of 52 days. One patient relapsed (7% *vs* 33.5% in literature) after 14 months of CR. We found a higher mortality rate (42%) compared to the literature (7.9%-33%), probably due to the transfer of critically ill patients to the Ghent University Hospital.

**Conclusion**
The characteristics of the patients diagnosed with AHA in the Ghent University Hospital over a period of almost nine years are comparable with those described in the literature, except the lower relapse rate and higher mortality rate. AHA is a severe bleeding disorder with a potential fatal outcome.Not recognizing the signs and symptoms may delay diagnosis and adequate treatment with severe impact on prognosis.

## P1.03 Comparison of hemoglobin on RapidPoint 500 blood gas analyser (Siemens) to XE-5000 cell counter (Sysmex)

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**Objective**
To evaluate whether hemoglobin concentration (Hb) measured by a RapidPoint 500 blood gas analyser (RP500) is interchangeable with that measured by a XE-5000 automated blood cell counter. Both methods use different blood tubes and different measurement principles.

**Materials and Methods**
Routinely prelevated heparinized arterial blood gas syringes (ABG) (Sarstedt, Germany) and EDTA vacutainer tubes (BD, USA) from patients admitted to the intensive care unit were collected. These tubes were prelevated simultaneously through the same arterial catheter. Hb on ABG was tested randomly on maximum five different RP500s (Siemens, Germany) at three hospital sites with a minimum of 30 measurements on each analyzer. Hb on EDTA tubes was measured by one XE-5000 (Sysmex, Japan). All samples were tested within 24 hours after blood sampling. Statistical analyses were performed using MedCalc (MedCalc Software, Belgium).

**Results**
During 18 days, 75 ABG and EDTA tubes were collected from 33 different patients. Hb on RP500 ranged from 6.4 to 14.3 g/dL and on XE-5000 from 5.9 to 13.3 g/dL. The overall correlation between Hb on XE-5000(x) and RP500(y) was y=0.4320+1.0425x with the correlation coefficient r= 0.9792 (95%CI[0.9714 to 0.9849 ]). Using the method of Bland and Altman, the overall mean difference in Hb between the XE-5000 and the RP500 was -0.84 g/dL (95%CI [-0.8946 g/dL to -0.7908 g/dL]) and among the RP500 analysers ranged between 0.02 g/dL and 0.16 g/dL .

**Conclusion**
Both methods correlate well but the RP500 overestimates Hb on 5 different analysers. Much smaller biasses were found among the RP500s. Correction factors at the level of the RP500 software should be established to make both measurements interchangeable. When reporting a parameter measured by different assay principles to clinicians, one should establish a correlation study. External QCs for Hb on blood gas analysers and interchangeable internal QCs between blood gas analysers and cell counters, could help in continuous quality assessment. Unfortunately, these QCs are not available.

## P1.04 Multiple myeloma cells instruct myeloid-derived suppressor cells to release pro-angiogenic cytokines

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Multiple myeloma (MM) is a hematological malignancy, characterized by the accumulation of monoclonal plasma cells in the bone marrow. Myeloid-derived suppressor cells (MDSC) are immature myeloid cells that are implicated in cancer progression through immune suppressive effects and tumor supporting capacities. Two major sub-populations have been described: monocytic or « MO-MDSC », and granulocytic or « PMN-MDSC ». In this work, we examined the immune suppressive function and angiogenic profile of the two different MDSC subpopulations in an immunocompetent murine model of MM, using 5TGM1 myeloma cell line.
We isolated the two MDSC subpopulations from bone marrow (healthy or myeloma-diseased mice), using immunomagnetic bead assay (MACS). Both of the isolated MDSC fractions caused a dose-dependent suppression of lymphocyte proliferation, but PMN-MDSC showed significantly higher suppression than MO-MDSC. No significant difference was seen in the suppressive phenotype of MDSC from MM mice compared to healthy mice.
We studied the effects of MM MDSC on angiogenesis using a gelatin-sponge chorioallantoic membrane assay. We observed a significant increase of angiogenesis in the presence of PMN-MDSC from MM mice when compared with PMN-MDSC from healthy mice or negative control. When MDSC were implanted in combination with 5TGM1 cells on CAMs, we observed again significantly higher angiogenesis in the presence of PMN-MDSC (compared to 5TGM1 cells alone or negative control). In order to identify pro-angiogenic factors implicated in the observed effects, we evaluated the RNA expression level in MDSC from MM mice compared to healthy mice. Increases in Placental Growth factor (PlGF) and angiopoietin 2 (Ang2) were identified in MM MDSC compared to controls. After co-culturing MDSC and 5TGM1 myeloma cells in a transwell insert allowing passage of secreted cytokines, we confirmed an upregulation of PlGF and Ang2 (after 24h and 48h) in PMN-MDSC, as well as other pro-angiogenic genes. These results show that immunosuppressive PMN-MDSC and MO-MDSC are present in the 5TGM1 model of MM and reveal pro-angiogenic properties of PMN-MDSC in MM, probably implicating PlGF and Ang2.

## P1.05 A multicentre study characterising different regimens for introducing second- or third-line anagrelide in 177 patients in France

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**Introduction**
Anagrelide is indicated in the European Union for at-risk patients with essential thrombocythaemia (ET) in whom prior therapy (PT) is not sufficiently effective or well tolerated.

**Aim**
To identify the switch modalities used when introducing anagrelide and determine any possible influence on 6-month outcomes (efficacy, tolerability and maintenance).