

July is Cord Blood Awareness Month

Cryo-Cell is proud to join healthcare providers across the nation in celebrating Cord Blood Awareness month by educating families on the benefits of preserving cord blood.

There are over 4 million births in the United States each year, yet only 2% choose to bank their newborn's cord blood. During the month of July, please take an extra moment to educate and explain the value of storing cord blood with your patients.

There are currently over 75 different diseases treated by cord blood including leukemia, lymphoma and sickle cell anemia. Today, research continues to find breakthrough treatments using cord blood stem cells for diseases that include Type 1 diabetes, cerebral palsy and spinal cord injuries.

Thank you for your continued dedication to educating your patients on the many benefits of cord blood stem cell preservation and particularly for your distinguished commitment to Cryo-Cell International.

For more information on Cryo-Cell or cord blood banking, please visit www.cryo-cell.com.

MULTIPOTENT MENSTRUAL BLOOD STROMAL STEM CELLS: ISOLATION, CHARACTERIZATION AND DIFFERENTIATION

By Amit N. Patel, Eulsoon Park, Michael Kuzman, Federico Benetti, Francisco Silva, and Julie Allickson
Cell Transplantation, Vol. 17. pp 303-311, 2008

The stromal stem cell fraction of many tissues and organs has demonstrated to exhibit stem cell properties such as the capability of self-renewal and multipotency, allowing for multilineage differentiation. In this study, we characterize a population of Stromal stem cells derived from menstrual blood (MenSCs). We demonstrate that MenSCs are easily expandable to clinical relevance and express multipotent markers such as Oct-4, SSEA-4, and c-kit at the molecular and cellular level. Moreover, we demonstrate the multipotency of MenSCs by directionally differentiating MenSCs into chondrogenic, adipogenic, osteogenic, neurogenic, and cardiogenic cell lineages. These studies demonstrate the plasticity of MenSCs for potential research in regenerative medicine.

To read the manuscript in its entirety visit www.CELLE.com. or call (888) 612-3553 to request a copy.

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SUMMER 2008

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CEO Message: The Cryo-Cell Difference

By: Mercedes Walton
Chairman and Chief Executive Officer
Cryo-Cell International, Inc.

Welcome to the first edition of *Cryo-Cell News*. In honor of Cord Blood Awareness Month, Cryo-Cell International is launching this newsletter to ensure regular communication with our referring physicians. I'd first like to say thank you for educating your patients on the many benefits of cord blood stem cell preservation and for your distinguished commitment to Cryo-Cell.

I'm often asked the question: "What makes Cryo-Cell different than other companies in the stem cell cryo-preservation industry."

First, Cryo-Cell's distinction is based on the company's trust, stability and longevity.

Cryo-Cell began banking cord blood in 1992. We are one of the world's largest and most established private family cord blood banks with over 155,000 clients worldwide. Our industry leadership and financial stability make Cryo-Cell a company that our clients and shareholders trust for proven performance, stability and future growth.

Cryo-Cell has achieved and sustained the highest quality standards and accreditations in our industry.

We are proud to have attained the industry's highest levels of quality certifications and more quality accreditations than any other private cord blood bank. Our facility is registered with the FDA; accredited by AABB and certified to ISO9001:2000 standards. We operate a Good Manufacturing Practice and Good Tissue Practice-compliant facility.

Cryo-Cell is known industry-wide for our consistently high levels of customer satisfaction.

Cryo-Cell is particularly proud that in our most recent, independently conducted annual client satisfaction survey, 98% of our clients were well-satisfied or far-exceeded expectations for the quality of service they received. Our staff of certified childbirth educators and professional nurses is available year-round, 24 hours and 7 days a week.

The Cryo-Cell Difference is also found in our value.

Cryo-Cell service includes many unique and exclusive features at the best value and we have a variety of payment plans and financing options to meet almost any family budget.

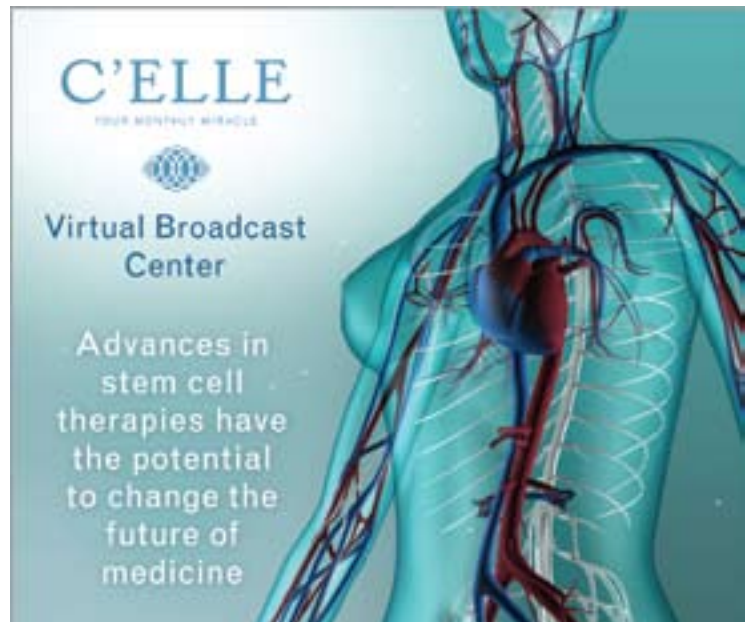
Finally, and perhaps most importantly, Cryo-Cell is recognized as global industry leader of innovative stem cell solutions.

