

# ABSTRACTS FROM THE 43RD ANNUAL MEETING OF THE EUROPEAN SOCIETY FOR BLOOD AND MARROW TRANSPLANTATION: STATISTICAL SYMPOSIUM—ORAL SESSION (O186-O188)

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## **O186** **Comparison of different treatment options for MDS patients who relapsed after first allogeneic transplantation**

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No standard exists for the treatment of myelodysplastic syndrome (MDS) relapsing after allogeneic haematopoietic stem cell transplantation (HSCT). We performed a retrospective analysis of treatments, outcomes and risk factors in 698 patients from the EBMT registry, treated with different strategies. During the first 6 months from relapse, patients either received (1) no cellular treatment (NCT, i.e. palliative chemotherapy or best supportive care), (2) donor lymphocyte infusion (DLI), or (3) second transplant (HSCT2). We will discuss how the different treatment groups were defined and compared, taking into account that they were not known yet at the moment of relapse and that patients dying early did not have enough time to receive a DLI or HSCT2. Further, the impact of different strategies on survival was analyzed. Pros and cons of different approaches (separate analyses, landmark approach and time-dependent Cox model) will be discussed.

**Disclosure of conflict of interest:** None.

## **O187** **Methodology in relative survival**

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Relative survival analysis is a subfield of survival analysis where competing risks data are observed, but the causes of death are

unknown. The idea of field is to join the observed data on patients with the general mortality population data. In this way, the information on the disease specific hazard can be extracted or, the patients' data can be compared to the general population mortality. This methodology is standard in cancer registry data analysis and very useful in any long-term survival study, where the cause of death is often unavailable or unreliable, especially in an older patient group. Several concepts may be of interest and we shall define the measures that are commonly a goal of such analysis: overall survival, crude mortality, net survival, relative survival ratio and the number of years lost. Each of these measures pursues a slightly different goal. We discuss their interpretation and briefly describe their estimators and the software that can be used for their calculation.

**Disclosure of conflict of interest:** None.

## **O188** **Single vs. double auto vs. autol-allo in plasma cell leukemia**

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Comparing sequences with tandem transplantation, with autologous or allogeneic second transplant, to single-transplant strategies (auto or allo) is a need in several diseases, for example in Plasma Cell Disorders. Lacking interventional studies, the EBMT registry data could be used, but difficulties and limitations of possible statistical approaches should be carefully discussed between Principal Investigator and Statistician. We will focus in particular on the use of available information on planned strategy, and using only information on actual treatments received applying classic or novel models with time-related effects.

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