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CARDIUM ANNOUNCES COMMERCIAL DEVELOPMENT OF EXCELLAGEN™
A CUSTOMIZED COLLAGEN-BASED TOPICAL GEL FOR INITIAL USE AS AN ADJUNCT TO
SURGICAL DEBRIDEMENT IN PATIENTS WITH DIABETIC FOOT ULCERS

***Important Clinical Findings Provide New Therapeutic Insights into Healing Potential
of Cardium's Matrix Technology Platform***

SAN DIEGO, CA – October 14, 2009 – Cardium Therapeutics (NYSE Amex: CXM) today announced plans for the commercial development of a new product candidate Excellagen™, a collagen-based topical gel for use by physicians in conjunction with surgical debridement of wounds in patients with chronic or non-chronic diabetic foot ulcers. This new product opportunity is based on clinical study findings reported today from the Excellerate™ Phase 2b clinical study. As reported, Cardium's customized collagen formulation (Excellagen, the matrix component of Excellerate), which has been modified to include structural stabilizers and hydrolytic enzyme inhibitors, appears to substantially promote the healing process of neuropathic diabetic foot ulcers when used as an adjunct to standard of care (including surgical debridement).

Both Excellagen and Excellerate appear to be safe and well tolerated in human patients. As reported in connection with the Phase 2b clinical study, there were no substantial differences observed with respect to adverse events, clinical laboratory results, physical exam findings or immunological antibody responses to either collagen or to the adenovector in patients receiving either one or two doses of product, as compared to each other or to standard of care.

Collagen formulations have been registered as medical devices with FDA 510(k) clearances in the U.S. and with analogous clearances in many other countries. Collagen is broadly used as a dermal filler and in certain reconstructive surgery applications. Cardium's Excellagen formulation has also been used in two human clinical studies for wound repair (as the collagen matrix component of Excellerate). Excellagen is believed to provide a physical and biological substrate conducive to cell migration and proliferation at the wound site, which are believed to be important for promoting robust wound repair responses. In the context of wound healing, the Company believes that its Excellagen formulation has certain advantages over other forms of collagen and may provide an important adjunct to surgical debridement, which is an essential component of standard care for all diabetic foot ulcers. Debridement removes dead or damaged tissue in and around the wound site and is known to promote wound healing. Cardium believes that Excellagen applied to a debrided wound provides a scaffold that can then promote and support the influx of repair cells in the wound bed.

Cardium's Excellerate product candidate comprises not only the collagen matrix but an adenovector encoding PDGF-B protein. PDGF-B is believed to promote wound healing by directly stimulating cells involved in wound repair and also by eliciting the production of other growth factors. Excellerate is being developed to provide advanced wound care for chronic non-healing diabetic foot ulcers, which are difficult to heal with standard of care and are associated with substantial risks of infection or amputation.

The Phase 2b Matrix clinical study was not powered to nor did it differentiate between the relative contributions of the individual Ad5PDGF-B and collagen components that make up Excellerate – but both the Excellerate and the collagen matrix study arms showed substantial improvements in achieving wound closure as compared to standard of care, which is the FDA-accepted control considered appropriate for product registration studies. Approximately 45% of patients receiving the collagen matrix in the Phase 2b study had complete wound closure by 12 weeks, compared to a 31% wound closure rate for the standard of care group. Based on the Company's clinical studies to date, Cardium will consider submitting an application for FDA 510(k) clearance of Excellagen for use in wound healing applications.

In addition to Excellagen (which would be advanced using a 510(k) registration pathway) and Excellerate (which is expected to proceed to a Phase 3 clinical study for non-healing diabetic foot ulcers), Cardium's formulation know-how and the unique properties of Excellagen are expected to enable additional new product opportunities by incorporating other agents including peptides, DNA or other biologics designed to address particular wound healing and other tissue repair applications.

