. Federal Trade Commission, in certain circumstances. Current enforcement policies prohibit the marketing of approved medical devices for unapproved uses. Each governing body reviews the labeling and advertising of medical devices to ensure that unapproved uses are not promoted. Before a new medical device can be introduced to the market, the manufacturer must obtain clearance or approval, depending upon the device classification. In the U.S., medical devices are classified into one of three classes — Class I, II or III. The regulations enforced by FDA and/or the appropriate governing bodies to the medical device(s) provide reasonable assurance that the device is safe and effective. In the U.S., Class I devices are non-critical products that FDA believes can be adequately regulated by “general controls” that include provisions relating to labeling, manufacturer registration, defect notification, records and reports, and current good manufacturing practices (“cGMP”) based on FDA's Quality Systems Regulations. Most Class I devices are exempt from pre-market notification and some are also exempt from cGMP requirements. Class II devices are products for which the general controls of Class I devices, by themselves, are not sufficient to assure safety and effectiveness and, therefore, require additional controls. Additional controls for Class II devices include performance standards, post-market surveillance patient registries, and the use of FDA guidelines. Standards may include both design and performance requirements. Class III devices have the most restrictive controls and require pre-market approval by FDA. Generally, Class III devices are limited to life-sustaining, life-supporting or implantable devices. All of the governing bodies with responsibility over the Company's products have the ability to inspect medical device manufacturers, order recalls of medical devices, seize non-complying medical devices, and to criminally prosecute violators.

Section 510(k) of the Federal Food, Drug and Cosmetic Act requires individuals or companies manufacturing medical devices intended for human use to file a notice with FDA at least ninety days before intending to introduce the device into the market. This notice, commonly referred to as a 510(k), must identify the type of classified device into which the product falls, the class of that type, and a specific product already being marketed or cleared by FDA and to which the product is “substantially equivalent.” In some instances, the 510(k) must include data from human clinical studies to establish “substantial equivalence.” The FDA must agree with the claim of “substantial equivalence” before the device can be marketed. The statutory time frame for clearance of a 510(k) is 90 days, though it often takes longer.

A Class III device does not qualify for the 510(k) process. Class III devices require a pre-market approval (“PMA”) application and approval before the product can be marketed and distributed. PMA applications must demonstrate, among other factors, that the device in question is safe and effective. Obtaining a PMA application approval can sometimes take several years depending upon the complexity of the issues involved with the device. The statutory time frame for the review of a PMA by the FDA is 180 days and many devices are reviewed and approved within that time frame or within a few months afterward. Marketing approval based on a PMA is generally a longer process than the 510(k) clearance process that is typically obtained in comparatively less time.

TABLE OF CONTENTS

The Company currently markets the AutoloGel™ System Centrifuge II, the AutoloGel™ Wound Dressing Kit, the Angel® Whole Blood Separation system, and certain commercially-available reagents (i.e. calcium chloride, ascorbic acid, ACD-A anticoagulant, and bovine thrombin). Each System's component is a legally-marketed product that has been cleared by FDA and/or the appropriate governing body. The AutoloGel™ System Centrifuge II, when used with the AutoloGel™ Wound Dressing Kit and AutoloGel™ Reagents Kit, are suitable for use on exuding wounds such as leg ulcers, pressure ulcers and diabetic ulcers and for the management of mechanically or surgically-debrided wounds. The Angel® Whole Blood Separation system consists of the Angel® system centrifuge, the Whole Blood Access Kit, the Whole Blood Processing Kit and the ActivAT® Autologous Thrombin Kit. It should be noted, that at the present time, the ActivAT® Autologous Thrombin Kit is marketed and distributed only in the European Union and Canada. The Angel® Whole Blood Separation system has been cleared for the separation of whole blood into red cells, platelet poor plasma and platelet rich plasma.

During 2003, the Company made a business decision to undertake a prospective, randomized, blinded, controlled trial for the AutoloGel™ System. The objective of the trial was to demonstrate safety and efficacy to the scientific and reimbursement community, as well as to FDA, of the AutoloGel™ System for use on diabetic foot ulcers. In making this decision, the Company subjected itself to increased FDA oversight and its regulations governing the investigational use of medical devices, codified in 21 C.F.R. Part 812. To this end, the Company submitted an Investigational Device Exemption ("IDE") application to FDA under these rules and obtained approval of this IDE on March 5, 2004, thus allowing the Company to begin its clinical trial. Once the study was complete and the clinical results analyzed, the Company submitted a 510(k) requesting FDA's clearance of the AutoloGel™ System in January 2006. Clearance was received in September 2007.

In April 2010, the Company acquired the Angel® Whole Blood Separation system from Sorin Group (Italy). The transfer and distribution of the product is an on-going process that is subject to FDA, Health Canada, and European Medicines Agency regulations.

As a specification developer, manufacturer and distributor of medical devices, Cytomedix is subject to and complies with, among other standards and regulations, 21 CFR of the Food, Drug and Cosmetic Act, ISO 13485, and the Medical Device Directive. As a manufacturer and distributor of medical devices, the Company, and in some instances its subcontractors, is required to register its facilities and products manufactured annually with the appropriate governing bodies and certain state agencies. Additionally, the Company is subject to periodic inspections by the governing bodies to assess compliance with cGMP regulations. Facilities may also be subject to inspections by other federal, foreign, state or local agencies. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

Bio-pharmaceutical Product Regulation

The Company's ALDH^{br} product candidates, recently acquired from Aldagen, and other bio-pharmaceuticals it may develop are also regulated by FDA. Under the United States regulatory scheme, the development process for new such products can be divided into two distinct phases:

- **Preclinical Phase.** The preclinical phase involves the discovery, characterization, product formulation and animal testing necessary to prepare an Investigational New Drug application ("IND") for submission to FDA. The IND must be accepted by FDA before the product candidate can be tested in humans. The review period for an IND submission is 30 days, after which, if no comments are made by FDA, the product candidate can be studied in Phase I clinical trials. Certain preclinical tests must be conducted in compliance with FDA's good laboratory practice regulations and the U.S. Department of Agriculture's Animal Welfare Act.
- **Clinical Phase.** The clinical phase of development follows a successful IND submission and involves the activities necessary to demonstrate the safety, tolerability, efficacy, and dosage of the product candidate in humans, as well as, the ability to produce the drug in accordance with cGMP requirements. Clinical trials are conducted under protocols detailing, among other things, the objectives of the study and the parameters to be used in assessing the safety and the efficacy of the product candidate. Each clinical protocol is submitted to FDA as part of the IND prior to beginning

TABLE OF CONTENTS

the trial. Each trial is reviewed, approved, and conducted under the auspices of an investigational review board (“IRB”) and each trial, with limited exceptions, must include the patient’s informed consent. Typically, clinical evaluation involves the following time-consuming and costly three-phase sequential process:

Phase I. In Phase I clinical trials, typically a small number of healthy individuals (although in some instances individuals with the disease or condition for which an indication is being sought for the product candidate) are tested with the product candidate to determine safety and tolerability and includes biological analyses to determine the availability and metabolism of the active ingredient following administration.

Phase II. Phase II clinical trials involve administering the product candidate to individuals who suffer from the target disease or condition to determine the ideal dose and potential efficacy. These clinical trials are well controlled, closely monitored, and conducted in a relatively small number of patients, usually involving no more than several hundred subjects.

Phase III. Phase III clinical trials are performed after preliminary evidence suggesting effectiveness of a product candidate has been obtained and safety, tolerability, and an ideal dosing regimen have been established. Phase III clinical trials are intended to gather additional information about effectiveness and safety that is needed to evaluate the overall benefit-risk relationship and to complete the information needed to provide adequate instructions for the use of the product candidate. Phase III trials usually include from several hundred to a few thousand subjects.

Throughout the clinical phase, samples of the product made in different batches are tested for stability to establish shelf life constraints. In addition, large-scale production protocols and written standard operating procedures for each aspect of commercial manufacture and testing must be developed. These trials require scale up for manufacture of increasingly larger batches of bulk chemical. These batches require validation analyses to confirm the consistent composition of the product.

Phase I, II, and III testing may not be completed successfully within any specified time period, if at all. The FDA closely monitors the progress of each of the three phases of clinical trials that are conducted under an IND and may, at its discretion, reevaluate, alter, suspend (place on “clinical hold”), or terminate the testing based upon the data accumulated to that point and the agency’s assessment of the risk/benefit ratio to the patient. The FDA may suspend or terminate clinical trials at any time for various reasons, including a finding that the subjects or patients are being exposed to an unacceptable health risk. The FDA can also request that additional clinical trials be conducted as a condition to product approval. Additionally, new government requirements may be established that could delay or prevent regulatory approval of products under development. Furthermore, IRBs, which are independent entities constituted to protect human subjects at the institutions in which clinical trials are being conducted, have the authority to suspend clinical trials at their respective institutions at any time for a variety of reasons, including safety issues.

After the successful completion of Phase III clinical trials, the sponsor of the new bio-pharmaceutical submits a Biologics License Application (“BLA”) to the FDA requesting approval to market the product for one or more indications. A BLA is a comprehensive, multi-volume application that includes, among other things, the results of all preclinical studies and clinical trials, information about the product candidate’s composition and manufacturing, and the sponsor’s plans for producing, packaging, and labeling the drug. Under the Pediatric Research Equity Act of 2003, an application also is required to include an assessment, generally based on clinical study data, on the safety and efficacy of product candidates for all relevant pediatric populations before the BLA is submitted. The statute provides for waivers or deferrals in certain situations. In most cases, the BLA must be accompanied by a substantial user fee. In return, the FDA assigns a goal of 10 months from acceptance of the application to return of a first “complete response,” in which FDA may approve the product or request additional information.

TABLE OF CONTENTS

The submission of the application is no guarantee that the FDA will find it complete and accept it for filing. The FDA reviews all BLA's submitted before it accepts them for filing. It may refuse to file the application and request additional information rather than accept the application for filing, in which case, the application must be resubmitted with the supplemental information. After the application is deemed filed and accepted by the FDA, agency staff reviews a BLA to determine, among other things, whether a product is safe and effective for its intended use. The FDA has substantial discretion in the approval process and may disagree with an applicant's interpretation of the data submitted in its BLA. As part of this review, the FDA may refer the application to an appropriate advisory committee, typically a panel of physicians, for review, evaluation, and an approval recommendation. The FDA is not bound by the opinion of the advisory committee. Drugs that successfully complete BLA review and receive clearance (i.e., approval) may be marketed in the United States, subject to all conditions imposed by the FDA.

Prior to granting approval, the FDA conducts an inspection of the facilities, including outsourced facilities, that will be involved in the manufacture, production, packaging, testing, and control of the product candidate for cGMP compliance. The FDA will not approve the application unless cGMP compliance is satisfactory. If FDA determines that the marketing application, manufacturing process, or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and will often request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the marketing application does not satisfy the regulatory criteria for approval and refuse to approve the application by issuing a "not approvable" letter. The length of the FDA's review may range from a few months to several years.

If the FDA approves the BLA, the product becomes available for physicians to prescribe in the United States. After approval, the BLA holder is still subject to continuing regulation by the FDA, including record keeping requirements, submitting periodic reports to the FDA, reporting of any adverse experiences with the product, and complying with drug sampling and distribution requirements. In addition, the BLA holder is required to maintain and provide updated safety and efficacy information to the FDA. The BLA holder is also required to comply with requirements concerning advertising and promotional labeling, including prohibitions against promoting any non-FDA approved or "off-label" indications of products. Failure to comply with those requirements could result in significant enforcement action by the FDA, including warning letters, orders to pull the promotional materials, and substantial fines. Also, quality control and manufacturing procedures must continue to conform to cGMP after approval.

Biologics manufacturers and their subcontractors are required to register their facilities and products manufactured annually with the FDA and certain state agencies and are subject to periodic unannounced inspections by the FDA to assess compliance with cGMP regulations. Facilities may also be subject to inspections by other federal, foreign, state or local agencies. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

In addition, following the FDA approval of a product, discovery of problems with a product or the failure to comply with requirements may result in restrictions on a product, manufacturer, or holder of an approved marketing application, including withdrawal or recall of the product from the market or other voluntary or the FDA-initiated action that could delay further marketing. Newly discovered or developed safety or effectiveness data may require changes to a product's approved labeling, including the addition of new warnings and contra-indications. Also, FDA may require post-market testing and surveillance to monitor the product's safety or efficacy, including additional clinical studies, known as Phase IV trials, to evaluate long-term effects.

Other regulatory agencies, including Health Canada and the European Medicines Agency, require preclinical and clinical studies, manufacturing validation, facilities inspection, and post-approval record keeping and reporting similar to FDA requirements. In some instances, data generated for consideration by the FDA may be submitted to these agencies for their consideration for approvals in other countries.

TABLE OF CONTENTS

Fraud and Abuse Laws

The Company may also be indirectly subject to federal and state physician self-referral laws. Federal physician self-referral legislation (commonly known as the “Stark Law”) prohibits, subject to certain exceptions, physician referrals of Medicare and Medicaid patients to an entity providing certain “designated health services” if the physician or an immediate family member has any financial relationship with the entity. A person who engages in a scheme to circumvent the Stark Law’s referral prohibition may be fined up to \$100,000 for each such arrangement or scheme. The penalties for violating the Stark Law also include civil monetary penalties of up to \$15,000 per referral and possible exclusion from federal health care programs such as Medicare and Medicaid. The Stark Law also prohibits the entity receiving the referral from billing any good or service furnished pursuant to an unlawful referral, and any person collecting any amounts in connection with an unlawful referral is obligated to refund such amounts. Various states have corollary laws to the Stark Law, including laws that require physicians to disclose any financial interest they may have with a health care provider to their patients when referring patients to that provider. Both the scope and exception for such laws vary from state to state.

The Company may also be subject to federal and state anti-kickback laws. Section 1128B (b) of the Social Security Act, commonly referred to as the Anti-Kickback Law, prohibits persons from knowingly and willfully soliciting, receiving, offering or providing remuneration, directly or indirectly, to induce either the referral of an individual, or the furnishing, recommending, or arranging for a good or service, for which payment may be made under a federal health care program such as Medicare and Medicaid. The Anti-Kickback Law is broad, and it prohibits many arrangements and practices that are otherwise lawful in businesses outside of the health care industry. The U.S. Department of Health and Human Services (“DHHS”) has issued regulations, commonly known as safe harbors that set forth certain provisions which, if fully met, will assure health care providers and other parties that they will not be prosecuted under the federal Anti-Kickback Law. Although full compliance with these provisions ensures against prosecution under the Anti-Kickback Law, the failure of a transaction or arrangement to fit within a specific safe harbor does not necessarily mean that the transaction or arrangement is illegal or that prosecution under the federal Anti-Kickback Law will be pursued. The penalties for violating the Anti-Kickback Law include imprisonment for up to five years, fines of up to \$250,000 per violation for individuals and up to \$500,000 per violation for companies and possible exclusion from federal health care programs. Many states have adopted laws similar to the federal Anti-Kickback Law, and some of these state prohibitions apply to patients for health care services reimbursed by any source, not only federal health care programs such as Medicare and Medicaid.

In addition, there are two other U.S. health care fraud laws to which the Company may be subject, one which prohibits knowingly and willfully executing or attempting to execute a scheme or artifice to defraud any health care benefit program, including private payers (“fraud on a health benefit plan”) and one which prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement or representation in connection with the delivery of or payment for health care benefits, items or services. These laws apply to any health benefit plan, not just Medicare and Medicaid.

The Company may also be subject to other U.S. laws which prohibit submitting claims for payment or causing such claims to be submitted that are false. Violation of these false claims statutes may lead to civil money penalties, criminal fines and imprisonment, and/or exclusion from participation in Medicare, Medicaid and other federally funded state health programs. These statutes include the federal False Claims Act, which prohibits the knowing filing of a false claim (or causing the submission of a false claim) or the knowing use of false statements to obtain payment from the U.S. federal government. When an entity is determined to have violated the False Claims Act, it must pay three times the actual damages sustained by the government, plus mandatory civil penalties of between \$5,500 and \$11,000 for each separate false claim. Suits filed under the False Claims Act can be brought by an individual on behalf of the government (a “qui tam action”). Such individuals (known as “qui tam relators”) may share in the amounts paid by the entity to the government in fines or settlement. In addition certain states have enacted laws modeled after the False Claims Act. “Qui tam” actions have increased significantly in recent years causing greater numbers of health care companies to have to defend false claim actions, pay fines or be excluded from the Medicare, Medicaid or other federal or state health care programs as a result of an investigation arising out of such action.

[TABLE OF CONTENTS](#)

Several states also have referral, fee splitting and other similar laws that may restrict the payment or receipt of remuneration in connection with the purchase or rental of medical equipment and supplies. State laws vary in scope and have been infrequently interpreted by courts and regulatory agencies, but may apply to all health care products and services, regardless of whether Medicaid or Medicare funds are involved.

Research and Development

Prior to the Aldagen acquisition, the Company focused its limited resources primarily on broad commercialization of AutoloGel™, as well as integration and sales growth of the Angel® product line. It therefore expended only limited amounts on research and development activities (“R&D”). The Company currently has several development projects underway to enhance the AutoloGel™ System and seek additional indications for Angel®. The AutoloGel™ enhancements will further strengthen our competitive edge in the chronic wound market. The studies necessary to support additional indications for Angel® are relatively small laboratory studies. The Company spent approximately \$98,000 and \$416,000 in total R&D expenditures in 2011 and 2010, respectively.

In addition to a continued modest amount of R&D spending relating to our existing commercial products, we expect significant additional expenditures to support the development and trial related activities of the ALDH^{br} cell line as described above.

Employees

After the acquisition of Aldagen, the Company has approximately 35 employees, including the Company's management. The remaining personnel consist of scientific, sales and marketing, accounting, clinical, and investor relations professionals. None of the Company's employees is covered by a collective bargaining agreement or represented by a labor union. The Company considers its employee relations to be good.

ITEM 1A. Risk Factors

The Company faces many risks. The risks described below may not be the only risks the Company faces. Additional risks not yet known or currently believed to be immaterial may also impair Cytomedix's business. If any of the events or circumstances described in the following risks actually occurs, the Company's business, financial condition or results of operations could suffer, and the trading price of its Common stock could decline. You should consider the following risks, together with all of the other information in this Annual Report on Form 10-K, before making an investment decision with respect to Cytomedix securities.

We Have Limited Sources of Working Capital

Because of our financial history, including bankruptcy in 2001/2002, it may be difficult to obtain debt financing. Working capital required to implement our business plan will most likely be provided by funds obtained through offerings of our equity and/or equity-linked securities, and revenues generated by us. No assurance can be given that we will have revenues sufficient to support and sustain our operations or that we would be able to obtain equity financing in the current economic environment. If we do not have sufficient working capital and are unable to generate sufficient revenues or raise additional funds, we may delay the completion of or significantly reduce the scope of our current business plan; delay some of our development and clinical or marketing efforts, our plans to pursue Medicare and/or commercial insurance reimbursement for our wound treatment technologies; certain development activities related to the newly acquired Aldagen business; or postpone the hiring of new personnel; or, under certain dire financial circumstances, cease our operations.

We Need Substantial Additional Financing, Which May Be Provided By Amounts Raised Under an Existing Financing Agreement.

We need substantial additional capital to fund our operations. To date, we have relied almost exclusively on financing transactions to fund our operations. Our inability to obtain sufficient additional financing would have a material adverse effect on our ability to implement our business plan and, as a result, could require us to diminish or suspend activities. At December 31, 2011, we had cash and cash equivalents of approximately \$2.2 million, total current assets of approximately \$5.2 million and total current liabilities of approximately \$3.1 million. Based on our current operating plan, we believe we have sufficient cash through at least the end of 2012, but anticipate needing additional capital in 2013. However, our projections could be wrong. We could face unforeseen costs or our revenues could fall short of our projections. We have access to additional funding, subject to certain contractual limitations, of up to approximately \$6 million from Lincoln Park Capital, LLC ("LPC") under the purchase agreement dated October 5, 2010 (the "Purchase Agreement"). Under the Purchase Agreement, we may direct LPC to purchase up to \$10 million of our shares of our common stock under our Purchase Agreement over a 25 month period ending in January 2013, generally in amounts of up to 150,000 shares. However, LPC does not have the right nor the obligation to purchase any shares of our common stock on any business day that the price of our common stock is less than \$.30 per share. We have registered 12,336,538 shares for sale by LPC related to the Purchase Agreement. In the event we elect to issue more than 12,336,538 shares offered hereby, we will be required to file a new registration statement and have it declared effective by the SEC. The extent to which we rely on LPC as a source of funding will depend on a number of factors including, our need for additional capital, the prevailing market price of our common stock and the extent to which we are able to secure working capital from other sources. If obtaining sufficient funding from LPC were to prove unavailable or prohibitively dilutive, and if other sources of funding are available to us, we may determine not to sell shares to LPC under the Purchase Agreement. New sources of capital may not be available to us when we need them or may be available only on terms we would not find acceptable. Additional financing will likely cause dilution to our stockholders and could involve the issuance of securities with rights senior to the outstanding shares. There is no assurance that such financing will be sufficient, that the financing will be available on terms acceptable to us and at such times as required, or that we will be able to obtain the additional financing required, if any, for the continued operation and growth of our business. Any inability to raise necessary capital will have a material adverse effect on our ability to implement our business strategy and will have a material adverse effect on our revenues and net income.

Our Common Stock Has Been Delisted from the NYSE Amex, Which Subjects Us to the SEC's Penny Stock Rules and May Decrease the Liquidity of Our Common Stock.

We were previously operating under a compliance plan intended to allow us to regain compliance with the NYSE Amex's stockholders' equity requirement. On January 20, 2011, the Company notified the NYSE Amex staff of its intent to withdraw the request for a hearing and the NYSE Amex notified the Company that its stock would cease being listed on or about January 26, 2011.

Over-the-counter markets are generally considered to be less efficient than, and not as broad as, a stock exchange. There may be a limited market for our stock now that it is quoted on the OTC Bulletin Board, trading in our stock may become more difficult and our share price could decrease. Specifically, shareholders may not be able to resell their shares of common stock at or above the price paid for such shares or at all.

In addition, our ability to raise additional capital may be impaired because of the less liquid nature of the over-the-counter markets. While we cannot guarantee that we would be able to complete an equity financing on acceptable terms, or at all, we believe that dilution from any equity financing while our shares are quoted on an over-the-counter market could be substantially greater than if we were to complete a financing while our common stock is traded on a national securities exchange. Further, now that our stock is not traded on an exchange, we are no longer eligible to use short-form registration statements on Form S-3 for the registration of our securities, which could impair our ability to raise additional capital as needed.

Our common stock is also subject to penny stock rules, which impose additional sales practice requirements on broker-dealers who sell our common stock. The SEC generally defines "penny stock" as an equity security that has a market price of less than \$5.00 per share, subject to certain exceptions. The ability of broker-dealers to sell our common stock and the ability of our stockholders to sell their shares in the secondary market will be limited and, as a result, the market liquidity for our common stock will likely be adversely affected. We cannot assure shareholders that trading in our securities will not be subject to these or other regulations in the future.

There is No Assurance that We Will Successfully Integrate the Aldagen Business, or that We Will Realize the Anticipated Synergies of the Combined Businesses.

The acquisition of Aldagen represents a significant investment by the Company. Although it comes with a complete infrastructure, including personnel, to proceed with its development plans, it will require significant attention and resources of non-Aldagen Cytomedix personnel which could reduce the likelihood of achievement of other corporate goals. The additional financing needs created by the Aldagen acquisition will also require additional management time to address. There is no assurance that we will, on a sustainable basis, successfully integrate any or all of the various aspects to the acquired business, including but not limited to the clinical trial, manufacturing, regulatory, finance, human resource, and other functions. Failure to smoothly and successfully integrate the acquired business could lead to a reduction in revenue for the Angel®, ActivAT®, and AutoloGel™, products compared to historical levels, generate ill will among our customer base, and therefore have a material adverse effect on us, our operations or the price of our common stock. There is no assurance that the development efforts underway with the Aldagen technology will be successful. Furthermore, there is no assurance that we will realize synergies in the scientific, clinical, regulatory, or other areas as we currently contemplate. In addition, there is no assurance that we will realize any anticipated economies of scale for the combined businesses.

The Restatement of Our Financial Statements in January 2011 has Subjected Us to Additional Risks and Uncertainties, Including Increased Professional Costs and the Increased Possibility of Legal Proceedings.

On January 6, 2011, the Company announced, among other things, in its Current Report on Form 8-K that, the previously issued financial statements for the year ended December 31, 2009 included in the Company's then most recently filed Form 10-K/A Amendment No. 1, and each of the quarterly periods from March 31, 2009 through September 30, 2010 included in the Company's quarterly reports on Forms 10-Q were no longer reliable because they failed to incorporate non-cash charges resulting from required adjustments to certain outstanding stock purchase warrants. On January 7, 2011, the Company filed its Annual Report on Form 10-K/A Amendment No. 2 as well as amended and restated Quarterly Reports on Forms 10-Q/A for the quarterly periods ended March 31, June 30 and September 30, 2009 and March 31, June 30, and

TABLE OF CONTENTS

September 30, 2010. The amendments to the Quarterly Reports on Forms 10-Q/A were filed to restate unaudited financial statements and related financial information for the periods contained in those reports. The amendment to the Annual Report on Form 10-K/A Amendment No. 2 was filed to restate financial statements for the fiscal year ended December 31, 2009.

As a result of the restatements, we have become subject to additional risks and uncertainties, including, among others, increased professional fees and expenses and time commitment that may be required to address matters related to the restatements, and scrutiny of the SEC and other regulatory bodies which could cause investors to lose confidence in the Company's reported financial information and could subject the Company to civil or criminal penalties or shareholder litigation. The Company could face monetary judgments, penalties or other sanctions that could have a material adverse effect on the Company's business, financial condition and results of operations and could cause its stock price to decline.

In addition, in connection with the foregoing restatements, the Company determined that there was a control deficiency in its internal control that constituted a material weakness. The Company implemented a remediation plan to address the material weakness and, as of December 31, 2010, and continuing through today, concluded that it had successfully remediated said weakness. The Company will continue to review and make necessary changes to the overall design of the Company's internal control environment, as well as to policies and procedures to improve the overall effectiveness of internal control over financial reporting. Additionally, management may identify material weaknesses in the future that could adversely affect investor confidence, impair the value of the Company's common stock and increase the Company's cost of raising capital. There can be no assurance that additional material weaknesses will not be identified in the future.

We are Reliant on Several Single Source Suppliers and an Interruption in Our Supply Chain Could Have a Material Adverse Effect on Our Business.

At the end of the fourth quarter of 2010, manufacturing responsibilities for all of the Angel® and ActivAT® products were transferred from Sorin to Cytomedix. Cytomedix is outsourcing the manufacturing of the various products, including component parts, composing these lines to contract manufacturers. While we believe these manufacturers to be of sufficient competency, quality, reliability, and stability, there is no assurance that one or more of them will not experience an interruption or inability to provide us with the products needed to satisfy customer demand. Additionally, while most of the components of AutoloGel™ are generally readily available on the open market, a reagent, bovine thrombin, is available exclusively through Pfizer, Inc. ("Pfizer"). If a temporary or permanent interruption in the supply of products were to occur, it would have a material adverse effect on our business. While we are formulating plans to develop redundant capabilities, such capabilities will not take effect for the foreseeable future. While the Company does maintain business interruption insurance, there is no assurance that such insurance will be sufficient to cover all losses which would occur as a result of any interruption in supply.

Adverse Conditions in the Global Economy and Disruption of Financial Markets May Significantly Restrict Our Ability to Generate Revenues or Obtain Debt or Equity Financing.

The global economy continues to experience volatility and uncertainty. Such conditions could reduce demand for our products which would significantly jeopardize our ability to achieve meaningful market penetration for AutoloGel™ and continued sales of Angel® and ActivAT® products. These conditions could also affect our potential strategic partners, which, in turn, could make it much more difficult to execute a strategic collaboration, and therefore significantly jeopardize our ability to fully develop and commercialize our products and product candidates. Global credit and capital markets continue to be relatively challenging. We may be unable to obtain capital through issuance of our equity and/or equity-linked securities, a significant source of funding for us throughout our history. If we are unable to secure funding through strategic collaborations, equity investments, or debt financing, we may not be able to achieve profitability, or fund our research and development activities, which may result in a cessation of operations.

TABLE OF CONTENTS

Business credit and liquidity have tightened in much of the world. Volatility and disruption of financial markets could limit our customers' ability to obtain adequate financing or credit to purchase and pay for our products in a timely manner, or to maintain operations, and result in a decrease in sales volume. General concerns about the fundamental soundness of domestic and international economies may also cause customers to reduce purchases. Changes in governmental banking, monetary and fiscal policies to restore liquidity and increase credit availability may not be effective. Economic conditions and market turbulence may also impact our suppliers' ability to supply sufficient quantities of product components in a timely manner, which could impair our ability to fulfill sales orders. It is difficult to determine the extent of the economic and financial market problems and the many ways in which they may affect our suppliers, customers, investors, and business in general. Continuation or further deterioration of these financial and macroeconomic conditions could significantly harm sales, profitability and results of operations.

Economic downturns or other adverse economic changes (local, regional, or national) can also hurt our financial performance in the form of lower interest earned on investments and/or could result in losses of portions of principal in our investment portfolio. While our investment policy requires us to invest only in short-term, low risk investments, there is no assurance that principal will not be eroded as a significant portion of these investments is in excess of federally mandated insurance.

We Have a History of Losses and Expect to Incur Losses for the Foreseeable Future.

