

planned to repeat every 3 weeks. RT was performed using 4-MV X-ray, and the prescription dose was 46–50 Gy/23–25 fx. (median, 50 Gy) Clinical target volume included gross tumour volume and the entire nasal cavity and the ipsilateral paranasal sinus. After treatment, all patients were followed at our hospital.

**Result:** A complete remission was achieved in 5 patients (83%) at one month after treatment. Both the 5-year overall survival rate and disease-free survival rate were 100%. No severe adverse effect (grade 3?) have been found so far.

**Conclusions:** The initial results of the present experimental CRT with DeVIC for this aggressive lymphoma was absolutely excellent. This is encouraging and deserves a further study for concurrent CRT with 50 Gy/25fx. and 3 cycles of DeVIC comprised of non-MDR agents and etoposide for nasal NKTL.

## 9223

## POSTER

**Palliative Splenic Irradiation (PSI) in Haematologic Malignancies (HM)**

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**Background:** Splenomegaly is a common complication in HM often associated with hypersplenism, and may cause pain, epigastric discomfort and variable systemic effects due to cytopenias. We retrospectively evaluated PRTS in terms of symptomatic relief in patients with HM.

**Patients and Methods:** In 1993–2006, 32 patients with HM (median age – 57) received PSI. Twenty one patients (66%) were diagnosed with myeloproliferative disorder (MPD), 5 patients (16%) had malignant lymphoma (ML), 5 patients (16%) had chronic lymphocytic leukemia (CLL), and 1 patient (3%) had hairy cell leukemia. Splenomegaly was accompanied by pain in 26 patients (81%), anemia in 20 patients (63%), thrombocytopenia in 17 patients (52%) and fever 3 patients (9%). Radiation therapy to entire spleen was delivered by 2 parallel opposed fields using 0.5 daily fractions given 5 days per week up to 6–10 Gy total dose. Survival was analyzed employing Kaplan–Meier method.

**Results:** PSI resulted in splenic size reduction in 85% of patients, improvement of anemia in 94% of patients and improvement of thrombocytopenia in 69% of patients. The median survival (MS) of pts with MPD, CLL and ML was 45, 10 and 5 months respectively. The MS of pts responders versus non responders was 55 and 16 months respectively (hazard ratio 0.17;  $p = 0.03$ ; confidence interval 0.035–0.84).

**Conclusion:** In our hands, low dose PRTS provided effective palliation for patients with HM.

## 9224

## POSTER

**Acute Lymphoblastic Leukemia in the Adolescent and Young Adults: a Single Center Experience in Russia**

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**Background:** Adolescents and young adults (AYA) with acute lymphoblastic leukemia (ALL) constitute a distinct population from children and older adults. Based on patterns of referral, they may be treated by either pediatric or adult hematologists. As a group, AYA with ALL have a worse overall survival (OS) and event-free survival (EFS) compared to that achieved by younger children. Original pediatric protocols ALL-MB 91 and 2002 have shown high efficiency of treatment of children in Russia. As a hypothesis we have assumed that outcomes for AYAs treated at adult and pediatric institutions will be equivalent when using therapy based on that used in pediatric cooperative group protocols.

**The purpose** of the study was to assess the efficacy and toxicity pediatric protocols ALL-MB 91 and 2002 for adolescents and AYA with ALL.

**Materials and Methods:** Enrollment on the study began in December 1997. Inclusion of patients (pts) in protocol ALL-BFM 90 ( $n = 43$ ) was completed in September 2005 and ALL-MB 91/2002 – March 2008 ( $n = 34$ ). In protocols ALL-MB 91/2002 the pts receive four drug induction with dexametazone 6 mg/m<sup>2</sup> daily for 36 days, daunorubicin 45 mg/m<sup>2</sup> for 2 doses, vincristine 2 mg weekly for 5 doses and intrathecal (IT) cytarabine and IT methotrexate and IT prednisolone weekly for 5 doses. Consolidation therapy included L-asparaginase in a constant dose of 10000 ME/m<sup>2</sup> weekly for 18 doses and 6-merkaptopurine 50 mg/m<sup>2</sup> (100%) daily and methotrexate 30 mg/m<sup>2</sup> (100%) weekly with weekly doses adjusted according to white blood cell count. Central nervous system (CNS) irradiation is performed for pts with CNS involvement at diagnosis and for patients with T-cell ALL and a high presenting white blood cell count.

