

(S105) A TRIPLET BORTEZOMIB- AND IMMUNOMODULATOR-BASED THERAPY BEFORE AND AFTER DOUBLE ASCT IMPROVES OVERALL SURVIVAL OF NEWLY DIAGNOSED MM PATIENTS: FINAL ANALYSIS OF PHASE 3 GIMEMA-MMY-3006 STUDY

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**Abstract:** S105

**Type:** Oral Presentation

**Presentation during EHA23:** On Friday, June 15, 2018 from 11:30 - 11:45

**Location:** Victoria Hall

**Background**

The phase 3 GIMEMA-MMY-3006 study comparing bortezomib-thalidomide-dexamethasone (VTD) versus thalidomide-dexamethasone (TD) as induction therapy before, and consolidation after, double autologous stem-cell transplantation (ASCT) for newly diagnosed multiple myeloma (MM) provided demonstration of prolonged PFS, but not OS, for patients randomized to the VTD arm (Cavo M et al, Lancet 2010; Blood 2012). Based on superior rates of high quality response and PFS, a bortezomib-based triplet is currently considered as the standard induction therapy for ASCT-eligible MM patients. However, no data from prospective phase 3 trials have so far shown an OS benefit from incorporation of bortezomib and an immunomodulatory into ASCT.

**Aims**

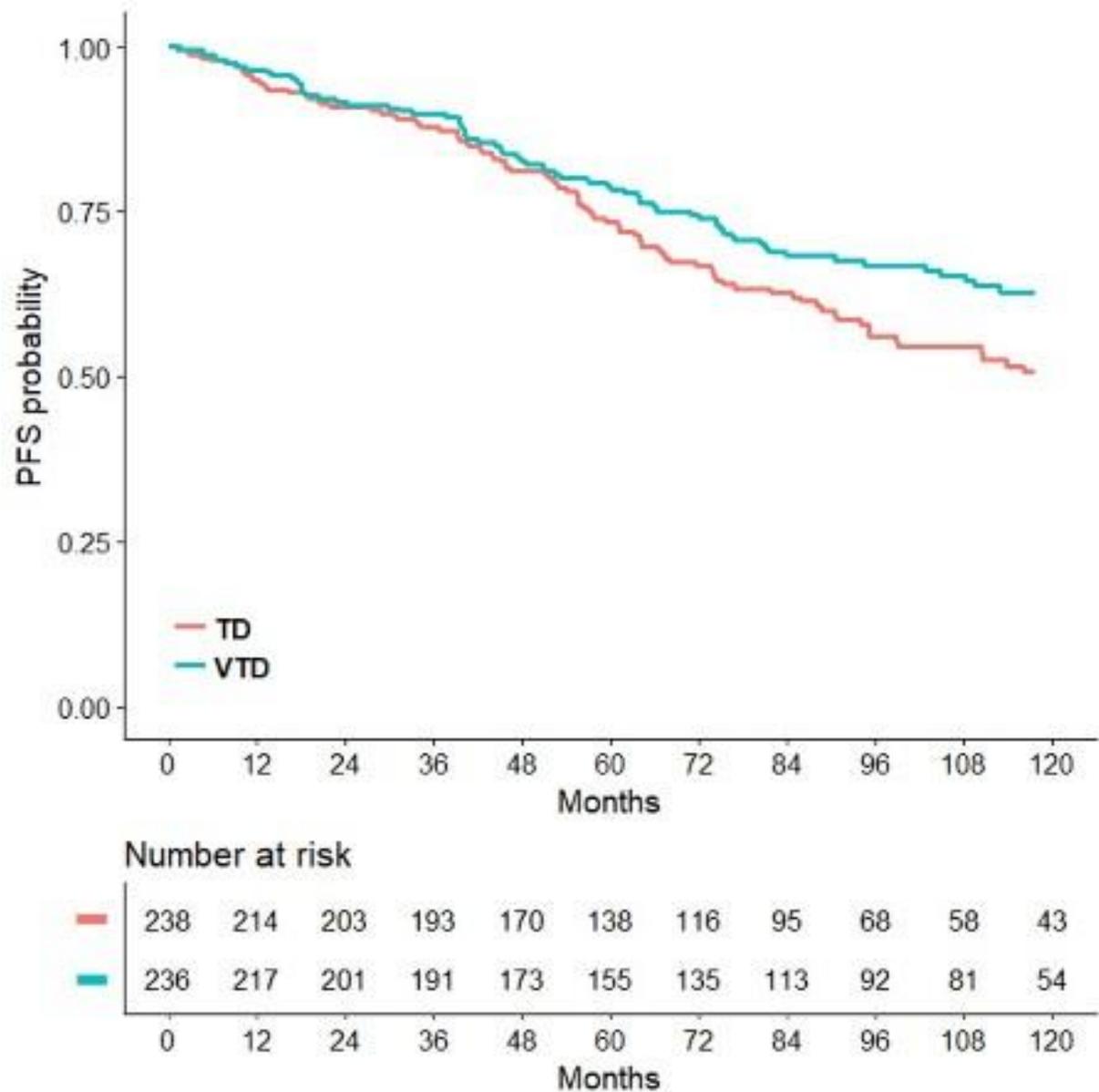
The current analysis was aimed at evaluating long term results of the GIMEMA-MMY-3006 study.

