Stem cells for babies and their surgeons: the future is now.

Journal: J Pediatr Surg

Publication Year: 2018

Authors: Samuel M Zuber, Tracy C Grikscheit

PubMed link: 30497818

Funding Grants: ASCENT- Advanced Stem Cell Enteric Neuropathy Therapy

Public Summary: Pediatric surgeons are ideal allies for the translation of basic science including stem cell therapies. In the spirit of Robert E. Gross, of applying creative solutions to pediatric problems with technical expertise, we describe the impending cellular therapies that may be derived from stem and progenitor cells. Understanding the types and capabilities of stem and progenitor cells is important for pediatric surgeons to join and facilitate progress for babies. We are developing an induced pluripotent stem cell therapy for enteric neuropathies such as Hirschsprung disease that might be helpful for children in the near future. Our goals, which we hope to share with other surgeons and scientists, include working to establish safe clinical trials and meeting regulatory standards in a thoughtful way that balances patients need and unknown risks.

Scientific Abstract: Pediatric surgeons are ideal allies for the translation of basic science including stem cell therapies. In the spirit of Robert E. Gross, of applying creative solutions to pediatric problems with technical expertise, we describe the impending cellular therapies that may be derived from stem and progenitor cells. Understanding the types and capabilities of stem and progenitor cells is important for pediatric surgeons to join and facilitate progress for babies. We are developing an induced pluripotent stem cell therapy for enteric neuropathies such as Hirschsprung disease that might be helpful for children in the near future. Our goals, which we hope to share with other surgeons and scientists, include working to establish safe clinical trials and meeting regulatory standards in a thoughtful way that balances patients need and unknown risks.

Source URL: https://www.cirm.ca.gov/about-cirm/publications/stem-cells-babies-and-their-surgeons-future-now