House Resolution No. 37

Introduced by Assembly Member Hill

August 7, 2012

House Resolution No. 37—Relative to umbilical cord blood banking.

WHEREAS, Since the first umbilical cord blood transplant in 1988, the systems for collecting umbilical cord blood for both public and private use have grown rapidly, both as a treatment for over 80 medical conditions and as an investigational therapy in numerous United States Food and Drug Administration (FDA) approved clinical trials; and

WHEREAS, Umbilical cord blood is rich in hematopoietic, or blood-forming, stem cells, similar to those found in bone marrow. Therefore, cord blood can be used as an alternative to bone marrow transplants; and

WHEREAS, Scientists are currently researching the possibility that umbilical cord blood may be able to assist the body in the repair of nerve and tissue damage, such as nerve and heart cells; and

WHEREAS, The demand for stem cells from umbilical cord blood is greater than the supply, and both personal and public banking are needed in order to increase the storage of umbilical cord blood; and

WHEREAS, The umbilical cord blood industry has grown rapidly and umbilical cord blood is currently used to treat blood cancers, such as leukemia, myeloma, and lymphoma, and more than 80 inherited immunodeficiencies and other genetic and acquired blood diseases, including sickle cell anemia, thalassemias,

hemoglobinopathies, aplastic anemias, and marrow failure disorders, and inherited disorders or errors of metabolism; and

WHEREAS, The benefits of banking umbilical cord blood are life saving, and storing cord blood is less expensive compared to the medical costs associated with life-threatening illnesses; and

WHEREAS, It is the intent of the Assembly to assist families who have newborns scoring three or less on the activity, pulse, grimace, appearance, and respiration (Apgar) scale by providing the families access to the stem cells of the newborn. These children have a greater likelihood of developing neurological disabilities that may be helped by advancements in regenerative medicine and stem cell research to treat diseases like brain injury, cerebral palsy (CP), and hearing loss; and

WHEREAS, CP is a heterogeneous group of neurological disorder conditions that appear in infancy or early childhood and permanently affect body movement and muscle coordination. CP is caused by abnormal brain development or damage to the developing brain, and might not be detected until months or years later; and

WHEREAS, According to a 2010 study published in the British Medical Journal, a low Apgar score was strongly associated with a later diagnosis of CP. The prevalence of CP in children scoring less than three on the Apgar scale was more than 130-fold higher than in children with a score of 10; and

WHEREAS, The average prevalence of CP in the United States is 3.3 per 1,000. Currently, there are an estimated 800,000 children and adults living with CP in the United States; and

WHEREAS, Births in California account for approximately 13 percent of all babies born in the United States. There were approximately 1,772 babies born with CP in California in 2009; and

WHEREAS, Based on federal Centers for Disease Control and Prevention data, the lifetime cost of CP in 2003 was $921,000 per person. When multiplied by the number of babies described above, this equates to an approximate cost of $1.632 billion; and

WHEREAS, Clinical trials looking at umbilical cord blood stem cells and CP are ongoing. Dr. James Carroll, pediatric neurologist at Georgia Health Sciences University, received the first FDA clearance to run a clinical trial using a child’s own umbilical cord blood stem cells as a potential therapy for children with CP. Other

clinical trials also have been approved by the FDA to evaluate the use of a child's own umbilical cord blood in regenerative therapies for diseases and conditions that could not previously be treated, such as hearing loss, traumatic brain injury, and juvenile diabetes; and

WHEREAS, There is growing evidence of the restorative potential of umbilical cord blood stem cells, and indications that many future therapies may come from autologous cells using the patient's own immune system; and

WHEREAS, There are seven low-Apgar umbilical cord blood stem cell collection programs already in place in California, located at Providence Health Systems in southern California, Southwest Healthcare System at Inland Valley Medical Center, Southwest Healthcare System at Rancho Springs Medical Center, Hoag Memorial Hospital in Newport Beach, Washington Hospital in Fremont, John Muir Medical Center in Walnut Creek, and Sequoia Hospital in Redwood City; and