We have a history of losses, are not currently profitable, and expect to incur substantial losses and negative operating cash flows in the future. Although, prior to the Aldagen acquisition, we were targeting operational cash flow break-even within the foreseeable future, the acquisition of Aldagen, and the expenditures necessary to fund the on-going clinical trial and related activities, will cause us to continue to generate losses. We may never generate sufficient revenues to achieve and maintain profitability. We will continue to incur expenses at current or increased levels as we seek to expand our operations, pursue development of our technologies, work to increase our sales, implement internal systems and infrastructure, and hire additional personnel. These ongoing financial losses may adversely affect our stock price.

We Have a Short Operating History and Limited Operating Experience.

We must be evaluated in light of the uncertainties and complexities affecting an early stage biotechnology company. We have, only in the past few years, implemented our commercialization strategy for AutoloGel™ and have only one year's experience operating the fully integrated Angel® and ActivAT® business. Thus, we have a very limited operating history. Continued operating losses, together with the risks associated with our ability to gain new customers for our product offerings, may have a material adverse effect on our liquidity. We may also be forced to respond to unforeseen difficulties, such as a decreased demand for our products and services, downward pricing trends, regulatory requirements and unanticipated market pressures. Since emerging from bankruptcy and continuing through today, we are developing a business model that includes protecting our patent position, addressing our third-party reimbursement issues, developing and executing a sales and marketing program, acquiring synergistic technologies and product lines, developing other technologies covered by, or derived from, our intellectual property, and seeking strategic partnerships. There can be no assurance that our business model in its current form can accomplish our stated goals.

Our Intellectual Property Assets Are Critical to Our Success

We regard our patents, trademarks, trade secrets and other intellectual property assets as critical to our success. We rely on a combination of patents, trademarks, and trade secret and copyright laws, as well as confidentiality procedures, contractual provisions, and other similar measures, to establish and protect our intellectual property. We attempt to prevent disclosure of our trade secrets by restricting access to sensitive information and requiring employees, consultants, and other persons with access to our sensitive information to sign confidentiality agreements. Despite these efforts, we may not be able to prevent misappropriation of our technology or deter others from developing similar technology in the future. Furthermore, policing the unauthorized use of our intellectual property assets is difficult and expensive. Litigation has been necessary in the past and may be necessary in the future in order to protect our intellectual property assets. Litigation could result in substantial costs and diversion of resources. We can provide no assurance that we will be successful in any litigation matter relating to our intellectual property assets. Continuing litigation or other challenges

TABLE OF CONTENTS

could result in one or more of our patents being declared invalid. In such a case, any royalty revenues from the affected patents would be adversely affected although we may still be able to continue to develop and market our products. Furthermore, the unauthorized use of our patented technology by otherwise potential customers in our target markets may significantly undermine our ability to generate sales. Any infringement on or challenge to our patents or other misappropriation of our intellectual property assets could have a material adverse effect on our ability to increase sales of our commercial products and/or continue the development of our pipeline candidates.

Our Products are Subject to Governmental Regulation

Our success is also impacted by factors outside of our control. Our current technology and products are subject to extensive regulation by numerous governmental authorities in the United States, both federal and state, and in foreign countries by various regulatory agencies. Specifically, our devices and bio-pharmaceutical products are subject to regulation by the FDA and state regulatory agencies. The FDA regulates drugs, medical devices and biologics that move in interstate commerce and requires that such products receive clearance or pre-marketing approval based on evidence of safety and efficacy. The regulations of government health ministries in foreign countries are analogous to those of the FDA in both application and scope. In addition, any change in current regulatory interpretations by, or positions of, state regulatory officials where our products are used could materially and adversely affect our ability to sell products in those states. The FDA will require us to obtain clearance or approval of new devices when used for treating specific wounds or marketed with specific wound healing claims, or for other products under development.

We believe all our products for sale are legally marketed. As we expand and offer additional products in the United States and in foreign countries, clearance or approval from the FDA and comparable foreign regulatory authorities prior to introduction of any such products into the market may be required. We provide no assurance that we will be able to obtain all necessary approvals from the FDA or comparable regulatory authorities in foreign countries for these products. Failure to obtain the required approvals would have a material adverse impact on our business and financial condition.

Compliance with FDA and other governmental requirements imposes significant costs and expenses. Further, our failure to comply with these requirements could result in sanctions, limitations on promotional or other business activities, or other adverse effects on our business. Further, recent efforts to control healthcare costs could negatively affect demand for our products and services.

Clinical Trials May Fail to Demonstrate the Safety or Efficacy of Our Product Candidates

Our product candidates are subject to the risks of failure inherent in the development of biotherapeutic products. The results of early-stage clinical trials do not necessarily predict the results of later-stage clinical trials. Product candidates in later-stage clinical trials may fail to demonstrate desired safety and efficacy traits despite having successfully progressed through initial clinical testing. Even if we believe the data collected from clinical trials of its product candidates is promising, this data may not be sufficient to support approval by the U.S. or foreign regulatory agencies. Pre-clinical and clinical data can be interpreted in different ways. Accordingly, the regulatory officials could reach different conclusions in assessing such data, which could delay, limit or prevent regulatory approval. In addition, the U.S. regulatory authorities or we may suspend or terminate clinical trials at any time. Any failure or delay in completing clinical trials for product candidates, or in receiving regulatory approval for the sale of any product candidates, has the potential to materially harm our business, and may prevent it from raising necessary, additional financing that may be needed in the future.

A Disruption in Healthcare Provider Networks Could Have an Adverse Effect on Operations and Profitability

Our operations and future profitability are dependent, in large part, upon the ability to contract with healthcare providers on favorable terms. In any particular service area, healthcare providers could refuse to contract with Cytomedix or take other actions that could result in higher healthcare costs, or create difficulties in meeting our regulatory requirements. In some service areas, certain healthcare providers may have a significant market presence. If healthcare providers refuse to contract with us, use their market position to negotiate unfavorable contracts or place us at a competitive disadvantage, our ability to market services or to be profitable in those service areas could be adversely affected. Provider networks could also be disrupted by the financial insolvency of a large healthcare provider group. Any disruption in provider networks could adversely impact our ability to generate revenues or profits.

Our Sales and Marketing Strategy for the AutoloGel™ System May Not Succeed

In January 2009, we implemented a revised sales and marketing strategy that focuses on intensive clinician to clinician interaction with both prospective and existing customers, and the scientific explanation of AutoloGel™'s mechanism of action. There is no assurance that this approach will result in significant, sustainable growth in sales revenue, or that we, as currently capitalized, will have sufficient resources to provide the level of clinical support for this initiative to be successful. We are seeking a strategic partner to participate in the commercialization efforts of AutoloGel™. Although we are currently in a period of exclusive negotiations with a potential partner in the form of a top 20 global pharmaceutical company, there is no assurance that an agreement will be reached. Additionally, if an agreement is reached, there is no assurance that the partnership will yield a significant revenue and/or royalty stream to Cytomedix.

CMS's Non-Coverage of AutoloGel™ Could Greatly Restrict Our Sales

The AutoloGel™ System is marketed to healthcare providers. Some of these providers, in turn, seek reimbursement from third-party payers such as Medicare, Medicaid, and other private insurers. Many foreign countries also have comprehensive government managed healthcare programs that provide reimbursement for healthcare products. Under such healthcare systems, reimbursement is often a determining factor in predicting a product's success, with some physicians and patients strongly favoring only those products for which they will be reimbursed. With CMS's national non-coverage determination, the market for the AutoloGel™ System is restricted and it may be difficult, if not impossible, to sell AutoloGel™ in most care settings. This currently hinders our ability to grow its revenues and could reduce the likelihood that it will ever achieve sustainable profitability. We provide no assurance that our efforts to obtain CMS coverage will be successful.

Our Efforts to Secure Medicare Reimbursement May Not Be Successful

In March 2008, CMS reaffirmed its 2003 non-coverage determination for autologous platelet rich plasma, which would include AutoloGel™. Since then we have gathered additional data and officially requested that CMS reconsider its non-coverage determination. In November 2011, CMS officially agreed to reconsider coverage for autologous blood therapies for the treatment of chronic wounds. We provide no assurance that we will ultimately be successful with this strategy and that CMS will decide that the evidence is sufficient to reverse all or a portion of its existing non-coverage determination. If we later determine that a new randomized, controlled trial is necessary, it could cost several millions of dollars and take multiple years to complete. We would almost certainly need to obtain additional, outside financing to fund such a trial. In any case, we may never be successful in securing Medicare coverage for our products.

We May Be Unable to Attract a Strategic Partner for the Further Development of Certain of Our Product Candidates

Due to our limited resources, we have determined that the best vehicle to ultimately commercialize the various potential indications for ALDH^{DR}, as well as our CT-112 technology, is through strategic partnerships, outlicensing, or other similar arrangements. There is no assurance, even if positive clinical data is achieved in the currently on-going trials, that we will be able to come to any such agreements or that we will even have the resources necessary to seek such arrangements. Furthermore, even if such a strategic relationship regarding any of our products is reached, there is no assurance that development milestones, clinical data, or other such

[TABLE OF CONTENTS](#)

benchmarks will be achieved. Therefore, these products may never proceed toward commercialization or drive cash infusions for us, and we may ultimately not be able to monetize the patents, existing clinical data, and other intellectual property.

The Success of Our Products Is Dependent on Acceptance by the Medical Community

The commercial success of our products and processes will depend upon the medical community and patients accepting the therapies as safe and effective. If the medical community and patients do not ultimately accept the therapies as safe and effective, our ability to sell the products will be materially and adversely affected. While acceptance by the medical community may be fostered by broad evaluation via peer-reviewed literature, we may not have the resources to facilitate sufficient publication.

We May Be Unable to Attract and Retain Key Personnel

Our future success depends on the ability to attract, retain and motivate highly skilled management, including sales representatives. We have retained a team of highly qualified officers and consultants, but cannot provide assurance that we will be able to successfully retain all of them, or be successful in recruiting additional personnel as needed. Our inability to do so will materially and adversely affect the business prospects, operating results and financial condition of the Company. Our ability to maintain and provide additional services to our customers depends upon our ability to hire and retain business development and scientific and technical personnel with the skills necessary to keep pace with continuing changes in regenerative biological therapy technologies. Competition for such personnel is intense; we compete with pharmaceutical, biotechnology and healthcare companies. Our inability to hire additional qualified personnel may lead to higher recruiting, relocation and compensation costs for such personnel. These increased costs may reduce our profit margins or make hiring new personnel impractical.

Legislative and Administrative Action May Have an Adverse Effect on Our Company

Political, economic and regulatory influences are subjecting the health care industry in the United States to fundamental change. We cannot predict what other legislation relating to our business or to the health care industry may be enacted, including legislation relating to third-party reimbursement, or what effect such legislation may have on our business, prospects, operating results and financial condition. We expect federal and state legislators to continue to review and assess alternative health care delivery and payment systems and possibly adopt legislation affecting further changes in the health care delivery system. Such laws may contain provisions that may change the operating environment for hospitals and managed care organizations. Health care industry participants may react to such legislation by curtailing or deferring expenditures and initiatives, including those relating to our products. Future legislation could result in modifications to the existing public and private health care insurance systems that would have a material adverse effect on the reimbursement policies discussed above. With growing pressures on government budgets due to the current economic downturn, government efforts to contain or reduce health care spending are likely to gain increasing emphasis. Several members of the current presidential administration and Congress are espousing support for cost-containment measures that could have significant implications for healthcare therapies, including our current and future products. If enacted and implemented, such measures could result in decreased revenue from our products and decrease potential returns from our research and development initiatives. Furthermore, there is no assurance that we will be able to successfully neutralize any lobbying efforts against our efforts to secure Medicare coverage or other initiatives we may have with governmental agencies.

We Could Be Affected by Malpractice Claims

Providing medical care entails an inherent risk of professional malpractice and other claims. We do not control or direct the practice of medicine by physicians or health care providers who use the products and do not assume responsibility for compliance with regulatory and other requirements directly applicable to physicians. There is no assurance that claims, suits or complaints relating to the use of our products and treatment administered by physicians will not be asserted against us in the future. The production, marketing and sale, and use of our products entails risks that product liability claims will be asserted against us. These risks cannot be eliminated, and we could be held liable for any damages that result from adverse reactions or infectious disease transmission. Such liability could materially and adversely affect our business, prospects, operating results and financial condition. We currently maintain professional and product liability insurance

TABLE OF CONTENTS

coverage, but cannot give assurance that the coverage limits of this insurance would be adequate to protect against all potential claims. We cannot assure that we will be able to obtain or maintain professional and product liability insurance in the future on acceptable terms or with adequate coverage against potential liabilities.

Our Products Have Existing Competition in the Marketplace

In the market for biotechnology products, we face competition from pharmaceutical companies, biopharmaceutical companies, medical device companies, and other competitors. Other companies have developed or are developing products that may be in direct competition with our current product line. Biotechnology development projects are characterized by intense competition. Thus, we cannot assure that we will be the first to the market with any newly developed products or that we will successfully be able to market these products. If we are not able to participate and compete in the regenerative biological therapy market, our financial condition will be materially and adversely affected. We cannot assure that we will be able to compete effectively against such companies in the future. Many of these companies have substantially greater capital resources, larger marketing staffs and more experience in commercializing products. Recently developed technologies, or technologies that may be developed in the future, may be the basis for developments that will compete with our products.

The Sale of Our Common Stock to Lincoln Park May Cause Substantial Dilution to Our Existing Stockholders and the Sale of the Shares of Common Stock Acquired by Lincoln Park Could Cause the Price of Our Common Stock to Decline

In October 2010, we entered into certain agreements with Lincoln Park Capital LLC (“LPC”) whereby we could, but were not required to, sell shares of our Common stock to LPC over a two year period up to a maximum aggregate amount of \$11.5 million (the “Purchase Agreements”). The number of shares ultimately offered for sale by LPC is dependent upon the number of shares we elect to sell to LPC under the Purchase Agreements. Depending upon market liquidity at the time, sales of shares of our common stock by LPC may cause the trading price of our common stock to decline. After it has acquired shares under the Purchase Agreements, LPC may sell all, some or none of those shares. Sales to LPC by us pursuant to the Purchase Agreements may result in substantial dilution to the interests of other holders of our Common stock. The sale of a substantial number of shares of our Common stock by LPC, or anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales. However, we have the right to control the timing and amount of any sales of our shares to LPC and the Purchase Agreements may be terminated by us at any time at our discretion without any cost to us.

Volatility of Our Stock Price Could Adversely Affect Current and Future Stockholders.

The market price of our common stock has been volatile, and fluctuates widely in price in response to various factors which are beyond our control. The price of our common stock is not necessarily indicative of our operating performance or long-term business prospects. In addition, the securities markets have from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. These market fluctuations may also materially and adversely affect the market price of our common stock. Factors that could cause the market price of our common stock to fluctuate substantially include, among others:

- our ability or inability to execute our business plan;
- the dilutive effect or perceived dilutive effect of additional equity financings;
- investor perception of our company and of the industry;
- the success of competitive products or technologies;
- regulatory developments in the United States or overseas;
- developments or disputes concerning patents or other proprietary rights;
- the recruitment or departure of key personnel; or
- general economic, political and market conditions.

TABLE OF CONTENTS

The stock market in general has recently experienced extreme price and volume fluctuations. Continued market fluctuations could result in extreme volatility in the price of our common stock, which could cause a decline in the value of our common stock. Price volatility could be worse if the trading volume of our common stock is low.

We May Likely Issue Additional Equity or Debt Securities Which May Materially and Adversely Affect the Price of Our Common Stock

Sales of substantial amounts of shares of our common stock in the public market, or the perception that those sales may occur, could cause the market price of our common stock to decline. We have used, and will likely continue to use, our common stock or securities convertible into or exchangeable for common stock to fund working capital needs or to acquire technology, product rights or businesses, or for other purposes. If additional equity and/or equity-linked securities are issued, particularly during times when our common stock is trading at relatively low price levels, the price of our common stock may be materially and adversely affected.

There is a Limited Public Trading Market for Our Common Stock

Although the average daily trading volume in our common stock has increased in the past six months, it has historically been relatively low. If low trading volume is persistent, it could be difficult to sell a significant number of shares of common stock at any particular time at the market prices prevailing immediately before such shares are offered. Shareholders may be required to hold shares of our common stock for an indefinite period of time. In addition, sales of substantial amounts of common stock could lower the prevailing market price of our common stock. This would limit or perhaps prevent our ability to raise capital through the sale of securities. Additionally, we have significant numbers of outstanding warrants and options that, if exercised and sold, could put additional downward pressure on the common stock price. In addition, in recent years the stock market in general, and the market for life sciences companies in particular, have experienced significant price and volume fluctuations. This volatility has affected the market prices of securities issued by many companies, often for reasons unrelated to their operating performance, and it may adversely affect the price of our common stock. These broad market fluctuations may reduce the demand for our stock and therefore adversely affect the price of our securities, regardless of operating performance.

We are Subject to Anti-Takeover Provisions and Laws

Provisions in our restated certificate of incorporation and restated bylaws and applicable provisions of the Delaware General Corporation Law may make it more difficult for a third party to acquire control of us without the approval of our Board of Directors. These provisions may make it more difficult or expensive for a third party to acquire a majority of our outstanding voting common stock or delay, prevent or deter a merger, acquisition, tender offer or proxy contest, which may negatively affect our common stock price.

ITEM 1B. Unresolved Staff Comments

None.

ITEM 2. Properties

The Company does not own any real property and does not intend to invest in any real property in the foreseeable future. The Company's offices and warehouse facilities are located in Gaithersburg, Maryland, and comprise approximately 4,100 square feet under a 40 month operating lease expiring December 2013. Monthly rent, including our share of certain annual operating costs and taxes, is approximately \$5,800 per month.

ITEM 3. Legal Proceedings

At present, the Company is not engaged in or the subject of any legal proceedings.

ITEM 4. Mine Safety Disclosures

Not applicable.

PART II**ITEM 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities****Market Information**

Since January 26, 2011, the Company's common stock has been quoted on the OTC Bulletin Board under the trading symbol "CMXI". From June 2005 through December 2010, the Company's Common stock had been listed on the NYSE Amex (formerly the American Stock Exchange) under the symbol "GTF." Set forth below are the high and low sale prices for the Common stock for each quarter in the two most recent fiscal years as reported by the Over the Counter Bulletin Board and NYSE Amex. The quotations reflect inter-dealer prices, without retail markup, markdown, or commissions, and may not represent actual transactions.

Quarter ended	High	Low
December 31, 2011	\$ 1.23	\$ 0.46
September 30, 2011	\$ 0.66	\$ 0.28
June 30, 2011	\$ 0.45	\$ 0.28
March 31, 2011	\$ 0.67	\$ 0.33
December 31, 2010	\$ 0.68	\$ 0.42
September 30, 2010	\$ 0.75	\$ 0.48
June 30, 2010	\$ 1.75	\$ 0.41
March 31, 2010	\$ 0.68	\$ 0.39

On March 16, 2012, the closing price of the Company's Common stock was \$1.29.

 Holders

There were approximately 506 shareholders of record of Common stock as of March 16, 2012.

 Dividends

Cytomedix did not pay dividends to holders of common stock in 2011 or 2010. The Company is prohibited from declaring dividends on common stock if any dividends are due on shares of Series A, B, or D Convertible Preferred stock. If there are no unpaid dividends on shares of Series A, B, C or D Convertible Preferred stock, any decision to pay cash dividends on Common stock will depend on the Company's ability to generate earnings, need for capital, and overall financial condition, and other factors the Board deems relevant. In February 2012, the Series A and B Convertible Preferred Stock were redeemed and the Series D Convertible Preferred Stock was converted to common stock. However, we do not anticipate paying cash dividends on common stock in the foreseeable future, but instead will retain any earnings for reinvestment in the business.

 Issuer Purchases of Equity Securities

The Company did not make any stock repurchases during the last quarter of 2011.

 Recent Sales of Unregistered Securities

During the last quarter of 2011, we issued 1,200,000 shares of our common stock to various holders of the Company's 12% convertible promissory notes dated July 15, 2011, pursuant to the terms and provisions of debt conversion agreements. This transaction was exempt from the registration requirement of the Securities Act of 1933, as amended, pursuant to Section 4(2) under the Act, as all debt holders were "accredited investors" as defined in the Act.

 ITEM 6. Selected Financial Data

As a smaller reporting company (as defined in Item 10(f)(1) of Regulation S-K), the Company is not required to provide selected financial data specified in Item 301 of Regulation S-K.

ITEM 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of the Company's financial condition and results of operations should be read in conjunction with the financial statements and related notes appearing elsewhere in this Annual Report. The discussion in this section regarding the Company's business and operations includes "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1996. Such statements consist of any statement other than a recitation of historical fact and can be identified by the use of forward-looking terminology such as "may," "expect," "anticipate," "estimate," or "continue," or the negative thereof or other variations thereof or comparable terminology. You are cautioned that all forward-looking statements are speculative, and there are certain risks and uncertainties that could cause actual events or results to differ from those referred to in such forward-looking statements. Actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth in the "Risk Factors" section and elsewhere in this Annual Report. The Company assumes no obligation to update any such forward-looking statements. The following should be read in conjunction with the audited financial statements and the notes thereto included elsewhere herein. Certain numbers in this section have been rounded for ease of analysis.

Corporate Overview

Cytomedix seeks to develop and commercialize autologous regenerative biotherapies that facilitate the body's natural healing processes for enhanced healing and tissue repair. We currently have a growing commercial operation, and a steady clinical pipeline designed to pursue market opportunities with unmet medical needs. Our current commercial offerings are centered around our platelet rich plasma ("PRP") platform technology, and primarily include the Angel® Whole Blood Separation System ("Angel®") and the AutoloGel™ System ("AutoloGel"). Our clinical pipeline primarily involves the ALDHbr cell-based therapies, acquired from Aldagen, Inc., a privately held biopharmaceutical company, in February 2012, and the expansion of the Angel® System for use in other clinical indications.

Our commercial operations primarily address the areas of wound care, infection control, and orthopedic surgery. Approximately 94% of our sales are in the United States, where we sell our products through a combination of direct sales representatives and independent sales agents. Combined, we have approximately 20 sales professionals operating throughout the United States.

In April 2010, the Company acquired the Angel® product line from Sorin. As a result, the Company realized a significant increase in product sales in 2010, and has seen consecutive quarterly growth in sales of Angel® in every quarter since the acquisition. Regarding AutoloGel™, in 2011 we focused on our reimbursement efforts and securing a marketing/distribution partner. Those efforts resulted in a reconsideration by CMS for Medicare coverage, which is ongoing, and an exclusive option agreement with a top 20 global pharmaceutical company for the potential license of AutoloGel™. Also, despite a reduction in commercial efforts in 2011, sales of AutoloGel™ were up modestly over 2010.

In 2012, the Company expects to see continued sales growth in Angel®, both domestically and internationally. We will also strive to bring the Medicare reimbursement efforts and potential licensing agreement for AutoloGel™ to successful conclusions.

Although our revenues have increased, they still remain insufficient to cover our operating expenses. Operating expenses primarily consist of employee compensation, professional fees, consulting expenses, and other general business expenses such as insurance, travel expenses, and sales and marketing related items.

Additionally, in February 2012, we acquired Aldagen, a development stage autologous stem cell company. This will further increase our operating expenses for at least the next two years, at which point, upon success with certain clinical efforts, we would expect to be in a position to partner the Aldagen technology for further development.

TABLE OF CONTENTS

Comparison of Years Ended December 31, 2011 and 2010 (rounded to nearest thousand)

Revenues

Revenues rose \$3,336,000 (85%) to \$7,247,000, comparing the year ended December 31, 2011, to the previous year. The increase was mostly due to higher product sales of \$2,114,000 and license fee revenue of \$1,345,000. The increased product sales were primarily due to an increase in Angel® sales of \$2,097,000 or 61%. AutoloGel™ sales increased 5% to \$384,000. License fee revenue was a result of fees recognized with respect to an option agreement with a top 20 global pharmaceutical company. Royalty revenues in 2010 reflect final close-out adjustments related to the expiration of license agreements in late 2009. We expect continued growth in product sales in 2012.

Gross Profit

Gross profit rose \$2,222,000 (97%) to \$4,520,000, comparing the year ended December 31, 2011, to the previous year. The increase was primarily due to approximately \$1.3 million in licensing revenue associated with the option agreement with the top 20 global pharmaceutical company, as well as increased margins on product sales.

Gross margin rose to 62% from 59% while gross margin on product sales rose to 54% from 52% comparing the 2011 and 2010 periods. The license fee recorded in the fourth quarter of 2011 had no associated cost of revenue. A 10% commission was charged to cost of sales for logistics support provided by Sorin during the months of April through July 2010 for US Angel® sales and April through December 2010 for non-US Angel® sales. In the second quarter of 2010, finished goods inventory acquired from Sorin and valued at fair value in accordance with purchase accounting rules was expensed as these products were sold in the ordinary course of business.

Cost of royalties in 2010 reflects a credit for final adjustments relating to the close-out of the licensing agreements described above.

The Company expects product margins to be approximately 55% in the upcoming quarters.

Operating Expenses

Operating expenses rose \$334,000 (4%) to \$8,035,000, comparing the year ended December 31, 2011, to the previous year. A discussion of the various components of Operating expenses follows below.

Salaries and Wages

Salaries and wages rose \$102,000 (4%) to \$2,852,000, comparing the year ended December 31, 2011, to the previous year. The increase was primarily a result of higher salaries (\$167,000) due to additional employees and higher commissions (\$90,000) associated with increased product sales, partially offset by lower stock-based compensation (\$123,000) and bonuses (\$42,000).

Consulting Expenses

Consulting expenses rose \$555,000 (70%) to \$1,348,000, comparing the year ended December 31, 2011, to the previous year. The increase was primarily due to increased spending associated with regulatory compliance, clinical consulting, and European distribution channel.

Professional Fees

Professional fees fell \$320,000 (29%) to \$786,000, comparing the year ended December 31, 2011, to the previous year. The decrease was primarily due to unusually high legal and accounting costs in 2010 associated with the Company's April 2010 acquisition of the Angel® Business along with lower accounting audit fees in 2011.

Research, Development, Trials and Studies

Trials and studies expenses fell \$317,000 (76%) to \$98,000, comparing the year ended December 31, 2011, to the previous year. The decrease was due to lower spending on developing the enhanced AutoloGel™ device, the AutoloGel™ package redesign, and our TAPS program (post-market surveillance study) for the AutoloGel™ System.

TABLE OF CONTENTS

General and Administrative Expenses

General and administrative expenses rose \$314,000 (12%) to \$2,949,000, comparing the year ended December 31, 2011, to the previous year. The increase was primarily the result of higher selling costs (including commissions, and domestic and international marketing costs) of approximately \$290,000.

Other Income (Expense)

Other income (expense) improved to \$22,000 income in 2011 compared to \$1,400,000 net expense in 2010. The improvement was primarily a result of changes in the fair value of derivative liabilities associated with the convertible notes issued to JMJ Financial Group Inc ("JMJ") and a gain from the Company's restructuring of the Sorin note payable in April 2011, partially offset by an increase in interest expense mainly due to the amortization of the convertible debt discount associated with the convertible notes issued to JMJ.

Liquidity and Capital Resources

Since inception we have incurred, and continue to incur significant losses from operations. Although our recent acquisition of Aldagen was an all equity transaction, the on-going Phase II study and general corporate activities at Aldagen will increase our operational expenditures over the next two years. Historically, we have financed our operations through a combination of the sale of debt, equity and equity-linked securities, and licensing, royalty, and product revenues. The Company's commercial products, the Angel® and AutoloGel™ product lines, are currently generating approximately \$6 million in revenue per year on a run-rate basis. The Company needs to sustain and grow these sales in order to meet its business objectives and satisfy its cash requirements.

At December 31, 2011, we had approximately \$2.3 million cash on hand. In February 2012, concurrent with the Aldagen acquisition, we sold \$5 million worth of restricted common stock to Aldagen investors, and received commitments to exercise \$3 million worth of warrants on or before June 30, 2012 from certain existing Cytomedix warrant holders. In February 2012, we also received a \$2.5 million non-refundable fee from a top 20 global pharmaceutical company for an extension of an exclusive option period through June 30, 2012. After considering these actual and potential infusions, we believe we will have sufficient cash to sustain the Company at least through 2012. However, we will require additional capital to finance the further development of our business operations, in particular the completion of the Phase II RECOVER-Stroke trial, beyond that point.

If a license and supply agreement is finalized with the pharmaceutical company mentioned above, we would expect such agreement to incorporate a modest incremental up-front license fee, a significant product development milestone payment related to the second generation AutoloGel™ separation device and a profit sharing arrangement on future U.S. sales of AutoloGel™. We also continue to have exploratory conversations with large companies regarding their interest in our various products and technologies. We will seek to leverage these relationships and this heightened interest to secure further non-dilutive sources of funding.

The Company may also access additional capital through the remaining purchase agreement with Lincoln Park Capital ("LPC"). Under this agreement, which expires in January 2013, the Company may, within certain parameters, raise up to an additional \$6.4 million. To date, the Company has raised \$5.1 million by selling a total of 10.6 million shares to LPC under purchase agreements, with nearly 75% of those shares sold prior to June 30, 2011. Given the parameters within which the Company may draw down from LPC, there is no assurance that the amounts available from LPC will be sufficient to fund our future operational cash flow needs.

