MULTIPLE MYELOMA MANAGEMENT IN NORTH AFRICA: REAL-WORLD EVIDENCE AND OUTCOMES FROM A 140-PATIENT TUNISIAN COHORT

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INTRODUCTION

Real-world data from North African centers are underrepresented in the multiple myeloma (MM) literature, limiting benchmarking of local practice. We report clinical characteristics, treatment patterns, and survival outcomes of a large single-center Tunisian MM cohort.

AIM

To describe the clinical presentation, laboratory and cytogenetic profile, treatment patterns, and survival outcomes of newly diagnosed multiple myeloma patients managed at a tertiary referral center in Tunisia, and to benchmark these real-world findings against published international data.

METHOD

Retrospective analysis of 140 newly diagnosed MM patients.

- Data collected at diagnosis: demographics, clinical presentation, laboratory findings, bone marrow evaluation, FISH cytogenetics, ISS/R-ISS staging, and treatment received.
- Induction therapy followed by autologous stem-cell transplantation (ASCT) where eligible.
- Response assessed per International Myeloma Working Group (IMWG) 2014 criteria.
- Overall survival (OS) and progression-free survival estimated by the Kaplan-Meier method.

CONCLUSIONS

This large Tunisian cohort reveals a young, predominantly high-risk MM population with advanced-stage disease and high CRAB burden.

VTD induction achieved deep responses; ASCT further enhanced response depth.

These findings highlight the capacity and challenges of guideline-concordant MM care in resource-constrained settings.

RESULTS

Cohort of 140 patients (54% female, 46% male); median age 58 years (range, 25–66); comorbidities present in 45%; median Karnofsky score 80%.

Bone pain was the predominant presenting symptom (69%), followed by anemic syndrome (41%), renal impairment (29%), and hypercalcemia (19%); bone complications occurred in 22% at presentation.

IgG was the most frequent isotype (53%), followed by IgA (21%); median bone marrow plasma-cell infiltration was 21%. Extramedullary disease was present in 29%.

Disease was advanced at diagnosis: ISS 3 in 48% and R-ISS 3 in 42%; high-risk cytogenetics were identified in 20% of FISH-tested patients.

VTD was the predominant induction regimen (77%), achieving very good partial response in 35% and complete response in 21%; 16% had primary refractory disease.

ASCT was completed in 38 patients (27%), with complete response achieved in 58% at Day 100.

At last follow-up, 73% of patients were alive; median OS was 15 months in the survival-evaluable subset.

AT A GLANCE

140
patients

58y
median age

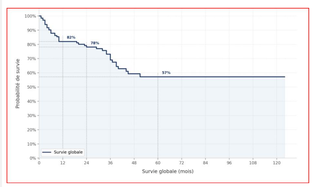
77%
received VTD induction

27%
underwent ASCT

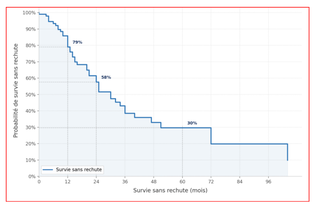
73%
alive at last follow-up

15 mo
median overall survival

Box 1. Key cohort statistics at a glance.



Overall survival diagram



PFS survival diagram

Demographics & Presentation	Laboratory & Marrow	Staging & Cytogenetics	Treatment & Response	Outcomes
Median age: 58y (range 25–66)	IgG isotype: 53%	ISS stage 1: 14%	VTD induction: 77%	Alive at last follow-up: 73%
Female sex: 54%	IgA isotype: 21%	ISS stage 2: 30%	VGPR post-induction: 35%	Median OS: 15 months
Comorbidities: 45%	Median BM plasma cells: 21%	ISS stage 3: 48%	CR post-induction: 21%	(survival-evaluable subset)
Median Karnofsky score: 80%	CRAB – anemia: 62%	R-ISS stage 1: 10%	Primary refractory: 16%	
Bone pain: 69%	CRAB – bone lesions: 82%	R-ISS stage 2: 47%	ASCT performed: 27% (n=38)	
Anemic syndrome: 41%	CRAB – hypercalcemia: 26%	R-ISS stage 3: 42%	CR at Day 100 post-ASCT: 58%	
Renal impairment: 29%	CRAB – renal insufficiency: 32%	High-risk FISH: 20% of tested		
Hypercalcemia: 19%	Extramedullary disease: 29%			
Bone complications: 22%				

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