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INTRODUCTION

- Chronic graft-versus-host disease (cGVHD) has a complex mechanism of occurrence, diverse clinical manifestations, and a protracted course¹.
- If standardized diagnosis and treatment are not followed, it can significantly impact patients' quality of life and long-term survival.
- Currently, the treatment sequence of cGVHD is complex, and there is a high prevalence of off-label drug use.
- Furthermore, the evidence regarding the patterns of treatment for cGVHD is limited.

OBJECTIVE

- To evaluate the real-world treatment patterns among Chinese cGVHD patients by reporting medications used and treatment duration within different treatment sequences.

METHOD

Inclusion Criteria

- Patients received systemic treatments for cGVHD after allogeneic Hematopoietic Stem Cell Transplantation (allo-HSCT)
- Patients aged above 12 years old
- With no less than 1-year follow-up post-treatment

Data collecting

- Data were collected from regional electronic health record database in China from 1 January 2016 to 1 January 2023
- The first-line treatment was defined as the initial systemic therapy post-HSCT
- change of the treatment sequences was defined as initiation of one or more systematic treatments.
- Durations of treatments were defined as time to discontinuation.

RESULTS

Patient Baseline Characteristics

- A total of 1,849 cGVHD patients were included with mean and median follow-up duration of 18.9 and 29.6 months, respectively.
- The mean age was 35.2 ± 9.5 years old. 6% of the patient were 12 to 18 years old.
- The percentage of males was 52.8%.

Treatment Patterns

- 90.3% of patients (n=1,669) received first-line treatment and the median duration of treatment (DOT) was 5.0 (95% CI: 4.7-5.4) months.
- Corticosteroids (100%) was the most common 1st line choice followed by calcineurin inhibitors (CNIs,19%).
- 80.8% of treated patients (n=1,348) received second-line or subsequent treatments with median treatment duration ranging from 2.0 to 6.8 months.
- Mycophenolate mofetil (57.2%) and Ruxolitinib (50.4%) were the most prescribed medications.
- 61.1% of the second-line treated patients received third-line or subsequent treatments with a median treatment of 4.57 (95% CI 3.6-7.5) months. Ruxolitinib (38.4%) was the most common prescription.
- Treatments combined with multiple medications were common among cGVHD patients.

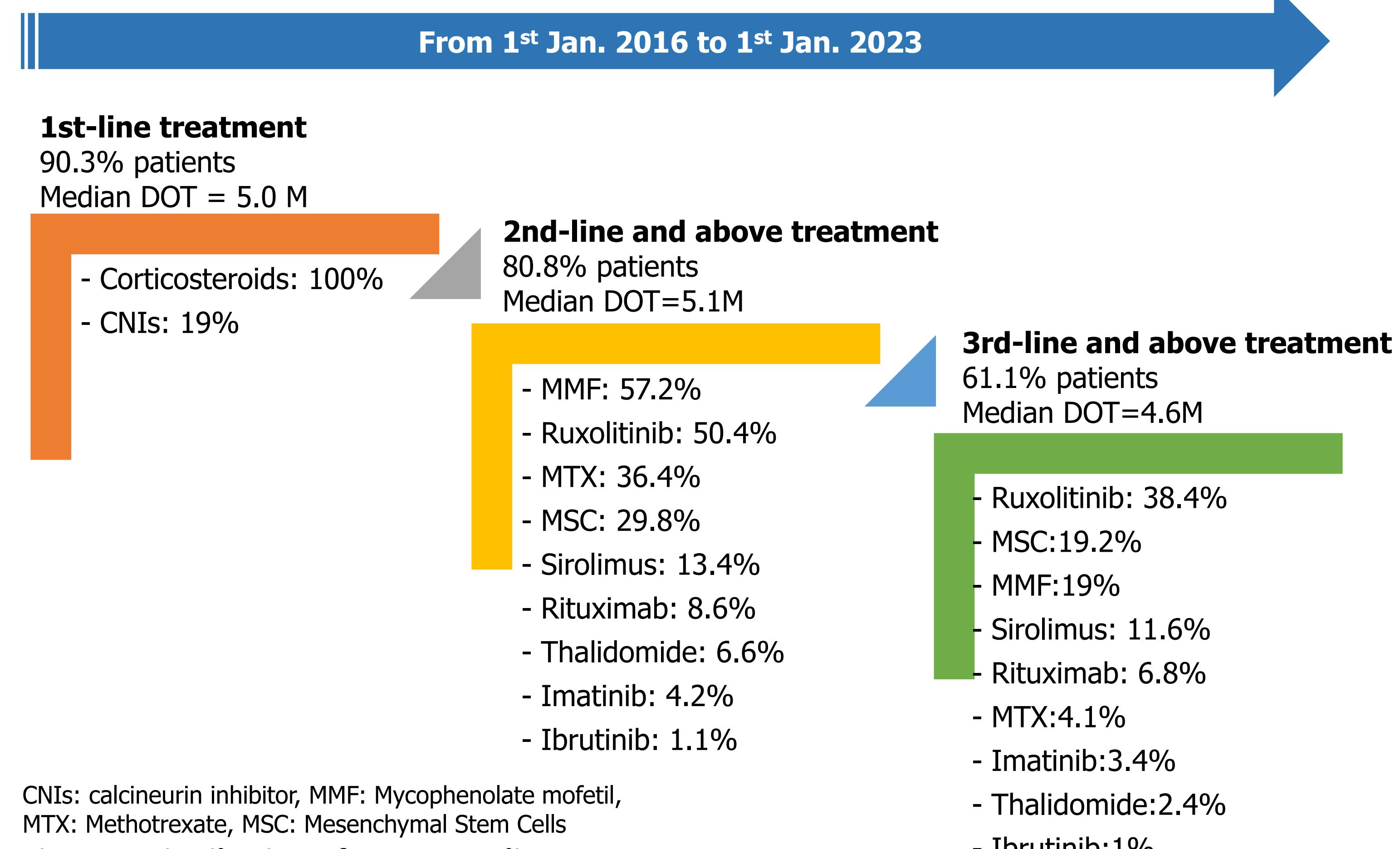


Figure 1 Distribution of treatment lines

Table 1 Median duration of treatment

Treatment sequence	medication	Median duration of treatment (month)
First-line	All	5.0 (4.67-5.40)
	corticosteroids	4.70
	calcineurin inhibitor (CNIs)	4.20
Second-line and above	All	5.1 (4.67-6.0)
	Mycophenolate mofetil (MMF)	4.58
	Ruxolitinib	8.00
	Methotrexate (MTX)	4.72
	Mesenchymal Stem Cells (MSC)	6.77
	Sirolimus	4.27
	Rituximab	4.88
	Thalidomide	11.57
	Imatinib	3.70
	Ibrutinib	1.97

CONCLUSIONS

- Chinese cGVHD patients exhibit diverse treatment patterns with high medication switch rates and relatively short treatment durations.
- Therefore, personalized treatment strategies and studies exploring cost-effectiveness for different treatment sequences are required.

REFERENCES

[1] Wang XQ, Zhang X. Interpretation of consensus on the diagnosis and management of Chronic graft-versus-host disease in China (2024) [J]. Journal of Clinical Hematology, 2024, 37(09): 597-601.

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