

## Neuroblastoma in patients over 12 years old: a 20-year experience at the Istituto Nazionale Tumori of Milan

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### ABSTRACT

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**Aims and background.** Neuroblastoma is the most common solid extracranial tumor in children. The median age of onset is 2 years, with more than 95% of patients younger than 10 years at diagnosis. As neuroblastoma is rare in adolescents and exceedingly rare in adults, few series are reported in the literature. In the present study, we analyzed the outcomes and clinical characteristics of a mono-institutional series.

**Methods.** We describe 27 consecutive patients over 12 years of age (range, 12-69) with previously untreated neuroblastoma treated at our Institution between 1982 and 2001.

**Results.** Overall survival at 5 and 10 years was 40% and 20%, respectively, and progression-free survival at 5 and 10 years was 18%. In the present series, there was a long interval between the onset of signs/symptoms and diagnosis, and between recurrence/progression and death. None had MYCN amplification.

**Conclusions.** The passive course of the disease in most of our patients did not reflect a more favorable outcome compared with younger patients, thus suggesting a possible genetically different subset of neuroblastoma in older patients. Free full text available at [www.tumorionline.it](http://www.tumorionline.it)

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**Key words:** adolescents, adults, ganglioneuroblastoma, neuroblastoma.

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