Abstract #152591 Clinical outcomes in t(11;14) multiple myeloma

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Background

- Chromosomal translocations involving the immunoglobulin heavy chain region on chromosome 14 are common abnormalities in multiple myeloma (MM).
- t(11;14) is the most common translocation (15-20% of MM patients).
- t(11;14) is considered an early cytogenetic event with higher prevalence in monoclonal gammopathy of undetermined significance.
- MM patients with t(11;14) are considered to have standard risk disease.
- Information regarding differences in responses and outcomes based on the specific therapies applied to MM patients with t(11;14) is lacking presently.

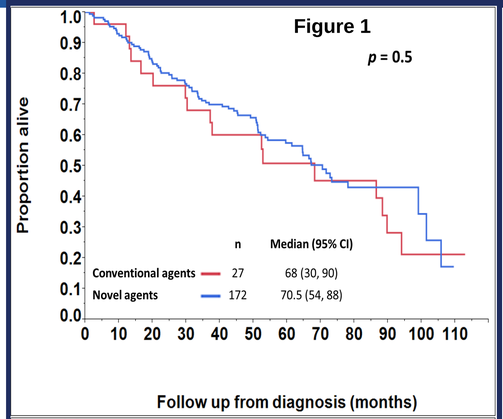
Objective

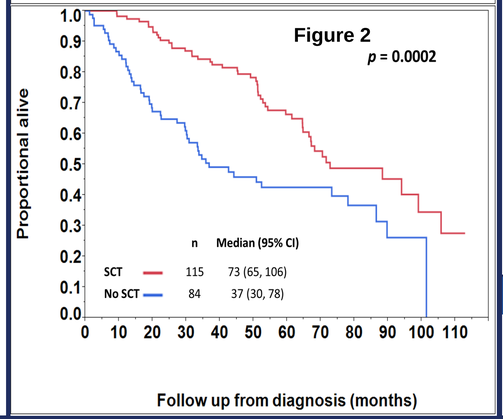
- To study the outcomes of MM patients with t(11;14) and their response to different types of therapies.

Methods and Patients

- We analyzed the medical records of patients with MM who were seen at Mayo Clinic, Rochester, MN and had fluorescence in situ hybridization (FISH) performed between 2004 and 2012 for MM.
- We selected patients who had t(11;14) abnormality.
- We included patients who had FISH studies before MM diagnosis or within 2 years of diagnosis.
- Out of the 254 MM patients with t(11;14), a total of 199 patients satisfied the inclusion criteria.
- Progression-free survival (PFS) and overall survival (OS) were analyzed using the Kaplan-Meier method.

Results

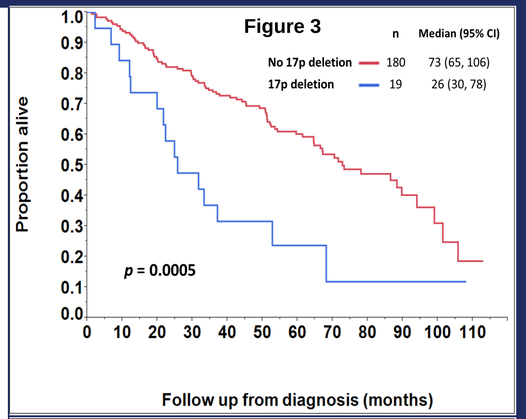


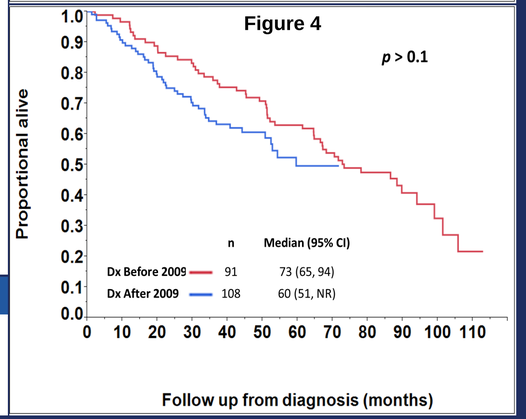


- Median age was 63 (range, 22-95) and 129 (65%) were male.
- The estimated median follow up for the whole cohort was 69 months (95% CI; 64, 75); 100 patients (50%) were alive at the time of analysis.
- The median progression-free survival (PFS) for the whole cohort was 15 months (95% CI; 11, 18) and OS was 68 months (95%CI; 54, 88).
- Twenty-seven (14%) patients received conventional therapies for induction, whereas 172 (86%) received novel agents (116 IMiDs, 33 proteasome inhibitors, 23 both); 115 had SCT at some point.
- Partial response (PR) or better to induction was seen in 55% of patients. Median OS was similar for pts receiving conventional drugs or novel agents for initial therapy; 68 months vs. 70.5 months, *p*>0.5. **(Figure 1)**
- Median OS for those receiving an SCT was 73 months compared with 37 months for the remainder. **(Figure 2)**
- The median OS for 19 pts with a 17p deletion was 26 months vs. 73 months for the remainder (p<0.01). **(Figure 3)**
- The OS for the 91 pts diagnosed before 2009 was similar to those diagnosed later; p>0.1. **(Figure 4)**

Conclusions

- The median survival of patients with t(11;14) abnormality is 5-6 years, and does not appear to have changed significantly within the last decade.





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