If significant amounts are not available to the Company from future strategic partnerships or under the LPC agreement, additional funding will be required for the Company to pursue all elements of its strategic plan. Specific programs that may require additional funding include, without limitation, continued investment in the sales, marketing, distribution, and customer service areas, further expansion into the European market, completion of the ongoing Phase II trial, significant new product development or modifications, and pursuit of other opportunities. We would likely raise such additional capital through the issuance of our equity or equity-linked securities, which may result in significant additional dilution to our investors. The Company's ability to raise additional capital is dependent on, among other things, the state of the financial markets at the time of any proposed offering. Given the current state of the financial markets, the ability to raise capital may be

TABLE OF CONTENTS

significantly diminished. In order to secure funding through strategic partnerships, it may be necessary to partner one or more of our technologies at an earlier stage of development, which could cause the Company to share a greater portion of the potential future economic value of those programs with its partners. There is no assurance that additional funding, through any of the aforementioned means, will be available on acceptable terms, or at all. If adequate capital cannot be obtained on a timely basis and on satisfactory terms, the Company's operations could be materially negatively impacted.

Net cash provided by (used in) operating, investing, and financing activities for the years ended December 31, 2011 and 2010 were as follows:

	2011	2010
	<i>(in millions)</i>	
Cash flows from operating activities	\$ (4.2)	\$ (3.5)
Cash flows from investing activities	\$ —	\$ (2.7)
Cash flows from financing activities	\$ 5.8	\$ 4.8

Operating Activities

Cash used in operating activities in 2011 primarily reflects our net loss of \$3.5 million adjusted by a net decrease of \$1.3 million due to changes in assets and liabilities, a \$0.6 million increase for depreciation and amortization, a \$0.6 million decrease for the non cash gain on restructuring of the Sorin debt, a \$0.5 million increase for amortization of debt discounts, a \$0.5 million decrease for the change in derivative liabilities and a \$0.3 million increase for stock-based compensation. The \$1.3 million decrease due to changes in assets and liabilities, in part reflects the full satisfaction of the \$1.2 million net payable obligation to Sorin arising during the transition period of the Angel@ Business acquisition.

Cash used in operating activities in 2010 primarily reflects our net loss of \$6.8 million adjusted by a net increase of \$1.6 million due to changes in assets and liabilities, a \$0.6 million increase for the change in derivative liabilities, a \$0.4 million increase for depreciation and amortization expense and a \$0.4 million increase for stock based compensation.

Investing Activities

Cash used in investing activities in 2010 primarily consisted of a \$2.0 million up-front payment to Sorin in connection with the acquisition of the Angel Business and approximately \$0.8 million in purchase of Angel@ centrifuge machines.

Financing Activities

In 2011, we raised \$2.1 million through the issuance of an interest only promissory note maturing April 28, 2015, \$2.4 million through the issuance of convertible debt, and \$4.0 million through the issuance of common stock (\$3.5 million of which was sold to LPC). We used \$2.6 million of these proceeds to fully satisfy the \$2.6 million carrying value of the note payable to Sorin that remained after a \$0.9 million negotiated discount. At December 31, 2011, \$1.8 million in convertible debt remained outstanding. This debt, maturing no earlier than July 2014, is expected to convert to equity over time. No cash expenditures are expected with regard to this debt obligation.

In 2010, we raised approximately \$2.1 million through various offerings of our common stock and \$3.2 million through the issuance of convertible preferred stock (which subsequently converted into common stock in February 2012). We used approximately \$0.5 million to repay a portion of the carrying amount of the note payable to Sorin.

Inflation

The Company believes that the rates of inflation in recent years have not had a significant impact on its operations.

Off-Balance Sheet Arrangements

The Company does not have any off-balance sheet arrangements.

TABLE OF CONTENTS

Critical Accounting Policies

Stock-Based Compensation

Under the Company's Long Term Incentive Plan (the "LTIP"), it grants share-based awards, typically in the form of stock options and stock awards, to eligible employees, directors, and service providers to purchase shares of Common stock. The fair values of these awards are determined on the dates of grant or issuance and are recognized as expense over the requisite service periods.

The Company estimates the fair value of stock options on the date of grant using the Black-Scholes-Merton option-pricing formula. The determination of fair value using this model requires the use of certain estimates and assumptions that affect the reported amount of compensation cost recognized in the Company's Consolidated Statements of Operations. These include estimates of the expected term of the option, expected volatility of the Company's stock price, expected dividends and the risk-free interest rate. These estimates and assumptions are highly subjective and may result in materially different amounts should circumstances change and the Company employ different assumptions in future periods.

For stock options issued during the year ended December 31, 2011 and 2010, the expected term was estimated by using peer company information as Cytomedix's history is limited. Estimated volatility was derived using the Company's historical stock price volatility. No cash dividends have ever been declared or paid on the Company's common stock and currently none is anticipated. The risk-free interest rate is based upon U.S. Treasury securities with remaining terms similar to the expected term of the options.

The Company estimates the fair value of stock awards based on the closing market value of the Company's stock on the date of grant. In certain select cases, the Company has issued stock purchase warrants, outside the LTIP, to service providers in exchange for the performance of consulting or other services. These warrants have generally been immediately vested and expense was recognized equal to the fair value of the warrant on the date of grant using the Black-Scholes option pricing model. The same assumptions (and related risks) as discussed above apply, with the exception of the expected term; for these warrants issued to service providers, the Company estimates that the warrant will be held for the full term.

Business Combinations

The Company accounts for business combinations using the acquisition method. Under this method the Company allocates the purchase price to the assets acquired and liabilities assumed based on their estimated fair values at the date of acquisition, including intangible assets that arise from contractual or other legal rights or are separable (i.e. capable of being sold, transferred, licensed, rented, or exchanged separately from the entity). Determination of fair value is based on certain estimates and assumptions regarding such things as forecasted future revenues and expenses, customer attrition, prevailing royalty rates, required rates of return, etc. The purchase price in excess of the fair value of the net assets and liabilities is recorded as goodwill.

Revenue Recognition

The Company recognizes revenue in accordance with FASB ASC 605, *Revenue Recognition*. ASC 605 requires that four basic criteria must be met before revenue can be recognized: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services rendered; (3) consideration is fixed or determinable; and (4) collectability is reasonably assured.

Sales of products

The Company provides for the sale of its products, including disposable processing sets and supplies to customers. Revenue from sales products is recognized upon shipment of products to the customers. The Company does not maintain a reserve for returned products as in the past those returns have not been material.

TABLE OF CONTENTS

Usage or leasing of blood separation equipment

Also, as a result of the acquisition of the Angel® business in 2010, the Company acquired various multiple element revenue arrangements that combine the (i) usage or leasing of blood separation processing equipment, (ii) maintenance of processing equipment, and (iii) purchase of disposable processing sets and supplies. Under these arrangements, the total arrangement consideration is allocated to the various elements based on their relative estimated selling prices. The usage of the blood separation processing equipment is accounted for as an operating lease; since customer payments are contingent upon the customer ordering new products, rental income is recorded following the contingent rental method when rental income is earned and collectability is reasonably assured. The sale of disposable processing sets and supplies and maintenance are deemed a combined unit of accounting; since (a) any consideration for disposable processing sets and supplies and maintenance is contingent upon the customer ordering additional disposable processing sets and supplies and (b) both the disposable products and maintenance services are provided over the same term, the Company recognizes revenue for this combined unit of accounting following the contingent revenue method at the time disposable products are delivered based on prices contained in the agreement. Rental income is currently less than 10% of total revenue and the Company therefore is not required to make separate disclosure in the statement of operations.

Licenses and royalties

Percentage-based fees on licensee sales of covered products are generally recorded as products are sold by licensees and are reflected as "Royalties" in the Consolidated Statements of Operations. Under certain agreements, Cytomedix has received up-front payments. If the up-front payment is deemed to be an inducement to enter into an agreement, and is applicable to some future period, then this amount is recorded as deferred revenue and amortized to revenue on a straight line basis over the course of the agreement.

Direct costs associated with product sales and royalty revenues are recorded at the time that revenue is recognized.

Option Agreement with a global pharmaceutical company

In the fourth quarter 2011, the Company entered into (and subsequently amended) an option agreement with a global pharmaceutical company ("Global Pharma") (the "Option Agreement"), pursuant to which Global Pharma had an exclusive option through February 3, 2012 to execute an agreement with the Company to license its AutoloGel system (the "License Agreement"). In connection with the execution of the Option Agreement, Global Pharma paid to the Company a non-refundable fee of \$2.0 million; Global Pharma had a right to extend the Option Agreement through June 30, 2012 for an additional non-refundable fee of \$2.5 million.

The Option Agreement includes the proposed terms of the License Agreement, including (i) a product license fee, (ii) a next generation product license fee (iii) a royalty agreement to share in the profits from the sale of licensed products. If Global Pharma had not executed the License Agreement by February 3, 2012 or extended the Option Agreement pursuant to stated extension terms, then the Option Agreement would have terminated and the Company would have retained all fees paid to it by Global Pharma. In February 2012, Global Pharma extended the Option Agreement through June 30, 2012 and paid the Company an additional \$2.5 million.

The Company has determined that the Option Agreement has multiple elements, including exclusivity during the two option periods and, if the License Agreement is executed, the product license and the next generation product license. Accordingly, total arrangement consideration is allocated to the various elements based on their relative estimated selling prices and will be recognized as revenue according to their specific characteristics. The Company has allocated \$1.9 million of consideration to the first exclusivity and option period and, in 2011, recognized approximately \$1.3 million of revenue related to that element.

TABLE OF CONTENTS

Valuation of Goodwill

The Company is required to perform a review for impairment of goodwill in accordance with FASB ASC 350, *Intangibles — Goodwill and Other*. Goodwill is considered to be impaired if it is determined that the carrying value of the Company exceeds its fair value. In addition to the annual review, an interim review is required if an event occurs or circumstances change that would more likely than not reduce the fair value of the Company below its carrying amount. Examples of such events or circumstances include:

- a significant adverse change in legal factors or in the business climate;
- a significant decline in Cytomedix's stock price or the stock price of comparable companies;
- a significant decline in the Company's projected revenue or cash flows;
- an adverse action or assessment by a regulator;
- unanticipated competition;
- a loss of key personnel;
- a more-likely-than-not expectation that the Company will be sold or otherwise disposed of;
- a substantial doubt about the Company's ability to continue as a going concern.

Valuation of Intangibles

The Company capitalizes the costs of purchased patents, trademarks, customer, and technology related intangibles. These intangibles are amortized using the straight-line method over their estimated useful lives. The Company reviews its finite-lived intangible assets for potential impairment when circumstances indicate that the carrying amount of assets may not be recoverable.

Fair Value of Financial Instruments

The balance sheets include various financial instruments that are carried at fair value. Fair value is the price that would be received from the sale of an asset or paid to transfer a liability assuming an orderly transaction in the most advantageous market at the measurement date. GAAP establishes a hierarchical disclosure framework which prioritizes and ranks the level of observability of inputs used in measuring fair value. These tiers include:

- Level 1, defined as observable inputs such as quoted prices in active markets for identical assets;
- Level 2, defined as observable inputs other than Level 1 prices such as quoted prices for similar assets; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and
- Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

An asset's or liability's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. At each reporting period, we perform a detailed analysis of our assets and liabilities that are measured at fair value. All assets and liabilities for which the fair value measurement is based on significant unobservable inputs or instruments which trade infrequently and therefore have little or no price transparency are classified as Level 3.

The Company accounts for derivative instruments under ASC 815, *Accounting for Derivative Instruments and Hedging Activities*, as amended and interpreted. ASC 815 requires that we recognize all derivatives on the balance sheet at fair value. Certain warrants issued in 2009 and prior years meet the definition of derivative liabilities. In October 2010, we executed an equity-linked transaction in which detachable stock purchase warrants were sold; the warrants are accounted for as a derivative liability. In July and November 2011, we issued convertible notes that contained embedded conversion options; the embedded conversion options are accounted for as a derivative liability. We determine the fair value of these derivative liabilities using the Black-Scholes option pricing model. This model determines fair value by requiring the use of estimates that

TABLE OF CONTENTS

include the contractual term, expected volatility of the Company's stock price, expected dividends and the risk-free interest rate. Changes in fair value are classified in "other income (expense)" in the consolidated statement of operations.

Recent Accounting Pronouncements

ASU No. 2010-28, "Intangibles — Goodwill and Other (Topic 350) — When to Perform Step 2 of the Goodwill Impairment Test for Reporting Units with Zero or Negative Carrying Amounts." ASU 2010-28 modifies Step 1 of the goodwill impairment test for reporting units with zero or negative carrying amounts. For those reporting units, an entity is required to perform Step 2 of the goodwill impairment test if it is more likely than not that a goodwill impairment exists. In determining whether it is more likely than not that a goodwill impairment exists, an entity should consider whether there are any adverse qualitative factors indicating that an impairment may exist such as if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. ASU 2010-28 became effective for the Company on January 1, 2011 and did not have a significant impact on the Company's financial statements.

ASU No. 2011-04, "Fair Value Measurement (Topic 820) — Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs." ASU 2011-04 amends the wording used to describe the requirements in U.S. GAAP for measuring fair value and for disclosing information about fair value measurements. This results in common fair value measurement and disclosure requirements in U.S. GAAP and IFRSs. ASU 2011-04 is effective during interim and annual periods beginning after December 15, 2011. Early application by public entities is not permitted. The Company is currently evaluating the impact, if any, that the adoption of this amendment will have on its financial statements.

ASU No. 2011-08, "Intangibles — Goodwill and Other (Topic 350) — Testing Goodwill for Impairment." The amendments in this Update are intended to reduce complexity and costs by allowing an entity the option to make a qualitative evaluation about the likelihood of goodwill impairment to determine whether it should calculate the fair value of a reporting unit. The amendments also improve previous guidance by expanding upon the examples of events and circumstances that an entity should consider between annual impairment tests in determining whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. Also, the amendments improve the examples of events and circumstances that an entity having a reporting unit with a zero or negative carrying amount should consider in determining whether to measure an impairment loss, if any, under the second step of the goodwill impairment test. The amendments are effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011. Early adoption is permitted, including for annual and interim goodwill impairment tests performed as of a date before September 15, 2011, if an entity's financial statements for the most recent annual or interim period have not yet been issued. The Company is currently evaluating the impact, if any, that the adoption of this amendment will have on its financial statements.

ITEM 7A. Quantitative and Qualitative Disclosures about Market Risk

As a smaller reporting issuer (as defined in Item 10(f)(1) of Regulation S-K), the Company is not required to report quantitative and qualitative disclosures about market risk specified in Item 305 of Regulation S-K.

[TABLE OF CONTENTS](#)

ITEM 8. Financial Statements and Supplementary Data

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Cytomedix, Inc.:

We have audited the consolidated balance sheet of Cytomedix, Inc. ("The Company") as of December 31, 2011, and the related consolidated statements of operations, changes in stockholders' equity (deficit), and cash flows for the year then ended. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Cytomedix, Inc. as of December 31, 2011, and the results of their operations and cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States.

/s/ Stegman & Company

Baltimore, Maryland
March 26, 2012

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Cytomedix, Inc.:

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of operations, of stockholders' equity (deficit) and of cash flows present fairly, in all material respects, the financial position of Cytomedix, Inc. and its subsidiaries at December 31, 2010 and the results of their operations and their cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has suffered recurring losses from operations and has insufficient liquidity to fund its ongoing operations that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ PricewaterhouseCoopers LLP

Baltimore, Maryland
March 29, 2011

CYTOMEDIX, INC.

CONSOLIDATED BALANCE SHEETS

	December 31, 2011	December 31, 2010
ASSETS		
Current assets		
Cash	\$ 2,246,050	\$ 638,868
Short-term investments, restricted	52,840	52,817
Accounts and royalties receivable, net	1,480,463	1,207,027
Inventory	548,159	627,984
Prepaid expenses and other current assets	695,567	610,409
Deferred costs, current portion	136,436	357,412
Total current assets	5,159,515	3,494,517
Property and equipment, net	978,893	1,324,996
Deferred costs	317,219	191,153
Intangible assets, net	2,916,042	3,182,875
Goodwill	706,823	706,823
Total assets	<u>\$ 10,078,492</u>	<u>\$ 8,900,364</u>
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities		
Accounts payable and accrued expenses	\$ 1,849,133	\$ 3,558,161
Deferred revenues, current portion	654,721	—
Note payable, current portion	—	1,520,947
Dividends payable on preferred stock	105,533	92,853
Derivative liabilities, current portion	528,467	—
Total current liabilities	3,137,854	5,171,961
Note payable	2,100,000	1,981,208
Derivative and other liabilities	1,559,055	1,826,447
Total liabilities	<u>6,796,909</u>	<u>8,979,616</u>
Commitments and contingencies		
Stockholders' equity (deficit)		
Series A Convertible preferred stock; \$.0001 par value, authorized 5,000,000 shares; 2011 and 2010 issued and outstanding – 97,663 shares, liquidation preference of \$97,663	10	10
Series B Convertible preferred stock; \$.0001 par value, authorized 5,000,000 shares; 2011 and 2010 issued and outstanding – 65,784 shares, liquidation preference of \$65,784	7	7
Series D Convertible preferred stock; \$.0001 par value, authorized 2,000,000 shares; 2011 issued and outstanding – 3,300 shares; 2010 issued and outstanding – 3,315 shares; 2011 liquidation preference of \$3,300,000; 2010 liquidation preference of \$3,315,000	—	—
Common stock; \$.0001 par value, authorized 100,000,000 shares; 2011 issued and outstanding – 55,536,292 shares; 2010 issued and outstanding – 44,103,743 shares	5,554	4,410
Additional paid-in capital	54,458,170	47,587,964
Accumulated deficit	(51,182,158)	(47,671,643)
Total stockholders' equity (deficit)	3,281,583	(79,252)
Total liabilities and stockholders' equity (deficit)	<u>\$ 10,078,492</u>	<u>\$ 8,900,364</u>

The accompanying notes are an integral part of these financial statements.

CYTOMEDIX, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,	
	2011	2010
Revenues		
Product Sales	\$ 5,902,120	\$ 3,787,935
License Fees	1,345,279	—
Royalties	—	123,098
Total revenues	<u>7,247,399</u>	<u>3,911,033</u>
Cost of revenues		
Cost of sales	2,727,156	1,799,352
Cost of royalties	—	(186,402)
Total cost of revenues	<u>2,727,156</u>	<u>1,612,950</u>
Gross profit	<u>4,520,243</u>	<u>2,298,083</u>
Operating expenses		
Salaries and wages	2,852,327	2,750,014
Consulting expenses	1,348,499	793,591
Professional fees	786,424	1,106,626
Research, development, trials and studies	98,148	415,633
General and administrative expenses	2,949,164	2,635,145
Total operating expenses	<u>8,034,562</u>	<u>7,701,009</u>
Loss from operations	<u>(3,514,319)</u>	<u>(5,402,926)</u>
Other income (expense)		
Interest, net	(1,048,474)	(798,671)
Change in fair value of derivative liabilities	470,466	(572,313)
Gain on debt restructuring	576,677	—
Other	23,135	(28,841)
Total other income (expenses)	<u>21,804</u>	<u>(1,399,825)</u>
Loss before provision for income taxes	<u>(3,492,515)</u>	<u>(6,802,751)</u>
Income tax provision	18,000	14,000
Net loss	<u>(3,510,515)</u>	<u>(6,816,751)</u>
Preferred dividends:		
Series A preferred stock	9,064	8,379
Series B preferred stock	6,168	5,698
Series D preferred stock	331,004	260,991
Amortization of beneficial conversion feature on Series D preferred stock	—	1,948,155
Net loss to common stockholders	<u>\$ (3,856,751)</u>	<u>\$ (9,039,974)</u>
Loss per common share –		
Basic and diluted	<u>\$ (0.08)</u>	<u>\$ (0.23)</u>
Weighted average shares outstanding –		
Basic and diluted	<u>50,665,986</u>	<u>38,668,698</u>

The accompanying notes are an integral part of these financial statements.

CYTOMEDIX, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

	Series A		Series B		Series D		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders Equity (Deficit)
	Preferred		Preferred		Preferred						
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
Balance at December 31, 2009	97,663	\$ 10	65,784	\$ 7	—	\$ —	37,273,628	\$ 3,727	\$41,827,199	\$(40,854,892)	\$ 976,051
Series D Preferred stock and warrants issued pursuant to private placement completed in Second Quarter	—	—	—	—	3,650	—	—	—	3,227,124	—	3,227,124
Common stock issued upon conversion of Series D stock	—	—	—	—	(335)	—	762,750	76	(76)	—	—
Dividends accrued on Series A, B and D stock	—	—	—	—	—	—	—	—	(275,068)	—	(275,068)
Dividends on Series D stock, paid in Common shares	—	—	—	—	—	—	371,927	37	189,463	—	189,500
Common stock issued upon exercise of August 2009 warrants	—	—	—	—	—	—	274,251	28	165,675	—	165,703
Adjustments of derivative liability for August 2009 warrants exercised and anti-dilutive issuances, net	—	—	—	—	—	—	—	—	165,573	—	165,573
Warrants issued pursuant to the Guaranty Agreements executed in connection with the Promissory Note payable to Sorin Group USA	—	—	—	—	—	—	—	—	655,260	—	655,260
Common stock and warrants issued pursuant to registered direct offering completed in Fourth Quarter	—	—	—	—	—	—	3,727,677	373	628,102	—	628,475
Common stock issued pursuant to equity purchase agreements executed in October 2010	—	—	—	—	—	—	1,693,510	169	593,751	—	593,920
Stock-based compensation related to options and warrants issued for services rendered by –											
Employees and Directors	—	—	—	—	—	—	—	—	360,269	—	360,269
Other parties	—	—	—	—	—	—	—	—	50,692	—	50,692
Net loss	—	—	—	—	—	—	—	—	—	(6,816,751)	(6,816,751)
Balance at December 31, 2010	97,663	\$ 10	65,784	\$ 7	3,315	\$ —	44,103,743	\$ 4,410	\$47,587,964	\$(47,671,643)	\$ (79,252)

CYTOMEDIX, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT) – (continued)

	Series A Preferred		Series B Preferred		Series D Preferred		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
Common stock issued upon conversion of Series D stock	—	—	—	—	(15)	—	34,153	4	(4)	—	—
Dividends accrued on Series A, B and D stock	—	—	—	—	—	—	—	—	(346,236)	—	(346,236)
Dividends on Series D stock, paid in Common shares	—	—	—	—	—	—	714,126	72	333,484	—	333,556
Common stock issued upon exercise of August 2009 warrants	—	—	—	—	—	—	374,561	37	190,989	—	191,026
Abatement of derivative liabilities for the August 2009 and October 2010 warrants pursuant to amendments of underlying agreements	—	—	—	—	—	—	—	—	1,434,322	—	1,434,322
Write off of deferred financing costs for the August 2009 and October 2010 warrants pursuant to amendments of underlying agreements	—	—	—	—	—	—	—	—	(136,543)	—	(136,543)
Warrants issued pursuant to the Guaranty Agreements executed in connection with the Promissory Note payable to JP's Nevada Trust	—	—	—	—	—	—	—	—	545,750	—	545,750
Common stock issued pursuant to private offering completed in Second Quarter	—	—	—	—	—	—	984,850	98	324,902	—	325,000
Conversion of 12% Convertible Promissory Notes completed in Fourth Quarter 2011	—	—	—	—	—	—	1,200,000	120	769,845	—	769,965
Common stock issued pursuant to equity purchase agreements executed in October 2010	—	—	—	—	—	—	8,124,859	813	3,448,517	—	3,449,330
Stock-based compensation related to options and warrants issued for services rendered by –											
Employees and Directors	—	—	—	—	—	—	—	—	241,174	—	241,174
Other parties	—	—	—	—	—	—	—	—	64,006	—	64,006
Net loss	—	—	—	—	—	—	—	—	—	(3,510,515)	(3,510,515)
Balance at December 31, 2011	<u>97,663</u>	<u>\$ 10</u>	<u>65,784</u>	<u>\$ 7</u>	<u>3,300</u>	<u>\$ —</u>	<u>55,536,292</u>	<u>\$ 5,554</u>	<u>\$54,458,170</u>	<u>\$(51,182,158)</u>	<u>\$ 3,281,583</u>

CYTOMEDIX, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,	
	2011	2010
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$(3,510,515)	\$ (6,816,751)
Adjustments to reconcile net loss to net cash used in operating activities:		
Increase in allowance for doubtful accounts	36,378	23,672
Depreciation and amortization	631,181	440,178
Stock-based compensation	305,180	410,961
Change in fair value of derivative liabilities	(470,466)	572,313
Amortization of deferred costs	201,875	263,337
Non-cash interest expense – amortization of debt discount	508,846	—
Deferred income tax provision	18,000	14,000
Loss (Gain) on disposal of assets	(41,065)	7,567
Gain on debt restructuring	(576,677)	—
Change in assets and liabilities net of effects from acquisition of Angel business:		
Accounts and other receivables, net	(944,589)	(1,050,139)
Inventory	79,825	549,037
Prepaid expenses and other current assets	(85,181)	(305,604)
Accounts payable and accrued expenses	(1,055,983)	2,356,062
Deferred revenues	654,721	—
Other liabilities	8,981	—
Net cash used in operating activities	<u>(4,239,489)</u>	<u>(3,535,367)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Capital expenditures	(66,430)	(774,625)
Payment for acquisition of Angel business	—	(2,000,000)
Proceeds from sale of equipment	89,251	54,632
Net cash provided by (used in) investing activities	<u>22,821</u>	<u>(2,719,993)</u>
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of debt	2,100,000	—
Proceeds from issuance of common stock, net	3,774,330	1,900,605
Proceeds from sale of preferred stock and warrants, net	—	3,227,124
Repayment of note payable	(2,641,506)	(506,703)
Proceeds from option and warrant exercises	191,026	165,703
Proceeds from issuance of convertible debt, net	2,400,000	—
Net cash provided by financing activities	<u>5,823,850</u>	<u>4,786,729</u>
Net increase (decrease) in cash	1,607,182	(1,468,631)
Cash, beginning of period	638,868	2,107,499
Cash, end of period	<u>\$ 2,246,050</u>	<u>\$ 638,868</u>

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 — Description of the Business

Cytomedix, Inc. (“Cytomedix,” the “Company,” “we,” “us,” or “our”) develops, sells, and licenses regenerative biological therapies intended to aid the human body in regenerating/healing itself, to primarily address the areas of wound care, infection control, and orthopedic surgery. The Company currently markets the AutoloGel™ System (“AutoloGel™”), as well as the Angel® Whole Blood Separation System (“Angel®”) and activAT® Autologous Thrombin Processing Kit (“activAT®”), both of which were acquired from Sorin USA, Inc. (“Sorin”) in April 2010 (the “Angel Business”).

AutoloGel™ is a device for the production of platelet rich plasma (“PRP”) gel derived from the patient’s own blood. The AutoloGel™ System is cleared by the Food and Drug Administration (“FDA”) for use on a variety of exuding wounds. The Company is currently pursuing a multi-faceted strategy to penetrate the chronic wound market with its AutoloGel™ System. Additionally, the Company has entered into an option agreement with a top 20 global pharmaceutical company granting the potential partner an exclusive option period through June 30, 2012 regarding license of the AutoloGel™ System.

Angel® and activAT® are used primarily in surgical settings. Angel® is used for separation of whole blood into red cells, platelet poor plasma and platelet rich plasma. ActivAT® is designed to produce autologous thrombin serum from platelet poor plasma and is sold exclusively in Europe and Canada, where it provides a safe alternative to bovine-derived products.

The Company is also pursuing opportunities for the application of AutoloGel™ and Angel® into other markets such as hair transplantation, pain management, and sports medicine, as well as actively seeking complementary products for regenerative medicine markets.

Cytomedix sells its products primarily to health care providers in the United States.

On February 8, 2012 Cytomedix announced the acquisition of Aldagen, Inc. (“Aldagen”) a biopharmaceutical company developing regenerative cell therapies based on its proprietary ALDH bright cell (“ALDH^{br}”) technology, currently in a Phase 2 trial for the treatment of ischemic stroke. See a further discussion of the Aldagen acquisition in the Subsequent Events note to these financial statements.

Note 2 — Liquidity and Management’s Plans

At December 31, 2010, there was substantial doubt about the Company’s ability to continue as a going concern. At that time, the Company had a cash balance of only approximately \$600,000, had limited history with the Angel® Business, had lost its licensing revenue stream due to the expiration of the patents in 2009 and needed additional capital to finance its operations and satisfy the then remaining installments on its note payable to Sorin.

Since then, the Company has undertaken numerous steps to improve its financial condition and business prospects. Specifically, it has completed the integration of a fully commercialized Angel Business, raised significant additional capital through the issuance of its equity, equity-linked, and debt securities, and obtained significant funding in the form of non-refundable option fees from a potential licensing and distribution partner. As such, the Company has sufficient resources to fund its operations at least through December 31, 2012, thereby removing the substantial doubt about its ability to continue as a going concern.

However, we will require additional capital to finance the further development of our business operations, in particular the completion of the Phase II RECOVER-Stroke trial, beyond that point. There is no assurance that additional funding will be available on acceptable terms, or at all. If adequate capital cannot be obtained on a timely basis and on satisfactory terms, the Company’s operations could be materially negatively impacted.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 3 — Summary of Significant Accounting Policies

Basis of Presentation

The Company's financial statements are prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America. They include the accounts of the company and our subsidiaries. All significant intercompany transactions and balances have been eliminated in consolidation. Certain prior period amounts have been reclassified to conform to the current period presentation with no impact to net loss.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and the accompanying notes. Actual results could differ from those estimates.

Business Combinations

The Company accounts for business combinations using the acquisition method. Under this method the Company allocates the purchase price to the assets acquired and liabilities assumed based on their estimated fair values at the date of acquisition, including intangible assets that arise from contractual or other legal rights or are separable (i.e. capable of being sold, transferred, licensed, rented, or exchanged separately from the entity). Determination of fair value is based on certain estimates and assumptions regarding such things as forecasted future revenues and expenses, customer attrition, prevailing royalty rates, required rates of return, etc. The purchase price in excess of the fair value of the net assets and liabilities is recorded as goodwill. See further discussion regarding the accounting for the Angel® Business (hereinafter defined) combination in Note 4.

