

Real-World Outcomes of Lenvatinib in Advanced Hepatocellular Carcinoma: The Largest Pakistani Cohort and Evidence for Maintained Efficacy at Reduced Doses

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Background

Lenvatinib has been a standard first-line therapy for advanced HCC since the REFLECT trial [1]. Real-world data from South Asia are limited, and many patients need dose reductions because of toxicity. Whether efficacy holds at lower doses in Asian patients is unclear.

Aim: to report outcomes in the largest Pakistani cohort and compare full-dose with reduced-dose treatment.

Methods

Retrospective cohort of 137 patients with advanced HCC treated in Lahore, Pakistan, between 2023 and 2025.

Starting dose was 12 mg/day (≥ 60 kg) or 8 mg/day (< 60 kg), reduced as clinically indicated. CT every 8–12 weeks.

Endpoints: ORR, DCR, PFS, OS and tolerability; Kaplan–Meier and chi-square analysis.

Conclusion

In this Pakistani cohort, lenvatinib achieved response and survival comparable to clinical trials despite late presentation.

Dose reduction did not compromise tumor control or survival, supporting individualized dosing in resource-limited settings.

Results

Most patients presented late, with only 4.4% within Milan criteria. Median PFS was **7.8 months** and median OS **12.1 months**, and both were similar with full and reduced doses (Figures 1–2).

Treatment was stopped in 39.4%, mostly for progression (77.8%); intolerance accounted for 9.3%. Child–Pugh score worsened in 19%.

Table 1. Baseline characteristics (n = 137)

	n	%
Child–Pugh A	120	87.6
ECOG 1	110	80.3
Multifocal disease	102	74.5
Macrovascular invasion	81	59.1
Extrahepatic spread	38	27.7
Within Milan criteria	6	4.4

Table 2. Best radiological response

	n	%
Partial response	33	24.1
Stable disease	49	35.8
Progressive disease	42	30.7
Not evaluable / lost to follow-up	13	9.5
Objective response rate		24.1
Disease control rate		59.9

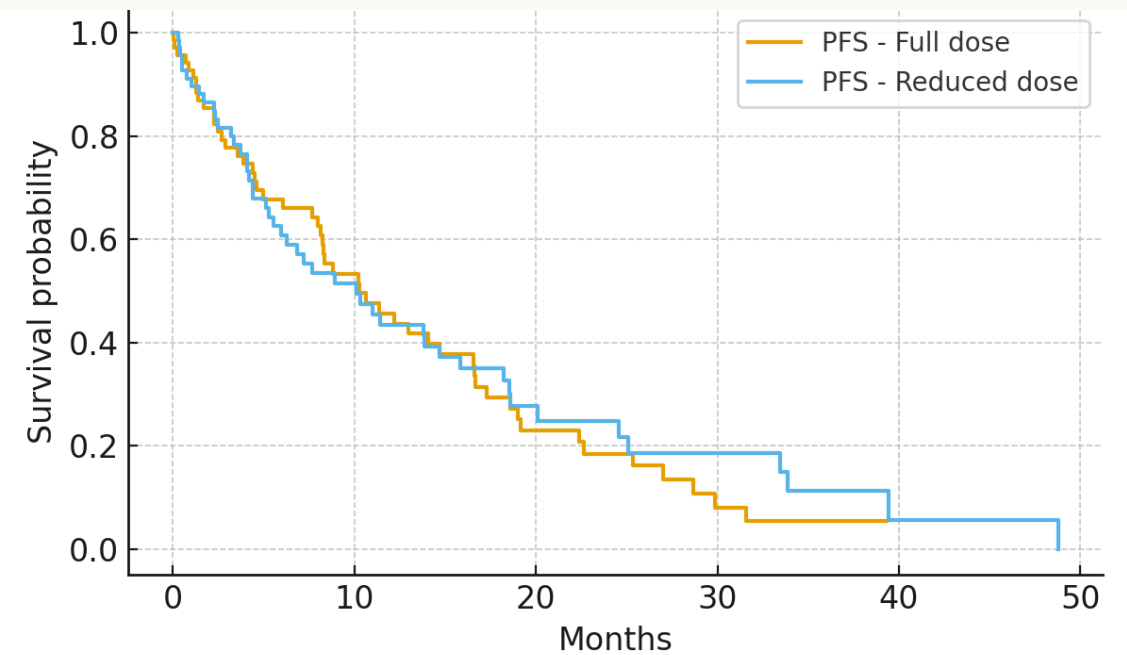


Figure 1. Progression-free survival by dose group.

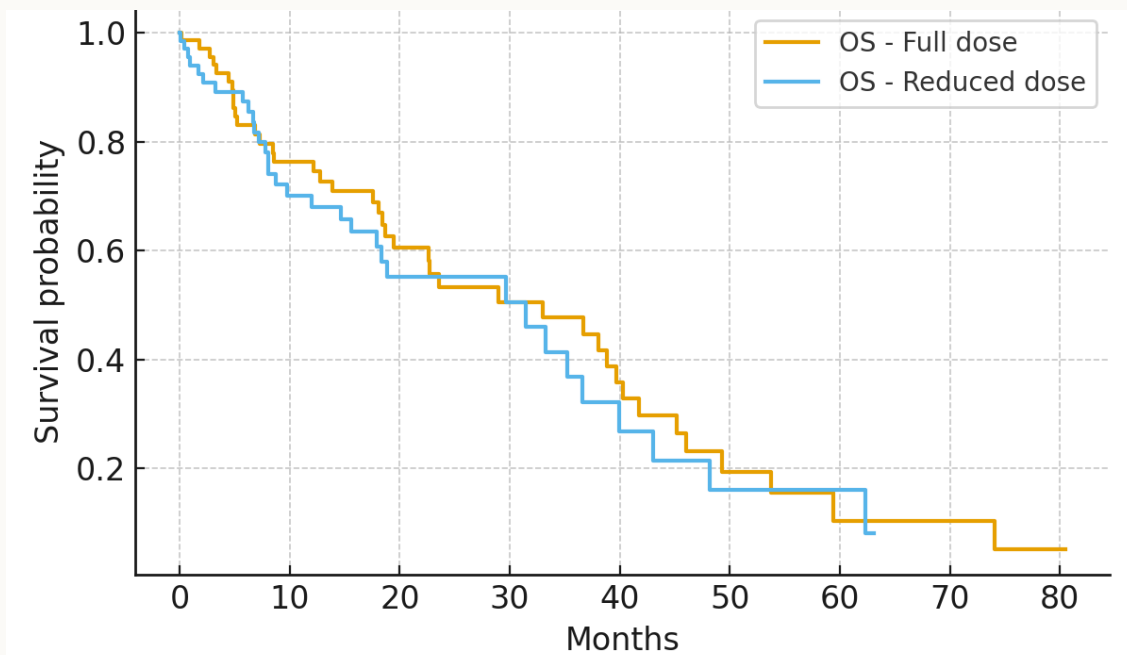


Figure 2. Overall survival by dose group.

[1] Kudo M, Finn RS, Qin S, et al. Lenvatinib versus sorafenib in first-line treatment of unresectable hepatocellular carcinoma (REFLECT). *Lancet* 2018;391:1163–73.