



Osiris Therapeutics to Present 29 Advanced Clinical and Scientific Abstracts, Including a Late-Breaking Abstract on its New Ambient Viable Tissue Preservation Technology

Experts to host a variety of presentations at Symposium on Advanced Wound Care and Wound Healing Society Spring Conference, April 5 – April 9, 2017, in San Diego, California

COLUMBIA, MARYLAND – April 4, 2017 (GLOBE NEWSWIRE) - [Osiris Therapeutics, Inc.](#) (Pink Sheets: OSIR), a leading regenerative medicine company focused on developing and marketing products for wound care, orthopedics, and sports medicine, will present advanced clinical and scientific research at the Symposium on Advanced Wound Care (SAWC) and Wound Healing Society (WHS) Spring Conference, the nation's largest interdisciplinary joint wound care event within the clinical field.

Osiris will be presenting a total of 29 abstracts, including 22 clinical studies and 7 scientific studies. The clinical studies demonstrate the positive outcomes of Osiris' placenta-based products, Grafix® and Stravix®. The scientific studies describe the characteristics and properties of placental tissues. Key presentations and events are highlighted below.

Dr. Eric Johnson, MD will be presenting a lecture entitled "A Comparative Outcomes Analysis Evaluating Clinical Effectiveness in Two Different Human Placental Membrane Products for Wound Management" on Thursday, April 6, at 12:00 pm. This is the first study summarizing clinical outcomes following use of two different human placental membranes for management of acute and chronic wounds at a single center. Results of this study are bridging the evidence gap between randomized clinical trials and broad daily clinical utilization by wound care providers to support product selection based on patient benefits.

Dr. Dane Wukich, MD and Dr. Katherine Raspovic, DPM will be presenting a CME lecture entitled "Clinical and Scientific Advances in the Use of Cryopreserved Placental Membranes" on Friday, April 7, at 10:30 am. The lecture overviews the science of viable placental membranes, their relevance in complex wounds and recently published clinical study results on the use of viable placental membranes in complex wounds with exposed bone and tendons. The lecture also discusses when and how to utilize viable placental membranes as an adjunct to good wound care.

Three scientific studies will be presented by Osiris scientists. A WHS Late Breaking Abstract (#H1.07), entitled, "Ambient Temperature Viable Amnion Processed via Novel Lyopreservation Method Retains Properties of Fresh Tissue" will be presented on Thursday, April 6, at the WHS Session H1 (Acute Wounds) at 4:15 pm. This podium presentation summarizes the results of *in vitro* and *in vivo* evaluation of viable lyopreserved amniotic membrane (VLAM) versus viable cryopreserved amniotic membrane (VCAM). VLAM was processed using a novel lyopreservation technology that allows for ambient storage of living cells and tissues. Data demonstrates that both VCAM and VLAM retain the structure, cell viability, and functional properties of fresh AM. However, VLAM is stored at ambient temperatures making VLAM more accessible for widespread use. Results will also be presented at the poster session on Friday, April 7, at 7:15 pm in Exhibit Hall A (Poster #P.LB16).

Another scientific study “Inhibition of Bacterial Growth by Human Cryopreserved Viable Amniotic Membrane Mediated by Soluble Antimicrobial Peptides” (#K4.01) will be presented at WHS Session K4 (Infection and Biofilms) on Friday, April 7, at 2:15pm. The study describes antimicrobial soluble factors released from human cryopreserved viable amniotic membranes. Several antimicrobial peptides were identified and their role against *Pseudomonas aeruginosa*, a common bacterium in chronic wounds, was evaluated. Results will be also presented at the poster session on Friday, April 7, at 7:15pm in Exhibit Hall A (Poster #P.IRD02). The WHS abstract review committee selected this study for the WHS Industrial Research & Development Poster Award Competition.