**Methods**

Overall, 474 patients were included in the trial, and of these 236 were randomized to VTD and 238 to the TD arm. Median follow-up for surviving patients was 92.8 months (IQR: 59.6-123.0). Analyses were performed on an intention-to-treat basis.

**Results**

Median PFS was 56.5 months for patients randomly assigned to the VTD arm, and 41.3 months for those in the TD group (HR=0.66,  $p<0.001$ ). PFS benefit with VTD was seen for patients with ISS stage II-III (HR=0.68,  $p=0.007$ ) and ISS stage I (HR=0.60,  $p=0.005$ ), as well as for those with t(4;14) and/or del(17p) positivity (HR=0.45,  $p<0.001$ ) and negativity (HR=0.66,  $p=0.003$ ). Median OS was not yet reached in the VTD arm and was 118.6 months in the TD arm (HR=0.71,  $p=0.024$ ), representing a 29% reduction in the risk of death with incorporation of VTD into double ASCT (Figure 1). Estimated rates of OS at 93 months were 67.6% and 58.5%, respectively. Superior OS benefit with VTD over TD was retained across prespecified subgroups of patients with both high-risk and low-risk disease, including those with ISS stages III (HR=0.52,  $p=0.056$ ), ISS stage I (HR=0.56,  $p=0.033$ ) and cytogenetics by FISH. In particular, VTD significantly prolonged the OS of patients with both t(4;14) and/or del(17p) positivity (HR=0.57,  $p=0.031$ ) and negativity (HR=0.66,  $p=0.034$ ). On multivariate Cox regression analysis, randomization to VTD was an independent factor predicting for prolonged PFS (HR=0.62,  $p<0.001$ ) and OS (HR=0.61,  $p=0.001$ ). Additional disease-related variables with a favorable impact on PFS and OS were absence of t(4;14) and/or del(17p) (HR=0.50,  $p<0.001$ ; HR=0.49,  $p<0.001$ ), and  $\beta$ 2-microglobulin  $<3.5$  mg/L (HR=0.60,  $p<0.001$ ; HR=0.51,  $p<0.001$ ). Further analyses of PFS2, time to second anti-MM therapy, and second primary malignancies will be presented at the meeting.



**Conclusion**

With an extended median follow-up of 7.6 years, a persistent PFS benefit with incorporation of VTD into ASCT was confirmed. Moreover, a longer OS from primary randomization to VTD versus TD was demonstrated in the overall population, as well as in subgroups of patients with high risk and low risk MM.

**Session topic:** 14. Myeloma and other monoclonal gammopathies - Clinical

**Keyword(s):** Autologous hematopoietic stem cell transplantation, bortezomib, Myeloma