

**Prognosis of Adult Acute Myeloid Leukemia in Southern Switzerland: A Population-based Analysis**

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**Background:** This study was aimed to evaluate the treatment outcome of adult patients with acute myeloid leukaemia (AML) diagnosed in the Italian-speaking part of Switzerland from 1983 to 2003.

**Methods:** Data were collected retrospectively for all adult patients diagnosed with AML in public hospitals and compared to tumour registry data to assess completeness. Univariate and multivariate analysis was performed to determine prognostic factors for progression-free survival (PFS) and overall survival (OS).

**Results:** 132 AML patients were identified with an incidence of 2.1/100,000 per year. Complete clinicopathological data and follow-up information were available for 128 cases. Median age was 67 years. At a median follow-up time of 97 months the median OS was 6 months and the median PFS was 3 months. 35 patients were treated with supportive care only or palliative chemotherapy. The median OS for this group was 2 months. 93 patients were treated with myelosuppressive chemotherapy with curative intent. The CR-rate was 74% for patients younger than 60 years and 29% for those older than 60 years ( $p < 0.001$ ) with a median OS of 16 and 6 months, respectively ( $p < 0.0005$ ) and a median PFS of 8 and 2 months, respectively ( $p < 0.0005$ ). Not surprisingly, survival was significantly longer ( $p < 0.0005$ ) for the patients with less than 40 years (median OS, 55 months and median PFS, 54 months). 48 patients were treated in a controlled clinical trial: they were significantly younger than the others (median age 57 vs. 73 years,  $p < 0.0005$ ) and had a significantly better prognosis (median OS 13 vs. 4 months,  $p = 0.0019$ ). High dose Ara-C was given to 25 of 93 patients treated with curative intent and resulted in a OS advantage compared to standard dose ( $p < 0.0005$ ). Finally, patients treated after 1993 had a better OS ( $p = 0.026$ ) compared to the previous cohort. A multivariate analysis performed excluding cytogenetic data (available only for 51 cases) found age ( $p = 0.005$ ), PS ( $p = 0.001$ ) and treatment before 1994 ( $p = 0.044$ ) to be the independent prognostic factors for both OS and PFS.

**Conclusions:** Young adults can be cured in approximately half of the cases but the outcome for the general population of adult AML, which is mainly an elderly disease, remains disappointing.

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Withdraw My Abstract if Not Selected: : No

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