WHEREAS, These hospitals contract with an accredited umbilical cord blood bank that provides collection kits and processing in order to provide this service, under a memorandum of understanding. As part of the contract, training is provided to ensure quality collection, sufficient collection volume, and sterility to ensure eligibility for acceptance in FDA-regulated clinical trials for CP; and

WHEREAS, Transplanting physicians have performed 25,000 stem cell transplants to date; and

WHEREAS, Not all umbilical cord blood samples collected specifically for public banks and allogeneic transplants are available for transplantation; and

WHEREAS, The remaining public banking units should be provided to research institutions to explore the potential of umbilical cord blood stem cells to treat many debilitating and lethal medical conditions; and

WHEREAS, The federal government enacted the Stem Cell Therapeutic and Research Act of 2005 to collect and maintain umbilical cord blood for public use in transplantation and research; and

WHEREAS, The Legislature enacted Senate Bill 1555 (Chapter 484 of the Statutes of 2006), requiring the State Department of Public Health to conduct the Umbilical Blood Community

Awareness Campaign, which requires the department to, among other things, provide awareness, assistance, and information regarding umbilical cord blood banking options. Senate Bill 1555 also authorized a primary prenatal care provider to provide to a woman who is known to be pregnant, during the first prenatal visit, with information developed by the department pursuant to Senate Bill 1555 regarding her options with respect to umbilical cord blood banking; and

WHEREAS, The Legislature enacted Assembly Bill 34 (Chapter 516 of the Statutes of 2007) to create a public banking infrastructure in California that adds genetically diverse umbilical cord blood units to the national public inventory to ensure that Californians, who are ethnically and genetically diverse, have that ethnic and genetic diversity reflected in the inventory. The more the inventory mirrors the genetic makeup of California's population, the greater the chance residents of California will find a match when they are in need; and

WHEREAS, The Legislature passed Assembly Concurrent Resolution 74 (Resolution Chapter 116 of the Statutes of 2010) expressing the Legislature's desire to find ways to help California gain a viable public umbilical cord blood banking system, to ensure that all races and ethnicities have an equal probability of finding a match when medically necessary, and also to specify that the Legislature supports related research being done with collected units that are not suitable for transplantation; and

WHEREAS, The Legislature enacted Assembly Bill 52 (Chapter 529 of the Statutes of 2010), to request the University of California to establish and administer the Umbilical Cord Blood Collection Program for the purpose of collecting units of umbilical cord blood for public use, for transplantation, and for providing nonclinical units for specified research; and

WHEREAS, The National Marrow Donor Program, in a recent plea to states to help increase the national umbilical cord blood public inventory, declared that states can help expand the number of publicly available umbilical cord blood units by appropriating additional resources for the collection and storage of units; now, therefore, be it

Resolved by the Assembly of the State of California, That the Assembly continues to desire to seek ways to help California gain a viable public umbilical cord blood banking system, to ensure all

that races and ethnicities have an equal probability of finding a match when medically necessary; and be it further

Resolved, That the Assembly continues to support related research being done with collected units that are not suitable for transplantation; and be it further

Resolved, That the Assembly encourages acute care hospitals to participate in free collection programs for umbilical cord blood and cord tissue in order to maximize the potential medical benefits that umbilical cord blood therapies can provide; and be it further

Resolved, That the Assembly encourages acute care hospitals to participate in free collection programs that provide parents of children born in those hospitals who have an activity, pulse, grimace, appearance, and respiration (Apgar) score of three or less at five minutes, with the option of storing the child's umbilical cord blood and cord tissue, at no cost to the parent, in order that the umbilical cord blood and cord tissue may be used for therapeutic purposes as therapies become medically available; and be it further

Resolved, That the Chief Clerk of the Assembly transmit copies of this resolution to the State Department of Public Health and the California Institute for Regenerative Medicine.

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