The scientific poster, “Phenotypic Characteristics of Cells Isolated from Human Amniotic and Chorionic Membranes” (#M1.04) will be presented at the WHS Session M (Rapid-Fire Poster Talks) on Friday, April 7, at 6:15 pm. This study shows that placental membranes contain a variety of stem cell types. Diversity of cells within placental membranes suggests that cell subpopulations may have different biological properties and therapeutic applications. Results will also be presented at the poster session on Friday, April 7, at 7:15 pm in Exhibit Hall A. The WHS abstract review committee selected this study for the WHS Industrial Research & Development Poster Award Competition.

The complete list of scientific and clinical abstracts includes:

- **WHS Late Breaking Abstract – selected for the podium and poster presentations**
“Ambient Temperature Viable Amnion Processed Via Novel Lyopreservation Method Retains Properties Of Fresh Tissue” (Oral Abstract #H1.07, WHS Session H1 (Acute Wounds), Thursday, April 6, 4:15pm, Poster #P.LB16)
- **WHS Abstract – selected for the podium presentation and WHS Industrial Research & Development Poster Award Competition**
“Inhibition of Bacterial Growth by Human Cryopreserved Viable Amniotic Membrane Mediated By Soluble Antimicrobial Peptides” (Oral Abstract #K4.01, WHS Session K4 (Infections and Biofilm), Friday, April 7, 2:15 pm, Poster #P.IRD02)
- **WHS Abstract – selected for Rapid-Fire Poster Talk and for Industrial Research & Development Poster Award Competition**
“Phenotypic Characteristics of Cells Isolated From Human Amniotic and Chorionic Membranes” (Abstract #M1.04, WHS Session M (Rapid-Fire Poster Talks), Friday, April 7, 6:15 pm)
- **WHS Abstract – selected for Industrial Research & Development Poster Award Competition**
“Utility of a New Chronic Wound Model in Diabetic Mice for Evaluation of Wound Care Products” (Abstract #P.CW11)
- **SAWC Research Poster Critique Recognition**
“Viable Cryopreserved Umbilical Tissue (vCUT) Inhibits Bacterial Growth in a Subcutaneous Rat Infection Model” (Abstract #LB011, Walking Grand Rounds. Friday, April 7, 10:30 am)
- “Viable Cryopreserved Umbilical Tissue (vCUT) Barrier Reduces Post-Operative Adhesions in a Rabbit Abdominal Adhesion Model” (Abstract #LB010)

- “Critical Role of Cell-Matrix Interactions In The Immunomodulatory Effects Of Human Amniotic Membrane-Derived Wound Care” (Abstract #K2.03, WHS Session K2 (Chronic wounds and Inflammation), Friday, April 7, 2:15 pm)
- “Stage IV Perineal Pressure Ulcers in Immobile Patients Treated with Surgical Muscle Flap Closure Augmented with Viable Cryopreserved Placental Membrane: A Report of 4 Cases” (Abstract #CS-083)
- “A Novel Surgical Subdermal Technique using Viable Cryopreserved Placental Membrane to Treat Chronic Ulcers” (Abstract #CS-055)
- “Use of Viable Cryopreserved Amniotic Membrane in Four Immunocompromised Patients with Lower Extremity Wounds” (Abstract #CS-156)
- “One-Time Application of Viable Cryopreserved Umbilical Tissue for the Treatment of Surgical Amputation Wounds in High-Risk Patients- A Series of 5 Cases” (Abstract #CS-131)
- “Utilization of a Viable Cryopreserved Placental Membrane in the Management of Wounds with Various Etiologies” (Abstract #CS-203)
- “Management of a Radiation-induced Wound with a Viable Cryopreserved Placental Membrane” (Abstract #CS-202)
- “Management of Non-healing Complex Wounds Using a Viable Cryopreserved Placental Membrane” (Abstract #CS-182)
- “A Cryopreserved Viable Placental Membrane Aids Durable Closure of Non-healing Radiation Burn Wound” (Abstract #CS-181)
- “Post-operative Limb Salvage Using a Viable Cryopreserved Human Placental Membrane” (Abstract #CS-187)
- “A Viable Cryopreserved Human Placental Membrane for Treatment of Refractory Venous Leg Ulcers” (Abstract #CS-123)
- “A Viable Cryopreserved Placental Membrane Aids the Closure of Chronic Wounds of Various Etiologies in High Risk Patients” (Abstract #CS-169)
- “A Viable Cryopreserved Human Placental Membrane Aids Closure of Non-healing Diabetic Foot Ulcers” (Abstract #CS-053)
- “Viable Cryopreserved Human Placental Membrane for the Management of a Stalled Pyoderma Gangrenosum Wound” (Abstract #CS-043)
- “Open Surgical Implantation of a Viable Intact Cryopreserved Human Amniotic Membrane for the Treatment of Recalcitrant Plantar Fasciitis: A 12-month Follow-Up Case Study” (Abstract #CS-179)