Concentration of Risk

As of December 31, 2011 approximately \$991,000 held in financial institutions was in excess of FDIC insurance; there were no such amounts at December 31, 2010. As of December 31, 2011 approximately \$503,000 held in money market accounts at brokerage firms was in excess of Securities Investor Protection Corporation ("SIPC"); there were no such amounts at December 31, 2010. The amount not covered by SIPC is insured by the Company's brokerage firm through additional "excess of SIPC" coverage from third party insurers. These third party insurers would cover losses in the event of the financial failure and liquidation of the financial institution that holds the Company's institutional money market investments, however they do not insure against losses due to market fluctuations. The Company currently has two products, both using Plasma Rich Platelet (PRP) technology, that are presently marketed. Significant changes in technology could lead to new products or services that compete with the product offered by the Company. These changes could materially affect the price of the Company's product or render it obsolete. The Company outsources manufacturing for all the components of its offerings.

Company utilizes single suppliers for several components of the Angel® and AutoloGel™ product lines. We outsource the manufacturing of various products, including component parts, composing the Angel® line to contract manufacturers. While we believe these manufacturers to be of sufficient competency, quality, reliability, and stability, there is no assurance that one or more of them will not experience an interruption or inability to provide us with the products needed to satisfy customer demand. Additionally, while most of the components of AutoloGel™ are generally readily available on the open market, a reagent, bovine thrombin, is available exclusively through Pfizer, with whom the Company has an established vendor relationship.

Cash Equivalents

The Company considers all highly liquid instruments purchased with an original maturity of three months or less to be cash equivalents.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 3 — Summary of Significant Accounting Policies – (continued)

Accounts Receivable

Cytomedix generates accounts receivable from the sale of its products. Cytomedix provides for a reserve against receivables for estimated losses that may result from a customer's inability or unwillingness to pay. The allowance for doubtful accounts is estimated primarily based upon historical write-off percentages, known problem accounts, and current economic conditions. Accounts are written off against the allowance for doubtful accounts when the Company determines that amounts are not collectable. Recoveries of previously written-off accounts are recorded when collected. At December 31, 2011 and 2010 the Company maintained an allowance for doubtful accounts of \$38,000 and \$36,000, respectively.

Inventory

The Company's inventory is produced by third party manufacturers and consists primarily of finished goods. Inventory cost is determined on a first-in, first-out basis and is stated at the lower of cost or net realizable value. The Company's primary product is the Angel® Processing set which has a shelf life of three years. The Company also maintains an inventory of kits, reagents, and other disposables that have shelf lives that generally range from ten months to five years. Expired products are segregated and used for demonstration purposes only; the Company writes off expired inventory through cost of sales.

Property and Equipment

Property and equipment is stated at cost less accumulated depreciation and is depreciated, using the straight-line method, over its estimated useful life ranging from three to five years for all assets except for furniture and manufacturing equipment which is depreciated over seven and ten years, respectively. Maintenance and repairs are charged to operations as incurred. When assets are disposed of, the cost and related accumulated depreciation are removed from the accounts and any gain or loss is included in other income (expense).

Centrifuges may be sold, leased, or placed at no charge with customers. They are stated at cost less accumulated depreciation and are depreciated, using the straight-line method, over their estimated useful lives of three to five years. Maintenance and repairs are charged to operations as incurred. Depreciation expense for centrifuges that are available for sale, leased, or placed at no charge with customers are charged to cost of sales. Depreciation expense for centrifuges used for sales and marketing and other internal purposes are charged to operations. When the centrifuges are sold the net book value is charged to cost of sales.

Intangible Assets

The Company capitalizes the costs of purchased patents, trademarks, customer, and technology related intangibles. These intangibles are amortized using the straight-line method over their estimated useful lives. The Company reviews its finite-lived intangible assets for potential impairment when circumstances indicate that the carrying amount of assets may not be recoverable.

The Company assesses the potential impairment of its goodwill and indefinite-lived intangible assets at least annually by applying a fair value based test. The Company conducts this test as of October 1 of each year. As of October 1, 2011 we determined that there was no impairment. In the event that our analysis indicates an impairment, the Company would record an impairment loss, based on the fair value of the assets. Since the date of our fair value test there have been no triggering events requiring the need to update our impairment test.

Income Taxes

The Company accounts for income taxes using the asset and liability method. Under the asset and liability method, current income tax expense or benefit is the amount of income taxes expected to be payable or refundable for the current year. A deferred income tax asset or liability is recognized for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 3 — Summary of Significant Accounting Policies – (continued)

and liabilities and their respective tax bases and tax credits and loss carryforwards. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Tax rate changes are reflected in income during the period such changes are enacted.

For the year ended December 31, 2011, the income tax provision relates exclusively to a deferred tax liability associated with the amortization of goodwill. The Company has analyzed filing positions in all of the federal and state jurisdictions where it is required to file income tax returns, as well as all open tax years in these jurisdictions. The only periods subject to examination for the Company's federal return are the 2007 through 2011 tax years. The Company believes that its income tax filing positions and deductions would be sustained on audit and does not anticipate any adjustments that would result in a material change to its financial position. Therefore, no reserves for uncertain income tax positions have been recorded.

The Company's policy for recording interest and penalties associated with audits is to record such items as a component of income before taxes. There were no such items during the periods covered in this report.

Revenue Recognition

The Company recognizes revenue in accordance with FASB ASC 605, *Revenue Recognition*. ASC 605 requires that four basic criteria must be met before revenue can be recognized: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services rendered; (3) consideration is fixed or determinable; and (4) collectability is reasonably assured.

Sales of products

The Company provides for the sale of its products, including disposable processing sets and supplies to customers. Revenue from sales products is recognized upon shipment of products to the customers. The Company does not maintain a reserve for returned products as in the past those returns have not been material.

Usage or leasing of blood separation equipment

Also, as a result of the acquisition of the Angel® business in 2010, the Company acquired various multiple element revenue arrangements that combine the (i) usage or leasing of blood separation processing equipment, (ii) maintenance of processing equipment, and (iii) purchase of disposable processing sets and supplies. Under these arrangements, the total arrangement consideration is allocated to the various elements based on their relative estimated selling prices. The usage of the blood separation processing equipment is accounted for as an operating lease; since customer payments are contingent upon the customer ordering new products, rental income is recorded following the contingent rental method when rental income is earned and collectability is reasonably assured. The sale of disposable processing sets and supplies and maintenance are deemed a combined unit of accounting; since (a) any consideration for disposable processing sets and supplies and maintenance is contingent upon the customer ordering additional disposable processing sets and supplies and (b) both the disposable products and maintenance services are provided over the same term, the Company recognizes revenue for this combined unit of accounting following the contingent revenue method at the time disposable products are delivered based on prices contained in the agreement. Rental income is currently less than 10% of total revenue and the Company therefore does not make separate disclosure in the statement of operations.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 3 — Summary of Significant Accounting Policies – (continued)

Licenses and royalties

Percentage-based fees on licensee sales of covered products are generally recorded as products are sold by licensees and are reflected as “Royalties” in the Consolidated Statements of Operations. Under certain agreements, Cytomedix has received up-front payments. If the up-front payment is deemed to be an inducement to enter into an agreement, and is applicable to some future period, then this amount is recorded as deferred revenue and amortized to revenue on a straight line basis over the course of the agreement.

Direct costs associated with product sales and royalty revenues are recorded at the time that revenue is recognized.

Option Agreement with a global pharmaceutical company

In the fourth quarter 2011, the Company entered into (and subsequently amended) an option agreement with a global pharmaceutical company (“Global Pharma”) (the “Option Agreement”), pursuant to which Global Pharma had an exclusive option through February 3, 2012 to execute an agreement with the Company to license its AutoloGel system (the “License Agreement”). In connection with the execution of the Option Agreement, Global Pharma paid the Company a non-refundable fee of \$2.0 million; Global Pharma had a right to extend the Option Agreement through June 30, 2012 for an additional non-refundable fee of \$2.5 million.

The Option Agreement includes the proposed terms of the License Agreement, including (i) a product license fee, (ii) a next generation product license fee (iii) a royalty agreement to share in the profits from the sale of licensed products. If Global Pharma had not executed the License Agreement by February 3, 2012 or extended the Option Agreement pursuant to stated extension terms, then the Option Agreement would have terminated and the Company would have retained all fees paid to it by Global Pharma. In February 2012, Global Pharma extended the Option Agreement through June 30, 2012 and paid the Company an additional \$2.5 million.

The Company has determined that the Option Agreement has multiple elements, including exclusivity during the two option periods and, if the License Agreement is executed, the product license and the next generation product license. Accordingly, total arrangement consideration is allocated to the various elements based on their relative estimated selling prices and will be recognized as revenue according to their specific characteristics. The Company has allocated \$1.9 million of consideration to the first exclusivity and option period and, in 2011, recognized approximately \$1.3 million of revenue related to that element.

Stock-Based Compensation

The Company, from time to time, may issue stock options or stock awards to employees, directors, consultants, and other service providers under its Long-Term Incentive Plan (“LTIP”) (see Note 18). In some cases, it has issued compensatory warrants to service providers outside the LTIP (see Note 18).

All equity-based compensation is estimated on the date of grant using the Black-Scholes-Merton option-pricing formula. The weighted-average assumptions used in the model are summarized in the following table:

	2011	2010
Risk free rate	1.03%	1.96%
Expected years until exercise	5.0	6.0
Expected stock volatility	141%	143%
Dividend yield	—	—

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 3 — Summary of Significant Accounting Policies – (continued)

For stock options, expected volatilities are based on historical volatility of the Company's stock. Due to the Company's short operating history, it uses peer company data to estimate option exercise and employee termination within the valuation model. The expected years until exercise represents the period of time that options are expected to be outstanding and was estimated by using peer company information. The risk-free rate for periods within the contractual life of the option is based on the U.S. Treasury yield curve in effect at the time of grant. The Company estimated that the dividend rate on its common stock will be zero.

The fair value of stock options or compensatory warrants issued to service providers utilizes the same methodology with the exception of the expected term. For these awards to non-employees, the Company estimates that the options or warrants will be held for the full term.

Stock-based compensation for awards granted to non-employees is periodically remeasured as the underlying options and warrants vest. The Company recognizes an expense for such awards throughout the performance period as the services are provided by the non-employees, based on the fair value of these options and warrants at each reporting period.

The Company estimates the fair value of stock awards based on the closing market value of the Company's stock on the date of grant.

Loss Per Share

Loss per share is calculated in accordance with FASB ASC 260, *Earnings Per Share*. Basic loss per share is computed based upon the weighted average number of shares of common stock outstanding for the period and excludes any potential dilution. Diluted earnings per share reflects potential dilution from the exercise of securities into common stock. Outstanding options and warrants to purchase common stock and the common stock equivalents of convertible preferred stock are not included in the computation of diluted earnings per share because the effect of these instruments would be anti-dilutive (i.e. would reduce the loss per share). The common shares potentially issuable upon the exercise of these instruments were as follows at December 31:

	2011	2010
Options	6,275,555	5,323,054
Warrants	13,650,844	11,668,364
Series A Preferred Stock	32,554	32,554
Series B Preferred Stock	21,928	21,928
Series C Preferred Stock	—	—
Series D Preferred Stock	7,460,339	7,494,492
	<u>27,441,220</u>	<u>24,540,392</u>

Defined Contribution Plans

The Company sponsors a defined contribution plan under Section 401(k) of the Internal Revenue Code covering substantially all full-time U.S. employees. Employee contributions are voluntary and are determined on an individual basis subject to the maximum allowable under federal tax regulations. Participants are always fully vested in their contributions. Beginning in 2007, the Company modified its plan and began making employer matching contributions, which also vest immediately. This plan is designated as a "Safe Harbor" plan. During 2011 and 2010, the Company contributed approximately \$54,000 and \$55,000 in cash to the plan.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 3 — Summary of Significant Accounting Policies – (continued)

Fair Value of Financial Instruments

The balance sheets include various financial instruments that are carried at fair value. Fair value is the price that would be received from the sale of an asset or paid to transfer a liability assuming an orderly transaction in the most advantageous market at the measurement date. GAAP establishes a hierarchical disclosure framework which prioritizes and ranks the level of observability of inputs used in measuring fair value. These tiers include:

- Level 1, defined as observable inputs such as quoted prices in active markets for identical assets;
- Level 2, defined as observable inputs other than Level 1 prices such as quoted prices for similar assets; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and
- Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

An asset's or liability's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. At each reporting period, we perform a detailed analysis of our assets and liabilities that are measured at fair value. All assets and liabilities for which the fair value measurement is based on significant unobservable inputs or instruments which trade infrequently and therefore have little or no price transparency are classified as Level 3.

The Company accounts for derivative instruments under ASC 815, *Accounting for Derivative Instruments and Hedging Activities*, as amended and interpreted. ASC 815 requires that we recognize all derivatives on the balance sheet at fair value. Certain warrants issued in 2009 and prior years meet the definition of derivative liabilities. In October 2010, we executed an equity-linked transaction in which detachable stock purchase warrants were sold; the warrants are accounted for as a derivative liability. In July and November 2011, we issued convertible notes that contained embedded conversion options; the embedded conversion options are accounted for as a derivative liability. We determine the fair value of these derivative liabilities using the Black-Scholes option pricing model. This model determines fair value by requiring the use of estimates that include the contractual term, expected volatility of the Company's stock price, expected dividends and the risk-free interest rate. Changes in fair value are classified in "other income (expense)" in the consolidated statement of operations.

Additional information regarding fair value is disclosed in Note 5.

Recent Accounting Pronouncements

ASU No. 2010-28, *"Intangibles — Goodwill and Other (Topic 350) — When to Perform Step 2 of the Goodwill Impairment Test for Reporting Units with Zero or Negative Carrying Amounts."* ASU 2010-28 modifies Step 1 of the goodwill impairment test for reporting units with zero or negative carrying amounts. For those reporting units, an entity is required to perform Step 2 of the goodwill impairment test if it is more likely than not that a goodwill impairment exists. In determining whether it is more likely than not that a goodwill impairment exists, an entity should consider whether there are any adverse qualitative factors indicating that an impairment may exist such as if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. ASU 2010-28 became effective for the Company on January 1, 2011 and did not have a significant impact on the Company's financial statements.

ASU No. 2011-04, *"Fair Value Measurement (Topic 820) — Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs."* ASU 2011-04 amends the wording used to describe the requirements in U.S. GAAP for measuring fair value and for disclosing information about fair value measurements. This results in common fair value measurement and disclosure requirements in

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 3 — Summary of Significant Accounting Policies – (continued)

U.S. GAAP and IFRSs. ASU 2011-04 is effective during interim and annual periods beginning after December 15, 2011. Early application by public entities is not permitted. The Company is currently evaluating the impact, if any, that the adoption of this amendment will have on its financial statements.

ASU No. 2011-08, *“Intangibles — Goodwill and Other (Topic 350) — Testing Goodwill for Impairment.”* The amendments in this Update are intended to reduce complexity and costs by allowing an entity the option to make a qualitative evaluation about the likelihood of goodwill impairment to determine whether it should calculate the fair value of a reporting unit. The amendments also improve previous guidance by expanding upon the examples of events and circumstances that an entity should consider between annual impairment tests in determining whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. Also, the amendments improve the examples of events and circumstances that an entity having a reporting unit with a zero or negative carrying amount should consider in determining whether to measure an impairment loss, if any, under the second step of the goodwill impairment test. The amendments are effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011. Early adoption is permitted, including for annual and interim goodwill impairment tests performed as of a date before September 15, 2011, if an entity’s financial statements for the most recent annual or interim period have not yet been issued. The Company is currently evaluating the impact, if any, that the adoption of this amendment will have on its financial statements.

Note 4 — Business Combinations

On April 9, 2010, Cytomedix, through its wholly owned subsidiary, and Sorin entered into an Asset Purchase Agreement (the “Agreement”) pursuant to which Cytomedix agreed to buy all title and interest in certain assets of and assume certain liabilities in Sorin’s operation of the Angel® and activAT® product lines (including the whole blood separation system, the blood processing kit and blood accessing kit) (the “Business Assets” or “Angel® Business”). The Angel® System is a device that utilizes validated blood separation technology to separate platelets and plasma from other components of a patient’s blood. The device provides the necessary flexibility and sophistication for more complex clinical situations. The activAT® technology facilitates the preparation of autologous human thrombin and currently is sold in Europe and Canada. The Angel® Business acquired from Sorin will provide Cytomedix with immediate access to surgical markets. By acquiring the Angel® Business, Cytomedix became the only supplier of PRP technology with FDA cleared indications for topical use and surgical use.

Pursuant to the terms of the Agreement, the consideration for the acquisition was \$7 million, to be paid as follows: (i) \$2 million paid on closing and (ii) \$5 million to be paid in accordance with a Secured Promissory Note with interest accruing at 2.7% per annum (the “Promissory Note”). On April 28, 2011, we entered into a settlement agreement with Sorin pursuant to which (i) the Company paid in full the remaining amount due on the Promissory Note and (ii) the parties agreed to settle disputes that had arisen between them related to certain ancillary agreements entered into at the time of acquisition.

The Company accounted for the acquisition of the Angel Business using acquisition accounting and, accordingly, allocated the total purchase consideration of approximately \$6 million to the tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values at the date of acquisition, with the excess being assigned to goodwill. The allocation of total purchase consideration was as follows:

Inventory	\$ 1,151,035
Intangibles	3,383,000
Property and equipment	768,000
Net assets acquired	<u>\$ 5,302,035</u>
Excess of costs of acquisition over net assets acquired	<u>\$ 706,823</u>

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 4 — Business Combinations – (continued)

The Company incurred approximately \$60,000 of expenses related to this acquisition, which are included in general and administrative expense in the Company's statement of operations in 2010.

In February 2012, the Company acquired 100% of the outstanding stock of Aldagen, Inc. (see Note 22). In 2011, the Company incurred approximately \$64,000 of expenses related to this acquisition, which are included in consulting, professional fees, and general and administrative expense in the Company's 2011 statement of operations.

Note 5 — Fair Value Measurements

Fair value is the price that would be received from the sale of an asset or paid to transfer a liability assuming an orderly transaction in the most advantageous market at the measurement date. U.S. GAAP establishes a hierarchical disclosure framework which prioritizes and ranks the level of observability of inputs used in measuring fair value.

Short-term Financial Instruments

The inputs used in measuring the fair value of cash and short-term investments are considered to be Level 1 in accordance with the three-tier fair value hierarchy. The fair market values are based on period-end statements supplied by the various banks and brokers that held the majority of the Company's funds. The fair value of other short-term financial instruments (primarily accounts receivable, inventory, prepaid expenses and other current assets, and accounts payable and accrued expenses) approximate their carrying values because of their short-term nature.

Other Financial Instruments

The Company has segregated its financial assets and liabilities that are measured at fair value into the most appropriate level within the fair value hierarchy based on the inputs used to determine the fair value at the measurement date in the table below. The Company has no non-financial assets and liabilities that are measured at fair value.

The carrying amounts of the derivative liabilities are as follows:

Description	Level 1	Level 2	Level 3	Total
Liabilities at December 31, 2011:				
Embedded conversion options	\$ —	\$ —	\$ 1,823,207	\$ 1,823,207
Total measured at fair value	\$ —	\$ —	\$ 1,823,207	\$ 1,823,207
Liabilities at December 31, 2010:				
Stock purchase warrants	\$ —	\$ —	\$ 1,812,447	\$ 1,812,447
Total measured at fair value	\$ —	\$ —	\$ 1,812,447	\$ 1,812,447

The liabilities measured at fair value in the above table are classified as "derivative and other liabilities" in the accompanying consolidated balance sheets.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 5 — Fair Value Measurements – (continued)

The following table sets forth a summary of changes in the fair value of Level 3 liabilities for the year ended December 31, 2011:

Description	Balance at December 31, 2010	New Issuances	Modification of Warrant Agreements	Conversion to Common Stock	Change in Fair Value	Balance at December 31, 2011
Derivative liabilities:						
Stock purchase warrants	\$1,812,447	\$ —	\$(1,434,322)	\$ —	\$(378,125)	\$ —
Embedded conversion options	\$ —	\$2,085,513	\$ —	\$(169,965)	\$(92,341)	\$1,823,207

The gains resulting from the changes in the fair value of the derivative instruments are classified as the “change in the fair value of derivative instruments” in the accompanying consolidated statements of operations. The fair value of the stock purchase warrants and embedded conversion options is determined based on the Black-Scholes option pricing model, and includes the use of unobservable inputs such as the expected term, anticipated volatility and expected dividends.

The terms of certain stock purchase warrants were modified in January 2011, resulting in a reclassification of the fair value of these warrants from derivative liabilities to additional paid-in capital. In addition, unamortized deferred financing costs relating to the issuance of the stock purchase warrants was also reclassified to additional paid-in capital.

In July and November 2011, we issued convertible notes that contained embedded conversion options which met the criteria for derivative liabilities. The fair value of the conversion options, at December 31, 2011, approximates \$1,800,000.

In June 2011, the Company purchased a Certificate of Deposit (“CD”) from its commercial bank in the amount of \$53,000. This CD bears interest at an annual rate of 0.50% and matures on February 24, 2012. The \$53,000 carrying value of the CD approximates its fair value. This CD collateralizes the Letter of Credit described in Commitment and Contingencies (see Note 21).

Note 6 — Patent Settlement and License Agreements

In 2005, 2006, and 2007 the Company identified and successfully pursued numerous companies that either marketed or sought to market products similar to the AutoloGel™ System, that the Company believed were infringing, inducing infringement of, or would infringe its intellectual property rights. Settlements were achieved and/or licenses were granted to these companies resulting in a royalty stream for Cytomedix. Royalties generated from these licensing agreements, as well as the related costs, are separately disclosed in the Consolidated Statements of Operations as “Royalties” and “Cost of royalties,” respectively. These license agreements, and the revenue streams associated therewith, have since terminated as the underlying patents expired in November 2009, with only final closeout adjustments being recorded in 2010.

Note 7 — Royalty Agreements

The Company was party to a Royalty Agreement with Curative Health Services, Inc (“Curative”). Under this agreement as amended, Curative was due a portion of certain licensing receipts relating to the patents it acquired from Curative. On the Consolidated Statements of Operations, these costs are reflected as a Cost of royalties. The related payables are included in Accounts payable and accrued expenses on the Consolidated Balance Sheets. The relevant license agreements concluded in November 2009, simultaneous with the expiration of the underlying patents, with only final close out adjustments being recorded in 2010. The Company currently has no further income relating to the Curative patents on which it would owe a royalty.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 7 — Royalty Agreements – (continued)

The Company is also party to a Royalty Agreement with Mr. Charles Worden. Under this agreement, the Company is to pay Mr. Worden a royalty equal to 5% of gross profit on sales relying on certain patents, subject to a \$6,250 minimum payment per month and a limit of \$600,000 during any calendar year. This agreement also provides Mr. Worden with a security interest and lien in the patent as well as a reversionary interest if the Company discontinues substantially all efforts to commercialize the Worden Patent. This agreement expires February 2019. In 2010 and 2011, the Company paid \$75,000 in annual royalties.

Note 8 — Receivables

Accounts and royalties receivable, net consisted of the following at December 31:

	2011	2010
Trade receivables	\$ 904,891	\$ 578,936
Due from Sorin, net	—	637,132
Other receivables	613,806	26,476
	<u>1,518,697</u>	<u>1,242,544</u>
Less allowance for doubtful accounts	<u>(38,234)</u>	<u>(35,517)</u>
	<u>\$1,480,463</u>	<u>\$ 1,207,027</u>

The Due from Sorin, net relates to supply chain activity that occurred during the transition period after the acquisition in April 2010. Other receivables consist primarily of the cost of raw materials needed to manufacture the Angel® products that are sourced by the Company and immediately resold, at cost, to the contract manufacturer.

The following table reflects the approximate change in allowance for doubtful accounts.

	Balance at Beginning of Period	Charged to Costs and Expenses	Deductions ⁽¹⁾	Balance at End of Period
Year Ended December 31, 2011				
Allowance for doubtful accounts	\$ 36,000	\$ 36,000	\$ (34,000)	\$ 38,000
Year Ended December 31, 2010				
Allowance for doubtful accounts	\$ 20,000	\$ 24,000	\$ (8,000)	\$ 36,000

(1) Reflects receivables written-off as uncollectible.

Note 9 — Inventory

Inventory consisted of the following at December 31:

	2011	2010
Raw materials	\$ 15,216	\$ 63,940
Finished goods	532,943	564,044
	<u>\$ 548,159</u>	<u>\$ 627,984</u>

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 10 — Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following at December 31:

	2011	2010
Prepaid insurance	\$ 59,349	\$ 104,806
Prepaid fees and rent	28,202	24,929
Deposits and advances	563,436	418,808
Other Current Assets	44,580	61,866
	<u>\$ 695,567</u>	<u>\$ 610,409</u>

Deposits and advances consist primarily of payments to the Company's raw materials suppliers and Angel® centrifuge manufacturers. Other Current Assets is exclusively made up of parts used to refurbish the Angel® centrifuges.

Note 11 — Property and Equipment

Property and equipment, net consisted of the following at December 31:

	2011	2010
Medical equipment	\$1,283,726	\$ 1,291,107
Office equipment	73,927	73,927
Manufacturing equipment	262,290	255,685
	1,619,943	1,620,719
Less accumulated depreciation	(641,050)	(295,723)
	<u>\$ 978,893</u>	<u>\$ 1,324,996</u>

Medical equipment, whose accumulated depreciation was approximately \$521,000 and \$225,000 at December 31, 2011 and 2010, respectively, primarily represents centrifuges that are leased or held for lease.

Depreciation expense was approximately \$364,000 and \$240,000 for the years ended December 31, 2011 and 2010, respectively. The net book value of property and equipment disposed was \$48,000 in 2011 and \$62,000 in 2010.

Note 12 — Goodwill and Identifiable Intangible Assets**Goodwill**

Goodwill represents the purchase price of acquisitions in excess of the amounts assigned to acquired tangible or intangible assets and assumed liabilities. Amounts allocated to goodwill are tax deductible in all relevant jurisdictions. The goodwill is attributable to the synergies expected to arise from the combined businesses.

As a result of its acquisition of the Angel® Business, Cytomedix recorded goodwill of approximately \$707,000. The table below sets forth the changes in the carrying amount of goodwill for the period indicated:

Goodwill – January 1, 2010	\$ —
Increase due to Angel® acquisition	706,823
Goodwill – December 31, 2010	706,823
Change in 2011	—
Goodwill – December 31, 2011	<u>\$ 706,823</u>

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 12 — Goodwill and Identifiable Intangible Assets – (continued)

Prior to the acquisition of the Angel® Business, the Company had no goodwill. It is the Company's policy to conduct an impairment test of goodwill on an annual basis as of October 1 of each year. The Company will also conduct tests if events occur or circumstances change that would, more likely than not, reduce the fair value of the Company below its carrying value. The Company determined that there was no impairment per its test as of October 1, 2011 and no such triggering events were identified during the quarter ended December 31, 2011.

Identifiable Intangible Assets

Cytomedix's identifiable intangible assets consist of trademarks, technology (including patents), and customer relationships. These assets were a result of the Angel® Business acquisition. Those intangible assets, and the associated accumulated amortization, are as follows:

	December 31, 2011	December 31, 2010
Trademarks	\$ 320,000	\$ 320,000
Technology	2,355,000	2,355,000
Customer relationships	708,000	708,000
Total	\$3,383,000	\$ 3,383,000
Less accumulated amortization	(466,958)	(200,125)
	<u>\$2,916,042</u>	<u>\$ 3,182,875</u>

Cytomedix reevaluates the recoverability of its identifiable, definitive lived intangible assets when changes in circumstances indicate the asset's value may be impaired. If such indicators are identified the Company then would evaluate the assets to determine the amount of such impairment, if any. No such indicators have been identified since the acquisition. Amortization expense of approximately \$157,000 was recorded to cost of sales and approximately \$110,000 was recorded to general and administrative expense in the year ended December 31, 2011. Annual amortization expense based on our existing intangible assets and their estimated useful lives is expected to be approximately:

2012	267,000
2013	267,000
2014	267,000
2015	267,000
2016	267,000
Thereafter	1,582,000

Note 13 — Accounts payable and accrued expenses

Accounts payable and accrued expenses consisted of the following at December 31:

	2011	2010
Trade payables	\$1,175,023	\$ 1,096,799
Due to Sorin, net	—	1,859,060
Accrued compensation and benefits	227,323	152,253
Accrued professional fees	194,658	100,000
Accrued interest	86,100	157,598
Other payables	166,029	192,451
	<u>\$1,849,133</u>	<u>\$ 3,558,161</u>

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 13 — Accounts payable and accrued expenses – (continued)

The Due to Sorin, net balance is comprised of logistical costs related to the sale of the Angel® and ActivAT® products that were incurred and the cost of additional Angel® and ActivAT® inventory that was purchased or manufactured by Sorin during the post acquisition transition period.

