

# MAINTENANCE THERAPY WITH LENALIDOMIDE SIGNIFICANTLY IMPROVED SURVIVAL OF YOUNG NEWLY DIAGNOSED MULTIPLE MYELOMA PATIENTS

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## BACKGROUND

High-dose chemotherapy with haemopoietic stem cell support is currently the standard of care for younger patients with multiple myeloma (MM).

The incorporation of new drugs into induction, consolidation and maintenance therapy is changing the treatment paradigm in newly diagnosed MM patients. It is possible that novel combination therapies may offer better outcomes than standard therapy.

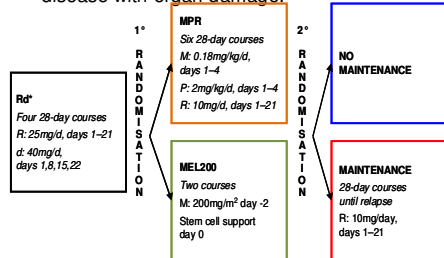
## AIMS

To compare conventional chemotherapy plus novel agents (melphalan-prednisone plus lenalidomide [MPR]) with tandem high-dose melphalan (melphalan 200mg/m<sup>2</sup> plus stem cell support [MEL200]) in the treatment of newly diagnosed MM.

To assess the effect of maintenance treatment with lenalidomide on outcomes.

## PATIENTS & TREATMENTS

- A total of 402 patients (aged <65 years) with newly diagnosed MM were recruited from 62 centres to a prospective randomised trial (MM-RV-PI209).
- Eligible patients had symptomatic, measurable disease with organ damage.



\*Thromboprophylaxis randomization: aspirin vs low molecular weight heparin; d, low-dose dexamethasone; M, melphalan; MEL200, melphalan 200mg/m<sup>2</sup>; P, prednisone; R, lenalidomide

## PATIENT CHARACTERISTICS (I)

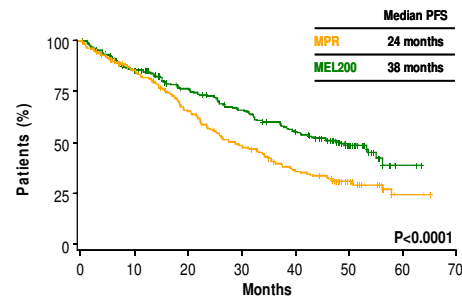
	MPR (N=202)	MEL200 (N=200)
Age (median)	58	58
>60 years	38%	37%
ISS Stage I / II / III, (%)	48/29/23	47/29/24
Chromosome abnormalities		
t(4;14)	12%	9%
t(14;16)	4%	3%
Del 17	11%	10%
NA	25%	31%

ISS, International Staging System; NA, not available.

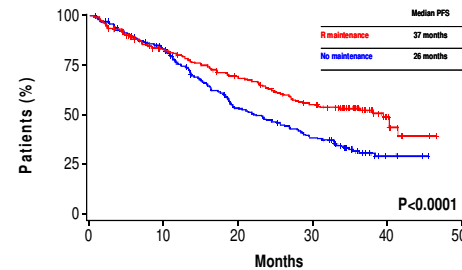
## PATIENT CHARACTERISTICS (II)

	Maintenance (N=198)	No maintenance (N=204)
Age, years (median)	57	58
>60 years	36%	39%
ISS Stage I / II / III, (%)	49/27/24	46/30/24
Chromosome abnormalities		
t (4;14)	11%	10%
t (14;16)	4%	3%
Del 17	8%	13%
NA	26%	29%

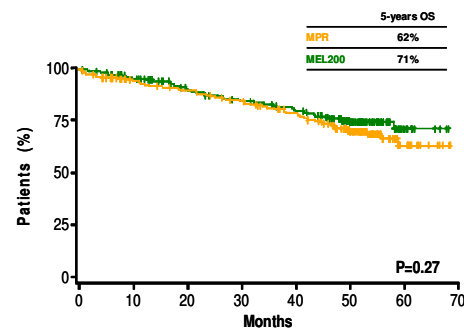
## PFS: MPR vs MEL200



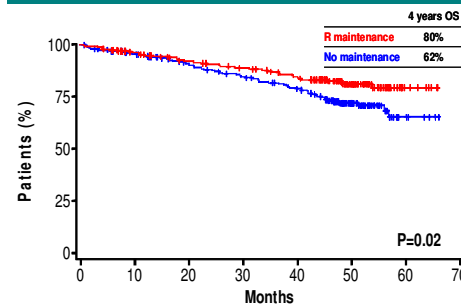
## PFS: MAINTENANCE vs NO MAINTENANCE



## OS: MPR vs MEL200



## OS: MAINTENANCE vs NO MAINTENANCE



## CONCLUSIONS

MEL200 significantly improves PFS versus patients receiving MPR. However, this did not translate to a difference in OS.

Lenalidomide maintenance treatment significantly improved both PFS and OS, versus patients not receiving maintenance.

## ACKNOWLEDGEMENTS

We Are Grateful to All Patients who took part in the study, Nurses and Physicians and Data Managers of the Participating Centers for their collaboration.

All these persons have significantly contributed to achieve the important and relevant results of this study.

## DISCLOSURES

Gay F.: Honoraria from Celgene and Janssen-Cilag; Advisory committee for Celgene and Byotest.

Cavallo F.: Honoraria from Celgene, Janssen-Cilag, Onyx; Advisory committee for Celgene.

Caravita T.: Honoraria and Research Funding from Celgene.

Boccadoro M.: Research support, consultancy and scientific advisory board from Celgene and Janssen Cilag.

Palumbo A.: Consultancy from Amgen, Bristol-Myers Squibb, Celgene, Janssen, Millenium, Onyx; Honoraria from Amgen, Bristol-Myers Squibb, Celgene, Janssen, Millenium, Onyx.

All the other authors have not relevant conflicts of interest to disclose.