Methods
This observational study (NCT01192347) was conducted in 43 clinical centres across France. High-risk patients (aged >60 years; history of thrombohaemorrhagic events; platelet count >1000x 10^9/L) with ET were identified and enrolled within 1 month of switching to anagrelide, and monitored for a total of 6 months.

Results
177 patients were enrolled: 62% female, 76% aged >60 years, median baseline platelet count 553x10^9/L. Intolerance to therapy (65%) and inefficacy (41%) were the most frequent reasons for treatment switch (factors not mutually exclusive). Almost all patients switched to anagrelide from hydroxycarbamide (93%). The Summary of Product Characteristics (SPC)-recommended anagrelide starting dose (1mg/day) was used most frequently (53%); a notable proportion of patients (41%) started on 0.5mg/day, and starting doses ranged from 0.3 to 1.5mg/day. The median anagrelide dose at study end was 1.5mg/day.
The method of anagrelide introduction was consistent with the SPC dosing recommendations in 76% of patients. After 6 months' follow up, 85% of patients (n=144/170) were still receiving anagrelide and 71% (n=120/170) achieved a platelet response. 87% of patients who discontinued PT after initiating anagrelide achieved a platelet response (n=34/39) compared with 67% of patients who discontinued PT before anagrelide initiation (n=77/115). Platelet response rates were higher in patients whose anagrelide initiation was consistent (n=100/133, 75%) versus inconsistent (n=20/37, 54%) with the SPC dosing recommendations. The most frequent adverse drug reactions were palpitations (13%) and headache (11%).

Conclusions
This real-world evidence study showed that highest platelet response rates were observed when PT was discontinued after anagrelide initiation or when anagrelide was initiated consistently with the SPC dosing recommendations. Safety data corresponded with the SPC.

P1.06 An unusual presentation of tuberculosis

F. Trullemans, R. Mertens, M.C. Chintinne, R. Schots

UZBrussel, Jette, Belgium

Immune thrombocytopenia is characterized by accelerated platelet destruction and decreased platelet production. Platelet antibodies are detected in 60% of patients. Most cases are considered primary (no underlying cause), whereas a minority is drug-induced or attributed to an underlying condition including infection, lymphoproliferative disease or autoimmune disorders. The most common associated chronic infections are hepatitis C (HCV), Human immunodeficiency virus (HIV) and Helicobacter Pylori.
A 43-year-old female with sickle cell disease presented with mucocutaneous bleeding. Her medical history revealed pulmonary arterial hypertension, osteonecrosis and hepatic cholestasis as a result of vaso-occlusive crises.
Physical examination showed petechiae, ecchymoses and localized erythema nodosum on both legs. Laboratory work-up documented moderate anemia, marked thrombocytopenia and presence of platelet autoantibodies. Screening for viral infections (HIV, HCV), systemic lupus erythematosis and antiphospholipid syndrome was negative. Bone marrow examination was unremarkable.
PET-CT scan revealed isolated FDG-avid periportal adenopathies. Histopathological examination of a CT-guided lymphe node biopsy was consistent with tuberculous adenitis. Microbiologic culture identified Mycobacterium Tuberculosis.
She was successfully treated with antituberculous drugs and intravenous immunoglobulines. During follow-up, a sustained platelet count recovery was achieved. Absence of platelet autoantibodies was documented after completion of therapy.
We report immune thrombocytopenia as a rare manifestation of tuberculous adenitis. This case illustrates that testing, in a population at risk for an otherwise unsuspected persistent infection with tuberculosis, might be worthwhile since treatment of the immune thrombocytopenia (steroids, immunosuppressive agents) may worsen the infection.

P1.07 Jacobsen syndrome as a rare cause of neonatal thrombocytopenia

C. Chantrain[1], C. Berce[1], J.P. Stalens[2], F.G. Debray[3], P. Philippet[1], N. Francotte[1], L. Tomme[1]

[1]Montegnée, Belgium, [2]Division of Pediatrics, Tournai, Belgium, [3]Pinocchio Centrum, Clinique de l'Espérance, Metabolic Unit and Clinical Genetics, Chc-chu liège, Belgium

