and receiver operating characteristic (ROC) analysis of most discriminating indices (Matos & Carvalho, Mentzer Index, RDW Index, Green and King, Ehsani Index) used in differential diagnosis of these two diseases was calculated using MedCalc v15.2 statistical software. Nonparametric nature of the CBC sample was assessed using the Kolmogorov–Smirnov test. Mann–Whitney test was used to investigate differences between the two groups. Area under the ROC curve was calculated for each index and their differences were assessed. A p-value < 0.05 was considered significant.

Among the 5 tested indices, the Ehsani index correctly diagnosed the highest number of children with β-thalassemia, but failed to properly recognize children with IDA (sensitivity 92%, specificity 46%). The most commonly used Mentzer index showed similar results (sensitivity 88%, specificity 48%). The best ratio between sensitivity and specificity was observed for the new Matos & Cavalho index (sensitivity 74%, specificity 88%) with highest area under the ROC curve. Pairwise comparison of ROC curves observed a significant difference between Matos & Cavalho index and the remaining four tested indices (RDWI p<0.0008; Ehsani p<0.0001; Green and King p<0.0001; Mentzer p<0.0001). Kolmogorov–Smirnov test for normal distribution of CBC values showed a p>0.05 while Mann–Whitney U test for independent samples showed a p<0.05 difference between IDA and β-thalassemia.

Our results show that the most optimal index for discriminating between β-thalassemia and IDA in analysed children is Matos & Cavalho Index. Therefore, it is more appropriate for discernment than the other analysed indexes. All indexes with low specificity (Mentzer, Ehsani, Green and King) were of low validity as they have a low proportion of IDA correctly identified as such.

## 295 NON-HODGKIN LYMPHOMA IN CHILDREN: SINGLE CENTER EXPERIENCE DURING 20 YEARS

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Lymphomas are the third most common malignant disease in childhood, after leukemia and brain tumors. The aim of this study is to show stratification by gender and age as well as long term survival in pediatric patients diagnosed with Non-Hodgkin Lymphoma in our center.

Our retrospective analysis included 85 children with newly diagnosed NHL from January 1, 1997 to December 31, 2016. They all have been diagnosed and treated at the Department of Pediatric Hematology and oncology, University Hospital Centre Zagreb.

Out of 85 children with newly diagnosed NHL 48 of them suffered from B-cell NHL (n = 48; 56%) while the rest of them had T-cell lymphoblastic lymphoma (T-LBL) (n = 20; 24%) or Anaplastic large-cell lymphoma (ALCL) (n = 17; 20%). There were 25 girls and 50 boys (age 3 – 17 years). Overall survival (OS) for the entire group was 78.82%. Diagnose based survival is in the favor of T-LBL – 85.00% in comparison to 81.25% in B-NHL and 64.71% in ALCL.

Our survival rates are not very different from the ones in the other European countries. We expect improved survival rates after introducing novel treatment that would optimize therapeutic effect and at the same time minimize the risk of severe late toxic effects.

## 296 ESTIMATION OF THE GLOMERULAR FILTRATION RATE IN CHILDREN WITH HAEMOPHILA

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Haemophilia is rare, inherited and severe bleeding disorder characterised with factor VIII or factor IX deficiency. The estimated glomerular filtration rate (eGFR) is one of the best-performing methods to evaluate kidney function. Glomerular filtration rate cannot be directly measured; however, it can be determined by measuring the clearance of an ideal filtration marker or estimated using predictive formulas. The aim of this preliminary study was to calculate eGFR of paediatric haemophilia patients treated in our centre and assess the correlation of eGFR calculated by creatinine-based and cystatin-based equations.

In our study, we included 36 boys with moderate or severe haemophilia. Out of a total of 36 patients, 27 had haemophilia A and 9 had haemophilia B.

Their mean age was 11.2±4.31 years, with a range from 3 to 18 years. We investigated the correlation and agreement between two eGFR equations (creatinine-based ‘Bedside Schwartz’ equation and cystatin-C based equation). Along with applying correlation and linear regression tests, the Bland Altman test was performed to assess the agreement of the results.

Statistically significant differences were found between the mean eGFR values (p<0.001). No significant correlation was found between the two methods (p<0.07). Bland-Altman analysis results showed higher mean eGFR values of bedside Schwartz equation compared to the cystatin-C based formula, meaning that a significant disagreement was found between those two equations. However, within the group of haemophilia B patients, statistically significant positive correlations between the two methods were found, although still a disagreement was observed. Due to the observed disagreements between eGFR within haemophilia patients, further research is needed to find the optimal measure of eGFR. We suggest extending this study on a larger cohort of patients and include other possible eGFR equations.
Our aim is to identify, analyze and compare the international guidelines or national consensus reports on the management of immune thrombocytopenia in children (ITP).

We performed a systematic search on PubMed database using keywords: ‘immune thrombocytopenia in children AND [‘children’ OR ‘pediatric’ OR ‘paediatric’] AND [‘guideline’ OR ‘consensus’]’ between 1992 (first guideline) and 2020. We excluded publications written in other languages than English or French and animal studies. A total of 54 papers have been initially found. After exclusion of those that were not relevant or other types of publications than guidelines or consensus (reviews, case series, case reports) we ended up in gathering 44 publications. After full text screening, we excluded papers that did not particularly refer to ITP guidelines but to quality of life, adherence to treatment etc. Finally 6 papers have been found to meet such strict criteria.

They are only six countries in the world published having a specific ITP published in PubMed with American Society of Oncology Guidelines for Immune Thrombocytopenia, Great Britain, Spain, Italy, Argentina and Japan.

The USA and Italian Guidelines recommend for children newly diagnosed with ITP without bleeding or minor bleeding observation rather than corticosteroids and Immuno globulin IV (USA). For Children with non-life threatening mucosal bleeding the American guideline suggest corticotherapy no longer than 7 days. For the forms non-responsive at the first line the treatment, the American and Spanish Guidelines indicate thrombopoietin receptors agonist (TPO-RA-Eltromobag) rather than Rituximab and Splenectomy. According to the Spanish guideline corticotherapy is the first choice therapeutic. Generally the primary goals of these guidelines are to review and implement evident based-recommendations. Other treatments include Azathioprine, Cyclophosphamide, Cyclosporine A, Dapsone, Danazol and Myofenolate of Mofetil. In 2018 a joint working group (JWG) of several hematology societies (Germany, Switzerland, Austria) published a European Guideline for adults with ITP but more limitate for children with ITP (no standard treatment for chronic ITP at children).

The splenectomy is universally the last option for treatment in ITP at children.

The general purpose of the Guidelines are the implement new therapies (Eltromobag/Romiplostim) at children because they are rather than cortico therapy and immuno globulin IV (which are important side-effects and expansive bugets ). At children for Eltromobag are raported minor or moderate side-effects and no for long term.