Webcast and Conference Call

The Company will hold a webcast and conference call to discuss the clinical results of the Excellerate Matrix Phase 2b clinical study today, October 14, 2009, at 5:00 p.m. ET. Participants can access the live conference call by dialing 800-259-0251 (U.S.) or 617-614-3671 (International) using the conference passcode 98344451. The call and accompanying slides can also be accessed via the webcast through the Company's website at <http://phx.corporate-ir.net/phoenix.zhtml?c=77949&p=irol-calendar>. If you are unable to attend the webcast, a replay of the conference call will be available approximately two hours after the conclusion of the call by dialing 888-286-8010 (U.S.) or 617-801-6888 (International) using passcode 68300091. The webcast will be archived for 90 days.

Gene Activated Matrix Technology Platform

Cardium's proprietary Gene Activated Matrix™ technology platform is designed to provide a therapeutic level of protein synthesis at a specific site in the body and can be used in soft tissue such as skin, ligament, tendons and cartilage, as well as in hard tissue such as bone. The technology is distinctive in that it is immobilized gene delivery that allows for gene uptake restricted to the application site. The Gene Activated Matrix comprises any biocompatible matrix containing a gene or DNA vector encoding for a growth factor or any therapeutic protein. The technology allows for a broad spectrum of formulations and the use of any biocompatible matrix, natural or synthetic, which would include, but not be limited to, collagen, de-mineralized bone, allograft and other synthetic graft materials.

The Company's studies have shown that proliferative cells migrate into the Gene Activated Matrix and then take up the immobilized gene resulting in localized and sustained production of small but physiologically active quantities of growth factor proteins or other therapeutic proteins based on the protein-producing DNA of choice. Compared with current protein therapy, which may

be limited due to the inherently short half-life of proteins, the Company believes that the localized and sustained production of therapeutically significant concentrations of DNA-driven proteins at the delivery site can significantly enhance the stimulation of localized therapeutic processes such as tissue repair.

Wound Care Applications and Pharmacoeconomics

The Matrix clinical development program is focused on developing new and innovative ways to enhance the treatment of diabetic foot ulcers, which affect about 15% of the almost 24 million diabetic patients in the United States, or 3.6 million people. Each year, over 800,000 patients in the U.S. develop diabetic foot ulcers. Of these patients, 6 percent will be hospitalized due to infection or other ulcer-related complications. The cost of diabetic ulcers to the U.S. healthcare system is approximately \$5 billion per year with treatment and subsequent lower limb amputations adding an additional \$1 billion per year. Diabetes is the leading cause of non-traumatic lower extremity amputations and approximately 14 to 24 percent of patients with diabetes who develop foot ulcers eventually have an amputation. The three year survival rate after amputation is only 50 percent.

As reported in the *Journal of the American Academy of Physician Assistants* (JAAPA, August 2009), chronic wounds affect an estimated 5.7 million patients in the U.S. and cost the healthcare system approximately \$20 billion annually. The article's author further notes that optimal wound care requires a portfolio of treatments including the only FDA-approved protein-based topical gel becaplermin (PDGF-B protein), bioengineered skin substitutes, hyperbaric oxygen therapy, and subatmospheric wound therapy (also known as negative-pressure wound therapy), as well as institutional support from the growing number of nationwide wound-care centers that offer specialized, multidisciplinary approaches to the treatment of chronic wounds. The author also reports that the cost of treating non-healing ulcers of longer than one year's duration is estimated to range from approximately \$20,000 to \$27,000, based on the level of advanced care.

As reported in the *International Wound Journal* (December, 2007), "one of the most feared complications of diabetes is the lower extremity amputation." Other studies report that diabetes is the leading cause of nontraumatic lower extremity amputations in the U.S., amounting to greater than 75,000 per year or over 200 per day. Limb amputation occurs 10 to 30 times more often in a diabetic person than in the general population. Among patients with lower extremity amputation procedures, 5-17% will die during the operation and 2-30% will die within 30 days of surgery. Longer term survival is even worse. Mortality following amputation ranges from 13-40% at one year, 35-65% at 3 years and 39-80% at 5 years. These mortality rates are worse than many common types of cancer. Despite these grim statistics, many remain unaware of the very serious nature of non-healing diabetic ulcers.

