biotransformation. As a result, if atorvastatin or simvastatin are use with TKIs for CV risk reduction the HMG-CoA reductase inhibitors exposure increase and it should be taken into account in patients with abnormal liver tests due to TKIs using. Rosuvastatin or pravastatin exposure does not change due to simultaneous treatment with TKIs and could be a beneficial role for CV disease prevention.

Conclusion: The decision for the necessity of the CV risk reduction for CML patients treated with TKIs through strategy prevention should be based on the assessment the next factors: individual CV risk of the patient and the necessity of CV risk reduction, liver function, the metabolism peculiarities of TKIs using for CML treatment, the metabolism peculiarities of the HMG-CoA reductase inhibitor potential recommended for CV risk reduction, drug–drug interactions TKI and HMG-CoA reductase inhibitor.

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CHRONIC MYELOPROLIFERATIVE DISEASES

OP 04

Analysis of demographic and clinical characteristics of primary myelofibrosis and post-polycythemia vera/essential thrombocythemia myelofibrosis patients

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Objective: Myelofibrosis (MF), could be de novo (primary myelofibrosis [PMF]), as well as developing in the clinical course of polycythemia vera (PV) or essential thrombocythemia (ET). PMF and post-PV/ET MF have many common features with clinical course and laboratory findings. However, there are insufficient studies showing the etiological or morphological differences between these patients. In this context, the aim of this study was to contribute to the literature by comparing PMF and PV/ET patients who developed MF.

Case report: . . .

Methodology: This retrospective study included 31 patients who were diagnosed with PMF and post-PV/ET MF in the Hematology Department of Dışkapı Yıldırım Beyazıt Training and Research Hospital between 2008–2019. The diagnosis of PMF was made according to the WHO criteria and the IWG-MRT group criteria were used for the diagnosis of PPV-MF and PET-MF. The two groups were compared in terms of demographic and clinical features. The diagnosis date, demographic and clinical features, physical examination findings, mutation analyses, treatment management and follow-up times of all the patients were recorded. Hematological parameters including Hb, hematocrit (Hct), leukocyte (WBC), neutrophil, lymphocyte, monocyte, platelet, platelet distribution width (PDW), mean platelet volume (MPV), LDH, ferritin and Vitamin B12 levels were examined.

Results: Evaluation was made of a total of 31 patients, including 16 PMF and 15 post-PV/ET MF. The mean follow-up period was 31.1 months [1–107.5]. JAK-2 V617F gene mutation was detected 10 (62.5%) PMF patients and 12 (80%) post-PV/ET MF patients. Splenomegaly was detected at the time of diagnosis in all PMF and post-PV/ET MF patients. When the size of the spleen was examined, there was no statistically significant difference between the two groups.JAK-2 V617F gene mutation was detected 10 (62.5%) PMF patients and 12 (80%) post-PV/ET MF patients. In terms of JAK-2 V617F mutation positivity, there was no statistically significant difference between the two groups. JAK-2 V617F mutation, and allele burden of ≥60% was detected in 70% of PMF patients and in 90% of post-PV/ET MF patients. The allele burden was not determined to affect OS in patients with MF. Hydroxyurea was most frequently used as the first line treatment in PMF (81.3%), while ruxolitinib was preferred in post ET/PV MF (53.3%). Throughout the follow-up period, thromboembolic complications developed in 12.5% of PMF patients and in 13.3% of post-PV/ET MF patients. There was no statistically significant difference between the two groups in terms of thromboembolic complications. Acute myeloid leukemia transformation was observed in 1 (6.25%) patient from the PMF group during the follow-up period. The OS of patients was mean 63.6 months in the PMF group, and mean 78.3 months in the post-PV/ET MF group. As a result of the Log Rank test, no significant difference was observed between the two groups in terms.

Conclusion: The results of this study demonstrated that PMF and post-PV/ET MF patients showed similar demographic, clinical and prognostic features in general. Therefore, patients with ET and PV should be closely monitored for MF development and should be managed as PMF if MF develops.

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OP 05

Incidence in PH-negative myeloproliferative neoplasms in armenia from 2005 to 2019

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Objective: Enhancements of laboratory diagnostics and the emergence of new therapies had a significant impact on incidence, prevalence and survival of patients with MPN. Published epidemiology data are scarce, and multiple sources are needed to assess the disease burden.

Case report: The aim of our work was to identify the patterns and trends of incidence, prevalence and survival of patients with MPN in the Republic of Armenia for the period 2005–2019.

Methodology: The data from Hematology Center blood diseases register, Oncological Center cancer register, as well as the data from death registration were basis of our research. Demographic data were obtained from National Statistical Office PA (http://www.armstat.am). The calculation of standardized indicators has been based upon the data from the Demographic compendium of Armenia from 2005 to 2019.