Note 14 — Derivatives and other liabilities

Derivative and other liabilities consisted of the following:

	December 31, 2011	December 31, 2010
Derivative liability, long-term portion	\$1,294,740	\$ 1,812,447
Long-term portion of convertible debt, net of unamortized discount	223,333	—
Deferred tax liability	32,000	14,000
Interest payable	8,982	—
	<u>\$1,559,055</u>	<u>\$ 1,826,447</u>

Note 15 — Debt

4% Convertible Notes and 4% Promissory Note

On July 15, 2011, Cytomedix issued \$1.3 million of its 4% Convertible Notes (the “July 4% Convertible Notes”) to an unaffiliated third party, JMJ Financial Group Inc. (“JMJ”). The July 4% Convertible Notes mature on July 15, 2014 and bear a one-time interest charge of 4% due on maturity. The July 4% Convertible Notes (plus accrued interest) convert at the option of JMJ, in whole or in part and from time to time, into shares of the Company’s common stock at a conversion rate equal to (i) the lesser of \$0.80 per share or (ii) 80% of the average of the three lowest closing prices of the Company’s common stock for the previous 20 trading days prior to conversion (subject to a “floor” price of \$0.25 per share). At December 31, 2011, the July 4% Convertible Notes were convertible into 1.7 million shares of common stock at a conversion price of \$0.76 per share.

Simultaneous with the issuance of the July 4% Convertible Notes, the Company loaned \$1.3 million to JMJ in exchange for a 4% secured promissory note (the “July 4% Promissory Note”). The July 4% Promissory Note is due on July 15, 2014, bears a one-time interest charge of 4% due on maturity, and is collateralized by certain money-market funds held by JMJ. The simultaneous issuance of the July 4% Convertible Notes and the July 4% Promissory Note allows JMJ to invest over a defined period of time and provides Cytomedix with a cash-collateralized security interest for the remaining investment. JMJ repaid \$800,000 to the Company in the third quarter 2011 and the remaining \$500,000 in the fourth quarter 2011.

On November 18, 2011, Cytomedix issued \$0.5 million of its 4% Convertible Notes (the “November 4% Convertible Notes”) to JMJ. The November 4% Convertible Notes mature on November 18, 2014 and bear a one-time interest charge of 4% due on maturity. The November 4% Convertible Notes (plus accrued interest) convert at the option of JMJ, in whole or in part and from time to time, into shares of the Company’s common stock at a conversion rate equal to 80% of the average of the three lowest closing prices of the Company’s common stock for the previous 20 trading days prior to conversion (subject to a “floor” price of \$0.25 per share). At December 31, 2011, the November 4% Convertible Notes were convertible into 0.7 million shares of common stock at a conversion price of \$0.76 per share.

Simultaneous with the issuance of the November 4% Convertible Notes, the Company loaned \$0.5 million to JMJ in exchange for a 4% secured promissory note (the “November 4% Promissory Note”). The November 4% Promissory Note is due on November 18, 2014, bears a one-time interest charge of 4% due on maturity, and is collateralized by certain money-market funds held by JMJ. The simultaneous issuance of the November 4% Convertible Notes and the November 4% Promissory Note allows JMJ to invest over a defined period of time and provides Cytomedix with a cash-collateralized security interest for the remaining investment. JMJ repaid \$500,000 to the Company in the fourth quarter 2011.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 15 — Debt – (continued)

JMJ has the option to provide additional funding of up to \$1.0 million on substantially the same terms; however, the Company may elect to cancel such notes, in its sole discretion, with no penalty.

The conversion option embedded in the July and November 4% Convertible Notes is accounted for as a derivative liability, and resulted in the creation at issuance of a discount to the carrying amount of the debt, totaling \$1.8 million, which is being amortized as additional interest expense using the straight-line method over the term of the July and November 4% Convertible Notes (the Company determined that using the straight-line method of amortization did not yield a materially different amortization schedule than the effective interest method). The embedded conversion option is recorded at fair value and is marked to market at each period, with the resulting change in fair value being reflected as “change in fair value of derivative liabilities” in the accompanying condensed consolidated statements of operations.

12% Convertible Notes

On July 15, 2011, the Company issued \$600,000 of its 12% convertible notes (the “12% Convertible Notes”) to four of its existing shareholders. The 12% Convertible Notes mature on March 31, 2012 and bear interest at a rate of 12% annually, payable quarterly. The 12% Convertible Notes (plus accrued and unpaid interest) convert at the option of the holders, in whole or in part and from time to time, into shares of the Company’s common stock at a conversion rate equal to 90% of the volume-weighted adjusted closing price of the Company’s common stock for the previous 10 trading days prior to conversion (subject to a “ceiling” price of \$0.50 per share).

The conversion option embedded in the 12% Convertible Notes is accounted for as a derivative liability, and resulted in the creation at issuance of a discount to the carrying amount of the debt, in the amount of \$0.3 million, which is being amortized as additional interest expense using the straight-line method over the term of the 12% Convertible Notes (the Company determined that using the straight-line method of amortization did not yield a materially different amortization schedule than the effective interest method). The embedded conversion option is recorded at fair value and is marked to market at each period, with the resulting change in fair value being reflected as “change in fair value of derivative liabilities” in the accompanying condensed consolidated statements of operations.

On December 30, 2011 the holders of the 12% Convertible Notes converted the \$600,000 principal balance of the notes into 1,200,000 common shares. As a result of the conversion, the Company wrote-off the unamortized debt discount related to the 12% Convertible notes to interest expense while the carrying amount of the debt and fair value of the embedded conversion option was reclassified to equity.

Sorin Note Payable

In conjunction with the Sorin Asset Purchase Agreement (see Note 4), the Company executed a \$5 million Promissory Note that accrued interest at 2.7% per annum and was secured by a first priority security interest in the assets acquired. The payments on the Promissory Note were payable as follows: (i) installments of \$800,000 each on the 6- and 12-month anniversaries of the Promissory Note, (ii) installments of \$1,200,000 each on the 18- and 24-month anniversaries of the Promissory Note, and (iii) an installment of \$1,000,000 on the 30-month anniversary of the Note. A portion of the foregoing payment obligations of the Company was guaranteed by certain guarantors as described below. Interest paid in 2011 was approximately \$315,000.

In conjunction with the Asset Purchase Agreement, certain existing shareholders of the Company (the “Guarantors”) executed guaranty agreements pursuant to which such Guarantors agreed to guaranty 50% of the first \$4 million payable to Sorin under the Promissory Note (the “Guaranty Agreements”). In connection with the foregoing guaranties, the Company agreed to provide the following consideration to the Guarantors: (i) cash fee calculated as a percentage of the amount guaranteed (the “Cash Fee”) and (ii) 5 year warrants to purchase an aggregate 1,333,334 shares of Common stock of the Company at an exercise price of \$0.5368 per share. These warrants were valued at approximately \$655,000, were capitalized as deferred debt issuance costs and were being amortized to interest expense on a straight-line basis over the two year guarantee period. The

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 15 — Debt — (continued)

Company determined that the straight line method of amortization did not yield a materially different amortization schedule from the effective interest method.

On April 28, 2011, we entered into a Settlement Agreement (the "Settlement Agreement") pursuant to which: (a) the Company agreed to satisfy in full the remaining \$3,400,000 due under the Sorin Note, and (b) the parties agreed to settle disputes that had arisen between them related to certain ancillary agreements entered into at the time of acquisition.

Pursuant to the Settlement Agreement, the Company agreed to pay Sorin an amount equal to \$2,100,000 in complete satisfaction of the \$3,400,000 due under the Sorin Note. Upon receipt of this payment, Sorin agreed to waive its right to and release the Company from its obligation to pay the remaining \$1,300,000 million due under the Sorin Note, and to release its security interest in the Business Assets and its rights under a subordination agreement that was issued in favor of Sorin at the time of acquisition. The \$2,100,000 payment was made on April 29, 2011.

Additionally, the Company agreed to repay approximately \$1.2 million in net amounts due Sorin pursuant to distribution agreements entered into at the time of the acquisition ("Payable to Sorin") in eight equal monthly installments commencing June 15, 2011.

In order to fund the \$2.1 million payment to Sorin described above, on April 28, 2011, the Company borrowed \$2.1 million pursuant to a secured promissory note that matures April 28, 2015. The note accrues interest at a rate of 12% per annum, and requires interest-only payments each quarter commencing September 30, 2011, with the then outstanding principal due on the maturity date, or April 28, 2015. The note may be accelerated by the lender if Cytomedix defaults in the performance of the terms of the promissory note, if the representations and warranties made by us in the note are materially incorrect, or if we undergo a bankruptcy event. The note is secured by business assets acquired from Sorin.

In accordance with the debt restructuring, the Company wrote-off the remaining unamortized deferred costs of the warrants relating to the Sorin Note guarantees and recognized a gain on the debt restructuring. These amounts, net of legal fees, are reflected as an approximate \$577,000 gain in the Other income (expense) section of our Consolidated Statements of Operations (representing approximately \$0.01 per share). The carrying value of the new note is reflected in the non-current liabilities section of the Consolidated Balance Sheets.

In connection with the issuance of the new secured promissory note, the Company issued the lender a warrant to purchase up to 1,000,000 shares at an exercise price of \$0.50 per share vesting as follows: (a) 666,667 shares upon issuance of the note, (b) 83,333 shares if the note has not been prepaid by the first anniversary of its issuance, (c) 116,667 shares if the note has not been prepaid by the second anniversary of its issuance, and (d) 133,333 shares if the note has not been prepaid by the third anniversary of its issuance.

Of the \$2,100,000 due under the note, our payment obligations with respect to \$1,400,000 under note were guaranteed by certain insiders, affiliates, and shareholders of the Company, including Mr. David Jorden, one of the Company's directors. In connection with this guarantee, the Company issued the guarantors warrants to purchase an aggregate of up to 1,500,000 shares, on a pro rata basis based on the amount of the guarantee, at an exercise price of \$0.50 per share vesting as follows: (a) 833,333 shares upon issuance of the note, (b) 166,667 shares if the note has not been prepaid by the first anniversary of its issuance, (c) 233,333 shares if the note has not been prepaid by the second anniversary of its issuance, and (d) 266,667 shares if the note has not been prepaid by the third anniversary of its issuance.

The warrants issued to the lender and the guarantors were valued at approximately \$546,000, were recorded as deferred debt issuance costs, and are being amortized to interest expense on a straight-line basis over the

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 15 — Debt – (continued)

four-year guarantee period. The Company determined that the straight-line method of amortization did not yield a materially different amortization schedule from the effective interest method.

On December 22, 2011, the Company and Sorin entered into a Receivable Settlement Agreement to which the Company agreed to satisfy, in full, the remaining balance of the \$1.2 million Payable to Sorin by December 31, 2011, at a discount of \$89,000. This discount is reflected as a gain in the Other income (expense) section of our Consolidated Statements of Operations.

Note 16 — Income Taxes

Income tax (expense) benefit for the years ended December 31, 2011 and 2010 consisted of the following:

	2011	2010
Current:		
Federal	\$ —	\$ —
State	—	—
Deferred:		
Federal	56,000	133,000
State	(18,000)	(25,000)
Net operating loss carryforward	1,310,000	2,023,000
Valuation Allowance	(1,366,000)	(2,145,000)
Total income tax (expense) benefit	\$ (18,000)	\$ (14,000)

Significant components of Cytomedix's deferred tax assets and liabilities consisted of the following at December 31:

	2011	2010
Deferred tax assets:		
Stock-based compensation	\$ 3,948,000	\$ 3,849,000
Amortization of patents	99,000	89,000
Tax deductible Goodwill	—	371,000
Derivative liabilities	713,000	—
Other	69,000	71,000
Total deferred tax assets	4,829,000	4,380,000
Deferred tax liabilities:		
Discount on Note Payable	(617,000)	(224,000)
Other	(32,000)	(14,000)
Total deferred tax liabilities	(649,000)	(238,000)
Net deferred tax assets, excluding net operating loss carryforwards	4,180,000	4,142,000
Net operating loss carryforwards	15,488,000	14,178,000
	19,668,000	18,320,000
Less valuation allowance	(19,700,000)	(18,334,000)
Total deferred tax assets (liabilities)	\$ (32,000)	\$ (14,000)

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 16 — Income Taxes – (continued)

The following table reflects the change in the valuation allowance for deferred tax assets at December 31:

Valuation allowance – January 1, 2010	\$ 16,042,000
Change in valuation – 2010	2,292,000
Valuation allowance – December 31, 2010	18,334,000
Change in valuation – 2011	1,366,000
Valuation allowance – December 31, 2011	<u>\$ 19,700,000</u>

The following table presents a reconciliation between the U.S. federal statutory income tax rate and the Company's effective tax rate:

	2011	2010
U.S. Federal statutory income tax	35.0%	35.0%
State and local income tax benefits	3.4%	3.2%
Fair value of Derivatives	4.7%	(3.0%)
Nondeductible guarantee fees	(2.0%)	(1.4%)
Other	(1.5%)	0.2%
Valuation allowance for deferred income tax assets	(39.1%)	(33.8%)
Effective income tax rate	<u>0.5%</u>	<u>0.2%</u>

The Company had loss carryforwards of approximately \$40,307,000 as of December 31, 2011 that may be offset against future taxable income. The carryforwards will expire between 2021 and 2031. Utilization of these carryforwards may be subject to annual limitations based upon previous significant changes in stock ownership. Management has determined that realization of the net deferred tax assets is not assured and accordingly has established a valuation allowance of \$19,700,000 and \$18,334,000 at December 31, 2011 and 2010, respectively.

In 2011, the Company recorded an income tax provision of \$18,000 related to a deferred tax liability resulting from the amortization of Goodwill for tax purposes.

The Company's source of income before expenses is primarily domestic.

The Company does not believe it has any uncertain income tax positions as described in its discussion of Income Tax accounting policy in Note 3.

Note 17 — Capital Stock

The Company has several classes of stock as described below.

Common Stock

Common stock has a par value of \$.0001 per share and is limited to a maximum of 100,000,000 shares. It is subordinate to Series A, B, C, and D Convertible Preferred stock and to all other classes and series of equity securities of the Company which by their terms rank senior to it, in the event of a liquidation, dissolution, or winding up of the Company or with regard to any other rights, privileges or preferences. Each share of Common stock represents the right to one vote. Holders of Common stock are entitled to receive dividends as may be declared by the Board of Directors, subject to the limitations in the terms of the Series A, B, C, and D Convertible Preferred stock described below.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 17 — Capital Stock – (continued)

Series A Convertible Preferred Stock

Series A Convertible Preferred stock ("Series A") has a par value of \$.0001 per share and is limited to a maximum of 5,000,000 shares. It has a stated liquidation preference of \$1.00 per share and preference over and rank senior to (i) Series B Convertible Preferred stock, (ii) Common stock, and (iii) all other classes and series of equity securities of the Company which by its terms do not rank senior to the Series A stock. The Series A contains a negative covenant prohibiting the Company from granting any security interest in the Company's patents and/or future royalty streams ("Intellectual Property"). The holders of record of shares are entitled to receive cumulative dividends at the rate of 8% of the stated liquidation preference amount per share per annum, payable quarterly in arrears. These dividends are prior and in preference to any declaration or payment of any distribution on any outstanding shares of Common stock or any other equity securities of the Company ranking junior as to the payment of dividends. Dividends are to be paid in shares of Series A or, in the sole discretion of the Board of Directors, in cash. Each share of Series A stock shall entitle the holder thereof to vote on all matters voted on by holders of Common stock of the Company voting together as a single class with the other shares entitled to vote.

Each share of Series A stock may be converted into Common stock at a conversion rate equal to 90% of the twenty-day average closing price of the Company's Common stock, but in no case shall this price be less than \$3.00 per share. The Company may redeem Series A stock for cash at a price per share equal to 104% of the liquidation preference amount plus all accrued but unpaid dividends, by providing proper notice of not less than 10 days nor more than 60 days prior to a redemption date set by the Company. The Series A preferred stock was redeemed in February 2012 — see Note 22.

Series B Convertible Preferred Stock

Series B Convertible Preferred stock ("Series B") has a par value of \$.0001 per share and is limited to a maximum of 5,000,000 shares. It has a stated liquidation preference of \$1.00 per share, is subordinate to the Series A stock, and has preference over and ranks senior to (i) Common stock, and (ii) all other classes and series of equity securities of the Company which by its terms do not rank senior to the Series B stock. The Series B contains a negative covenant prohibiting the Company from granting any security interest in the Company's Intellectual Property. The holders of record of shares are entitled to receive cumulative dividends at the rate of 8% of the stated liquidation preference amount per share per annum, payable quarterly in arrears. These dividends are prior and in preference to any declaration or payment of any distribution on any outstanding shares of Common stock or any other equity securities of the Company ranking junior as to the payment of dividends. Dividends are to be paid in shares of Series B or, in the sole discretion of the Board of Directors, in cash. Each share of Series B stock shall entitle the holder thereof to vote on all matters voted on by holders of Common stock of the Company voting together as a single class with the other shares entitled to vote.

Each share of Series B stock may be converted into Common stock at a conversion rate equal to 90% of the twenty-day average closing price of the Company's Common stock, but in no case shall this price be less than \$3.00 per share. The Company may redeem Series B stock for cash at a price per share equal to 103% of the liquidation preference amount plus all accrued but unpaid dividends, by providing proper notice of not less than 10 days nor more than 60 days prior to a redemption date set by the Company. The Series B preferred stock was redeemed in February 2012 — see Note 22.

Series C Convertible Preferred Stock

Series C Convertible Preferred stock ("Series C") has a par value of \$.0001 per share and is limited to a maximum of 1,000 shares. It has a stated liquidation preference of \$10,000 per share, and ranks junior to the Series A regarding distributions upon liquidation of the Company. Series C stock ranks junior to the Series B solely with respect to the priority security interest in the Company's Intellectual Property. The shares accrued dividends at 6% of the stated liquidation preference amount from the date of issuance and increased to 8%

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 17 — Capital Stock – (continued)

commencing on September 25, 2005, and were payable annually in cash or shares of Common stock at the option of the Company. The Series C stock ranks pari passu with Series A and Series B with respect to payment of dividends. As of December 31, 2010 and 2009, no Series C remained outstanding.

Series D Convertible Preferred Stock

The Company's Board designated 2,000,000 shares of the preferred stock as the 10% Series D Convertible Preferred Stock (the "Preferred Stock") with a stated value of \$1,000 per share. The Preferred Stock earns cumulative dividends at the rate of 10% per annum, payable quarterly in cash in arrears on January 15, April 15, July 15 and October 15, beginning on July 15, 2010, or, in the Company's sole discretion, in shares of common stock valued at the 5-day volume weighted average price ending 3 days immediately preceding the dividend due date, but in no case at a price less than \$0.40 per share. The Preferred Stock may be converted, at the holder's option, into shares of common stock at a conversion price equal to \$0.4392. Upon any liquidation, dissolution or winding-up of our company, whether voluntary or involuntary, the holders will be entitled to receive out of the Company's assets an amount equal to the stated value, plus any accrued and unpaid dividends thereon and any other fees then due and owing thereon, for each share of Preferred Stock before any distribution or payment is made to the holders of any junior securities. The holders of the Preferred Stock can vote their shares on a "one share one vote" basis. At any time after the third anniversary of the issuance date, the Company may redeem some or all of the then outstanding Preferred Stock, for cash equal to 100% of the aggregate stated value and accrued but unpaid dividends. The Preferred Stock also provides that with limited exceptions as discussed below, in no event will the Company effect any conversion of the Preferred Stock and the holder of the Preferred Stock will not have the right to convert the Preferred Stock, to the extent that such conversion would result in beneficial ownership by the holder of the Preferred Stock and its affiliates in excess of 9.99% of the then outstanding shares of common stock (after taking into account the shares to be issued to the holder upon such conversion). The Preferred Stock holder may decrease the foregoing threshold upon 61 days' notice of such decrease to us. The Preferred Stock is not and will not be listed on any securities exchange or automated quotation system. The Series D preferred stock was converted into common stock in February 2012 — see Note 22.

Warrants and Options

The Company had the following outstanding warrants and options at December 31:

Equity Instrument	# Outstanding	
	December 31, 2011	December 31, 2010
Class D Warrants ⁽¹⁾	—	304,033
Fitch/Coleman Warrants ⁽²⁾	975,000	975,000
August 2008 Warrants ⁽³⁾	1,000,007	1,000,007
August 2009 Warrants ⁽⁴⁾	1,489,884	1,638,888
April 2010 Warrants ⁽⁵⁾	4,128,631	4,128,631
Guarantor 2010 Warrants ⁽⁶⁾	1,333,334	1,333,334
October 2010 Warrants ⁽⁷⁾	1,863,839	1,863,839
Guarantor 2011 Warrants ⁽⁸⁾	2,500,000	—
Other warrants ⁽⁹⁾	360,149	424,632
Options issued under the Long-Term Incentive Plan ⁽¹⁰⁾	6,275,555	5,323,054

(1) These warrants were issued in May 2006, were voluntarily exercisable at \$3.50 per share, and expired without exercise on May 1, 2011.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 17 — Capital Stock – (continued)

- (2) These warrants were issued in connection with the August 2, 2007 Term Sheet Agreement and Shareholders' Agreement with the Company's outside patent counsel, Fitch Even Tabin & Flannery and The Coleman Law Firm, and have a 7.5 year term. The strike prices on the warrants are: 325,000 at \$1.25 (Group A); 325,000 at \$1.50 (Group B); and 325,000 at \$1.75 (Group C). The Company may call up to 100% of these warrants, provided that the closing stock price is at or above the following call prices for ten consecutive trading days: Group A — \$4/share; Group B — \$5/share; Group C — \$6/share. If the Company exercises its right to call, it shall provide at least 45 days notice for one-half of the warrants subject to the call and at least 90 days notice for the remainder of the warrants subject to the call.
- (3) These warrants were issued in connection with the August 2008 registered direct offering of Common stock and warrants, are voluntarily exercisable at \$1.00 per share, provided that the exercise does not result in the holder owning in excess of 9.99% of the outstanding shares of the Company's common stock, and expire on August 29, 2012.
- (4) These warrants were issued in connection with the August 2009 financing, are voluntarily exercisable at \$0.51 per share and expire in February 2014. These amounts reflect adjustments for an additional 420,896 warrants due to anti-dilutive provisions. These warrants were previously accounted for as a derivative liability through January 28, 2011. At that time, they were modified to remove non-standard anti-dilution clauses and the associated derivative liability and related deferred financing costs were reclassified to APIC.
- (5) These warrants were issued in connection with the April 2010 Series D preferred stock offering, are voluntarily exercisable at \$0.54 per share and expire on April 9, 2015.
- (6) These warrants were issued pursuant to the Guaranty Agreements executed in connection with the Promissory Note payable to Sorin. These warrants have an exercise price of \$0.54 per share and expire on April 9, 2015.
- (7) These warrants were issued in connection with the October 2010 registered direct offering of common stock. They have an exercise price of \$0.60 and expire on April 7, 2016. These warrants were previously accounted for as a derivative liability through January 28, 2011. At that time, they were modified to remove non-standard anti-dilution clauses and the associated derivative liability and related deferred financing costs were reclassified to APIC.
- (8) These warrants were issued pursuant to the Guaranty Agreements executed in connection with the Promissory Note payable to JP's Nevada Trust. These warrants have an exercise price of \$0.50 per share and expire on April 28, 2016.
- (9) These warrants were issued to consultants and other professional service providers in exchange for services provided. They have terms ranging from 5 to 10 years with various expiration dates through February 24, 2014 and exercise prices ranging from \$1.10 to \$2.55. They are all vested and voluntarily exercisable. There is no call provision associated with these warrants.
- (10) These options were issued under the Company's Long-Term Incentive Plan approved by shareholders. See Note 18 for a full discussion regarding these options.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 17 — Capital Stock – (continued)

Activity

The Company issued 11,432,549 shares of common stock during 2011. The following table lists the sources of and the proceeds from those issuances:

Source	# of Shares	Total Proceeds
Conversion of Series D Convertible Preferred shares	34,153	\$ —
Exercise of August 2009 warrants	374,561	\$ 191,026
Common stock issued in lieu of cash for dividend payable on Series D Convertible Preferred shares	714,126	\$ —
Conversion of 12% Convertible Notes completed in Fourth Quarter 2011	1,200,000	\$ —
Sale of shares pursuant to private offering completed in Second Quarter 2011	984,850	\$ 325,000
Sale of shares pursuant to October 2010 equity purchase agreement	7,913,804	\$ 3,449,330
Common stock issued in lieu of cash for fees incurred pursuant to October 2010 equity purchase agreement	211,055	\$ —
Totals	11,432,549	\$ 3,965,356

The Company issued 6,830,115 shares of Common stock during 2010. The following table lists the sources of and the proceeds from those issuances:

Source	# of Shares	Total Proceeds
Conversion of Series D Convertible Preferred shares	762,750	\$ —
Exercise of August 2009 warrants	274,251	\$ 165,703
Common stock issued in lieu of cash for dividend payable on Series D Convertible Preferred shares	371,927	\$ —
Sale of shares pursuant to registered direct offering completed in Fourth Quarter 2010	3,727,677	\$ 1,506,000
Sale of shares pursuant to October 2010 equity purchase agreement	1,350,000	\$ 613,920
Common stock issued in lieu of cash for fees incurred pursuant to October 2010 equity purchase agreement	343,510	\$ —
Totals	6,830,115	\$ 2,285,623

The Company has used the cash proceeds from these 2011 and 2010 issuances for general corporate purposes. The issuance of shares of the Company's securities were either registered under the Securities Act or made in reliance on the private offering exemptions contained in Section 4(2) of the Securities Act and regulations promulgated thereunder, and in reliance on similar exemptions under applicable state laws as a transaction not involving a public offering. None of these transactions involved any underwriters, underwriting discounts or commissions.

In 2011, the Company granted 1,000,500 options to purchase the Company's common stock with exercise prices ranging from \$0.35 to \$0.80 under the LTIP (see Note 18).

During the year ended December 31, 2011, 112,482 stock options and compensatory warrants expired or were forfeited by contract due to the termination of the underlying service arrangement.

On December 30, 2011, the Company issued 1,200,000 shares of common stock to various holders of 12% Convertible Promissory Notes dated July 15, 2011, pursuant to certain debt conversion agreements (see Note 15).

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 17 — Capital Stock – (continued)

On October 17, 2011, pursuant to the terms of the Certificate of Designation, the Company paid a dividend on its Series D Preferred stock in the form of shares of its Common stock. The total dividend paid to all Series D Preferred stock holders was 156,833 common shares.

On July 18, 2011, pursuant to the terms of the Certificate of Designation, the Company paid a dividend on its Series D Preferred stock in the form of shares of its Common stock. The total dividend paid to all Series D Preferred stock holders was 207,189 Common shares.

On April 29, 2011, the Company sold 984,850 shares of common stock at a purchase price of \$0.33 per share to four investors. The shares were sold in transactions exempt from registration under the Securities Act of 1933, in reliance on Section 4(2) thereof and Rule 506 of Regulation D thereunder. Each purchaser represented that it was an “accredited investor” as defined in Regulation D.

On April 18, 2011, pursuant to the terms of the Certificate of Designation, the Company paid a dividend on its Series D Preferred stock in the form of shares of its Common stock. The total dividend paid to all Series D Preferred stock holders was 207,189 common shares.

On March 28, 2011, the Board of Directors retired the Company’s Series C Convertible Preferred stock; there was no such stock outstanding at the time of retirement.

On January 18, 2011, pursuant to the terms of the Certificate of Designation, the Company paid a dividend on its Series D Preferred stock in the form of shares of its Common stock. The total dividend paid to all Series D Preferred stock holders was 142,915 common shares.

In 2010, the Company granted 733,000 options to purchase the Company’s common stock with exercise prices ranging from \$0.47 to \$0.61 under the LTIP (see Note 18).

During the year ended December 31, 2010, 851,500 stock options and compensatory warrants expired or were forfeited by contract due to the termination of the underlying service arrangement.

On October 15, 2010, pursuant to the terms of the Certificate of Designation, the Company paid a dividend on its Series D Preferred stock in the form of shares of its common stock. The total dividend paid to all Series D Preferred stock holders was 196,878 common shares.

On October 7, 2010, Cytomedix entered into securities purchase agreements with investors to raise gross proceeds of approximately \$1.5 million, before offering related expenses, in a registered direct offering of 3,727,677 shares of its common stock and warrants to purchase 1,863,839 shares of common stock. The per share purchase price paid by investors was \$0.40, the purchase price paid by affiliate investors was \$0.53. The warrants expire after five years and are exercisable at \$0.60 per share on or after April 7, 2011. The Company expects to use the proceeds from this transaction for debt servicing and general corporate and working capital purposes. The Company’s total expense in connection with this offering is \$199,000.

On October 6, 2010, Cytomedix entered into a certain Purchase Agreement (the “LPA”) with Lincoln Park Capital Fund, LLC (“LPC”), which provides that, upon the terms and subject to the conditions and limitations set forth therein, LPC is committed to purchase up to an aggregate of \$1.5 million of the Company’s shares of common stock, including up to 91,784 commitment shares, over the 25-month term of the LPA. Under this LPA, the Company has the right, in its sole discretion, on every other business day, to present LPC with a purchase notice, directing LPC (as principal) to purchase up to 150,000 shares of the Company’s common stock per trading day, up to \$1.5 million of the Company’s common stock in the aggregate over the 25-month term of the LPA, at a per share price (the “Purchase Price”) calculated as the lower of (i) the lowest trading price on the date of sale or (ii) the arithmetic average of the three lowest closing sale prices for the common stock during the 12 consecutive business days ending on the business day immediately preceding the purchase date of those securities. The LPA provides in no event shall the Purchase Price be less than \$0.30 per share. The Company will control the timing and amount of any sales of its common stock to LPC. LPC has no right

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 17 — Capital Stock – (continued)

to require any sales by the Company, but is obligated to make purchases from the Company as the Company directs in accordance with the LPA. The Company also can accelerate the amount of common stock to be purchased under certain circumstances. There are no limitations on use of proceeds, financial or business covenants, restrictions on future fundings, rights of first refusal, participation rights, penalties or liquidated damages in the LPA. The Company did not pay any expense reimbursement or placement agent fee in connection with the LPA. The LPA may be terminated by the Company at any time, at its discretion, without any penalty or cost to the Company. The Company's ability to sell its shares to LPC is also subject to its obtaining all necessary consents, amendments or waivers as may be required. Under the LPA, the Company may not sell to LPC any shares of its common stock in excess of 19.99% of its shares of common stock outstanding, unless and until such issuances are approved by our shareholders, in the event such approval is required under the rules and regulations of the trading market where the Company's securities are then listed. The LPA contains customary representations, warranties, covenants, closing conditions and indemnification and termination provisions by, among and for the benefit of the parties. LPC has covenanted not to cause or engage in any manner whatsoever, any direct or indirect short selling or hedging of the Company's shares of common stock. The net proceeds the Company may receive will depend on the frequency and prices at which it sells shares of stock to LPC under the LPA and the maximum proceeds it may receive over the 25-month term of the agreement is \$1.5 million. The Company expects that any proceeds received by the Company from sales of the Company's common stock to LPC under the LPA, when such sales are made, will be used for debt servicing and general corporate and working capital purposes.