Thrombocytopenia is one of the most common hematological problems in neonates, affecting 0,5-0,9% of all newborns and more than 25% of all patients admitted to neonatal intensive care units. In rare cases, it is caused by inherited conditions wherein decreased platelet count may be associa ed to a broad spectrum of clinical and biological symptoms including abnormal platelet functions. We report the case of a baby boy born at 36 weeks of gestation with intra-uterine growth retardation, facial dysmorphism (low-set and posteriorly rotated ears with hypoplastic helices, micrognathia, hypertelorism), perimembranous intraventricular septal defect and severe neonatal thrombocytopenia. The platelet count at birth was 10,000/uL and remained at 21,000/uL despite a treatment with intravenous immunoglobulin. The child received 2 transfusions of platelets and his count progressively increased around 50,000/uL at day 14. A bone marrow examination was performed at day 14 and revealed a megakaryocytopenia. Based on the dysmorphic syndrome, a genetic workup was rapidly initiated. The CGH-array revealed a deletion in the 11q24.2-q25 region consistent with the diagnosis of Jacobsen syndrome. The genetic investigation of the family was negative, suggesting that this deletion occurred *de novo*. The platelet count progressively increased and was normalized after 4 months of life. In addition, the child developed a moderate microcytic anemia currently treated by iron supplementation. His neutrophil and lymphocyte counts remained normal for the age over time. A first coagulation screening was normal but additional assessments of the platelet morphology and functions are scheduled within the next months. To date, over 200 cases of Jacobsen syndrome have been reported. This syndrome is caused by terminal deletion of the long arm of chromosome 11. It includes dysmorphic craniofacial features, cardiac and urogenital malformations, syndactyly, ophthalmologic problems, GH and thyroid defect, developmental delay and neonatal thrombocytopenia or pancytopenia. Platelet count tends to increase spontaneously to near normal level. The prevalence has been estimated at 1/100,000 births, with a female/male ratio 2:1.

P1.08 Hemolytic crisis induced by rasburicase administration revealing G-6-PD deficiency

S. Sid, D. Dugauquier, B. De Prijck, C. Bonnet, Y. Beguin

University Hospital of Liège, Liège, Belgium

Mr BI, a 27-year-old man of Moroccan origin was hospitalized in our center for exploration of abdominal masses discovered by CT scan performed in the setting of gastric pain. Analysis of the surgical biopsy revealed the presence of a Burkitt's lymphoma (CD20+, CD5-, CD23-, CD22+, FMC7+, CD79b+, t(8;14)(q24;q32)). The Ann-Arbor stage was 4A. The blood analysis showed a complete blood count within normal range, an inflammatory

syndrome and cholestatic and cytolytic hepatitis. There was no cardiac, kidney or pancreatic impairment. Within 48 hours, debulking corticotherapy (methylprednisolone 20mg 3x/d IV) was started. To avoid tumor lysis syndrome, the patient received abundant hydration in association with rasburicase. Two days later, routine measurement of arterial saturation showed a SaO2 of 80% with 15% of methemoglobin and anemia (Hb 9.1g/dL). First asymptomatic (except for the macroscopic hematuria), the patient developed two hours later grade IV anemia (Hb 6.5g/dL) with evidence of hemolytic crisis (LDH: 5330 UI/L and bilirubinemia: 58.1 mg/L respectively). The patient was transferred to the intensive care unit for monitoring and received 6 units of red blood cells. The evolution was good with administration of the planned chemotherapy and achievement of a complete response.
A more detailed history of the patient revealed Glucose-6-phosphate dehydrogenase (G-6-PD) deficiency in two brothers. This defect may induce, hemolytic anemia by decreasing the synthesis of NADPH, an essential enzyme that prevents aggression of the cytoplasmic membrane by free radical accumulation. Several drugs can induce this type of complication, including rasburicase, a recombinant urate oxidase.
Three months after the end of treatment, G-6-PD deficiency was confirmed by spectophotometric *measurement of the G-6-PD activity.*
This case report underlines the high incidence of G6PD deficiency in some ethnic groups and the importance of a detailed patient and family history before starting treatment even in case of emergency.

P1.09 Evaluation of automated white blood cell differential count in cerebrospinal fluid on the body fluid module of Sysmex XN 2000

D. Labaere[1], I. Geerts[2], M. Moens[2], M. Van den Driessche[2]

[1]Imelda Hospital Bonheiden, Leuven, Belgium, [2]Imelda hospital, Bonheiden, Belgium