Cardium Orthobiologics Initiative

Cardium recently announced its plans to develop a DNA-based orthobiologics product portfolio based on research and development that will initially focus on non-union bone fractures for medically-compromised patients, and spinal fusions for patients with degenerative disc disease. Orthobiologics is a rapidly growing segment of the orthopedics market and represents biologically-active products designed to enhance musculo-skeletal repair and regeneration. The initial orthobiologics focus will be on the development of Osteorate™, a DNA-based non-surgical injectable bone graft gel to repair bone fractures and regenerate tissue in certain medically-compromised patient populations. Osteorate will be based on a reformulation of the Excellerate wound healing product candidate. The Gene Activated Matrix technology allows for a broad

spectrum of formulations which would include, but not be limited to, collagen, demineralized bone matrices, allograft and synthetic graft materials.

In addition, Cardium recently announced the results of preclinical research published in the scientific journal, *Gene Therapy*, demonstrating the potential benefits of its Gene Activated Matrix technology for accelerating and enhancing periodontal tissue repair and oral implant osseointegration. This research further supports Cardium's decision to expand the Company's focus of its regenerative medicine technologies to include the emerging new high growth market segment of orthobiologics.

About Cardium

Cardium is focused on the acquisition and strategic development of new and innovative biomedical product opportunities and businesses that have the potential to address significant unmet medical needs and definable pathways to commercialization, partnering and other economic monetizations. Cardium's investment portfolio includes the Tissue Repair Company and Cardium Biologics, medical technology companies primarily focused on the development of innovative therapeutic products for wound healing, bone repair, and cardiovascular indications. In July 2009, Cardium completed the sale of its InnerCool Therapies medical device business to Royal Philips Electronics, the first asset monetization from the Company's biomedical investment portfolio. News from Cardium is located at www.cardiumthx.com.

Forward-Looking Statements

Except for statements of historical fact, the matters discussed in this press release are forward looking and reflect numerous assumptions and involve a variety of risks and uncertainties, many of which are beyond our control and may cause actual results to differ materially from stated expectations. For example, there can be no assurance that Excellagen, Excellerate or our other candidates will prove to be sufficiently safe and effective, or that results or trends observed in one clinical study or procedure will be reproduced in subsequent studies or procedures, or that clinical studies even if successful will lead to product advancement or partnering; that the Excellagen or Excellerate product candidate offers the potential for simpler or more cost-effective treatment for physicians and patients than other FDA-approved products that currently are or will be on the market; that the Matrix clinical study program or other human clinical trials can be conducted and completed in an efficient and successful manner; that we can develop a DNA-based orthobiologics product portfolio; that our products or product candidates will not be unfavorably compared to competitive products that may be regarded as safer, more effective, easier to use or less expensive; that FDA or other regulatory clearances or other certifications, or other commercialization efforts will be successful or will effectively enhance our businesses or their market value; that our products or product candidates will prove to be sufficiently safe and effective after introduction into a broader patient population; or that third parties on whom we depend will perform as anticipated.

Actual results may also differ substantially from those described in or contemplated by this press release due to risks and uncertainties that exist in our operations and business environment, including, without limitation, risks and uncertainties that are inherent in the development of complex biologics and in the conduct of human clinical trials, including the timing, costs and outcomes of such trials, our ability to obtain necessary funding, regulatory approvals and expected qualifications, our dependence upon proprietary technology, our history of operating losses and accumulated deficits, our reliance on collaborative relationships and critical personnel, and current and future competition, as well as other risks described from time to time in filings we make with the Securities and Exchange Commission. We undertake no obligation to release publicly the

results of any revisions to these forward-looking statements to reflect events or circumstances arising after the date hereof.

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