In the fast-emerging world of regenerative medicine and stem cell therapy, Cryo-Cell is on the forefront of the industry's global leadership in providing innovative stem cell solutions. Cryo-Cell now offers the exclusive "Protect Baby, Protect Mom[®]" service, which combines U-Cord[®] with our revolutionary new menstrual stem cell service, C'elle. I encourage you to read the other articles in this publication to learn more about this exciting new discovery and its implications for future regenerative medical therapies.

Thank you for taking the time to read about the Cryo-Cell difference. Thank you once again for your continued support of Cryo-Cell. We are honored to be your partner in educating patients on innovative stem cell solutions and we look forward to working with you in the future.

Kindest Regards,

Mercedes Walton



Cryo-Cell Launched OR-Live Virtual Broadcast, "The Discovery of C'elleSM: Novel Adult Stem Cell Found in Menstrual Blood"

Cryo-Cell International, Inc., one of the largest and most established family cord blood banks, on July 10th broadcasted the discovery of breakthrough stem cell technology and the launch of C'elle (pronounced "C-L"), the world's first service for women to store their own menstrual stem cells for future use.

The broadcast includes details about the C'elle study, the cell characteristics, preclinical studies, and the C'elle service. The broadcast can be accessed anytime by [visiting www.orlive.com](http://www.orlive.com) and [clicking on the C'elle Virtual Broadcast Center link](#).

Cryo-Cell's discovery shows new scientific evidence that menstrual flow, which results from the shedding of the uterine lining (endometrium) during menstruation, contains millions of stem cells that have many properties and characteristics similar to those of both bone marrow and embryonic stem cells.

Through several independent laboratory research studies, these menstrual stem cells have demonstrated the capability *in vitro* to differentiate into neural, cardiac, bone, cartilage, and adipose cells and possibly other cell types. Although research is preliminary, given their properties, Cryo-Cell believes that these menstrual stem cells demonstrate compelling promise to transform regenerative medicine in coming years.

"Stem cells isolated from menstrual blood are multi-potent, highly prolific and readily accessible," said Julie Allickson, PhD, MS, MT (ASCP) Vice President of Laboratory Operations and Research & Development. "These indicators signify significant promise for future use in clinical regenerative medical therapies."

On November 1, 2007, Cryo-Cell announced the introduction of C'elle which enables women to collect stem cells found in menstrual fluid, which can be cryogenically preserved in a manner similar to stem cells from umbilical cord blood and may one day serve as a potential source for promising regenerative therapies to treat heart disease, diabetes, neurological disorders like spinal cord injury, Parkinson's and Alzheimer's diseases, in addition to cosmeceutical applications such as anti-aging therapies.

Preliminary research related to the immunological profile of these unique menstrual stem cells suggests that, in addition to the donor, these stem cells may also be used to benefit other family members who are genetically related to the donor, such as a parent, sibling or child.

For more information, call (888) 612-3553
or visit www.CELLE.com

C'ELLE

YOUR MONTHLY MIRACLE



C'ELLE DISTRIBUTION OPPORTUNITY PROVIDES REVENUE SOURCE AND CUTTING-EDGE PATIENT OFFERING

Cryo-Cell International is now offering the opportunity to become a C'elle distributor, enabling physicians to bring the latest medical innovation to patients, while establishing an additional revenue channel.

Becoming a C'elle distributor is a simple process. There is no start-up investment required; no need to purchase materials; and no quota obligation.

There are four easy steps to becoming a C'elle distributor:

1. Sign two originals of a one-page agreement
2. Complete a W9 so commission payment can be remitted
3. Fill out a practice contact information sheet
4. Fax or email these items to Cryo-Cell

TURN KEY REVENUE CHANNEL

Upon completion, you'll receive a unique distributor number. This number is important, because it's how you get credit for enrollments. As a C'elle distributor, there is no inventory to carry.

Your patients simply go to the C'elle web site, www.celle.com, and complete a 10-minute online enrollment. To receive credit for enrollments, ensure that your patients use your distributor number during their online enrollment. This can also be completed by your office staff to ensure your code is used. You may earn up to 30% commission on the net sales price of each C'elle unit sold from your practice.

COLLECTION PROCESS

C'elle is an easy, painless, at-home collection process, so no in-office procedures are necessary. Upon ordering, clients will receive an attractive, discreet C'elle collection kit. Inside they'll find everything needed to collect and send their C'elle menstrual stem cells for processing and preservation.