On October 5, 2010, we entered into a \$10 million Purchase Agreement (the "Purchase Agreement") with LPC, together with a Registration Rights Agreement (the "Registration Rights Agreement"), whereby LPC has agreed to purchase up to \$10 million of the Company's common stock over a 25-month period. Under the Registration Rights Agreement, the Company agreed to file a registration statement related to the transaction with the U.S. Securities & Exchange Commission ("SEC") covering the shares that have been or may be issued to LPC under the Purchase Agreement. After the SEC has declared effective such registration statement, the Company has the right, but not the obligation, over a 25-month period, to sell shares of its common stock to LPC in amounts of up to 150,000 shares per business day every other business day, depending on certain conditions as set forth in the Purchase Agreement, up to the aggregate amount of \$10 million. The purchase price for the shares of common stock to be purchased by LPC will be the lower of (i) the lowest trading price on the date of sale or (ii) the arithmetic average of the three lowest closing sale prices for the common stock during the 12 consecutive business days ending on the business day immediately preceding the purchase date of those securities. In no event, however, will the additional shares be sold to LPC at a price of less than \$0.30 per share. In consideration for entering into the Purchase Agreement, the Company issued to Lincoln Park 305,944 shares of restricted common stock as an initial commitment and is required to issue up to 336,538 additional commitment shares of common stock, pro rata, as the Company requires LPC to purchase the Company's shares under the Purchase Agreement over the term of the agreement. The Company can also accelerate the amount of common stock to be purchased under certain circumstances. The Purchase Agreement may be terminated by the Company at any time at the Company's discretion without any cost to the Company. Under the Purchase Agreement, the Company may not sell to LPC any shares of its common stock in excess of 19.99% of its shares of common stock outstanding, unless and until such issuances are approved by our shareholders, in the event such approval is required under the rules and regulations of the trading market where the Company's securities are then listed. The Company's ability to sell its shares to LPC is also subject to its obtaining all necessary consents, amendments or waivers as may be required. The proceeds received by the Company under the Purchase Agreement are expected to be used for debt servicing, working capital and general corporate purposes.

On July 15, 2010, pursuant to the terms of the Certificate of Designation, the Company paid a dividend on its Series D Preferred stock in the form of shares of its Common stock. The total dividend paid to all Series D Preferred stock holders was 175,049 Common shares.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 17 — Capital Stock – (continued)

On April 9, 2010, in connection with the Guaranty Agreements, the Company issued warrants to the Guarantors to purchase an aggregate 1,333,334 shares of Common stock of the Company. The warrants expire after five years and are exercisable at \$0.5368 per share (see Note 15).

On April 9, 2010, the Company entered into Subscription Agreements with certain accredited investors (the “Purchasers”), with respect to the sale of its (i) 10% Series D Convertible Preferred stock (the “Preferred Stock”), and (ii) warrants to purchase shares of Common stock of the Company (the “Warrants”) (together, the “Securities”), for gross proceeds of \$3.65 million (before customary offering expenses of approximately \$423,000, and excluding any proceeds that Cytomedix may receive upon exercise of the Warrants) (the “Preferred Stock Offering”). The Preferred Stock earns dividends at the rate of 10% per annum, payable quarterly in cash or, in the Company’s sole discretion, in shares of the Company’s Common stock. The Preferred Stock may be converted, at the holder’s option, into fully paid and non-assessable shares of the Common stock at the conversion price equal to 90% of the volume weighted average price (“VWAP”) for the 10 trading days prior to the closing date, or \$0.4392. The conversion price on the Preferred Stock for affiliate investors is \$0.5580. Upon any liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, the holders will be entitled to receive out of the Company’s assets an amount equal to the stated value, plus any accrued and unpaid dividends thereon and any other fees then due and owing thereon, for each share of Preferred Stock before any distribution or payment is made to the holders of any junior securities. At any time after the third anniversary of the issuance date, the Company may redeem some or all of the then outstanding Preferred Stock for cash in an amount equal to the stated value of the outstanding Preferred Stock plus any accrued dividends. The Preferred Stock will not be listed on any securities exchange or automated quotation system. The Purchasers were also issued five-year Warrants to purchase, in the aggregate, 4,128,631 shares of Common stock, which number represents 50% of shares of Common stock underlying the Preferred Stock as of the closing of the Preferred Stock Offering, at an exercise price per share of \$0.5368. Each Warrant is exercisable immediately on the date of issuance and will expire on April 9, 2015. In accordance with the terms of the Registration Rights Agreement executed by the Company in connection with the April 2010 private offering, the Company filed a registration statement on Form S-3 with the SEC to register the resale of the Company’s common stock underlying certain securities sold in the April 2010 private offering. The registration statement was declared effective by the SEC on November 3, 2010. The Preferred Stock and Warrants are classified as equity. The proceeds from the Preferred Stock Offering were allocated among Preferred Stock and Warrants based on their relative fair values. Pursuant to the terms of the Preferred Stock Offering, a beneficial conversion feature in the amount of \$1,948,155 was recorded and fully amortized in April 2010 and is reflected in the Preferred dividend section of the statement of operations. The beneficial conversion feature represents the intrinsic value of the Preferred Stock which results from the effective conversion price of the convertible preferred stock being lower than the fair value of the underlying common stock on the date of issuance.

No dividends were declared or paid on the Company’s common stock in 2011 and 2010.

At December 31, the following amounts were accrued for dividends payable:

	<u>2011</u>	<u>2010</u>
Series A Preferred Stock	\$ 21,388	\$ 12,324
Series B Preferred Stock	15,206	9,038
Series D Preferred Stock	68,939	71,491
	<u>\$ 105,533</u>	<u>\$ 92,853</u>

As of December 31, 2011, the balance of unamortized stock-based compensation for warrants granted to non-employees was \$0.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 18 — Long-Term Incentive Plan and Other Compensatory Awards

Cytomedix has a shareholder-approved, Long-Term Incentive Plan (“LTIP”) that permits incentive awards of options, stock appreciation rights, restricted stock awards, phantom stock awards, performance unit awards, dividend equivalent awards and other stock-based awards. Cytomedix may issue up to 8,000,000 shares of stock under this LTIP. At December 31, 2011, 1,228,245 shares were available for future grants. Of all options granted through December 31, 2011, 496,200 had been exercised and 6,275,555 remained outstanding. Option terms are set by the Board of Directors for each option grant, and generally vest immediately upon grant or over a period of time ranging up to three years, are exercisable in whole or installments, and expire ten years from the date of grant. Outstanding options expire at various dates through December 1, 2021.

A summary of option activity under the LTIP as of December 31, 2011, and changes during the year then ended is presented below:

LTIP Options	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at January 1, 2011	5,323,054	\$ 1.34		
Granted	1,000,500	\$ 0.59		
Exercised	0	—		
Forfeited or expired	(47,999)	\$ 0.61		
Outstanding at December 31, 2011	6,275,555	\$ 1.23	5.2	\$1,765,141
Exercisable at December 31, 2011	5,246,233	\$ 1.35	4.8	\$1,235,177

The following table summarizes information about stock options outstanding as of December 31, 2011:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number of Outstanding Shares	Weighted Average Remaining Contract Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$0.30 – \$1.50	4,725,555	5.7	\$ 0.86	3,696,233	\$ 0.93
\$1.51 – \$3.00	1,480,000	3.8	\$ 2.22	1,480,000	\$ 2.22
\$3.01 – \$4.50	0	—	—	0	—
\$4.51 – \$6.00	70,000	4.0	\$ 5.20	70,000	\$ 5.20

The weighted-average grant-date fair value of stock options granted under the LTIP during the years 2011 and 2010 was \$0.59 and \$0.39, respectively. No stock options were exercised under the LTIP during the fiscal years ended December 31, 2011 and 2010.

As of December 31, 2011, there was approximately \$418,000 of total unrecognized compensation cost related to non-vested stock options granted under the LTIP. That cost is expected to be recognized over a weighted-average period of 1.4 years. The total fair value of stock options granted under the LTIP that vested during the fiscal years ended December 31, 2011 and 2010 was approximately \$433,000 and \$378,000, respectively.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 18 — Long-Term Incentive Plan and Other Compensatory Awards – (continued)

Additionally, the Company has issued certain compensatory warrants outside of the LTIP, in exchange for the performance of services. A summary of service provider warrant activity as of December 31, 2011, and changes during the year then ended is presented below:

Warrants to Service Providers	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at January 1, 2011	1,399,632	\$ 1.65		
Granted	0	—		
Exercised	0	—		
Forfeited or expired	(64,483)	\$ 4.34		
Outstanding at December 31, 2011	<u>1,335,149</u>	<u>\$ 1.52</u>	<u>2.6</u>	<u>\$ 0</u>
Exercisable at December 31, 2011	<u>1,335,149</u>	<u>\$ 1.52</u>	<u>2.6</u>	<u>\$ 0</u>

The following table summarizes information about compensatory warrants outstanding as of December 31, 2011:

Range of Exercise Prices	Warrants Outstanding			Warrants Exercisable	
	Number of Outstanding Shares	Weighted Average Remaining Contract Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$1.10 – \$1.50	950,149	2.6	\$ 1.37	950,149	\$ 1.37
\$1.51 – \$3.00	385,000	2.6	\$ 1.87	385,000	\$ 1.87

As of December 31, 2011, there was no remaining unrecognized compensation cost related to warrants.

The Company has recorded stock-based compensation expense as follows:

Stock-Based Expense	Year Ended December 31	
	2011	2010
Awards under the LTIP	\$ 305,180	\$ 410,961
Awards outside the LTIP	\$ —	\$ —
	<u>\$ 305,180</u>	<u>\$ 410,961</u>
Included in Statements of Operations caption as follows:		
Salaries and wages	\$ 155,097	\$ 277,945
Consulting expense	\$ 64,006	\$ 50,693
General and administrative	\$ 86,077	\$ 82,323
	<u>\$ 305,180</u>	<u>\$ 410,961</u>

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 19 — Supplemental Cash Flow Disclosures — Non-Cash Transactions

Non-cash Investing and Financing transactions for years ended December 31 include:

	2011	2010
Accrued dividends on preferred stock	\$ 346,236	\$ 275,068
Preferred dividends paid by issuance of stock	333,556	189,500
Reclassification of derivative liabilities for modified warrant agreements	1,434,322	—
Discharge of previously deferred financing costs for modified warrant agreements	(136,543)	—
Derivative liability for embedded conversion option	(2,085,513)	—
Conversion of convertible debt to common stock	(600,000)	—
Business acquisitions:		
Inventory acquired	—	1,151,035
Property and equipment acquired	—	768,000
Goodwill and intangible assets	—	4,089,823
Deferred charges	—	655,260
Note Payable for balance of acquisition	—	(4,008,858)

Cash paid for interest was \$424,000 and \$371,000 in 2011 and 2010, respectively. There were no income taxes paid in 2011 and 2010.

Note 20 — Operating Leases

The Company leases its office space under an operating lease expiring in December 2013, with future minimum lease payments as indicated in the table below:

Years ending December 31:

2012	\$ 79,413
2013	71,895
2014	—
Thereafter	—
Total future minimum lease payments	\$ 151,308

For the years ended December 31, 2011 and 2010, the Company incurred rent expense of approximately \$65,000 and \$77,000, respectively.

Note 21 — Commitments and Contingencies

The Company is prohibited from granting a security interest in certain of the Company's patents and/or future royalty streams under the terms of the Series A and B Convertible Preferred stock.

Under the Company's plan of reorganization upon emergence from bankruptcy in July 2002, the Series A Preferred stock and the dividends accrued thereon that existed prior to emergence from bankruptcy are to be exchanged into one share of new Common stock for every five shares of Series A Preferred stock held as of the date of emergence from bankruptcy. This exchange is contingent on the Company's attaining aggregate gross revenues for four consecutive quarters of at least \$10,000,000 and would result in the issuance of 325,000 shares of Common stock. Through December 31, 2011, the Company had not reached such aggregate revenue levels.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 21 — Commitments and Contingencies – (continued)

In conjunction with its FDA clearance, the Company agreed to conduct a post-market surveillance study to further analyze the safety profile of bovine thrombin as used in the AutoloGel™ System. This study is estimated to cost between \$500,000 and \$700,000 over a period of several years, which began in the third quarter of 2008. As of December 31, 2011, approximately \$350,000 had been incurred.

In July 2009, in satisfaction of a new Maryland law pertaining to Wholesale Distributor Permits, the Company established a Letter of Credit, in the amount of \$50,000, naming the Maryland Board of Pharmacy as the beneficiary. This Letter of Credit serves as security for the performance by the Company of its obligations under applicable Maryland law regarding this permit and is collateralized by the CD described in Fair Value Measurements (see Note 5).

At December 31, 2011, we are committed to \$321,000 in capital expenditures representing Angel® machines sufficient to address forecasted customer demand.

Note 22 — Subsequent Events

Dividend on Series D Preferred Stock

On January 17, 2012, pursuant to the terms of the Certificate of Designation, the Company paid a dividend on its Series D Preferred Stock in the form of shares of its common stock. The total dividend paid to all Series D preferred stock holders was 76,461 shares of Common stock.

Stock Option Grants

On January 3, 2012, under the LTIP, the Company granted 190,000 stock options to board members for their upcoming service in 2012. These options have an exercise price of \$1.13, which was the closing market price on their date of grant and expire ten years from the date of grant. The board members' options vest in equal monthly installments through December 2012.

Option Extension with Top 20 Global Pharmaceutical Company

On February 2, 2012 the Company and Global Pharma executed an extension to the Option Agreement, extending the exclusive option period through June 30, 2012 in exchange for an additional non-refundable fee of \$2.5 million. The Company has since received said fee from Global Pharma.

Aldagen Acquisition and Concurrent Transactions

Business Combination

On February 8, 2012, the Company acquired all of the issued and outstanding capital stock and convertible promissory notes of Aldagen. As consideration, Cytomedix issued 135,398 shares of its Series E Convertible Preferred Stock (the "Series E Preferred Stock") to Aldagen's former investors. The Series E Preferred Stock are automatically convertible into shares of common stock, in a 1-for-100 shares ratio, upon the Company's filing an amendment to its Certificate of Incorporation to increase the number of authorized shares of common stock and number of directors.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 22 — Subsequent Events – (continued)

In addition to the Series E Preferred Stock, Aldagen's former investors have the right to receive up to 20,309,723 shares of the Company's common stock (the "Contingent Consideration"), contingent upon Aldagen's achieving certain milestones related to its current ALD-401 Phase 2 clinical trial. Finally, each holder of warrants to acquire shares of Aldagen capital stock agreed to exchange the Aldagen warrants for warrants to acquire an aggregate of 2,115,596 shares of the Company's common stock with an exercise price of \$1.42 per share (the Replacement Warrants"). Each Replacement Warrant expires December 31, 2014 and, subject to call provisions of the Replacement Warrant, is exercisable as follows: (i) commencing on the issuance date, for up to 30% of the total shares of the Company's common stock exercisable under the Replacement Warrant, and (ii) upon issuance of the final tranche of the Contingent Consideration, for the remaining balance of the shares under the Replacement Warrant. The Replacement Warrants also contain exercise price adjustments, cashless exercise and other provisions customary to instruments of this nature.

Simultaneous with the closing of the Acquisition, the Company executed several other transactions, which are not considered part of the purchase consideration, as follows.

Issuance of Common Stock

On February 8, 2012 and simultaneous with the closing of the Acquisition, the Company entered into subscription agreements (the "Subscription Agreements") with certain accredited investors, with respect to the sale of shares of its common stock, for gross proceeds of \$5 million.

Redemption of Series A and Series B Redeemable Convertible Preferred Stock

The Company redeemed all outstanding shares of its Series A and Series B Convertible Preferred Stock, for \$208,000 in cash, pursuant to their terms.

Series D Convertible Preferred Stock Conversions

All holders of the Company's outstanding Series D Convertible Preferred Stock (the "Series D Preferred Stock") purchased in a private placement of the Company's securities in April 2010 converted their shares of the Series D Preferred Stock into shares of the Company's common stock prior to the Series D Preferred Stock redemption date of April 2013, under the terms of such securities at the conversion price of \$0.4392 per share (or \$0.558 per share in case of affiliates), for the total of 7,790,350 shares of common stock, which included 330,000 shares of common stock representing forgone dividend payments to such holders through April 2013.

Warrant Exercises

An offer was extended to certain holders of Company warrants (holding warrants to purchase approximately 5.7 million shares of the Company's common stock) acquired in previously reported private placement transactions in 2010 and 2011 requesting them to exercise their respective warrants pursuant to the terms of individually negotiated and executed warrant exercise agreements, in exchange for an equity sweetener. In consideration for such early exercises and estimated proceeds of approximately \$2.8 million, the Company agreed to issue additional warrants to purchase an aggregate of 1,180,547 shares of common stock, at an exercise price per share of \$1.42. Each warrant expires December 31, 2014 and, subject to call provisions of the warrant, is exercisable as follows: (i) commencing on the issuance date, for up to 30% of shares of the Company's common stock under each warrant, and (ii) upon issuance of the final tranche of the Contingent Consideration, for the remaining balance of the warrant. Each warrant also contains exercise price adjustments, cashless exercise and other provisions customary to the instruments of this nature.

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 22 — Subsequent Events – (continued)

Post-Combination Stock-Based Compensation

Each outstanding option to acquire shares of Aldagen capital stock was cancelled and, in satisfaction of a closing condition, the Company's Board granted approximately 1.7 million options to acquire shares of the Company's stock to certain newly added employees, officers, directors and advisors under the Company's Long-Term Incentive Plan. The new options vest during a post-combination service period and will be expensed during such service period.

The following table represents the allocation of the purchase consideration to the assets acquired and liabilities assumed on February 8, 2012:

	Estimated Fair Value
Purchase Consideration:	
Series E Preferred Stock	\$18,955,742
Contingent Consideration	\$11,109,020
Replacement Warrants	\$ 1,883,751
Total Consideration	<u>\$31,948,513</u>
Tangible Assets Acquired:	
Cash	\$ 20,067
Receivables	\$ 210,394
Property and equipment	\$ 772,486
Other	\$ 87,391
Identifiable Intangible Assets Acquired:	
IPR&D Technology	\$29,585,000
Trademarks and Tradename	\$ 1,990,000
Liabilities Assumed:	
Accounts Payable and Accrued Expenses	\$ (1,040,034)
Other	\$ (118,617)
Goodwill	<u>\$ 441,826</u>
	<u>\$31,948,513</u>

Identifiable intangible assets associated with trademarks and tradename will be amortized on a straight-line basis over their estimated useful lives of 20 years. Identifiable intangible assets associated with IPR&D are initially classified as indefinite lived; such classification will be reassessed every reporting period based on the status of the research and development projects. Goodwill is considered an indefinite lived asset.

The following unaudited pro forma financial information summarizes the results of operations for the periods indicated as if the purchase of Aldagen had been completed as of January 1, 2011. Pro forma information primarily reflects adjustments relating to (i) elimination of the interest on Aldagen's promissory notes, (ii) additional stock-based compensation expense, (iii) elimination of the impact of the changes in the fair value of Aldagen's derivative liabilities, and (iv) the amortization of intangibles acquired. The pro forma amounts do not purport to be indicative of the results that would have actually been obtained if the acquisition occurred as of January 1, 2011 or that may be obtained in the future.

Pro forma results for the year ended December 31, 2011

Revenue	\$ 7.9 million
Net Loss	\$ 11.0 million

CYTOMEDIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 23 — Quarterly Financial Data (Unaudited) Required by Regulation S-X Item 3-02(b)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2011				
Revenues	\$ 1,365,613	\$ 1,394,294	\$ 1,532,378	\$ 2,955,114
Gross profit	\$ 720,229	\$ 755,067	\$ 815,543	\$ 2,229,404
Net loss	\$(1,410,220)	\$ (791,361)	\$(2,206,353)	\$ 897,419
(Loss) gain per common share –				
Basic	\$ (0.03)	\$ (0.02)	\$ (0.04)	\$ 0.02
Diluted	\$ (0.03)	\$ (0.02)	\$ (0.04)	\$ 0.01
2010				
Revenues	\$ 178,734	\$ 1,147,219	\$ 1,297,447	\$ 1,287,633
Gross profit	\$ 353,177	\$ 461,941	\$ 762,998	\$ 719,967
Net loss	\$(1,067,966)	\$(2,257,359)	\$(1,415,021)	\$(2,076,405)
Loss per common share –				
Basic and diluted	\$ (0.03)	\$ (0.11)	\$ (0.04)	\$ (0.05)

[TABLE OF CONTENTS](#)

ITEM 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

ITEM 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this Annual Report, under the supervision and with the participation of management, including the Chief Executive Officer and Chief Financial Officer (the "Certifying Officers"), the Company conducted an evaluation of its disclosure controls and procedures. As defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act, the term "disclosure controls and procedures" means controls and other procedures of an issuer that are designed to ensure that information required to be disclosed by the issuer in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer's management, including the Certifying Officers, to allow timely decisions regarding required disclosure. Based on this evaluation, the Certifying Officers have concluded that the Company's disclosure controls and procedures were effective as of December 31, 2011.

The Company had previously reported a material weakness for the year ended December 31, 2009 and each of the periods ended March 31, 2009 through September 30, 2010. However, as of December 31, 2010, that material weakness had been effectively remediated as further described below.

Management's Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of its management, including the Certifying Officers, the Company conducted an evaluation of the effectiveness of its internal control over financial reporting based on the framework in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States of America. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Based on this evaluation under the framework in *Internal Control — Integrated Framework*, management concluded that the Company's internal control over financial reporting was effective as of December 31, 2011.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during the fourth quarter of 2011 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Remediation of Previously Disclosed Material Weakness

The Company had previously reported a material weakness in internal control over financial reporting, as of December 31, 2009, related to accounting for stock purchase warrants, which also resulted in a restatement of the consolidated financial statements for the year ended December 31, 2009 and each of the quarterly periods ended March 31, 2010, June 30, 2010 and September 30, 2010. In April 2010, the Company implemented enhanced procedures related to accounting for equity transactions, including those containing stock purchase warrants, which includes (i) detailed contemporaneous review of such transactions and (ii) the use of outside financial consultants. These new procedures assisted the Company in identifying the previous errors in

TABLE OF CONTENTS

accounting for certain stock purchase warrants during 2009 that qualified for warrant liabilities in accordance with ASC 815-40. The accounting for these warrants was corrected by restating our financial results in 2009 and 2010. The Company continued to monitor and analyze the effects of these new procedures on its accounting for equity transactions, including several transactions that included stock purchase warrants. Management has concluded, based on the documentation and testing of the new procedures, that as of December 31, 2010, the material weakness had been remediated.

PART III

ITEM 10. Directors, Executive Officers and Corporate Governance

The following table sets forth the names and ages of all Cytomedix directors and executive officers as of December 31, 2011. Officers are appointed by, and serve at the pleasure of, the Board of Directors.

Name	Age	Date of Election or Appointment	Position(s) with the Company
James S. Benson	72	November 1, 2004	Presiding Independent Director and Acting Chairman of the Board ⁽¹⁾
Stephen N. Keith	59	September 19, 2008	Independent Director
Mark T. McLoughlin	56	June 7, 2004	Independent Director
Craig B. Mendelsohn	57	November 12, 2009	Independent Director ⁽²⁾
C. Eric Winzer	54	January 30, 2009	Independent Director
David E. Jorden	49	September 19, 2008	Executive Director ⁽¹⁾
Martin P. Rosendale	54	July 1, 2008	Chief Executive Officer, Director
Andrew S. Maslan	42	August 15, 2005	Chief Financial Officer
Patrick P. Vanek	56	July 26, 2010	Vice President of Operations

(1) Effective February 2, 2012, the Board appointed David E. Jorden as Executive Chairman of the Board, replacing Acting Chairman of the Board, James S. Benson. Mr. Benson will remain on the Company's Board as its Principal Director, a position that carries the functions of the lead independent director

(2) Effective February 8, 2012, Richard Kent, Lyle Hohnke, and Joseph Del Guercio joined the Company's Board, which was expanded to nine seats. In addition, Edward L. Field was appointed as the Company's Chief Operating Officer. Concurrent with these additions, Craig Mendelsohn stepped down from the Board.

Biographical Information of Directors and Executive Officers

Biographical information with respect to the Company's current executive officers and directors is provided below.

James S. Benson has served as a Director since November 1, 2004. Mr. Benson has over 40 years of experience in the healthcare industry, and also serves as a director of Cryolife, Inc. Mr. Benson retired from the Advanced Medical Device Association (Advamed) where he served as executive vice president for technical and regulatory affairs. Prior to that, he held numerous senior positions at the Food and Drug Administration ("FDA") over a twenty year period. He retired from the FDA as Director of the Center for Devices and Radiological Health (CDRH). Earlier, he served as deputy commissioner of the FDA, and also as its commissioner for a one-year period. Mr. Benson earned a B.S. degree in civil engineering from the University of Maryland and a M.S. degree in nuclear engineering from the Georgia Institute of Technology. Mr. Benson brings his experience and expertise in the areas of the FDA regulation, corporate governance, and executive leadership to the Board and the Company.

David E. Jorden, CPA, CFA has served as Executive Chairman since February 3, 2012 and was previously an executive board member since October 2008. From 2003 to 2008, he was with Morgan Stanley's Private Wealth Management group where he was responsible for equity portfolio management for high net worth individuals. Prior to Morgan Stanley, Mr. Jorden served as CFO for Genometrix, Inc., a private genomics/life sciences company focused on high-throughput microarray applications. Mr. Jorden was previously a principal with Fayez Sarofim & Co. Mr. Jorden has a MBA from Northwestern University's Kellogg School and a

TABLE OF CONTENTS

B.B.A. from University of Texas at Austin. He holds both Certified Financial Analyst and Certified Public Accountant designations. Mr. Jordan serves on the board of Opexa Therapeutics, Inc. (Nasdaq: OPXA). He is also on the board of two private companies, PLx Pharma, Inc., a specialty pharmaceutical company developing GI safer NSAIDs (nonsteroidal anti-inflammatory drugs), and DLush, LLC, a deluxe beverage retail concept. Mr. Jordan brings his experience and expertise in the areas of capital raising, investor relations, financial management and analysis, and business strategy to the Board and the Company.

Stephen N. Keith, MD, MSPH has served as a Director since September 19, 2008. Dr. Keith served as the office of Chief Executive Officer of the American College of Clinical Pharmacology, a premier professional society for the discipline of clinical pharmacology, from 2009 until early 2012. From 2002 until 2009, Dr. Keith was President and Chief Operating Officer of Panacea Pharmaceuticals, Inc., a biopharmaceutical company located in Gaithersburg, MD. Dr. Keith has held a range of senior management positions in the pharmaceutical and biotechnology industries, including President and Chief Operating Officer at Antex Biologics, Inc.; Vice President, Marketing and Sales at North American Vaccine, Inc.; Senior Director, Health Care Delivery Policy in Corporate Public Affairs, Senior Customer Manager in the U.S. Human Health Division and Senior Director, Health Strategies, in the Merck-Medco Managed Care Division at Merck & Co, Inc. (NYSE: MRK). Dr. Keith holds an undergraduate degree from Amherst College in Massachusetts (1973), a degree in medicine from University of Illinois, College of Medicine, (1977) and a Master of Science in Public Health degree from the University of California, Los Angeles (1982). He is a licensed physician in the states of California and Maryland. Dr. Keith is a Fellow of the Academy of Pediatrics and a Diplomate of the American Board of Pediatrics. Dr. Keith brings his experience and expertise in the areas of practice of medicine, product commercialization, investment banking, and executive leadership to the Board and the Company.

Mark T. McLoughlin has served as a Director since June 7, 2004. Mr. McLoughlin currently serves as a Senior Vice President for VWR International, a global distributor of laboratory supplies, equipment and services to the pharma, biotech, industrial and clinical laboratory. In this capacity, he has responsibility for VWR's Emerging Businesses to include Canada, Mexico, Puerto Rico, their Healthcare Business, BioExpress and the manufacturing businesses Anachemia and AMRESCO. Prior to joining VWR International, he was Senior Vice President, Chief Marketing Officer for Cardinal Health based in Rolle, Switzerland. Prior to joining Cardinal, he was vice president of commercial operations for Norwood Abbey Ltd., an Australian-based medical technology company. Earlier, he was President of North American operations for Ion Beam Application, Inc., a Belgium-based global medical technology company. His executive career experience also includes Mallinckrodt, as well as positions with other healthcare companies. Mr. McLoughlin brings his experience and expertise in the areas of sales, marketing, distribution, international business, medical supplies industry, and executive leadership to the Board and the Company.

