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## PP-102

## Incidence, mortality and time trends of childhood soft tissue sarcomas in Russia

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**Introduction:** The aim of the study was to estimate patterns and trends of childhood soft tissue sarcomas (STS) in Russia with respect to incidence and mortality data.

**Materials and Methods:** The analysis was based on annual reports of Ministry of Health and Federal State Statistics Service on cases, deaths and person-years by gender, age, calendar year and region. Age-specific and age-adjusted rates were calculated. Additionally, the average annual percent change (AAPC) with 95% confidence interval, derived from a Poisson regression model, was estimated. Excess or deficit of incidence rates for geographical areas were expressed as standardized incidence ratio SIR (standardized to rate of Russia as whole).

**Results:** STS represent 5,8% of all childhood malignancies in Russia registered during for 2008-2012 behind leukaemias, brain tumors, lymphomas and renal tumors. The age-adjusted incidence rate (ASR, world standards) of STS per 1000000 patients below the age of 15 years was 7.2 (774 incident cases). The highest age-specific incidence was observed in children aged 0-4 years (11.5 per 1000000). A significant incidence trend was shown with AAPC of 3.7% between 1989 and 2012. The largest increase was observed in children aged 0-4 years (AAPC=5.6%). There were doubling of average Russian incidence rates in some areas such as Samarskaya oblast about 15 cases per 1000000. STS accounts for 10.8% of deaths from cancer in children in Russia and thus rank third behind leukaemia and brain tumors. The age-adjusted mortality rate of STS per 1000000 patients below the age of 15 years for 2008-2012 was 4.3 (459 deaths). The highest age-specific incidence was observed in children aged 1-4 years (6.7 per 1000000). A significant increase of mortality between 1999 and 2012 was shown with AAPC of 3.2%). The geographical differences of death rates were not analysed because of small numbers.

**Conclusion:** Significant increase of both incidence and mortality for childhood STS were found in Russia for last decades. Further study is required to explain higher rate areas.