

Clinical management of myeloid sarcoma in a single-center cohort

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Introduction and objective

Myeloid sarcoma (MS) is a rare extramedullary tumor of immature myeloid precursors, generally associated with high mortality rates. Management remains challenging, with no standardized treatment strategy. In this real-world single-center exploratory cohort, we analyzed MS patients to describe clinical features and assess the impact of different therapeutic strategies on outcomes.

Methods

Observational, retrospective, monocentric cohort study including 10 patients with MS.

2021- 2025.

Tertiary university hospital in Liège, Belgium.

Results

Patient's profile

Median age: 50.5 years.

Median follow-up time: 222 days (IQR: 135–585).

Initial treatment

Patients with de novo MS:

- 3/6 received Venetoclax-Azacitidine.
- 2/6 received AML-type induction chemotherapy "7+3".
- 1/6 received best supportive care.

Patients with relapsed MS post-allo-HSCT:

- All underwent allo-HSCT and radiotherapy (2/4 also received donor lymphocyte infusions; 1/4 treated with Venetoclax-based regimen).

Treatment relapse

Patients with de novo MS:

Among 3 relapsed patients who received treatment:

- 1/3 received radiotherapy alone.
- 2/3 treated with venetoclax-based regimen, which enabled bridging to second allo-HSCT.

Patients with relapsed MS post-allo-HSCT:

Among 2 relapsed patients who received treatment:

- 1/2 received radiotherapy followed by second allo-HSCT.
- 1/2 received tyrosine kinase inhibitor, radiotherapy and DLI.

Survival

Patients initially treated with VenAZA:

- 2/3 achieved CR. One of whom (with BM involvement) relapsed and was treated. Both are still alive.
- 1/3 (with BM involvement) did not achieve CR, developed complications leading to a therapeutic impasse and died.

Patients initially treated with "7+3":

- 2/2 achieved CR, later relapsed, were treated and are still alive.

Patients initially treated with allo-HSCT:

- 4/4 relapsed or developed complications leading to a therapeutic impasse and died.

Conclusion

Both "7+3" and VenAZA regimens achieved high rates of complete remission in de novo MS.

Venetoclax-based regimen appeared to confer a lower risk of relapse, highlighting its potential as a promising therapeutic option.

Relapsed MS post-allo-HSCT carries an extremely poor prognosis despite intensive therapy.

Perspective

The considerable heterogeneity in patients' clinical, molecular, and genetic profiles emphasizes the need for larger, multicenter studies to refine prognostic markers and optimize treatment strategies.

Figure 1. Patient's profile

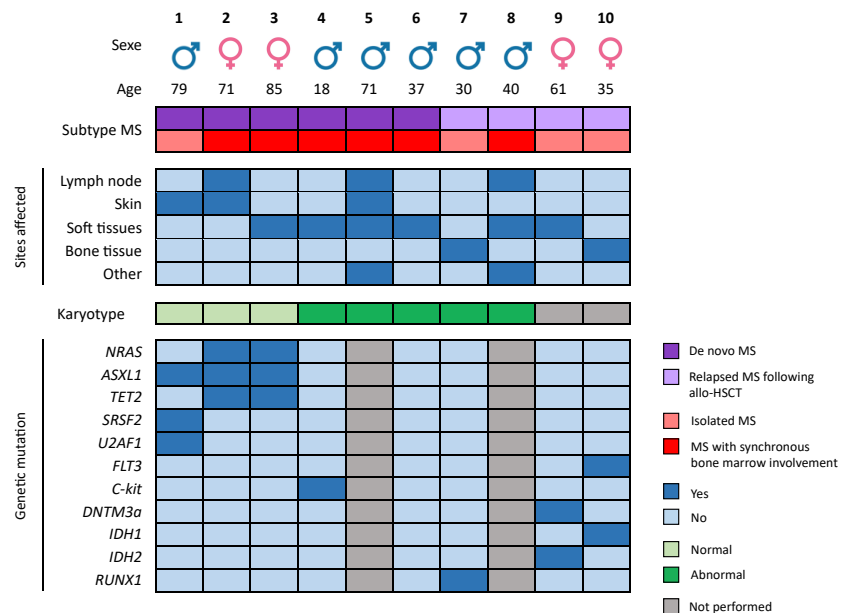


Figure 2. Treatment

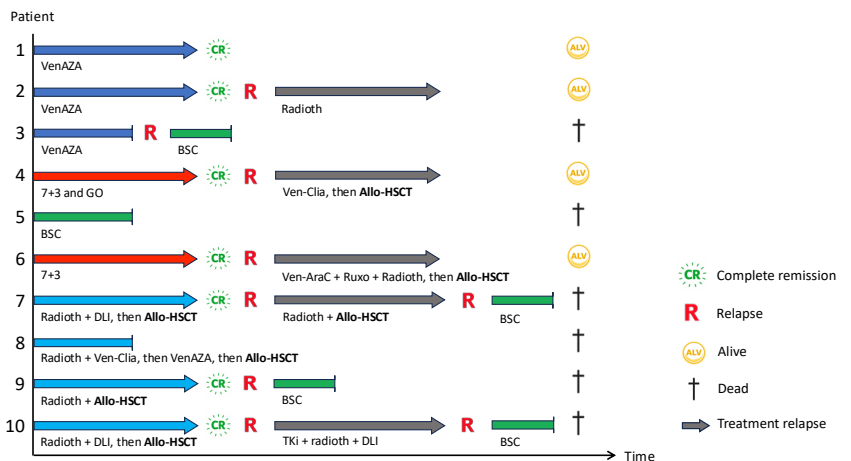


Figure 3. Overall survival

