

Case 3: Male 78 years-old diagnosed of SRA (low IPSS, normal cytogenetic) 1 year ago. He had a transitory respond to EPO. 2 months later, he began 5-aza therapy, with good respond 3 months later. He did keep up to 15th cycle. Later, he has initiated Lenalidomide (10 mg/d), he has managed the independent transfusional. Initial Hb was 6 g/dL, and now Hb is 9 g/dL, after 8 months of treatment.

Case 4: Female 63 years-old was diagnosed of SRA (low IPSS, normal cytogenetic) 20 years ago. She began 5-aza therapy, with good respond 3 months later, and this was maintained 24 months later. She has initiated Lenalidomide (10 mg/d). At present, she hasn't respond yet, after 5 months.

**Results:** 3 patients reached the independent transfusion, but we were obligated to tapering dosage and we must wait 6–10 months to research the respond.

#### Conclusions:

1. In low risk MDS patients, non 5q-, lenalidomide is an alternative therapeutic, when 5-aza has failed;
2. Lenalidomide used dosage, is lower than recommended by toxicity;
3. The response is later than we hope.

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#### Update of open-label extension study evaluating the long-term safety and efficacy of romiplostim in thrombocytopenic patients with myelodysplastic syndromes (MDS)

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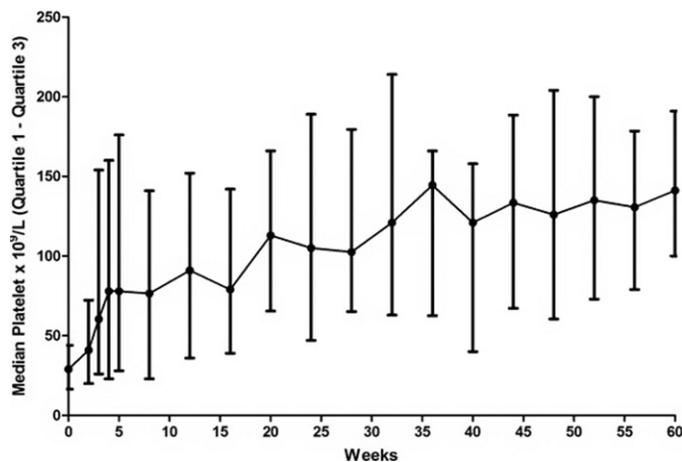
**Background/introduction:** Romiplostim increases platelet production by binding and activating the thrombopoietin receptor.

**Methods:** After completing a romiplostim study, MDS patients with platelets  $\leq 50 \times 10^9/L$  could enroll in an open-label extension. Based on previous dosing, patients received romiplostim at 250 mcg weekly or biweekly, or 500, 750, 1000, or 1500 mcg weekly, adjusting for platelets.

**Results:** As of December 2010, 56 patients had enrolled: previous treatments were romiplostim or placebo alone (44), with decitabine (7), or romiplostim with lenalidomide (5). Thirty-three patients (59%) were male; median age 71 (Q1–Q3: 64–77) years, median baseline platelets  $29 \times 10^9/L$  (Q1–Q3: 17–44  $\times 10^9/L$ ), most common MDS subtypes RA (22 patients) and RCMD (16). Median treatment duration was 30 weeks (range: 5–158 weeks) in addition to previous studies ( $\leq 74$  weeks); median average weekly dose was 750 mcg (Q1–Q3: 643–934 mcg). Most adverse events were mild-to-moderate; the most common being epistaxis (30%), cough (29%), and fatigue (27%). No neutralizing antibodies to romiplostim or thrombopoietin were detected. Transient peripheral blast increases in 2 patients (baseline: MDS-U and RA) resolved after romiplostim discontinuation. Three cases of AML progression occurred in patients who were IPSS-risk low or int-1 (parent study baseline) and MDS subtypes of RAEB-1 or RCMD. They had received 750 mcg romiplostim for 6, 36, and 49 weeks during this study; one died post-study. Three deaths occurred on study: cardiac arrest and intestinal obstruction after 83 weeks, cerebral hemorrhage after 30 weeks, and congestive heart failure after 17 weeks; none were attributed to romiplostim. One patient who withdrew from the study later developed AML and died from it. The annual rate of AML or death was 10.2% (95% CI: 4.9%–21.4%). Thirty-five patients (63%) reported  $\geq 1$  bleeding event(s); the incidence rate was 18.5/100 patient-weeks.

Seventeen patients (30%) reported  $\geq 1$  clinically significant bleeding event(s); the proportion of patients with significant bleeding events and the proportion receiving platelet transfusions decreased over time. From Week 3 onwards, the median platelet count was  $\geq 50 \times 10^9/L$ ; 49 patients (88%) had a platelet response (per IWG 2006). The median duration of platelet response at this cutoff was 20 weeks (Q1–Q3: 7–81 weeks).

**Conclusion:** In this study, long-term treatment of MDS patients with romiplostim for up to 3 years resulted in platelet responses in most patients with most adverse events being mild-to-moderate in intensity.



Median platelet count over time.

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#### Azacitidine low-dose schedule in low-risk myelodysplastic syndromes. Clinical results of a multicenter phase II study

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**Background:** Azacitidine (AZA) at a dose of 75 mg/mq/day subcutaneously for 7 days, every 28 days, induces high hematologic response rates and prolongation of survival in high-risk MDS patients (pts) (Fenaux, 2009). However few data are hitherto available concerning the efficacy and safety of Aza in lower risk MDS. A lower dose regimen, AZA 5 (75 mg/mq daily, subcutaneously, for 5 consecutive days every 4 weeks) have shown to induce response rates consistent with the currently approved schedule (Lyons, 2009), however in this study pts were not classified according to IPSS risk.

**Aim:** In our phase II, prospective, multicentric trial, AZA 5 regimen was administered to IPSS low-or-intermediate-1 risk pts, for a total of 8 courses, in order to evaluate its efficacy and safety. Furthermore pharmacogenomic studies (GEP, SNP) cytokine network and PI-PLC-beta1 methylation and gene expression, before and at the end of 4<sup>th</sup> and 8<sup>th</sup> course of Aza treatment, were planned to identify new biological markers to predict the response.

**Methods:** From September 2008 to February 2010, 34 low-risk MDS patients with a median age of 71 (56–84) yrs were enrolled into the study.

**Results:** At present time 30/34 pts are evaluable: 26/30 pts (87%) completed the treatment plan (8 courses). According to the 2006