

## CIRCULATING REGULATORY T-CELL NUMBER DOES NOT PREDICT PROGNOSIS OF MONOCLONAL GAMMOPATHIES OF UNCERTAIN SIGNIFICANCE

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### Abstract

**Background:** FOXP3-expressing regulatory T-cells (Tregs), which suppress aberrant immune response against self-antigens, also suppress anti-tumor immune response. It has been shown that there is an increased proportion of Tregs in several different human malignancies, although the actual mechanism remains unclear.

**Aims:** The research aims to explore the relationship between the number of Tregs and a predict prognosis in particular hematological diseases as monoclonal gammopathies of uncertain significance (MGUS).

**Methods:** Tregs were evaluated by means of flow cytometry (CD4<sup>+</sup> CD25<sup>high/+</sup> CD127<sup>low/-</sup>) in whole peripheral blood of 56 patients with MGUS to predict progression to overt multiple myeloma (MM).

**Results:** In two groups of patients, MGUS versus MGUS evolved to MM, we found a significant difference for the number of white blood cells, but not in terms of clinical and laboratory features evaluated at diagnosis.

**Conclusions:** The study demonstrated the absence of a prognostic relevance of Tregs in MGUS. Nevertheless, their role in these disorders is still to defined.

**Keywords:** regulatory T cells, multiple myeloma, monoclonal gammopathy of undetermined significance, prognosis