

## Management of elderly patients with immune thrombocytopenia: Real-world evidence from 451 patients older than 60 years

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### Abstract

**Introduction:** Primary Immune thrombocytopenia (ITP) in the elderly is a major clinical challenge which is increasingly frequent due to global ageing population.

**Materials and methods:** To describe baseline ITP features, management, and outcome, a centralized electronic database was established, including data of 451 patients aged  $\geq 60$  years that were treated from 2000 onwards and were observed for  $\geq 1$  year (total observation of 2704 patient-years).

**Results:** At ITP diagnosis, median age was 71.1 years (age  $\geq 75$ : 42.8%); 237 (53.9%) patients presented with haemorrhages (grade  $\geq 3$ : 7.5%). First-line therapy included prednisone (82.9%), dexamethasone (14.6%), thrombopoietin-receptor agonists (TRAs, 1.3%), and oral immunosuppressive agents (1.1%). Prednisone starting dose  $\geq 1$  mg/kg/d ( $p = .01$ ) and dexamethasone 40 mg/d ( $p < .001$ ) were mainly reserved to patients aged 60-74, who were more treated with rituximab (RTX,  $p = .02$ ) and splenectomy ( $p = .03$ ) second-line. Overall response rates to first and second-line therapies were 83.8% and 84.5%, respectively, regardless of age and treatment type/dose. A total of 178 haemorrhages in 101 patients (grade  $\geq 3$ : n. 52, 29.2%; intracranial in 6 patients), 49 thromboses in 43 patients (grade  $\geq 3$ : n. 26, 53.1%) and 115 infections in 94 patients (grade  $\geq 3$ : n. 23, 20%) were observed during follow-up. Incidence rates of complications per 100 patient-years were: 4.5 (haemorrhages, grade  $\geq 3$ : 1.7), 1.7 (thromboses, grade  $\geq 3$ : 0.9), and 3.9 (infections, grade  $\geq 3$ : 0.7). TRAs use were associated with reduced risk of bleeding and infections, while cardiovascular risk factors (particularly, diabetes) significantly predicted thromboses and infections.

**Conclusions:** Age-adapted treatment strategies are required in elderly and very elderly patients.