C. Eric Winzer has served as Director since January 30, 2009. Mr. Winzer currently serves as Chief Financial Officer of OpGen, Inc., a privately held, whole-genome analysis company headquartered in Gaithersburg, MD. Prior to joining OpGen, Mr. Winzer was Executive Vice President and Chief Financial Officer of Avalon Pharmaceuticals, Inc. (Nasdaq: AVRX) from July 2007 to June 2009. Mr. Winzer was with Life Technologies Corporation (Nasdaq: LIFE), formerly Invitrogen Corporation, a provider of life science technologies for disease research and drug discovery, from 2000 to 2006, where he served as Senior VP and Chief Financial Officer, Executive Sponsor for Life's ERP implementation and VP, Finance. From 1986 to 2000, Mr. Winzer held positions of increasing responsibilities at Life Technologies, Inc., including Chief Financial Officer, Secretary and Treasurer. From 1980 until 1986, he held various financial positions at Genex Corporation. Mr. Winzer received his B.A. in Economics and Business Administration from McDaniel College and an M.B.A. from Mount Saint Mary's University. Mr. Winzer brings his experience and expertise in the areas of financial management and analysis, corporate governance, mergers and acquisitions to the Board and the Company.

Martin P. Rosendale has served as our Chief Executive Officer and Director since July 1, 2008. Prior to that, in March 2008, he was appointed as Executive Vice-President and Chief Operating Officer of the Company. From January 2005 to March 2008, Mr. Rosendale held the position of Chief Executive Officer of Core Dynamics, Inc., a Rockville, MD biotechnology startup company using cryopreservation technology developed in Israel. From March 2001 to December 2004, Mr. Rosendale held the position of Senior Vice President and

TABLE OF CONTENTS

General Manager of ZLB Bioplasma, Inc., a Glendale, CA biologics company, as well as other positions at various biotechnology companies. Mr. Rosendale holds a Bachelor of Science degree in Microbiology from California State University in Long Beach, CA (1982).

Dr. Richard S. Kent has served as served as Director since February 8, 2012. He previously served as a member of Aldagen's Board from March 2010 to February 2012. Since December 2008, he has been a Partner with Intersouth Partners, a venture capital firm that was Aldagen's largest stockholder. Dr. Kent served as the President and Chief Executive Officer of Serenex, Inc., a biotechnology company focused on oncology, from 2002 until its sale to Pfizer in April 2008. From 2001 until he joined Serenex, he served as President and Chief Executive Officer of Ardent Pharmaceuticals, Inc. Before that, he held senior executive positions at GlaxoSmithKline, where he was Senior Vice President of Global Medical Affairs and Chief Medical Officer; at Glaxo Wellcome, where he was Vice President of U.S. Medical Affairs and Group Medical Director; and at Burroughs Wellcome, where he was International Director of Medical Research. Dr. Kent has served as a director of Inspire Pharmaceuticals, Inc., a publicly traded biotechnology company, since June 2004, until its acquisition by Merck in 2011. Dr. Kent received his undergraduate degree from the University of California, Berkeley and his M.D. from the University of California, San Diego. He is board certified in both internal medicine and cardiology. Dr. Kent's qualifications to serve on the Board include his extensive experience as a chief executive officer and senior medical officer in the pharmaceutical industry.

Dr. Lyle Hohnke has served as served as Director since February 8, 2012. He previously served as a member of Aldagen's Board from August 2008 to February 2012 and Aldagen's President and Chief Executive Officer from October 2010 to February 2012. He was previously a partner of Tullis Dickerson, a healthcare-focused venture capital fund and an investor in Aldagen. Dr. Hohnke holds Ph.D. and M.A. degrees from the University of Oregon and was a postdoctoral fellow at the UCLA School of Medicine. He also holds an M.B.A. degree from the Hartford Graduate Institute at Rensselaer Polytechnic Institute and a B.A. degree from Western Michigan University. Dr. Hohnke's qualifications to serve on the Board include his experience in working with entrepreneurial companies in the healthcare field and his business and finance background.

Joseph Del Guercio has served as served as Director since February 8, 2012. He has been Managing Director at CNF Investments (CNF)/Clark Enterprises, an Aldagen investor, since November 2004. Mr. Del Guercio serves on the boards of directors of Terrago Technologies Inc., an Atlanta-based technology company, KZO Innovations, a Virginia-based technology company, Innovative Biosensors, a Maryland-based diagnostics company, and Ogmento, Inc., a New York-based technology company. He also serves on the board of directors of Vital Sensors, Inc., a private company based in Richmond, Virginia, Verax Biomedical, Inc., another privately held company based in Worcester, Massachusetts, Overture Technologies, Inc., a Bethesda, MD-based software company, Vision Chain, Inc., a Washington DC based technology company, and DigitalBridge Communications, Inc., an Ashburn, Virginia-based private company. Mr. Del Guercio has an M.B.A. degree from Harvard Business School and a B.S. degree from Boston College.

Andrew S. Maslan, CPA joined the Company as corporate controller on July 1, 2005 and became the Chief Financial Officer on August 15, 2005. Mr. Maslan most recently served as controller for BioReliance Corporation based in Rockville, MD. Earlier, he held positions with two other Rockville, MD-based companies, serving as a principal with GlobeTraders, Inc., and senior accountant for Providence Laboratory Associates. Mr. Maslan began his professional career serving as an auditor with KPMG Peat Marwick and is a Certified Public Accountant licensed in the State of Maryland.

Patrick Vanek joined Cytomedix, Inc. in July 2010. He brings to Cytomedix more than 30 years of diverse technical and managerial experience in pharmaceuticals and medical devices, specifically Formulation Design, Process Development, QA/QC and Supply Chain/Logistics. Prior to joining Cytomedix, Mr. Vanek spent 12 years at Otsuka America Pharmaceutical, Inc. where he rose through a number of managerial positions to become Vice President of Technical Operations. Prior to that, he held various development/technical management positions at KV Pharmaceutical Corp., Teva Pharmaceuticals USA, Wyeth Laboratories and McNeil Pharmaceutical. Mr. Vanek earned a B.S. in Pharmacy from the Philadelphia College of Pharmacy & Science and is a Registered Pharmacist.

TABLE OF CONTENTS

Edward L. Field joined the Company as Chief Operating Officer February 8, 2012. Prior to joining the Company, Mr. Field served as Aldagen's President and Chief Operating Officer from November 2004 to March 2010. From March 2010 to November 2010, he served as Aldagen's Chief Business Officer. From November 2010 to February 2012, he served as Aldagen's Chief Operating Officer. Prior to joining Aldagen, Mr. Field was the President and Chief Executive Officer of Inologic, Inc., a private biopharmaceutical company, from 2002 to September 2004. Prior to joining Inologic, from 1999 to 2002, Mr. Field was the President of Molecumetics, Ltd., a drug discovery and development subsidiary of Tredegar Corporation, until its merger with Therics, LLC, a regenerative medicine company. Mr. Field received a Master of Business Administration degree from the University of Virginia's Darden School of Business Administration and a Bachelor of Arts degree in Economics from Duke University.

Board of Directors

The Board oversees the business affairs of Cytomedix and monitors the performance of management. Presently, there are nine Board members. At each annual meeting, shareholders elect directors for a full term or the remainder thereof, as the case may be, to succeed those whose terms have expired. Each director holds office for the term for which he or she is elected or until his or her successor is duly elected. There has been no material change in the procedures by which shareholders may recommend nominees to the Company's Board.

Following and as a result of the Aldagen transaction, we have undertaken certain changes to our Board. Specifically, effective as of February 8, 2012, our Board approved an amendment to the Company's bylaws, as amended to date, to increase in the size of the Company's Board from seven seats (prior to the amendment) to no more than nine seats. The Board appointed Richard S. Kent, Lyle A. Hohnke and Joseph Del Guercio to serve on the Board. The foregoing appointments to the Board were made pursuant to the terms of the Exchange Agreement with the effective date as of February 8, 2012, the closing date of the transaction. In addition, effective as of February 8, 2012, Craig Mendelsohn, resigned as a director and a member of the Nominating and Corporate Governance and Compensation Committees, respectively. Mr. Mendelsohn's resignation was not for cause or due to any disagreements with the Company. Following the Board's review of the background and other relevant information, the Board determined that Messrs. Kent and Del Guercio were "independent" as such term is defined under the federal securities laws and the NYSE Amex Company Guide. Except as disclosed above, there is no arrangement or understanding by and among the foregoing directors and any other persons pursuant to which they were appointed as discussed above. Nor are there any family relationships by and among such directors and any executive officers and directors. Further, except as set forth below and in the Company's Current Report on Form 8-K filed in connection with the Aldagen transaction, there are no transactions involving the Company and such persons which transaction would be reportable pursuant to Item 404(a) of Regulation S-K promulgated under the Securities Act of 1933, as amended.

Further, effective as of February 3, 2012, the Board appointed David E. Jorden, a current member of the Company's Board, to the office of Executive Chairman of the Board following James Benson's stepping down from that position on the Board. Mr. Benson will carry on as the Board's Principal Director, a position that carries the functions of the lead independent director.

Prior to joining our Board, Lyle Hohnke was Aldagen's Chief Executive Officer. Joseph Del Guercio, an independent director on our Board, is one of the managing members of CNF Investments II, LLC. ("CNF"), an entity which directly owns shares and warrants to purchase common stock of our Company acquired in the February 2012 private offering. CNF is also a limited liability members of Aldagen Holdings LLC, the holder of the Series E Preferred. Dr. Richard Kent, also an independent director of the Company, is the general partner of Intersouth Affiliates V, L.P, Intersouth Partners V, L.P, Intersouth Partners VI, L.P and Intersouth Partners VII L.P., respectively (collectively, the "Intersouth Affiliates") which entities, individually and indirectly, own shares and warrants to purchase common stock of our Company acquired in the February 2012 private offering. Each of the Intersouth Affiliates is also a limited liability members of Aldagen Holdings LLC, the holder of the Series E Preferred. Please refer to the beneficial ownership table and notes to such table of this Annual Report for the details of their respective ownership.

TABLE OF CONTENTS

Following the foregoing changes, the Board currently consists of the following members: Stephen Keith, James Benson, Mark McLoughlin, David Jordan (Chairman), Richard Kent, Joseph Del Guercio, Lyle Hohnke, Martin Rosendale and Eric Winzer.

There were no material changes to the procedures by which shareholders may recommend nominees to the Board since the Company's last disclosure of such policies.

No director or officer of the Company has, during the last 10 years, been subject to or involved in any legal proceedings described under Item 401(f) of Regulation S-K, been convicted of any criminal proceeding (excluding traffic violations or similar misdemeanors), or been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, United States federal or state securities laws or finding any violations with respect to such laws.

Audit Committee

The Board formed an Audit Committee in December 2004. Mr. Winzer currently serves as chairman of the Audit Committee. The Board has determined that Mr. Winzer is an audit committee financial expert as defined by Item 407(d) of Regulation S-K under the Securities Act and is "independent" as the term is defined under the federal securities laws. Other members of the Audit Committee are Mr. McLoughlin and Dr. Keith. Following its transition from the NYSE Amex onto the OTC Bulletin Board, the Company is no longer subject to the requirements of the NYSE Amex Company Guide and, particularly, the "independence" standards set forth in the Company Guide. However, the Company elects to continue to apply the same standard in determining the "independence" of its Board and Board committee members. The Board has determined that each member of the Audit Committee is "independent" as required by the NYSE Amex Company Guide and under the federal securities laws. The Audit Committee has a written charter adopted by the Board, which is available on the Company's website at www.cytomedix.com and at no charge by contacting the Company at its headquarters as listed on the cover page of this report. Information appearing on the Company's web site is not part of this Annual Report.

The purpose of the Audit Committee is to assist the Board in its general oversight of Cytomedix's financial reporting, internal controls and audit functions. As described in the Audit Committee Charter, the Audit Committee's primary responsibilities are to:

- Review whether or not management has maintained the reliability and integrity of the accounting policies and financial reporting and disclosure practices of the Company;
- Review whether or not management has established and maintained processes to ensure that an adequate system of internal controls is functioning within the Company;
- Review whether or not management has established and maintained processes to ensure compliance by the Company with legal and regulatory requirements that may impact its financial reporting and disclosure obligations;
- Oversee the selection and retention of the Company's independent public accountants, their qualifications and independence;
- Prepare a report of the Audit Committee for inclusion in the proxy statement for the Company's annual meeting of shareholders;
- Review the scope and cost of the audit, the performance and procedures of the auditors, the final report of the independent auditors; and
- Perform all other duties as the Board may from time to time designate.

Code of Conduct and Ethics

In April 2005, the Board approved a Code of Conduct and Ethics applicable to all directors, officers and employees which complies with Section 807 of the NYSE Amex Company Guide and with Item 406 of Regulation S-K. A copy of this Code of Conduct is available at the Company's website at

TABLE OF CONTENTS

www.cytomedix.com, and is available at no charge by contacting the Company at its headquarters as listed on the cover page of this Annual Report. Information appearing on the Company's website is not part of this Annual Report.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires officers, directors and persons who own more than ten percent of a registered class of equity securities to, within specified time periods, file certain reports of ownership and changes in ownership with the SEC.

Based solely upon a review of Forms 3 and Forms 4 furnished to the Company pursuant to Rule 16a-3 under this Act during the Company's most recent fiscal year, and Forms 5 with respect to the most recent fiscal year, the Company believes that, except as set forth below, all such forms required to be filed pursuant to Section 16(a) were timely filed as necessary by the executive officers, directors and security holders required to file same during the fiscal year ended December 31, 2011. Forms 4 for Messrs. Maslan, Rosendale, and Jordan in connection with the January 15, 2011 dividend payment on the Series D Preferred Stock and Patrick Vanek's Form 4 in connection with the December 1, 2011 stock option grant were inadvertently filed late. All such forms have been filed to date.

ITEM 11. Executive Compensation

This discussion focuses on the compensation paid to "named executive officers," which is a defined term generally encompassing all persons that served as principal executive officer at any time during the fiscal year, as well as certain other highly paid executive officers serving in such positions at the end of the fiscal year. During 2010 and 2011, the named executive officers consisted of the following persons:

- Martin P. Rosendale — Chief Executive Officer (Principal Executive Officer)
- Andrew S. Maslan — Chief Financial Officer (Principal Financial Officer)
- Patrick P. Vanek — Vice President of Operations (effective July 16, 2010)
- Carelyn P. Fyelling — Vice President of Professional Services (through July 13, 2010)

Summary Compensation Table

Name and Principal Position	Year	Salary	Bonus	Option Awards ⁽⁵⁾	All Other Compensation	Total
Martin P. Rosendale ⁽¹⁾ Chief Executive Officer (Effective July 1, 2008)	2011	\$ 300,000	\$ —	\$ 108,935	\$ 9,800	\$ 418,735
	2010	\$ 300,000	\$ —	\$ —	\$ 9,800	\$ 309,800
Andrew S. Maslan ⁽²⁾ Chief Financial Officer (Effective August 16, 2005)	2011	\$ 200,000	\$ —	\$ 39,693	\$ 7,733	\$ 247,426
	2010	\$ 200,000	\$ —	\$ 25,628	\$ 8,000	\$ 233,628
Patrick P. Vanek ⁽³⁾ VP – Operations (Effective July 26, 2010)	2011	\$ 195,000	\$ —	\$ 25,169	\$ —	\$ 220,169
	2010	\$ 84,943	\$ —	\$ 51,256	\$ —	\$ 136,199
Carelyn P. Fyelling ⁽⁴⁾ VP – Professional Services	2010	\$ 142,291	\$ —	\$ 15,377	\$ 5,692	\$ 163,360

(1) Mr. Rosendale may earn a cash bonus of up to 50% of his salary. The exact amount of such bonus compensation is to be determined by the Compensation Committee and approved by the Board. Amounts under Option Awards represent the grant date fair value of 150,000 options granted during 2011. Amounts in All Other Compensation reflect employer 401(k) matching contributions.

(2) Mr. Maslan may earn a cash bonus of up to 35% of his salary. The exact amount of such bonus compensation is to be determined by the Compensation Committee and approved by the Board. Amounts under Option Awards represent the grant date fair value of 60,000 and 50,000 options granted during 2011 and 2010, respectively. Amounts in All Other Compensation reflect employer 401(k) matching contributions.

TABLE OF CONTENTS

- (3) Mr. Vanek joined the Company on July 26, 2010 as an officer and Vice President. Amount of salary for 2010 represents amount earned from his date of hire. Mr. Vanek may earn a cash bonus of up to 30% of his salary. The exact amount of such bonus compensation is to be determined by the Compensation Committee and approved by the Board. Amounts under Option Awards represent the grant date fair value of 40,000 and 100,000 options granted during 2011 and 2010, respectively.
- (4) Ms. Fylling relinquished her position as an officer of the Company effective July 13, 2010. However, she remains an employee and Vice President. Ms. Fylling may earn a cash bonus of up to 35% of her salary. The exact amount of such bonus compensation is to be determined by the Compensation Committee and approved by the Board. Amounts under Option Awards represent the grant date fair value of 30,000 options granted during 2010. Amounts in All Other Compensation reflect employer 401(k) matching contributions.
- (5) Represents the fair value of the stock option awards granted during the fiscal year, calculated in accordance with FASB ASC Topic 718. Assumptions used to determine the grant date fair value of option awards may be found in Note 3 to the Consolidated Financial Statements.

Employment Contracts and Termination of Employment and Change-in-Control Arrangements

The Company has employment agreements with the following named executive officers. The following is a description of these agreements.

Martin P. Rosendale: Mr. Rosendale's employment agreement, as amended, provides for his at-will employment as the Company's Chief Executive Officer. Effective January 1, 2009, Mr. Rosendale's annual salary was \$300,000 and his target bonus percentage was 50%, depending on the achievement of performance criteria. This compensation is subject to annual review and modification by the Board of Directors. If Mr. Rosendale's employment is terminated by the Company, he is entitled to receive a lump sum severance payment of \$50,000.

Andrew S. Maslan: Mr. Maslan's employment agreement, as amended, provides for his at-will employment as the Company's Chief Financial Officer. Effective October 1, 2008, Mr. Maslan's annual salary was \$200,000 and his target bonus percentage was 35%, depending on the achievement of performance criteria. This compensation is subject to annual review and modification by the Board of Directors. If Mr. Maslan's employment is terminated by the Company without cause, he is entitled to receive his annual base salary and all other benefits for a period of six months on the same terms and schedules as existed immediately prior to his termination. Additionally, unvested stock options will continue to vest during this six month period.

Patrick P. Vanek: Mr. Vanek joined the Company on July 26, 2010. His employment agreement provides for his at-will employment as the Company's Vice President, Operations at an annual salary of \$195,000 and a target bonus percentage of 30%, depending on the achievement of performance criteria. This compensation is subject to annual review and modification by the Board of Directors.

Outstanding Equity Awards at December 31, 2011
Option Awards

Name	Number of Securities Underlying Unexercised Options Exercisable ⁽¹⁾	Number of Securities Underlying Unexercised Options Unexercisable	Option Exercise Price	Option Expiration Date
	Martin P. Rosendale	200,000	—	\$ 1.54
	300,000	—	\$ 0.75	9/19/2018
	200,000	—	\$ 0.40	12/16/2018
	143,334	21,666 ⁽²⁾	\$ 0.56	9/18/2019
	—	150,000 ⁽³⁾	\$ 0.80	12/1/2021
Andrew S. Maslan	60,000	—	\$ 5.07	1/11/2016
	40,000	—	\$ 2.52	3/16/2016
	50,000	—	\$ 2.73	10/11/2016
	20,000	—	\$ 0.88	7/27/2017
	100,000	—	\$ 0.70	9/18/2018
	35,000	—	\$ 0.60	5/13/2019
	20,000	10,000 ⁽⁴⁾	\$ 0.62	9/17/2019
	16,667	33,333 ⁽⁵⁾	\$ 0.56	7/13/2020
	10,000	—	\$ 0.37	5/23/2021
	—	50,000 ⁽⁶⁾	\$ 0.80	12/1/2021
Patrick P. Vanek	33,334	66,666 ⁽⁷⁾	\$ 0.56	7/13/2020
	10,000	—	\$ 0.37	5/23/2021
	—	30,000 ⁽⁸⁾	\$ 0.80	12/1/2021
Carelyn P. Fylling	250,000	—	\$ 1.50	8/7/2012
	19,077	—	\$ 1.25	10/21/2013
	20,000	—	\$ 2.40	1/11/2016
	20,000	—	\$ 0.88	7/27/2017
	30,000	—	\$ 0.70	9/18/2018
	15,000	—	\$ 0.60	5/13/2019
	20,000	10,000 ⁽⁹⁾	\$ 0.62	9/17/2019
	10,000	20,000 ⁽¹⁰⁾	\$ 0.56	7/13/2020
	10,000	—	\$ 0.37	5/23/2021
	—	30,000 ⁽¹¹⁾	\$ 0.80	12/1/2021

(1) All options are fully vested.

(2) Options vest as follows: 21,666 on September 18, 2012.

(3) Options vest as follows: 50,000 each on December 1, 2012, December 1, 2013, and December 1, 2014.

(4) Options vest as follows: 21,666 on September 17, 2012.

(5) Options vest as follows: 16,667 on July 13, 2012 and 16,666 on July 13, 2013.

(6) Options vest as follows: 16,666 on December 1, 2012 and 16,667 each on December 1, 2013 and December 1, 2014.

(7) Options vest as follows: 33,333 each on July 13, 2012 and July 13, 2013.

(8) Options vest as follows: 10,000 each on December 1, 2012, December 1, 2013, and December 1, 2014.

(9) Options vest as follows: 10,000 on September 17, 2012.

(10) Options vest as follows: 10,000 each on July 13, 2012 and July 13, 2013.

(11) Options vest as follows: 10,000 each on December 1, 2012, December 1, 2013, and December 1, 2014.

TABLE OF CONTENTS

Director Compensation in 2011

For service during 2011, each non-employee director was entitled to and received options to purchase 30,000 shares of the Company's Common stock and, in addition, the Presiding Director and Acting Chairman of the Board and each committee chair was entitled to and received options to purchase 10,000 shares of the Company's Common stock.

Name	Fees Earned or Paid in Cash	Option Awards ⁽¹⁾	All Other Compensation	Total
James S. Benson	\$ 30,000	\$ 18,122	\$ —	\$ 48,122
Stephen N. Keith	\$ 27,000	\$ 18,122	\$ —	\$ 45,122
Mark T. McLoughlin	\$ 27,000	\$ 18,122	\$ —	\$ 45,122
Craig B. Mendelsohn	\$ 22,000	\$ 13,591	\$ —	\$ 35,591
C. Eric Winzer	\$ 30,000	\$ 18,122	\$ —	\$ 48,122
David E. Jordan ⁽²⁾	\$ —	\$ 36,312	\$ 60,000	\$ 96,312

(1) At December 31, 2011, the following number of stock options remained unexercised by non-employee directors as follows: Benson — 310,000, Keith — 120,000, McLoughlin — 310,000, Mendelsohn — 65,000, Winzer — 120,000. Assumptions used to determine the grant date fair value of option awards may be found in Note 3 to the Consolidated Financial Statements.

(2) Mr. Jordan is an executive member of management in addition to serving on the Board. He is not compensated for his Board service. The amount in the Option Awards column represents the grant date fair value of 50,000 options granted during 2011. The amount in the All Other Compensation column represents his cash compensation as an employee in 2011.

ITEM 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Securities Authorized for Issuance under Equity Compensation Plans

Long Term Incentive Plan

As of December 31, 2011, our Long-Term Incentive Plan ("LTIP"), authorized the issuance of up to 8,000,000 shares of common stock. The Board amended the terms and provisions of the LTIP effective as of February 8, 2012 to increase the number of shares authorized for issuance under the LTIP from 8,000,000 to 10,500,000 shares, which increase will be subject to shareholder ratification within twelve months of the Board's action. The Board also approved an aggregate of 1,781,500 options to purchase shares of the Company's common stock which options were issued to newly added employees of the Company effective as of and the exercise price as of the closing date of the Exchange Agreement, with vesting commencing on February 22, 2012. Following the foregoing amendment and stock option grants, the Company has approximately 1,756,745 shares of its common stock available for issuance under the LTIP.

The LTIP permits incentive awards of options, SARs, restricted stock awards, phantom stock awards, performance unit awards, dividend equivalent awards or other stock-based awards to our employees, officers, consultants, independent contractors, advisors, and directors. We believe that the making of awards under the LTIP promotes the success and enhances our value by providing the awardee with an incentive for outstanding performance. The LTIP is further intended to provide flexibility to us in our ability to motivate, attract, and retain the services of personnel upon whose judgment, interest, and special effort the successful conduct of our operation is largely dependent.

Equity Compensation Plan Information as of December 31, 2011

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants, and rights	Weighted average exercise price of outstanding options, warrants, and rights	Number of securities remaining available for future issuance
Equity compensation plans approved by security holders	6,275,555	\$ 1.23	1,228,245
Equity compensation plans not approved by security holders ⁽¹⁾	1,335,149	\$ 1.52	n/a
Total	7,610,704	\$ 1.28	1,228,245

(1) These amounts represent the aggregate of individual compensation arrangements with external service providers.

As of December 31, 2011, 496,200 shares of common stock have been issued upon exercise of options granted pursuant to the Long Term Incentive Plan.

Security Ownership of Certain Beneficial Owners

The following table sets forth information regarding the ownership of the Company's Common stock as of March 16, 2012 by all those known by the Company to be beneficial owners of more than five percent of its Common stock. This table is prepared in reliance upon beneficial ownership statements filed by such shareholders with the SEC under Section 13(d) or 13(g) of the Exchange Act and/or the best information available to the Company.

The table does not give effect to the conversion of the Series E Convertible Preferred stock. None of the persons listed in the table own any shares of Series E Convertible Preferred stock. In the event and upon conversion of the Series E Convertible Preferred stock, Aldagen Holdings LLC, the sole holder of the Series E Convertible Preferred stock, will be issued 13,539,816 shares of the Company's Common stock, which would represent approximately 15.3% of the outstanding shares based on the number of shares of Common stock outstanding at March 16, 2012. Such shares may be regarded as beneficially owned by Aldagen Holdings LLC under Rule 13d-3 promulgated by the Commission under the Exchange Act. Mailing address for Aldagen Holdings LLC is 4101 Lake Boone Trail, Suite 300, Raleigh, NC 27607.

Name of Beneficial Owner	Beneficial Ownership ⁽¹⁾	Percent of Class ⁽¹⁾
John Paul DeJoria	6,900,044 ⁽²⁾	9.2%
Charles E. Sheedy	7,363,798 ⁽³⁾	9.7%

(1) Percentage ownership as of March 16, 2012 is based upon 74,673,844 total shares of Common stock, which includes 70,644,027 shares issued and outstanding and 4,029,817 shares issuable in satisfaction of the contractual commitments of certain warrant holders to exercise such warrants on or before June 30, 2012. For purposes of determining the amount of securities beneficially owned, share amounts include all Common stock owned outright plus all shares of Common stock issuable upon conversion of convertible notes, or the exercise of options or warrants currently exercisable, or exercisable within 60 days after the preparation of this table. Shares of Common stock issuable upon conversion of convertible notes, or the exercise of options or warrants currently exercisable, or exercisable within 60 days after the preparation of this table, are deemed outstanding for the purpose of computing the percentage ownership of the person holding such options or warrants, but are not deemed outstanding for computing the percentage ownership of any other persons.

(2) Based on the Company's records, Mr. DeJoria's beneficial ownership of the Company's securities includes 4,503,276 shares of Common stock, 2,138,434 shares of Common stock issuable in satisfaction of the commitment to exercise warrants on or before June 30, 2012, and 258,334 shares of Common stock issuable upon exercise of warrants held by Mr. DeJoria. Mailing address for Mr. DeJoria is 1888 Century Park East, Suite 1600, Century City, CA 90067.

(3) Based on the Company's records, Mr. Sheedy's beneficial ownership of the Company's securities includes 5,354,545 shares of Common stock, 758,672 shares of Common stock issuable in satisfaction of the commitment to exercise warrants on or before June 30, 2012, and 1,250,581 shares of Common stock issuable upon exercise of warrants held by Mr. Sheedy. Mailing address for Mr. Sheedy is Two Houston Center, 909 Fannin Street, Suite 2907, Houston, Texas 77010.

TABLE OF CONTENTS

Security Ownership of Management

The following table sets forth information regarding the ownership of the Company's Common stock as of March 16, 2012 by: (i) each director; (ii) each of the Named Executive Officers in the Summary Compensation Table; and (iii) all executive officers and directors of the Company as a group.

Name of Beneficial Owner	Beneficial Ownership ⁽¹⁾	Percent of Class ⁽¹⁾
James S. Benson	326,667 ⁽²⁾	*
Joseph Del Guercio	683,878 ⁽³⁾	*
Edward L. Field	200,000 ⁽⁴⁾	*
Lyle A. Hohnke	475,000 ⁽⁵⁾	*
David E. Jordan	7,083,325 ⁽⁶⁾	9.4%
Stephen N. Keith	136,667 ⁽⁷⁾	*
Richard S. Kent	3,024,508 ⁽⁸⁾	4.0%
Andrew S. Maslan	465,055 ⁽⁹⁾	*
Mark T. McLoughlin	346,668 ⁽¹⁰⁾	*
Martin P. Rosendale	1,021,404 ⁽¹¹⁾	1.4%
Patrick P. Vanek	43,334 ⁽¹²⁾	*
C. Eric Winzer	136,667 ⁽¹³⁾	*
Group consisting of executive officers and directors	13,943,173	17.8%

* Less than 1%.

