# Children's Health

# A New Approach To Autism

(NAPSA)—Many families may be relieved to learn about a new opportunity to try to stem the tide of autism.

#### The Situation

The rate of children diagnosed with autism spectrum disorder has reached epidemic proportions, impacting one in 88, up from one in 110 just a short time ago, according to the Centers for Disease Control and Prevention.\* That figure jumps to one in 54 for boys.

# Seeking A Solution

Because of this, Cord Blood Registry® (CBR®), the world's largest newborn stem cell bank, has partnered with Sutter Neuroscience Institute and Sutter Institute for Medical Research to establish the first-of-its-kind FDA-regulated clinical trial that will assess the use of a child's own cord blood stem cells to treat select patients with autism.

## **Understanding Autism**

Autism is thought to have multiple risk factors including genetic, environmental and immunological components. It is the leading cause of delayed development in children, typically surfacing before 3 years of age. The condition is characterized by impaired communication, repetitive thoughts and behavior and difficulty in socialization. This clinical trial will evaluate the ability of an infusion of cord blood stem cells to help improve language and behavior. To ensure quality of the cellular infusion, only families that have had Cord Blood Registry process and store their baby's cord blood stem cells will be eligible to participate in this trial.

#### The Doctor's Opinion

"This is the start of a new age of research in stem cell therapies for chronic diseases such as autism, and a natural step to determine whether patients receive some benefit from an infusion of their own cord blood stem cells," said Michael Chez, M.D., director of Pediatric Neurology with Sutter Neuroscience and principal study investigator. "I will focus on a select portion of children diagnosed with autism who have no obvious cause for the condition, such as known genetic syndromes or brain injury."



Children with autism and their families may look forward to a brighter future due to a new way of looking for a treatment.

Umbilical cord blood stem cells have long been used to treat a variety of conditions including certain forms of cancer, blood diseases and immune disorders. The cord blood contains a unique population of stem cells that can be used to rebuild the blood and immune systems.

"We have evidence to suggest that certain children with autism have dysfunctional immune systems that may be damaging or delaying the development of the nervous system," said Dr. Chez. "Cord blood stem cells may offer ways to modulate or repair the immune systems of these patients, which would also improve language and some behavior in children who have no obvious reason to have become autistic."

### Banking On An Answer

"CBR works as a catalyst for medical researchers to advance stem cell medicine and this clinical trial is an example that sets us apart in the industry," said Heather Brown, vice president of scientific & medical affairs at CBR. "As the largest newborn stem cell bank, we are the best equipped to match researchers with children who have access to their own cord blood stem cells as a potential therapy."

The study will enroll 30 children between the ages of 2 and 7, who meet the inclusion criteria for the study.

\*Centers for Disease Control and Prevention, Autism Spectrum Disorder, Data and Statistics, http://www.cdc.gov/ncbddd/autism/data.html, accessed May 2012