- “Viable Cryopreserved Human Placental Membrane Induces Granulation Over Exposed Bone, Tendon and Joint Surfaces of the Hand to Support Skin Autograft Survival” (Abstract #CS-191)
- “Use of a Viable Intact Cryopreserved Human Amniotic Membrane for the Management of Nonhealing Chronic Wounds in a Hospital Outpatient Based Setting” (Abstract #CS-134)
- “Surgical Management of Chronic Plantar Diabetic Foot Ulceration with Dorsal Implantation of Viable Intact Cryopreserved Human Placental Tissues” (Abstract #CS-162)
- “The Use of Viable Cryopreserved Umbilical Tissue to Augment 1st Metatarsophalangeal Joint Cheilectomy- A Report of 3 Cases” (Abstract #CS-035)
- “Repair of Acute Achilles Tendon Ruptures Using Viable Intact Cryopreserved Umbilical Tissue- A Report of 3 Cases” (Abstract #CS-034)
- “A Technical Tip: The “K Technique” – A Combination of Viable Cryopreserved Placental Membrane and Oxidized Regenerated Cellulose/Collagen/Silver for the Treatment of Chronic Wounds “(Abstract #CS-099)
- “Aesthetic Reconstruction over Exposed Nasal Cartilage with a Viable Cryopreserved Human Placental Membrane as an Alternative to Surgical Three-Stage Forehead Flap” (Abstract #CS-149)
- “Complex and Traumatic Wound Management with a Viable Cryopreserved Human Placental Membrane” (Abstract #CS-199)

Osiris Therapeutics will also be exhibiting at the Symposium on Advanced Wound Care and Wound Healing Society Meeting at booth 925. The event runs from April 5 through April 9, 2017 at the San Diego Convention Center, San Diego, California.

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 wound care, orthopedics, and sports medicine, including Grafix®, Stravix®, BIO4™, and Cartiform®. Osiris, Grafix, Stravix and Cartiform are trademarks of Osiris Therapeutics, Inc., and BIO4 is a trademark of Howmedica Osteonics Corp. Osiris makes no claims concerning functional activities of Grafix or Stravix. Although well characterized in scientific literature and studies, preservation of tissue integrity including cells may not be indicative of clinical outcome. More information can be found on the Company’s website, www.Osiris.com. (OSIR-G)

Forward-Looking Statements

This press release contains forward-looking statements. Forward-looking statements include statements about our expectations, beliefs, plans, objectives, intentions, assumptions and other statements that are not historical facts. Words or phrases such as "anticipate," "believe," "continue," "ongoing," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project" or similar words or phrases, or the negatives of those words or



phrases, may identify forward-looking statements, but the absence of these words does not necessarily mean that a statement is not forward-looking. Examples of forward-looking statements may include, without limitation, statements regarding the potential uses of Prestige™ Lyotechnology and the publication of Osiris's profile in Nature (www.nature.com). Forward-looking statements are subject to known and unknown risks and uncertainties and are based on potentially inaccurate assumptions that could cause actual results to differ materially from those expected or implied by the forward-looking statements. Accordingly, you should not unduly rely on these forward-looking statements. We undertake no obligation to publicly revise any forward-looking statement to reflect circumstances or events after the date of this press release or to reflect the occurrence of unanticipated events.

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