(1) Percentage ownership as of March 16, 2012 is based upon 74,673,844 total shares of Common stock, which includes 70,644,027 shares issued and outstanding and 4,029,817 shares issuable in satisfaction of the contractual commitments of certain warrant holders to exercise such warrants on or before June 30, 2012. For purposes of determining the amount of securities beneficially owned, share amounts include all Common stock owned outright plus all shares of Common stock issuable upon conversion of convertible notes, or the exercise of options or warrants currently exercisable, or exercisable within 60 days after the preparation of this table. Shares of Common stock issuable upon conversion of convertible notes, or the exercise of options or warrants currently exercisable, or exercisable within 60 days after the preparation of this table, are deemed outstanding for the purpose of computing the percentage ownership of the person holding such options or warrants, but are not deemed outstanding for computing the percentage ownership of any other persons. Unless otherwise indicated, the mailing address of all persons named in this table is: c/o Cytomedix, Inc., 209 Perry Parkway, Suite 7, Gaithersburg, MD 20877.

(2) Independent director of the Company. Includes 326,667 shares Mr. Benson may acquire upon the exercise of stock options approved by the Board and issued under the Company's Long-Term Incentive Plan.

(3) Independent director of the Company. Includes 634,679 shares of the Company's Common stock owned directly by CNF Investments II, LLC ("CNF"). The individual managing members (collectively, the "CNF Member Managers") of CNF are Joseph Del Guercio and Robert J. Flanagan. CNF and CNF Member Managers may share voting and dispositive power over the shares directly held by CNF. Mr. Del Guercio is Managing Director of CNF. He disclaims beneficial ownership of such securities. Also includes 49,199 shares issuable upon exercise of the warrant also held by CNF. Mailing address for CNF is 7500 Old Georgetown Road, Suite 620, Bethesda, MD 20814.

(4) Chief Operating Officer of the Company. Includes 200,000 shares Mr. Field may acquire upon the exercise of stock options approved by the Board and issued under the Company's Long-Term Incentive Plan.

(5) Director of the Company. Includes 475,000 shares Mr. Hohnke may acquire upon the exercise of stock options approved by the Board and issued under the Company's Long-Term Incentive Plan.

(6) Executive Chairman of the Board of the Company. Includes 458,325 shares Mr. Jordan may acquire upon the exercise of stock options approved by the Board and issued under the Company's Long-Term Incentive Plan and warrants.

(7) Independent director of the Company. Includes 136,667 shares Dr. Keith may acquire upon the exercise of stock options approved by the Board and issued under the Company's Long-Term Incentive Plan.

TABLE OF CONTENTS

- (8) Independent director of the Company. Includes (i) 39,892 shares and 5,192 shares issuable upon the exercise of February 2012 warrants held by Intersouth Affiliates V, L.P. ("AFF V"), which shares are indirectly held by Intersouth Associates V, LLC ("ISA V"), as general partner of AFF V, and each of the individual managing members of ISA V, (ii) 872,634 shares held by Intersouth Partners V, L.P. ("ISP V") and 113,616 shares issuable upon the exercise of February 2012 warrants, which shares are indirectly held by ISA V, as general partner of ISP V, and each of the individual managing members of ISA V, (iii) 912,527 shares and 19,458 shares issuable upon the exercise of February 2012 warrants held by Intersouth Partners VI, L.P. ("ISP VI"), which shares are indirectly held by Intersouth Associates VI, LLC ("ISA VI"), as general partner of ISP VI, and each of the individual managing members of ISA VI, and (iv) 912,527 shares and 148,662 shares issuable upon the exercise of February 2012 warrants held by Intersouth Partners VII, L.P. ("ISP VII"), which shares are indirectly held by Intersouth Associates VII, LLC ("ISA VII"), as general partner of ISP VII, and each of the individual managing members of ISA VII. The individual managing members of AFF V, ISA V, ISA VI and ISA VII are Mitch Mumma and Dennis Dougherty. Member Managers may share voting and dispositive power over the shares directly held by such entities. Dr. Kent is a member of ISA V, ISA VI and ISA VII, respectively; he is also the general partner of AFF V, ISP V, ISP VI and ISP VII, respectively. Mailing address for all affiliated entities is 406 Blackwell Street, Suite 200, Durham, NC 27701.
- (9) Chief Financial Officer of the Company. Includes 367,275 shares Mr. Maslan may acquire upon the exercise of stock options approved by the Board and issued under the Company's Long-Term Incentive Plan and warrants.
- (10) Independent director of the Company. Includes 333,334 shares Mr. McLoughlin may acquire upon the exercise of stock options approved by the Board and issued under the Company's Long-Term Incentive Plan and warrants.
- (11) Chief Executive Officer of the Company. Includes 17,922 shares of Common stock issuable in satisfaction of the commitment to exercise warrants on or before June 30, 2012, and 889,075 shares Mr. Rosendale may acquire upon the exercise of stock options approved by the Board and issued under the Company's Long-Term Incentive Plan and warrants.
- (12) Vice President of Operations of the Company. Includes 43,334 shares Mr. Vanek may acquire upon the exercise of stock options approved by the Board and issued under the Company's Long-Term Incentive Plan.
- (13) Independent director of the Company. Includes 136,667 shares Mr. Winzer may acquire upon the exercise of stock options approved by the Board and issued under the Company's Long-Term Incentive Plan.

There are no arrangements, known to the Company, including any pledge by any person of securities of the registrant, the operation of, which may, at a subsequent date, result in a change of control of the registrant.

ITEM 13. Certain Relationships and Related Transactions, and Director Independence

In 2011, the Company did not enter into any related party transactions exceeding \$120,000.

Review and Approval Policies and Procedures for Related Party Transactions

Pursuant to Board policy, the Company's executive officers and directors, and principal stockholders, including their immediate family members and affiliates, are not permitted to enter into a related party transaction without the prior consent of the Audit Committee. Any request for such related party transaction with an executive officer, director, principal stockholder, or any of such persons' immediate family members or affiliates, in which the amount involved exceeds \$120,000 must first be presented to the Audit Committee for review, consideration and approval. All of the Company's directors, executive officers and employees are required to report to the Audit Committee any such related party transaction. In approving or rejecting the proposed agreement, the Audit Committee will consider the relevant facts and circumstances available and deemed relevant to the Audit Committee which will approve only those agreements that, in light of known circumstances, are in, or are not inconsistent with, the Company's best interests, as the Audit Committee determines in the good faith exercise of its discretion.

Director Independence

Following the changes to the Board size and composition discussed in Item 10 of this Annual Report, our Board currently consists of the following members: Stephen Keith, James Benson, Mark McLoughlin, David Jordan (Chairman), Richard Kent, Joseph Del Guercio, Lyle Hohnke, Martin Rosendale and Eric Winzer.

TABLE OF CONTENTS

Following our transition from the NYSE Amex onto the OTC Bulletin Board, we are no longer subject to the requirements of the NYSE Amex Company Guide and, particularly, the “independence” standards set forth in the Company Guide. However, we elect to apply the same standard in determining the “independence” status of its Board and Board committee members. Each of these directors is independent as defined by the listing standards of the NYSE Amex Company Guide, with the exception of Messrs. Rosendale, Jorden and Hohnke. None of these individuals serve on the Audit, Nominating and Governance, or Compensation Committees. The Board based its independent determinations primarily on a review of the responses of the directors and executive officers to questions regarding employment and transaction history, affiliations and family and other relationships and on discussions with the directors. Except as otherwise disclosed elsewhere in this report, none of our directors engages in any transaction, relationship, or arrangement contemplated under section 404(a) of Regulation S-K.

ITEM 14. Principal Accounting Fees and Services

In April 2011, we dismissed PricewaterhouseCoopers LLP (“PwC”) as our independent registered public accounting firm and engaged, upon the Audit Committee’s approval, the services of Stegman & Company (“Stegman”) as the Company’s new independent registered public accounting firm to audit the Company’s consolidated financial statements as of December 31, 2011 and for the year then ended. Stegman also performed a review of the unaudited condensed consolidated quarterly financial statements to be included in the Company’s quarterly reports on Form 10-Q, which review included financial quarters beginning with the quarter ending March 31, 2011. The decision to change accountants was approved by the Audit Committee of the Board. The Company filed a Current Report on Form 8-K, including, among other things, PwC’s letter relating to the Company’s disclosures, to disclose the foregoing auditor change with the SEC in April 2011.

The following table presents fees for professional services rendered by Stegman & Company for the fiscal year 2011 and PricewaterhouseCoopers, LLP for the fiscal year 2010:

Services Performed	2011	2010
Audit fees ⁽¹⁾	\$ 164,000	\$ 500,500
Audit-related fees ⁽²⁾	—	15,000
Tax fees ⁽³⁾	25,000	26,500
All other fees ⁽⁴⁾	—	—
Total Fees	\$ 189,000	\$ 542,000

(1) Audit fees represent fees billed for professional services provided in connection with the audit of the Company’s annual financial statements, reviews of its quarterly financial statements, and audit services provided in connection with statutory and regulatory filings for those years.

(2) Audit-related fees represent fees billed primarily for assurance and related services not reported under Audit fees.

(3) Tax fees principally represent fees billed for tax preparation, tax advice and tax planning services.

(4) All other fees principally would include fees billed for products and services provided by the accountant, other than the services reported under the three captions above.

Pursuant to its charter, the Audit Committee must pre-approve audit services and permitted non-audit services (including the fees and terms thereof) to be performed for the Company by its independent auditor. In 2011 and 2010, all such services were pre-approved by the Audit Committee.

Audit Committee Pre-Approval Policies and Procedures

The Audit Committee has the sole authority to pre-approve all audit and non-audit services provided by independent accountants. The Audit Committee has adopted policies and procedures for the pre-approval of services provided by the independent accountants. The Audit Committee, on an annual basis, reviews audit and non-audit services performed by the independent accountants. All audit and non-audit services are pre-approved by the Audit Committee, which considers, among other things, the possible effect of the performance of such services on the accountants’ independence. All requests for services to be provided by the independent accountants, which must include a description of the services to be rendered and the amount of corresponding fees, are submitted to the Chief Financial Officer. The CFO has the authority to authorize services that fall within the category of services that the Audit Committee has pre-approved. If there is any

TABLE OF CONTENTS

question as to whether a request for services falls within the category of services that the Audit Committee has pre-approved, the CFO will consult with the chairman of the Audit Committee. The CFO submits requests or applications to provide services that the Audit Committee has not pre-approved, which must include an affirmation by the CFO and the independent accountants, that the request or application is consistent with the SEC's rules on auditor independence, to the Audit Committee (or its chairman or any of its other members pursuant to delegated authority) for approval.

As permitted under the Sarbanes-Oxley Act of 2002, the Audit Committee may delegate pre-approval authority to one or more of its members. Any service pre-approved by a delegate must be reported to the Audit Committee at the next scheduled quarterly meeting. The Audit Committee considered whether the provision of the auditors' services, other than for the annual audit and quarterly reviews, is compatible with its independence and concluded that it is compatible.

[TABLE OF CONTENTS](#)

PART IV

ITEM 15. Exhibits and Financial Statement Schedules

(a) Financial Statements

The following financial statements of Cytomedix, Inc. are included in ITEM 8:

	Page
Report of Independent Registered Public Accounting Firm	33
Consolidated Balance Sheets	34
Consolidated Statements of Operations	35
Consolidated Statements of Stockholders' Equity	36
Consolidated Statements of Cash Flows	38
Notes to Consolidated Financial Statements	39

(b) Exhibits

For a list of exhibits filed with this Form 10-K, refer to the Exhibit Index beginning on page [89](#).

SIGNATURES

In accordance with Section 13 or 15(d) of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CYTOMEDIX, INC.

By: /s/ Martin P. Rosendale

Martin P. Rosendale
Chief Executive Officer and Director
(Principal Executive Officer)

Date: March 29, 2012

In accordance with the Exchange Act, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By: /s/ Martin P. Rosendale

Martin P. Rosendale
Chief Executive Officer and Director

Date: March 29, 2012

/s/ Andrew S. Maslan

Andrew S. Maslan
Chief Financial Officer
(Principal Financial and Accounting Officer)

Date: March 29, 2012

/s/ James S. Benson

James S. Benson
Principal Director

Date: March 29, 2012

/s/ David E. Jorden

David E. Jorden
Executive Chairman of the Board

Date: March 29, 2012

/s/ Stephen N. Keith

Stephen N. Keith
Director

Date: March 29, 2012

/s/ Mark T. McLoughlin

Mark T. McLoughlin
Director

Date: March 29, 2012

/s/ C. Eric Winzer

C. Eric Winzer
Director

Date: March 29, 2012

/s/ Richard S. Kent

Richard S. Kent
Director

Date: March 29, 2012

[TABLE OF CONTENTS](#)

/s/ Lyle Hohnke

Lyle Hohnke

Director

Date: March 29, 2012

/s/ Joseph Del Guercio

Joseph Del Guercio

Director

Date: March 29, 2012

Signed originals of this written statement have been provided to Cytomedix, Inc. and will be retained by Cytomedix, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT INDEX

Number	Exhibit Table
2.1	First Amended Plan of Reorganization with All Technical Amendments (previously filed on June 28, 2002, as exhibit to Current Report on Form 8-K, File No. 000-28443, and incorporated by reference herein).
2.2	Amended and Restated Official Exhibits to the First Amended Plan of Reorganization of Cytomedix, Inc. with All Technical Amendments (previously filed on May 10, 2004, as exhibit to Form 10-QSB for the quarter ended March 31, 2004, File No. 000-28443, and incorporated by reference herein).
2.3	Asset Purchase Agreement by and among Sorin Group USA, Inc., Cytomedix Acquisition Company and Cytomedix, Inc, dated as of April 9, 2010 (previously filed on April 12, 2010 as exhibit to the Current Report on Form 8-K, File no. 001-32518, and incorporated by reference herein).
3(i)	Restated Certificate of Incorporation of Cytomedix, Inc. (previously filed on November 7, 2002, as exhibit to Form 10-QSB for quarter ended June 30, 2001, File No. 000-28443, and incorporated by reference herein).
3(i)(1)	Amendment to Restated Certificate of Incorporation of Cytomedix, Inc. (previously filed on November 15, 2004, as exhibit to Form 10-QSB for quarter ended September 30, 2004, File No. 000-28443, and incorporated by reference herein).
3(i)(2)	Certificate of Amendment to the Certificate of Incorporation (previously filed on July 1, 2010 as exhibit to the Current Report on Form 8-K, File no. 001-32518, and incorporated by reference herein).
3(ii)	Restated Bylaws of Cytomedix, Inc. (previously filed on November 7, 2002, as exhibit to Form 10-QSB for quarter ended June 30, 2001, File No. 000-28443, and incorporated by reference herein).
4.1	Amended and Restated Certificate of Designation of the Relative Rights and Preferences of Series A Preferred, Series B Preferred and Common stock of Cytomedix, Inc. (previously filed on March 31, 2004, as exhibit to Form 10-KSB for year ended December 31, 2003, File No. 000-28443, and incorporated by reference herein).
4.2	Form of Class A Warrant issued to New Investors and DIP Lenders (previously filed on December 5, 2002, as exhibit to Form 10-QSB for quarter ended September 30, 2001, File No. 000-28443, and incorporated by reference herein).
4.3	Form of Class B Warrant issued to New Investors and DIP Lenders (previously filed on December 5, 2002, as exhibit to Form 10-QSB for quarter ended September 30, 2001, File No. 000-28443, and incorporated by reference herein).
4.4	Form of Series C-1 Warrant to Purchase Shares of Common stock of Cytomedix, Inc. (previously filed on March 29, 2004 as exhibit to Current Report on Form 8-K, File No. 000-28443, and incorporated by reference herein.)
4.5	Form of Series C-2 Warrant to Purchase Shares of Common stock of Cytomedix, Inc. (previously filed on March 29, 2004 as exhibit to Current Report on Form 8-K, File No. 000-28443, and incorporated by reference herein).
4.6	Certificate of Designation of the Relative Rights and Preferences of the Series C Convertible Stock of Cytomedix, Inc. as filed with the Delaware Secretary of State on March 25, 2004 (previously filed on March 29, 2004 as exhibit to Current Report on Form 8-K, File No. 000-28443, and incorporated by reference herein).
4.7	Form of warrant issued to investors in the 2004 Unit Offering (previously filed on May 11, 2004, as exhibit to the registration statement on Form SB-2, File No. 333-115364, and incorporated by reference herein).

TABLE OF CONTENTS

<u>Number</u>	<u>Exhibit Table</u>
4.8	Form of Class D Warrant to Purchase Shares of Common stock of Cytomedix, Inc. (previously filed on May 2, 2005, as exhibit to Current Report on Form 8-K, File No. 001-32518, and incorporated by reference herein).
4.9	Form of Registration Rights Agreement between Cytomedix, Inc., and Class D Warrant holders (previously filed on May 2, 2005, as exhibit to Current Report on Form 8-K, File No. 001-32518, and incorporated by reference herein).
4.10	Form of Warrant (previously filed on April 12, 2010 as exhibit to the Current Report on Form 8-K, File no. 001-32518, and incorporated by reference herein).
4.11	Certificate of Designation, Relative Rights and Preferences of the 10% Series D Convertible Preferred Stock (previously filed on April 12, 2010 as exhibit to the Current Report on Form 8-K, File no. 001-32518, and incorporated by reference herein).
4.12	Form of Warrant (previously filed on October 8, 2010 as exhibit to the Current Report on Form 8-K, File No. 001-32518, and incorporated by reference herein).
10.1	Royalty Agreement, dated as of December 26, 2000, by and between Cytomedix, Inc. and Curative Health Services, Inc. (previously filed on January 17, 2001, as exhibit to Current Report on Form 8-K, File No. 000-28443, and incorporated by reference herein).
10.2	First Amendment to Royalty Agreement, dated as of April 20, 2001, by and between Cytomedix, Inc. and Curative Health Services, Inc. (previously filed on May 25, 2001, as exhibit to the registration statement on Form SB-2/A, File No. 333-55818, and incorporated by reference herein).
10.3	Second Amendment to Royalty Agreement, dated as of December 5, 2002, by and between Cytomedix, Inc. and Curative Health Services, Inc. (previously filed on March 31, 2003, as exhibit to Form 10-KSB for year ended December 31, 2002, File No. 000-28443, and incorporated by reference herein).
10.4	Cytomedix, Inc. Long-Term Incentive Plan.*
10.5	License Agreement dated March 21, 2001, by and between Cytomedix, Inc. and DePuy AcroMed, Inc. (previously filed on April 16, 2001, as exhibit to Form 10-KSB for year ended December 31, 2000, File No. 000-28443, and incorporated by reference herein).
10.6	Amendment dated March 3, 2005, to the License Agreement by and between Cytomedix, Inc. and DePuy Spine, Inc. (f/k/a DePuy Acromed, Inc.) (previously filed on March 31, 2005, as exhibit to Form 10-KSB for year ended December 31, 2004, File No. 000-28443, and incorporated by reference herein).
10.7	Second License Agreement dated March 3, 2005, to the License Agreement by and between Cytomedix, Inc. and DePuy Spine, Inc. (f/k/a DePuy Acromed, Inc.) (previously filed on March 31, 2005, as exhibit to Form 10-KSB for year ended December 31, 2004, File No. 000-28443, and incorporated by reference herein).
10.8	Settlement and License Agreement dated May 1, 2005 by and between Cytomedix, Inc. and Medtronic, Inc. (previously filed on May 10, 2005, as exhibit to Current Report on Form 8-K, File No. 000-28443, and incorporated by reference herein).
10.9	Settlement Agreement and License Agreement dated May 23, 2005, by and between Cytomedix, Inc., and Harvest Technologies Corporation (previously filed on May 27, 2005, as exhibit to Current Report on Form 8-K, File No. 000-28443, and incorporated by reference herein).
10.10	Settlement and License Agreement dated June 26, 2005, by and between Cytomedix, Inc., and Perfusion Partners and Associates Inc. (previously filed on August 15, 2005, as exhibit to Form 10-QSB for the quarter ended June 20, 2005, File No. 000-28443, and incorporated by reference herein).

TABLE OF CONTENTS

<u>Number</u>	<u>Exhibit Table</u>
10.11	License Agreement dated October 7, 2005, by and between Cytomedix, Inc., and COBE Cardiovascular, Inc. (previously filed on October 11, 2005, as exhibit to Current Report on Form 8-K, File No. 000-28443, and incorporated by reference herein).
10.12	Settlement and License Agreement dated October 12, 2005, by and between Cytomedix, Inc., and SafeBlood Technologies, Inc. (previously filed on November 9, 2005, as exhibit to Form 10-QSB, File No. 000-28443, and incorporated by reference herein).
10.13	Employment Agreement with Ms. Carelyn P. Fyelling (previously filed on December 5, 2002, as exhibit to Form 10-QSB for quarter ended September 30, 2001, File No. 000-28443, and incorporated by reference herein).*
10.14	Employment Agreement with Kshitij Mohan, Ph.D., dated April 20, 2004 (previously filed on May 7, 2004, on Current Report on Form 8-K, File No. 00028443, and incorporated by reference herein).*
10.15	Termination Agreement between Cytomedix, Inc., and Kshitij Mohan, dated April 20, 2004 (previously filed on May 7, 2004, as exhibit to Current Report on Form 8-K, File No. 000-28443, and incorporated by reference herein).*
10.16	Employment Agreement dated June 3, 2005, by and between Cytomedix, Inc., and Andrew Maslan (previously filed on June 20, 2005, as exhibit to Current Report on Form 8-K, File No. 000-28443, and incorporated by reference herein).*
10.17	Distributor Agreement dated October 31, 2005 by and between Cytomedix, Inc. and National Wound Therapies, LLC. (previously filed on March 23, 2006, as exhibit to Form 10-KSB, File No. 001-32518, and incorporated by reference herein).
10.18	Settlement and License Agreement dated May 19, 2006, between Cytomedix, Inc., and Biomet Biologics, Inc. (previously filed on August 9, 2006, as exhibit to Form 10-Q, File No. 001-32518, and incorporated by reference herein).
10.19	First Addendum to Letter Agreement dated October 4, 2006, between Cytomedix, Inc., and Andrew Maslan (previously filed on November 1, 2006 as exhibit to Form 10-Q, File No. 001-32518, and incorporated by reference herein).*
10.20	License Agreement between Cytomedix, Inc., and Smith & Nephew, Inc. (previously filed on October 15, 2007 as exhibit to Current Report on Form 8-K, File No 001-32518, and incorporated by reference herein).
10.21	First Amendment to Employment Agreement by and between the Company and Kshitij Mohan (previously filed on January 29, 2008 as exhibit to Current Report on Form 8-K, File No. 001-32518, and incorporated by reference herein).*
10.22	Letter Agreement by and between the Company and Martin Rosendale, dated as of March 14, 2008 (previously filed on March 17, 2008 as exhibit to Current Report on Form 8-K, File No. 001-32518, and incorporated by reference herein, and incorporated by reference herein).*
10.23	Kshitij Mohan Termination and Consulting Agreement (previously filed on June 10, 2008 as exhibit to Current Report on Form 8-K, File No. 001-32518, and incorporated by reference herein, and incorporated by reference herein, and incorporated by reference herein).*
10.24	Form of Securities Purchase Agreement (previously filed on August 26, 2008 as exhibit to Current Report on Form 8-K, File No. 001-32518, and incorporated by reference herein, and incorporated by reference herein).
10.25	Form Warrant (previously filed on August 12, 2009 as exhibit to Current Report on Form 8-K, File No. 001-32518, and incorporated by reference herein, and incorporated by reference herein).
10.26	Form Securities Purchase Agreement (previously filed on August 12, 2009 as exhibit to Current Report on Form 8-K, File No. 001-32518, and incorporated by reference herein).

TABLE OF CONTENTS

<u>Number</u>	<u>Exhibit Table</u>
10.27	Form of Transition Agreement, dated as of April 9, 2010 (previously filed on April 12, 2010 as exhibit to the Current Report on Form 8-K, File no. 001-32518, and incorporated by reference herein).
10.28	Form of Asset Transfer and Assumption Agreement, dated as of April 9, 2010 (previously filed on April 12, 2010 as exhibit to the Current Report on Form 8-K, File no. 001-32518, and incorporated by reference herein).
10.29	Form of Subscription Agreement (previously filed on April 12, 2010 as exhibit to the Current Report on Form 8-K, File no. 001-32518, and incorporated by reference herein).
10.30	Form of Registration Rights Agreement (previously filed on April 12, 2010 as exhibit to the Current Report on Form 8-K, File no. 001-32518, and incorporated by reference herein).
10.31	Form of Promissory Note (previously filed on April 12, 2010 as exhibit to the Current Report on Form 8-K, File no. 001-32518, and incorporated by reference herein).
10.32	Flex Space Office Lease by and between Cytomedix, Inc. and Saul Holdings Limited Partnership, dated as of May 19, 2010 (previously filed on August 16, 2010, as exhibit to Form 10-Q for quarter ended June 30, 2010, File No. 001-32518, and incorporated by reference herein).
10.33	Form of the Purchase Agreement (previously filed on October 8, 2010 as exhibit to the Current Report on Form 8-K, File No. 001-32518, and incorporated by reference herein).
10.34	Form of the Registration Rights Agreement (previously filed on October 8, 2010 as exhibit to the Current Report on Form 8-K, File No. 001-32518, and incorporated by reference herein).
10.35	Form of the Securities Purchase Agreement (previously filed on October 8, 2010 as exhibit to the Current Report on Form 8-K, File No. 001-32518, and incorporated by reference herein).
10.36	Form of the Lincoln Purchase Agreement (previously filed on October 8, 2010 as exhibit to the Current Report on Form 8-K, File No. 001-32518, and incorporated by reference herein).
10.37	Form of Settlement Agreement dated as of April 28, 2011 (previously filed on May 16, 2011 as exhibit to the Company's Quarterly Report on Form 10-Q, File No. 001-32518, and incorporated by reference herein).
10.38	Form of Subscription Agreement (previously filed on May 16, 2011 as exhibit to the Company's Quarterly Report on Form 10-Q, File No. 001-32518, and incorporated by reference herein).
10.39	Form of Promissory Note dated as of April 28, 2011 (previously filed on May 16, 2011 as exhibit to the Quarterly Report on Form 10-Q, File No. 001-32518, and incorporated by reference herein).
10.40	JMJ Promissory Note dated July 15, 2011 (previously filed on August 15, 2011 as exhibit to the Quarterly Report on Form 10-Q, File No. 001-32518, and incorporated by reference herein).
10.41	JMJ Letter Agreement and Additional Default Provisions dated July 14, 2011 (previously filed on August 15, 2011 as exhibit to the Quarterly Report on Form 10-Q, File No. 001-32518, and incorporated by reference herein).
10.42	JMJ Collateralized Note dated July 15, 2011 (previously filed on August 15, 2011 as exhibit to the Quarterly Report on Form 10-Q, File No. 001-32518, and incorporated by reference herein).
21.1	Subsidiaries of the Company
23.1	Consent of PricewaterhouseCoopers, LLP.
23.2	Consent of Stegman & Company
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certificate of Chief Executive Officer pursuant to 18 U.S.C.ss.1350.
32.2	Certificate of Chief Financial Officer pursuant to 18 U.S.C.ss.1350.

TABLE OF CONTENTS

Number	Exhibit Table
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

* Indicates a management contract or compensatory plan or arrangement.

SUBSIDIARIES OF THE COMPANY

The following is a list of subsidiaries of the Company as of December 31, 2011.

<u>NAME</u>	<u>WHERE INCORPORATED</u>
Cytomedix Acquisition Company, LLC	Delaware

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-162135) of Cytomedix, Inc. of our report dated March 30, 2011 relating to the financial statements, which appears in this Annual Report on Form 10-K.

/s/ PricewaterhouseCoopers LLP

Baltimore, Maryland

March 29, 2012

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-3 (No. 333-168936) and the Registration Statement on Forms S-8 (Nos. 333-120141 and 333-162135) of Cytomedix, Inc. of our report dated March 26, 2012 relating to the financial statements, which appears in this Annual Report on Form 10-K.

/s/ Stegman & Company

Baltimore, Maryland
March 29, 2012

CERTIFICATION

I, Martin P. Rosendale, certify that:

1. I have reviewed this Form 10-K of Cytomedix, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 29, 2012

/s/ Martin P. Rosendale

Martin

P. Rosendale, Chief Executive Officer

A signed original of this written statement has been provided to Cytomedix, Inc. and will be retained by Cytomedix, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

CERTIFICATION

I, Andrew S. Maslan, certify that:

1. I have reviewed this Form 10-K of Cytomedix, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 29, 2012

/s/ Andrew S. Maslan

Andrew

S. Maslan, Chief Financial Officer

A signed original of this written statement has been provided to Cytomedix, Inc. and will be retained by Cytomedix, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. §1350**

Pursuant to 18 U.S.C. §1350 and in connection with the Annual Report on Form 10-K of Cytomedix, Inc. (the "Company") for the fiscal year ended December 31, 2011 (the "Report"), I, Martin P. Rosendale, Chief Executive Officer of the Company, hereby certify that to the best of my knowledge and belief:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934;
and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company for said period.

Date: March 29, 2012

/s/ Martin P. Rosendale
Martin P. Rosendale
Chief Executive Officer

A signed original of this written statement has been provided to Cytomedix, Inc. and will be retained by Cytomedix, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

**CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. §1350**

Pursuant to 18 U.S.C. §1350 and in connection with the Annual Report on Form 10-K of Cytomedix, Inc. (the "Company") for the fiscal year ended December 31, 2011 (the "Report"), I, Andrew S. Maslan, Chief Financial Officer of the Company, hereby certify that to the best of my knowledge and belief:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934;
and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company for said period.

Date: March 29, 2012

/s/ Andrew S. Maslan _____

Andrew S. Maslan
Chief Financial Officer

A signed original of this written statement has been provided to Cytomedix, Inc. and will be retained by Cytomedix, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.
