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- **Abstract title:** FIVE-YEAR EVOLUTION OF REPERFUSION THERAPY AND EARLY FUNCTIONAL OUTCOME AND MORTALITY WITH ACUTE ISCHEMIC STROKE IN FRANCE

- **Abstract text:**

Background. Our study aimed to analyze the temporal trend of thrombolysis rate after the implementation of a regional emergency network (RESUVal network) for acute ischemic stroke (AIS) through a real-life registry.

Methods. In 2010, a regional emergency network was developed based on cooperation between emergency physicians and neurologists. The network includes 5 Primary (PSC), one Comprehensive Stroke Center (CSC) and 37 emergency departments covering a population of 3 million of inhabitants.

Results. From 2010 to 2015, 18 986 AIS were recorded in the regional Hospitalization Database, among them 2 215 thrombolysed AIS enrolled in the RESUVal registry, with an overall incidence of 11.7%. Median age remained stable around 74 years old [63 ;82] but elderly (>80) increased over time from 23,65% in 2010 to 32,81% in 2015 (p=0.0003). The annual incidence rate of thrombolysis increased modestly around 1% increment from the first year (10.20%) to the second (11.05%) and third year (12.67%) and remained stable in the fourth (12.19%), and the fifth (12.09%) until it increased again in the sixth (14.5%). Patients treated within 3 hours (60.6%), between 3 and 4.5 hours (30.8%), and beyond 4.5 hours (4.7%) of onset symptoms remained stable. About 40% of the patients had a good early recovery after thrombolysis and the 30-day all-cause mortality rate remained stable at 12.12%. At 3 months, 44.33% of patients presented a minor disability (mRS < 2).

Conclusion. The network has enabled emergency physicians to be more responsive, improving the thrombolysis rate through the territory with a 3-month evolution of functional outcome benefitted for patients.