



## **Peer-reviewed Publication on the use of Grafix® in High-Risk Peripheral Arterial Disease Patients with Treatment Refractory Ulcerations Demonstrating Durable Wound Closure**

**COLUMBIA, MARYLAND – November 22, 2016** - Osiris Therapeutics, Inc. (NASDAQ: OSIR) announced today that a new peer-reviewed manuscript by physician and surgeon Jonathan Smedley, DPM, FACFAS, entitled “Wound Closure in Smoking Peripheral Arterial Disease Patients with Treatment Refractory Ulcerations: A 12-month Follow-up Case Series,” has been published in the *International Journal of Lower Extremity Wounds* and is available [on-line](#).

A 1-year, single-center effectiveness review was conducted on the clinical outcomes in actively smoking peripheral arterial disease (PAD) patients treated with Grafix® for use in the treatment of refractory lower extremity ulcerations. Wound types included chronic ischemic and neuroischemic ulcerations and wounds of mixed venous and arterial etiology. Wounds were characterized by an average size of 4.6 cm<sup>2</sup> and a previous duration of 53 weeks with a failure to respond to standard of care and other advanced treatment measures. Eighty percent of the patients were diabetic. Daily cigarette consumption for the patients ranged from ½ pack to > 1 pack per day, and the mean ankle brachial index for the group was 0.7. More than half of the patients were not candidates for revascularization procedures.

### **Study Outcomes:**

- All wounds reached complete closure and remained closed at the 12-month follow up
- The mean time to closure was 7.8 weeks with a mean graft use of 7.0 grafts
- The mean 4-week percentage of wound area reduction was 69.4 %
- There were no adverse events attributed to the use of Grafix

“Patients often times present with a variety of comorbid conditions that pose challenges to wound care providers. Some refractory wounds persist despite long term multidisciplinary efforts to promote timely closure. Options such as Grafix allow us to pursue management of these lower extremity ulcerations to the point of resolution. This is extremely valuable, especially in the high-risk diabetic population,” said Dr. Smedley.

### **About Grafix**

Grafix is a cryopreserved placental membrane comprised of an extracellular matrix (ECM) rich in collagen, growth factors, and viable cells native to the tissue. Grafix is processed using Osiris' proprietary technology; it is flexible and conforming and designed for application directly to hard-to-treat acute and chronic wounds, including but not limited to diabetic foot ulcers, venous leg ulcers and thermal burns.



## **About Osiris Therapeutics**

Osiris Therapeutics, Inc., based in Columbia, Maryland, is a world leader in researching, developing, and marketing regenerative medicine products that improve health and lives of patients and lower overall healthcare costs. Having developed the world's first approved stem cell drug, the company continues to advance its research and development in biotechnology by focusing on innovation in regenerative medicine – including bioengineering, stem cell research and viable tissue based products. Osiris has achieved commercial success with products in orthopaedics, sports medicine and wound care, including BIO<sup>4</sup>™, Cartiform®, Grafix®, TruSkin™ and Stravix™. Osiris, Grafix, Cartiform, TruSkin and Stravix are registered trademarks of Osiris Therapeutics, Inc. BIO<sup>4</sup> is a trademark of Howmedica Osteonics Corp.. More information can be found on the company's website, [www.Osiris.com](http://www.Osiris.com). (OSIR-G)

## **Forward-Looking Statements**

This press release may contain forward-looking statements. These forward-looking statements may generally be identified by the use of the words "may," "will," "expects," "anticipates," "believes," "estimates," and similar expressions, and involve a number of risks and uncertainties. For a variety of reasons, actual results may differ materially from those described in or contemplated by any such forward-looking statement. Examples of forward-looking statements may include, without limitation, statements regarding the anticipated efficiencies and advantages of products or services. Consequently, the reader is cautioned to consider all forward-looking statements in light of the risks to which they are subject.

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