## NATIONAL CANCER INSTITUTE THE LITHUANIAN ACADEMY OF SCIENCES VILNIUS UNIVERSITY

## ACTA MEDICA LITUANICA

 $2022 \\ \mbox{Vol. 29, No 2 / Supplement}$ 

Published since 1994

## HSCT for Latvian Children - from Early-Stage Salvage Option to Regular Therapeutic Alliance with a Lithuanian Center

Zanna Kovalova<sup>1,2</sup>, Anda Kivite-Urtane<sup>3,4</sup>, Elizabete Cebura<sup>1,2</sup>, Marika Grutupa<sup>1</sup>, Anna Valaine<sup>1</sup>, Zelma Vishnevska-Preciniece<sup>1</sup>, Jelena Rascon <sup>5,6</sup>

- <sup>1</sup> Department of Hematology and Oncology, Children's Clinical University Hospital, Riga, Latvia;
- <sup>2</sup> Department of Paediatrics, Riga Stradins University, Riga, Latvia
- <sup>3</sup> Institute of Public Health, Riga Stradins University, Latvia
- <sup>4</sup> Department of Public Health and Epidemiology, Riga Stradins University, Latvia
- <sup>5</sup> Center for Pediatric Oncology and Hematology, Vilnius University Hospital Santaros Klinikos, Vilnius, Lithuania
- <sup>6</sup> Vilnius University, Faculty of Medicine

**Background:** Hematopoietic stem cell transplantation (HSCT) became a clinically realistic and financially supported option for Latvian children in 2005 when Latvia joined the EU.

Aim of the study: Clinical data of transplanted Latvian children with different diagnoses were retrospectively analyzed to evaluate outcomes during different periods and at different transplantation centers.

**Patients and Methods:** 30 consecutive patients after alloHSCT were enrolled during the "early" transplantation phase (2005-2018) in Germany/Hungary/Sweden in the proportion of 25/4/1 respectively. During the Lithuanian period (2011-2022), 31 patients were enrolled for analyses including auto- (n=9) and alloHSCT (n=22). Descriptive analysis was performed, and Kaplan-Meier survival curves were constructed. Results were considered statistically significant if p<0.05.

**Results:** Clinical characteristics of both patient groups are statistically different in distribution by diagnosis and by indications for transplantation (p=0.025). The Median follow-up time in both groups was 39.0 months (interquartile range (IQR) 13.5-80.5). Median age at transplantation and sex distribution were similar in both groups (p=0.36 and p=0.94 respectively). The median interval from diagnosis to transplantation was 18.5 (IQR 7.0-33.0) months during the "early phase" and 11.0 (IQR 7.0-24.0) for patients, transplanted during the Lithuanian phase (p=0.53). Despite apparent differences in 12-month survival proportions between groups (71.4% for LT phase vs. 57.1% for "early phase"), no significant differences were found between the overall survival curves (p=0.95).

**Conclusion:** There is still room for further improvement for the whole healthcare team of both countries including a uniform approach for indications for HSCT, usage of the same therapeutic programs, and certified laboratory facilities.