Traditional maintenance was carried out up to 24 months. The protocol ALL-BFM 90 called for the purpose of comparison as an effective standard therapy.

**Results:** 78 ( $m = 8$ ,  $f = 30$ ) pts have been enrolled. 77 pts are valuable (1 withdrew on day 1 of therapy). The median age is 19.3 years (range 15–35). 37 (86%) pts are in complete remission (CR) on the protocol ALL-BFM 90 vs. 29 (88%) pts – ALL-MB 91/2002. Respectively 3 (7%) and 3 (9%) pts died in the induction. 3 (7%) and 1 (3%) pts is refractory to therapy. 5 (12%) and 1 (3%) pts died in CR from significant toxicities. Respectively 9 (21%) and 3 (9%) pts relapsed. 4 (33%) pts have CNS relapse, and 6 (50%) have bone marrow relapse. 6-years event free survival (6 y-EFS) has 54 vs. 77% (median of observation 5.7 years,  $p > 0.05$ ), and 6-years overall survival (6 y-OS) has 65 vs. 82% ( $p > 0.05$ ) respectively. Myelosuppression toxicities of ALL-MB 91/2002 protocols have less significant compared with the ALL-BFM 90. In postremission period the most frequent significant toxicities are neutropenia Grade 4 (21 vs. 66%,  $p < 0.05$ ), and thrombocytopenia Grade 4 (0 vs. 62%,  $p < 0.05$ ), and infectious Grade 3–4 (32 vs. 55%,  $p > 0.05$ ).

**Conclusions:** Protocols ALL-MB 91/2002 is effective therapeutic regimes for ALL. Further studies with higher power are needed to determine if this treatment regimen offers an advantage to AYA patients with ALL.

## 9225

## POSTER

**G-CSF Administration in First Line Chemotherapy With ABVD for Hodgkin's Lymphoma in Adults**

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**Background:** Hodgkin's lymphoma is a hematological malignancy originating from B lymphocytes, characterized by the presence of Reed-Sternberg cells amongst other reactive cells. Recent advances in treatment have allowed, even in advanced stages, an overall survival of up to 89% in 5 years. ABVD (doxorubicin, bleomycin, vinblastine and dacarbazine) is the most widely used chemotherapeutic regimen, also associated with significant pulmonary, cardiac and hematologic toxicity. Neutropenia, one of its most common adverse effects, may lead to dose-density alterations, possibly worsening long-term results. Our objective was to verify the role of G-CSF administration in the maintenance of ABVD regimen dose-density, in first-line treatment of Hodgkin Lymphoma in adults.

**Material and Methods:** We conducted a retrospective cohort of patients who had histologic diagnosis of Hodgkin's lymphoma confirmed by our department of Pathology, from 2004 to 2009 ( $n = 272$ ). After application of admission criteria, 133 individuals were included. The patients were grouped according to prophylactic administration of G-CSF, which varied consonant different opinions of the doctors that integrated the Service, as there were no guidelines for this intent in use at the time of this Study. Statistical analysis was performed using SPSS version 18.0.2 program (SPSS Inc. ©, 2001, Chicago – IL, www.spss.com).

**Results:** We analyzed 1311 cycles of chemotherapy, administered for 133 patients, with a median of 12 cycles per patient [1;16]. There was a slight male predominance ( $n = 67$ ), with a median age of 33 years [16;73] and no significant difference between sexes. Although associated with higher neutrophil counts in subsequent cycles ( $p = 0.035$ ), administration of G-CSF resulted in no reduction in the frequency of treatment delays ( $p = 0.510$ ). Overall toxicity was acceptable, with 4 episodes of grade 3–4 adverse events.

**Conclusion:** Administration of G-CSF didn't affect the dose-density of the ABVD regimen for first line treatment in Hodgkin Lymphoma in the studied patient sample, in spite of altering the neutrophils count. Hodgkin's lymphoma is probably a unique entity in which it is possible to maintain dose-density of chemotherapy without using hematopoietic stimulating factors, even in those patients who have neutropenia at the beginning of each cycle.

## 9226

## POSTER

**Alemtuzumab-based Conditioning of Allogeneic Stem Cell Transplantation – a Retrospective Analysis of a Single Center**

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**Background:** Alemtuzumab-based conditioning of allogeneic stem cell transplantation (alloSCT) is used to lower the incidence of graft-versus-host disease (GVHD) in selected high risk patients. It is associated with high rate of mixed donor chimerism (MDC) and in some series with increased