FRONTLINE ABVD CHEMOTHERAPY OUTCOMES IN HODGKIN LYMPHOMA IN A RESOURCE-LIMITED SETTING: HIGH RELAPSE BURDEN DESPITE ACCEPTABLE SURVIVAL

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INTRODUCTION

To evaluate treatment response, survival outcomes, toxicity profile, and prognostic factors in patients with HL treated with frontline ABVD chemotherapy in a resource-limited setting.

SETTING

This was a single-center study done at a tertiary care hematology and bone marrow transplant center in Pakistan.

DESIGN

This was a retrospective cohort study of patients treated at our center from 2010 till 2025. The survival analysis was done using Kaplan–Meier estimator, Log-rank test, and Cox proportional hazards model.

INTERVENTIONS

Patients received frontline ABVD chemotherapy and interim PET imaging was performed in 34.4% of patients.

PATIENTS

Ninety-three consecutive patients with HL treated with frontline ABVD chemotherapy were included. Median age was 32 years (range, 11–71 years), and 76.3% were male. Advanced-stage disease was present in 81.7% of patients, while 58.1% had B symptoms.

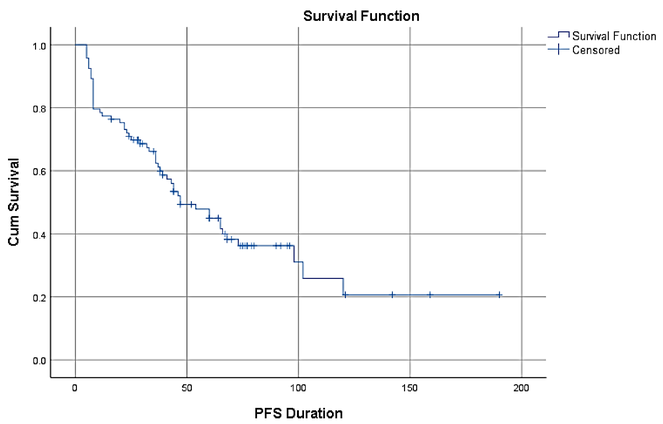
CONCLUSIONS

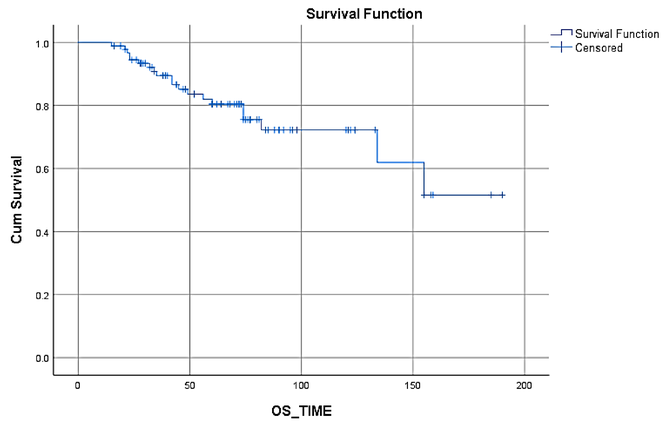
In this real-world cohort from a resource-limited setting, frontline ABVD chemotherapy achieved acceptable OS despite a high burden of advanced-stage disease. B symptoms independently predicted inferior survival outcomes, while treatment response strongly correlated with long-term disease control. These findings highlight the importance of earlier diagnosis and improved access to response-adapted strategies in low-resource environments.

RESULTS

Overall response rate (complete or partial response) was 80.6%. After a median follow-up of 47 months, estimated 3-year PFS and OS were 62.4% and 89%, respectively. Median PFS was 47 months, while median OS was not reached.

Patients with early-stage disease demonstrated superior PFS compared with advanced-stage disease (3-year PFS: 73.3% vs 59.8%; P = 0.035). Patients achieving an overall response had significantly superior PFS compared with non-responders (P < 0.001). On multivariable analysis, B symptoms independently predicted inferior PFS (HR 1.95, P = 0.032). Treatment-related toxicities were predominantly low grade; with grade 3 neutropenia observed in 4.3% of patients and no cardiotoxicity reported.





Toxicity	CTCAE Grade	n (%)
Neutropenia	Grade 1	60 (64.5%)
	Grade 2	29 (31.2%)
	Grade 3	4 (4.3%)
Thrombocytopenia	Grade 1	77 (82.8%)
	Grade 2	16 (17.2%)
Anemia	Grade 1	85 (91.4%)
	Grade 2	8 (8.6%)
Peripheral neuropathy	Any grade	4 (4.3%)
Pulmonary toxicity	Any grade	6 (6.5%)
Cardiotoxicity	Any grade	0 (0%)

Variable	Survival Outcome	Result	P value
Stage	3-year PFS	Early stage: 73.3% vs Advanced stage: 59.8%	0.035
Overall response	PFS	Responders had significantly superior PFS	<0.001
Histological subtype	PFS	No significant difference among subtypes	0.371

MAIN OUTCOME MEASURES

Primary outcomes included progression-free survival (PFS) and overall survival (OS). Secondary outcomes included overall response rate (ORR), toxicity profile, and prognostic factors.

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