# EVOLVING FRONTLINE MANAGEMENT OF NEWLY DIAGNOSED MULTIPLE MYELOMA

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## Introduction

Multiple myeloma (MM) treatment is rapidly evolving.

Frontline regimens increasingly incorporate daratumumab-based triplets and quadruplets, reducing reliance on autologous stem cell transplantation (ASCT).

Early relapse patients may now receive CAR-T cell therapy. However, real-world outcomes associated with these practice changes remain under-characterized.

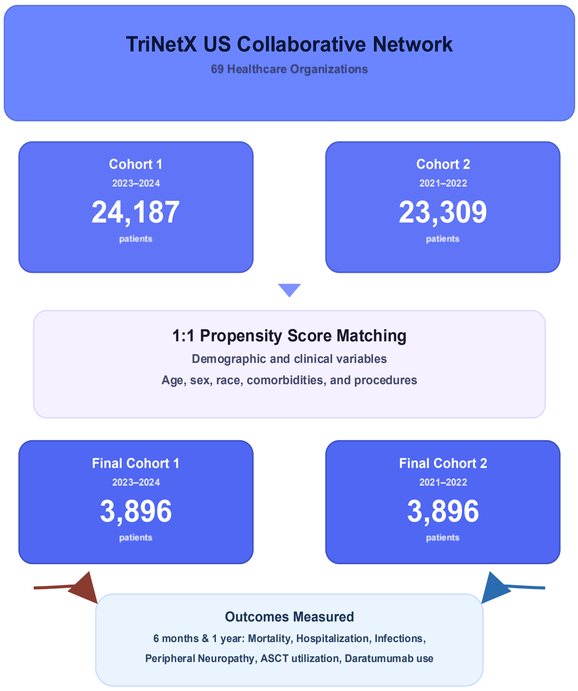
## Aim

To evaluate real-world trends in frontline therapy for newly diagnosed multiple myeloma.

## Objectives

To compare adoption of daratumumab-based regimens, CAR-T therapy, and ASCT utilization, along with short-term outcomes, across recent patient cohorts.

## Methods




## Results

**Frontline therapy trends**

Daratumumab-based therapy increased from ~40% (2021–2022) to >50% (2023–2024).

ASCT utilization declined from 14.2% to 12.3%.

**6-month outcomes**

Peripheral neuropathy: 3.7% → 2.2% (p<0.001).

Infections: 15.0% → 12.9% (p=0.033).

Mortality trended downward: 9.8% → 8.6% (p=0.076).

Hospitalization rates remained stable.

No significant changes in renal function, calcium, or anemia.

**1-year outcomes**

Mortality: 12.9% → 11.3% (p=0.035).

Neuropathy: 5.0% → 3.2% (p<0.001).

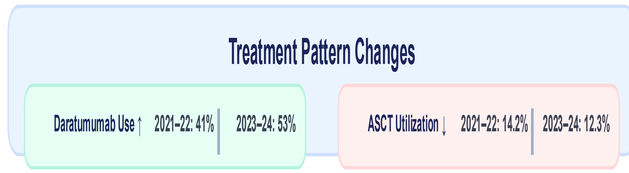
Infections: 20.7% → 17.3% (p=0.002).

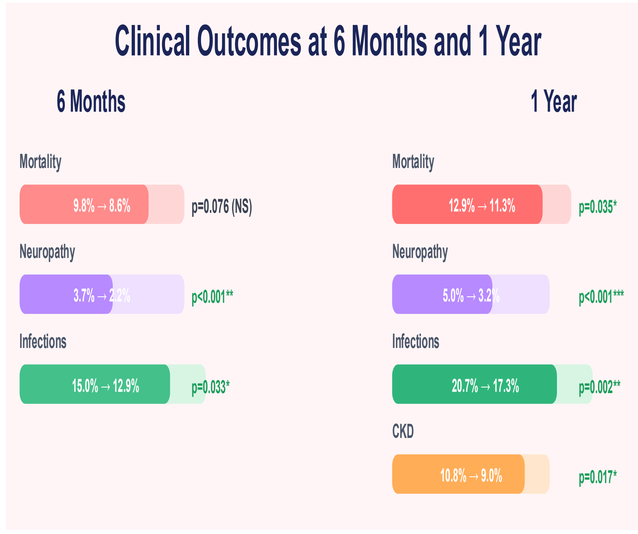
CKD: 10.8% → 9.0% (p=0.017).

Osteoporosis: 4.3% → 3.1% (p=0.007).

Heart failure: 8.2% → 6.8% (p=0.039).

## Results




## Discussion

Daratumumab now constitutes the majority of frontline therapy, reflecting rapid adoption of novel immunotherapies.

ASCT use declined modestly but remains a key modality for eligible patients.

Reduced rates of neuropathy, infections, CKD, osteoporosis and heart failure suggest lower early toxicity with daratumumab-based regimens.

Although CAR-T adoption in newly diagnosed MM is still emerging, continued monitoring is warranted to evaluate long-term outcomes.

## Summary