White blood cell (WBC) differential count in cerebrospinal fluid is an urgent and important analysis which is traditionally performed by microscopy on cytospin slides. This study investigated whether automated WBC differential count on Sysmex XN 2000 could serve as a suitable alternative for the manual method. Twenty-nine CSF samples with WBC count ≥ 10/µl were used for method comparison between the Sysmex XN 2000 and manual differentiation (200 WBCs) on cytospin slides. An excellent correlation without significant bias was found for the percentage (%) and absolute number (cells/µl) of polymorphonuclear cells ($y = 0.95x + 0.97$, $R^2 = 0.98$ and $y = 1.01x - 2.84$, $R^2 = 1.00$, respectively) and mononuclear cells ($y = 0.95x + 3.70$, $R^2 = 0.98$ and $y = 0.95x + 5.33$, $R^2 = 0.98$, respectively). Moreover, the XN 2000 agreed well with microscopic differentiation for the percentage and absolute number of neutrophils ($y = 0.95x + 0.92$, $R^2 = 0.98$ and $y = 1.00x - 2.38$, $R^2 = 1.00$, respectively) and lymphocytes ($y = 0.96x + 2.90$, $R^2 = 0.98$ and $y = 1.03x + 1.70$, $R^2 = 0.97$, respectively), but a small significant negative bias was found for monocytes ($y = 0.88x + 1.46$, $R^2 = 0.91$ and $y = 0.85x + 2.04$, $R^2 = 0.99$, respectively). In conclusion, this study found a good agreement between automated WBC differential count on Sysmex XN 2000 and manual differentiation. Therefore, this instrument is a fast and accurate alternative to microscopy for analyzing CSF.

P1.10 Immunomodulatory effects of Rapamycin in xenogeneic GVHD

G. Ehx[1], M. Hannon[1], S. Dubois[1], A. Halleux[1], L. Belle[1], P. Drion[1], Y. Beguin[1], S. Humblet-Baron[2], F. Baron[1]

[1]University of Liege, Liège, Belgium, [2]University of Leuven, Leuven, Belgium

Graft-versus-host disease (GVHD) remains a major cause of morbidity and mortality after allogeneic hematopoietic stem cell transplantation (HSCT). Several studies have shown that rapamycin (RAPA), an mTOR inhibitor with immunosuppressive properties, is an efficient treatment for many patients with GVHD, notably by favoring regulatory T cells (Tregs) proliferation in vivo and in vitro. However, very few data have been reported about the global impact of this drug on the immune system in the context of GVHD. The present work investigates the cellular mechanisms by which RAPA delays death from xenogeneic GVHD induced by human peripheral blood mononuclear cells infusion in NOD-scid IL-2Rγnull (NSG) mice. Our results show that RAPA injections significantly delay death from xenogeneic GVHD and reduce disease severity. Flow cytometric analyses highlighted a strong reduction of human cells chimerism in RAPA-treated mice in comparison to control mice, together with higher $CD4^+/CD8^+$ T cells balance due to a lower proliferation of $CD8^+$ T cells. In addition, the frequencies of naive $CD4^+$ and $CD8^+$ T cells were higher and the $CD4^+$ T cells showed a reduced effector phenotype ($CD45RO^+CD27^-$). Tregs were positively affected by RAPA that up-regulated their expression of Bcl-2 and Ki67 as well as their STAT5 phosphorylation level, leading to higher Treg frequency in treated mice. Altogether these data demonstrate that RAPA delays xenogeneic GVHD by lowering human chimerism and effector $CD4^+$ frequency as well as promoting Tregs.

P1.11 Acute myeloblastic leukemia infiltrating-T lymphocyte characterization, from bone marrow and peripheral blood

R. Rouas, M. Merimi, M. Berehab, D. Moussa-Agha, P. Lewalle, P. Martiat

Institut Jules Bordet, Bruxelles, Belgium

Since a few years, there is increased evidence that the immune microenvironment plays a fundamental role in the outcome of leukemia. In particular, several groups have recently highlighted the role of regulatory T cells. In acute myeloblastic leukemia patients, we have assessed quantitatively and qualitatively the purified T cell population, using flow cytometry, Affymetrix microarray and quantitative RT-PCR array studies, at diagnosis and in complete remission, in bone marrow and peripheral blood samples, in an effort to better correlate the role of the absolute number and percentage of the various T cell subpopulations to the outcome of the disease in terms of relapse-free survival and overall survival, in otherwise undistinguishable leukemia as far as known prognostic factors are concerned. Patients clustering analyses revealed important significant differences between leukemic patients and healthy individuals in the gene expression profile of their T lymphocytes. T cell polarization bias in AML patients vs healthy individuals consist in the fact that type 1 T cell response associated molecules are downregulated, type 2 T cell response associated molecules are upregulated, regulatory T cell associated molecules are upregulated, innate immunity is inhibited, immunosuppressive molecules are expressed, T cell activation, inflammation and immune cell recruitment genes are expressed. We also observed significant differences in T cells from the different groups, showing that high risk AML patients have T cells that display a distinct genetic program than those from intermediate or "favorable"risk group, The same thing is observed when we perform an age super-vised analysis. However, a few differences were observed in remission compared to diagnosis in T cells.
Most of AML studies were focused on the leukemic blast biology,