malignant tumour cells and its differential effects on human cytotoxic lymphoid cells.

REFERENCES

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P01.18  METABOLIC STATUS AND IMMUNE ACTIVATION INFLUENCE CLINICAL OUTCOMES IN PATIENTS AFTER ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANTATION

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Background The nutritional status is an important factor contributing to non-relapse mortality for patients undergoing allogeneic hematopoietic stem cell transplantation (alloHSCT). In contrast to underweight, the role of overweight and obesity for alloHSCT outcomes is less well understood. This might be due to the use of the body-mass-index (BMI) as a classic measure of metabolic risk, which does not necessarily reflect body composition and visceral obesity. Importantly increased inflammation and malnutrition (Glasgow-Prognosis-Score, GPS) as well as increased neutrophil-to-lymphocyte ratios (NLR) have been described as adverse prognostic factors for a variety of solid tumors. In alloHSCT the GPS and NLR are ill defined so far. Here, we analyzed the impact of pretransplant GPS and pretransplant NLR on clinical outcomes after alloHSCT.

Materials and Methods Clinical data of consecutively treated patients between 2012 and 2017 at our transplant center were analyzed. From these cases only matched (10/10) related and unrelated donors and reduced intensity conditionings were included into the analysis. Based on BMI and GPS prior to conditioning we defined three groups respectively: normal weight (NW), overweight (OW), obese (OB); and GPS 0 (CRP<10 mg/dl, normal protein), GPS 1 (CRP >10 mg/dl, normal protein), GPS 2 (CRP >10 mg/dl, low protein). NLR at d+100 were also analyzed. We focused on survival and mortality until the data lock. Incidence rates of acute graft-versus-host disease (aGvHD) were determined until day+100. Results From a total of 464 identified records, 265 cases were included into the analysis based on the inclusion criteria. Median overall survival in OB patients was doubled compared to NW (48 vs. 21.8 months; p=0.01) and in OW patients median overall survival was not reached (figure 1, not included in the submitted abstract). Pretransplant GPS could also dissect survival curves with worst OS for patients with GPS 2: 9 (GPS 2) vs. 25.6 (GPS 1) vs. 48 (GPS 0) months, p=0.007). However, GPS values did not correlate with BMI (figure 2, not included in the submitted abstract).

Increased d+100 NLR correlated non-significantly with poorer survival and increased relapse rates. There was a trend to increased clinically relevant aGvHD (≥II*) in GPS 2 individuals, not detectable according to BMI groupings.

Conclusions There is a need for better immunometabolic risk measures in patients before alloHSCT. Our data suggest that pretransplant GPS and NLR could be of value for risk estimations and further validation is warranted.


P01.19  ABSTRACT WITHDRAWN

P01.20  TIM-3-GALECTIN-9 IMMUNOSUPPRESSIVE PATHWAY IN HUMAN LIQUID AND SOLID TUMOURS

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Background In recent years there has been increasing evidence highlighting biochemical pathways operated by human cancer cells, which allow them to escape host immune surveillance. Understanding the molecular basis of these immune evasion pathways and mechanisms underlying their biochemical regulation would allow development of fundamentally novel strategies of anti-cancer immunotherapy. This work is devoted to understanding the pathological role of Tim-3-galectin-9 immunosuppressive pathway.