

Accepted Manuscript

Title: Umbilical Cord Blood Expansion: are We There Yet?

Author: Troy C. Lund

PII: S1083-8791(18)30254-4

DOI: <https://doi.org/10.1016/j.bbmt.2018.05.002>

Reference: YBBMT 55118

To appear in: *Biology of Blood and Marrow Transplantation*

Received date: 30-4-2018

Accepted date: 1-5-2018



Please cite this article as: Troy C. Lund, Umbilical Cord Blood Expansion: are We There Yet?, *Biology of Blood and Marrow Transplantation* (2018), <https://doi.org/10.1016/j.bbmt.2018.05.002>.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Umbilical Cord Blood Expansion: Are We There Yet?

Troy C. Lund, PhD, MD, FAAP¹

¹Division of Pediatric Blood and Marrow Transplant, University of Minnesota, Minneapolis, MN

Corresponding Author

Troy Lund MSMS PhD MD FAAP

Associate Professor

University of Minnesota

Pediatric Blood and Marrow Transplant Program

Stem Cell Institute

Global Pediatrics

MMC 366

420 Delaware St SE

Minneapolis, MN 55455

Phone: 612-625-4185

Email: lundx072@umn.edu

Words: 740

References: 12

Tables: 1

Umbilical cord blood (UCB) as an alternative stem cell source has been used in hematopoietic cell transplant (HCT) for over 25 years now¹. While UCB is a safe and effective source of hematopoietic stem cells, it is limited by the fact that it contains a fixed number of HSC and is available only once for infusion. The number of HSC tends to be lower than one obtains from marrow as an HSC source. While UCB can achieve reasonable per kilogram cell doses in pediatric HCT, adults undergoing HCT may suffer from inadequate cell numbers. Recently, methodology to overcome the cell dose limitation have been pursued in a variety of ways: infusion of two UCB units², increasing homing efficiency of UCB cells³, and expanding the

Download English Version:

<https://daneshyari.com/en/article/8429666>

Download Persian Version:

<https://daneshyari.com/article/8429666>

[Daneshyari.com](https://daneshyari.com)