

Stem cell-based therapy in neonates

Brankica Vasiljevic

NMC Royal Hospital, UAE



Abstract

Despite recent advances in neonatal intensive therapy, still is present significant morbidity associated with extreme prematurity that includes both short-term and long-term pulmonary, neurologic and visual impairments. These complications of prematurity not only affect the quality of life of these children in the rest of their lives, but can also cause numerous medical and economic burdens in the society.

No single therapy has proven to be effective in preventing or treating developmental lung, brain and retinal injuries in preterm infants or the hypoxic-ischemic brain injury in full-term infants. Stem cell-based therapies are emerging as potential alternative treatment for such complex diseases (BPD, IVH, ROP and HIE) with multifactorial etiologies. Recently, various preclinical studies have shown that stem cell therapy significantly attenuates injuries in newborn animal models of BPD, HIE, IVH and ROP.

Caution is warranted, however, because stem cell-based therapies for regenerative purposes represent innovation, mechanisms of action are still not completely understood, and standardization, clinical indications, timing and dosage are required to permit safe clinical translation of stem cell therapy in animal models for newborn infants in the near future.

Boston University School of Medicine and Visiting scholar and Internships in Greece (Alexandar Hospital, Iaso Hospital and Elena Hospital in Athens), USA (Morgan Children's Hospital in New York) and Austria (General Hospital of Salzburg in Salzburg and Regional Hospital (LKHLandeskrankenhaus) in Graz). She had won the ESPNIC Educational Grant at 5th World Congress on Pediatric Intensive & Critical Care in Geneva Switzerland (2007). She was a local coordinator for International Neonatal Immunotherapy Study-INIS for Serbia and Montenegro and participated in SIOP 93-01 Study, ITP Study and Twin Birth Study.

[30th International Conference on Pediatrics & Primary Care](#); Webinar- September 16-17, 2020.

Abstract Citation:

Brankica Vasiljevic, Stem cell-based therapy in neonates, Primary Care 2020, 30th International Conference on Pediatrics & Primary Care; Webinar- September 16-17, 2020 (<https://primarycare.pediatricsconferences.com/abstract/2020/stem-cell-based-therapy-in-neonates>)



Biography:

Brankica Vasiljevic is Head of Maternity and Child Health Services in NMC Royal Hospital DIP in Dubai, UAE. After completed her MD she had completed her clinical postgraduate education (Pediatric and after that Neonatology fellowship) and academic postgraduate education (MSc in pediatric and ultrasonography field and PhD in neonatology field) at Belgrade University School of Medicine in Belgrade, Serbia. She has completed also Yugoslav School of Ultrasound and different courses in ultrasonography and echocardiography in Serbia and UK, Post Graduate Program in Pediatric Nutrition at