Results: Analysis of the data obtained has shown that, during the reporting period the average annual incidence of MPN was 1.84 per 100,000 inhabitants, including 2.1 for male and 1.64 for female. Analysis of incidence rates of MPN in relation to sex and age in the period under study revealed high rates in patients in groups 65–74 (8.3) and 55–64 (5.12 per 100 thousand years), respectively. According to the data obtained in the group of patients with MPN, the high annual average incidence rates are noted in PMF (1.09 in 2018) and PV (0.89 in 2016), the lowest for ET (0.7 in 2016) per 100,000 population, respectively. In comparing our data to those obtained for 1966–1971 and 1998–2004 periods, one may detect a statistically significant increase in the total incidence of PMF and PV ($p < 0.001$).

Conclusion: Analysis of the incidence rate in MPNs adjusted for age and gender shown prevalence in group 65–74 (8.3) and in group 55–64 (5.13) per 100,000 inhabitants. The peak of incidence rate for both males and females was the age 65–74 and the male female incidence ratio in this age group was 11.3:6.2. The increasing incidence rate in MPNs in Armenia depends on the improvement of laboratory diagnosis. Thrombotic complications are observed in patients with MPN in 45.3% of cases. In most cases, thrombosis is the first clinical symptom of a myeloproliferative disease, which determines the need for the introduction into clinical practice of molecular genetic testing methods among patients with thrombosis, an increase in blood levels, splenomegaly for the early diagnosis of clonal hematopoiesis and the use of a targeted drug.

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LYMPHOMA

OP 06

The importance of next generation sequence in patients with diffuse large B cell lymphoma

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Objective: Diffuse large B cell lymphomas (DLBCL) are clinically and morphologically heterogen diseases. There are more than 150 gene mutations in DLBCL. Mutations effect disase survey by histon modification, cell proliferation, cell metabolism and differentiation, apoptosis, response to DNA injury, B cell and Toll-like receptor signalization, angiogenesis and immun regulation in patients with DLBCL. We aim to search gene expression frequency, the relation of mutative genes expression with treatment response and survey in patients with DLBCL.

Methodology: The DNAs of patients with DLBCL obtained from formalin fixed paraffin embedded biopsy material in Pathology Department as retrospectively. Illumina genom analyzer and qiaqen method for bioinformatic software was used. Total 141 gene were evaluated. SPSS 17.0 were used for statistically analyses. We used Shapiro-Wilk test relevance for distrubition. The results were described as a number, frequency, and percentage. The chi-squared and Student's *T*, Mann–Whitney *U* tests were used for the analysis. The results were assessed at a 95% confidence interval and a *p*-value of less than 0.05 was accepted as significant.

Results: We found mutation in 13 of 141 genes. The pathological genes were ANKRD26, BRCA1, BRCA2, EZH2, KMT2C, MSH6, MYC, MYD88, NF1, NOTCH1, PMS2, PTEN and WRN. There were relations among ANKRD26, BRCA2, MYD88, NOTCH1 genes with prognosis. The remission rates in patients with ANKRD26, BRCA2, MYD88, NOTCH1 were 33.3% ($p < 0.05$), 52.4% ($p < 0.05$), 0% ($p < 0.05$), 37.5% ($p > 0.05$), respectively. The relapse rates in patients with ANKRD26, BRCA2, MYD88, NOTCH1 gene mutation were 58.3% ($p < 0.05$), 38.1% ($p = 0.37$), 66.7% ($p = 0.23$), 62.5% ($p = 0.03$), respectively.

Conclusion: ANKRD26, BRCA2, MYD88, NOTCH1 genes effect prognosis in patients with DLBCL. Aggressive treatment can be useful in patients DLBCL that have ANKRD26, BRCA2, MYD88, NOTCH1 gene mutations.

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OP 07

Real experience of brentuximab vedotin for cutaneous T cell lymphomas

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Objective: Patients with relapsed/refractory CD30 positive lymphomas have relatively poor outcomes, with reported 3–5-year overall survival (OS) of only 30–50%. Mycosis fungoides (MF) and its leukemic variant, Sézary syndrome (SS), are the most common subtypes of cutaneous T cell lymphoma (CTCL). Brentuximab vedotin (BV) is an antibody-drug conjugate linking a CD30 antibody to four molecules of the microtubule inhibitor monomethyl auristatin E (MMAE), which has multiple proposed mechanisms of action BV is FDA-approved for relapsed Hodgkin's lymphoma (HL) and systemic anaplastic large cell lymphoma (sALCL). National Comprehensive Cancer Network guidelines have already incorporated BV as a primary treatment option in multifocal primary cutaneous anaplastic large cell lypmhoma (pcALCL) and MF.

Methodology: Between January 2018 and June 2020, 10 patients with CD30+ cutaneous T cell lymphoma (MF and pcALCL) who were treated with BV are evaluated in our study. One cycle of BV typically involves 1.8 mg/kg being administered intravenously once every 3 weeks. We detail our experience with BV and the position of BV in our treatment methods for CTCL.

Results: Ten patients (6 male and 4 female) have received BV in our center. Median age at time of commencing brentuximab was 54.5 years (range 34–72 years), 80% of patients had experienced at least one prior line of chemotherapy (range 0–2). Six patients with Mycosis Fungoides (MF) and large cell transformation (LCT) and one with high burden Sezary