



The 6<sup>th</sup> World Congress on  
CONTROVERSIES IN MULTIPLE  
MYELOMA (COMy)

# Multiple Myeloma in the Elderly: An Irish Perspective

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## INTRODUCTION and METHODS

Multiple myeloma (MM) is a malignant disorder of plasma cells in the bone marrow.<sup>1</sup> It predominantly affects the elderly, with approximately 40% diagnosed over the age of 75.<sup>2</sup> This age group are poorly represented in clinical trials.<sup>3</sup> The impact of dose reductions, to manage toxicities, in this frail, older population is not well described. It is important to examine real world data to determine if therapeutic outcomes are being achieved whilst managing toxicities in this age group.

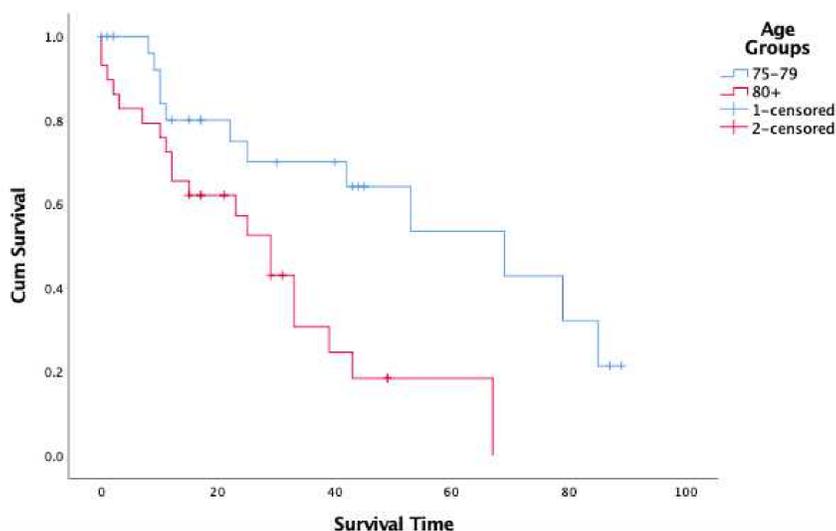
Outcomes of elderly ( $\geq 75$ ) newly diagnosed myeloma patients were assessed over an 11-year period (2008-2018) at our tertiary referral centre. 57 consecutive patients were eligible for analysis and categorised into 2 age groups: 75-79 and  $\geq 80$ . Clinical data were obtained by retrospective review of medical notes and laboratory results. Patients were followed from time of diagnosis until death, loss to follow-up, or end of study period.

## RESULTS

Of the 57 patients eligible for participation in the study 54 (95%) received first-line treatment. The median age was 80 with 49% of patients aged 75-79 and 51% aged 80 and above

The median overall survival (OS), estimated using the Kaplan-Meier method, was 33 months with an increased median OS in the 75-79 age group vs the 80+ age group ( $p=0.004$ , 69 months vs 29 months) see Figure 1.

Figure 1. Kaplan-Meier Curve showing the difference in overall survival between age groups



The patients in this study received up to 6 lines of treatment with 32% receiving at least 3 lines of treatment  
34% of patients had first line treatment stopped due to toxicity, with 47% of patients experiencing at least one episode of toxicity during first line treatment

Time spent on treatment when adjusted for age, was positively independently associated with survival, using the Cox proportional hazard model ( $p=0.02$ ), with an adjusted hazard ratio (AHR) of 99 per unit change in treatment duration (days), see Figure 2. This was also shown to be independent of toxicity in first line treatment with a multivariate model, see Table 1, showing that the duration of treatment was independently associated with improved survival independent of age and development of toxicity in first line treatment ( $p=0.0167$ ).

Figure 2. Survival curve showing the impact of time spent on treatment adjusted for age

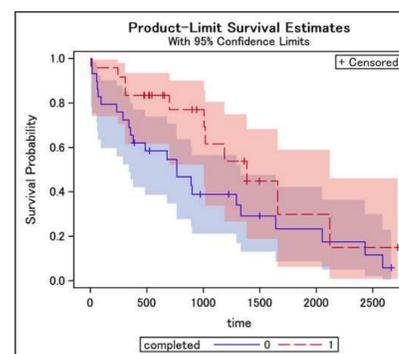


Table 1. Results for multivariate model

Parameter	Standard Error	Chi-squared p value
Total time on therapy for all lines	0.0004240	0.0167
Age	0.06015	0.4715
Toxicity (in first line treatment)	0.39	0.0824

## CONCLUSION

Patients aged 75 and over who received a longer duration of treatment had an increased overall survival

Personalising treatment for older patients taking account of age, performance status and co-morbidities may allow for greater treatment exposure and consequent success

Careful management of toxicity with dose reductions and interruptions to treatment may also lead to increased treatment longevity and benefits in overall survival.

## REFERENCES

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