

ant statistical analyses were performed on a number of patient characteristics, disease manifestations and treatment modalities and their outcomes, and compared in patients grouped according to treatment protocol, meaning also according to the period when they were observed and/or treated at our Clinic. Special attention was placed on the subgroup of HD patients in whom the ABVD chemotherapy protocol was the principal one. Multivariate analyses were performed in order to define whether known predictive factors, certainly the ones incorporated in the IPI, and others, sustain prognostic significance within the 'newer' subpopulation of HD patients, treated initially with the present gold chemotherapy standard. The most obvious advantage of ABVD treated patients was observed in the field of life expectancy. Overall survival was above 85% at 10 years, reaching its plateau shortly after year 2, as opposed to a near 55% for MOPP-based treated patients. EFS followed this line of conclusions. Chance for relapse was also markedly low. Patients treated with the hybrid MOPP/ABV(D) were not valuable for the analyses, since when this treatment option first became available, it was widely used for poor risk HD patients, thus diminishing their chances for a privileged outcome. In the segment of univariate statistical analyses, most of the parameters maintained their prognostic significance, although with slightly higher p-values. This applies to the IPI parameters also, both with the original settings, as well as under our dichotomization criteria (slightly altered points derived from population and disease characteristics). Nevertheless, in multivariate analyses, ABVD treated patients manifest no outcome affection by the known predictive parameters, except for a couple: one patient characteristic - age, and one disease manifestation - symptom presence. Therefore, HD patients treated with ABVD chemotherapy as their underlying regimen, still remain with significantly greater outcome expectations and very high reliability for achieving definite disease control. In that process not many patient characteristics, nor disease manifestations can influence their favorable prognosis, which is why this chemotherapy protocol is applicable to patients with different age and gender, with disease of different type or extent, with comparably similar favorable effect. The evidently lower incidence of undesired late effects is also a fact deserving respect and a confidence vote.

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### OBSERVATIONS WITH INTERIM PET/CT IN HODGKIN-AND DIFFUSE LARGE B-CELL LYMPHOMAS

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**Background.** Complete remission and recovery have been achieved in the majority of lymphoma patients owing to development of diagnostics, modern treatment strategies, and risk-adapted therapy. 18FDG-PET/CT has role in the correct determination of stage, prognostic factors and early recognition of relapsed in Hodgkin's lymphoma (HL) and diffuse large B cell lymphomas (DLBCL). Positive or negative interim PET/CT had stronger connect with prognosis of the disease than prognostic factors, that we knew. **Design and Methods.** We examined 50 patients (32 HL and 18 DLBCL) in the CHEAP (chemotherapy effectiveness assessed by PET) study, after 2. or 3. cycle of the chemotherapy from June 2008. Assessment of the examen based on SUV and we compared this with the pretreatment PET/CT. We detected complete metabolic remission or minimal residual uptake in 80% of the patients. We continued the treatment of these patients. Interim PET/CT was positive in 20% of the cases, we changed the therapy (one patients had high-dose therapy and autolog stem cell transplantation). **Conclusions.** Interim PET/CT is useful for lymphoma patients. But there are some questions that we don't know the answers yet. Shall we do PET/CT after complete the therapy, if interim PET/CT was negative? Shall we change the therapy (cycle, dose or another therapeutic options) if we seen minimal residual uptake on interim PET/CT? Shall we reduced therapy (cycle or dose) if interim PET/CT negative?

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### GEMCITABINE (GEMZAR) AS A SALVAGE THERAPY AT RELAPSED AND REFRACTORY HODGKIN'S LYMPHOMA

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**Background.** Most patients with Hodgkin's lymphoma (HL) can be cured with initial chemotherapy. Effective salvage treatment is needed

at about 20-30% patients who had refractory and relapsed disease. The purpose of this study was to analyze the efficacy and the toxic profile of gemcitabine in patients with relapsed and refractory Hodgkin's lymphoma. **Design and Methods.** This study included ten patients with Hodgkin's lymphoma diagnosed between January 2001 and April 2007 at the Institute of hematology CCS, Belgrade. Demographic characteristics were as follow: male/female ratio was 7:3 (70%:30%); the median age was 43 years (range, 20-76). All patients had advanced disease: 4 pts had CS II B M+, 2 pts had CS III B, 4 pts had CS IV B); International Prognostic Score < 3 had 4/10 patients. Six patients were refractory to initial therapy. Six patients with mediastinal bulky form of disease were initially treated with BEACOPP regimens and 4 pts received ABVD. Seven patients received involved field radiotherapy. Gemcitabine was administered at a starting dose of 1250 mg/m<sup>2</sup> on day 1, 8 and 15 every 3 weeks in combinations with steroids (dexamethasone). All patients had received at least 2 cycles of gemcitabine (range, 2-6). The median follow-up period was six months. **Results.** Overall response rate was 30% with 1 patient achieving complete remission (CR) and 2 patients partial remission (PR). Hematological toxicity grade 3-4 occurred in 5 patients leading to dose reduction. No other non-hematological toxicities were observed. Seven patients discontinued treatment because of disease progression. The median time to treatment failure was 4,5 months. The longest responder has been in CR for over 40 months. **Conclusions.** Gemcitabine is an effective drug with low toxicity profile in patients with refractory and relapsed Hodgkin's lymphoma. Dose and schedule may be modified in the future to optimize responses. Further trials using gemcitabine in combination with other chemotherapy are needed.

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### THE PROGNOSTIC PROFILE AND THE OUTCOME OF PATIENTS WITH EXTRANODAL HODGKIN'S LYMPHOMA

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**Background.** Hodgkin's lymphoma (HL), much more than non-Hodgkin's Lymphoma (NHL) is predominantly a nodal disease with extranodal involvement being uncommon. Although the treatment of patients (pts) with HL at any stage of presentation is highly successful, a significant minority of pts fails primary therapy. Distinguishing further prognostic factors might contribute to initially better selection of pts for more intensive treatment. **Aims.** To analyze the prognostic value of extranodal involvement in advanced HL pts in order to determine optimal initial prognostic model which could follow more adequate therapeutic modality. **Design and Methods.** In a cohort of 89 pts with advanced HL (CS IIB-IV) treated with ABVD regimen from 1997-2004, we examined subgroup of 31 pts with extranodal disease for prognostic profile, at diagnosis. The median follow-up was 7 years (yrs). Their significance was evaluated according to the response to treatment and survival period. It was correlated with International Prognostic Score (IPS), bulky mass, >3 sites involvement, ESR>50 as well as molecular parameters Ki67, Bcl2 and BAX. **Results.** The distribution of extranodal disease was: 18 patients had bone marrow infiltration, the spleen in 5 patients, the lungs in 4 patients, the liver in 4 pts. The IPS> 3 had 25 pts and 15 of them had bone marrow infiltration. The EN localization had adverse effect on OS7y (45% vs 78% for pts without EN,  $p=0.005$ ) and also on EFS (log rank  $p<0.05$ ). There was a positive correlation between IPS>3 and EN disease  $p=.001$ , as well as bone marrow involvement  $p=.003$ . Both pts with EN localization and pts with bone marrow infiltration had high proliferative index (Ki67>50%)  $p=0.019$ ,  $p=0.004$  respectively. There was no significant correlation with other examined features. Cox's multivariate model did not revealed EN disease as a significant independent prognostic factor ( $p>0.05$ ). **Conclusions.** Extranodal HL patients with high IPS and high proliferative index are at higher risk of treatment failure and might be eligible for more effective treatment approach.