COMPLIMENTARY MARKETING MATERIAL

As an official C'elle Distributor, you will receive a comprehensive C'elle Distribution Kit, containing all the

marketing material you'll need to communicate the benefits of C'elle to your patients and promote C'elle in your facility. We replenish these materials, as needed, at no cost to our distributors.

C'elle is for women who want to be on the cutting edge of medical innovation. As a distributor, you will be able to bring this innovation to your patients, while creating an additional revenue channel for your business.



FOR MORE INFORMATION, CALL C'ELLE AT (888) 612-3553 OR VISIT www.CELLE.com

IN THE NEWS...

Therapeutic Potential of Cord Blood Stem Cells

June 7th, 2008 Washington, June 7 (ANI): Researchers from Rush University Medical Centre have found a new method to enhance and expand "homing" and therapeutic potential of cord blood stem cells in bone marrow transplants.

Therapeutic Potential Of Cord Blood Stem Cells Enhanced With New Technology

ScienceDaily (Jun. 6, 2008) — A CD26 Inhibitor increases the efficiency and responsiveness of umbilical cord blood for bone marrow transplants and may improve care for blood cancer patients according to research from Rush University Medical Center being presented at the 6th Annual International. Medical researchers are asking the state to continue to support the use of adult stem cell Umbilical Cord Blood Transplantation Symposium, June 6-7 in Los Angeles.

Boy, 8 —Tells Texas Lawmakers How Stem Cells Cured Him.

Texas lawmakers listened to the testimony from more than half-a-dozen patients and experts regarding adult stem cell research.

FOR MORE INFO ON THESE STORIES AND MORE VISIT www.stemcellresearchnews.net

Did you know...



...approximately half of all transplants released from Cryo-Cell were autologous?

Umbilical cord blood cell transplants may help ALS patients

Moderate dose proves most effective in mouse model

Anne DeLotto Baier – University of South Florida Health

The other co-authors of the study were Cyndy Davis Sanberg and Nicole Kuzmin-Nichols of Saneron CCELL Therapeutics, Inc., and Alison E. Willing, Carmelina Gemma, Paula C. Bickford, Christina Miller, and Robert Rossi from USF

Tampa, FL (June 24, 2008) – A study at the University of South Florida has shown that transplants of mononuclear human umbilical cord blood (MNChUCB) cells may help patients suffering from Amyotrophic Lateral Sclerosis (ALS), also known as Lou Gehrig's disease. A disease in which the motor neurons in the spinal cord and brain degenerate, ALS leaves its victims with progressive muscle weakness, paralysis and, finally, respiratory failure three to five years after diagnosis.

In this study, USF researchers transplanted human umbilical cord blood (HUCB) cells into mouse models with ALS. Cells were transplanted at three different dose strength levels – low, moderate and high – to determine the degree to which dose levels of transplanted cells might delay disease symptom progression and increase lifespan. In results published today online at *PLoS ONE* (Public Library of Science), researchers determined that the moderate-strength dose of HUCB cells was most effective in increasing lifespan and reducing disease progression.

“Our results demonstrate that treatment for ALS with an appropriate dose of MNC hUCB cells may provide a neuroprotective effect for motor neurons through active involvement of these cells in modulating the host immune inflammatory system response,” said the study's lead author Svitlana Garbuzova-Davis, PhD, DSc, of the Center of Excellence for Aging and Brain Repair at USF.

According to the research team, modulating immune and inflammatory effectors with HUCB cells could have a protective effect on dying motor neurons. The team had previously shown that hUCB cell transplants reduced inflammation and provided neuroprotection in models of stroke and Alzheimer's disease.

“This preclinical study indicates that MNC hUCB cells may protect motor neurons by inhibiting an immune inflammatory response by decreasing pro-inflammatory cytokines, signaling proteins in the brain and spinal cord that play a role in immune response,” Garbuzova-Davis and colleagues wrote. “Proinflammatory cytokines may be indirect mediators for glial cells' contribution to motoneuron death and the decrease in these cytokines might be due to a reduction of activated microglia, the cells that form active immune defense in the central nervous system.”

The research team noted, however, that the mechanism underlying the beneficial effect of hUCB cells for repairing diseased motor neurons in ALS still needs more clarification.

Suggesting that ‘more is not better,’ it was the moderate, not the high, dose of hUCB cells that proved most effective. Researchers speculated that the high dose may have been less effective because it induced an immunological conflict within the mouse model.

“Future studies should look at multiple injections of smaller doses over time, in order to help translate this research to clinical trials,” according to co-author Paul R. Sanberg, PhD, DSc, director of the Center.

“Developing an effective treatment for ALS is complicated by the diffuse nature of motor neuron death,” concluded Garbuzova-Davis. “However, cell therapy may offer a promising new treatment.”

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