Irinotecan-Based Regimen as Second-Line Chemotherapy for Extensive-Stage Small Cell Lung Cancer

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Abstract

Purpose: This study evaluates the clinical outcomes of extensive-stage small-cell lung cancer (SCLC) patients who received Irinotecan-based second-line chemotherapy after platinum-based first-line therapy, especially focused on efýcacy and toxicity between single-agent and doublet chemotherapy.

Patients and methods: We retrospectively reviewed 83 patients who given irinotecan-based second-line chemotherapy for extensive-stage SCLC. Survival curves were plotted using the Kaplan ï Meier method. The Cox proportional hazard model was used for multivariate analysis.

Results: Fifty-nine patients received doublet chemotherapy and 24 with single-agent treatment. The objective response rate (ORR) was 23.7% in the doublet group and 25% in the single-agent group (P=0.90). The disease control rate (DCR) was 65.7% and 58.3%, respectively, (P=0.71). The Progression-free survival (PFS) was 3.10 months in the doublet group and 2.10 months in the single-agent group (P=0.35). In the sensitive recurrence group, 27 patients were with doublet chemotherapy and 10 with single-agent treatment. The Median PFS was 4.73 months (95% CI: 4.37-5.09) and 3.83months (95% CI: 2.65-5.02), respectively (P=0.543). In the refract).S(pa the no control 3

Patients who responded to initial chemotherapy and developed

PFS was 3.10 months in the doublet group and 2.10 months in the single-agent group (P=0.347) (Figure 1).

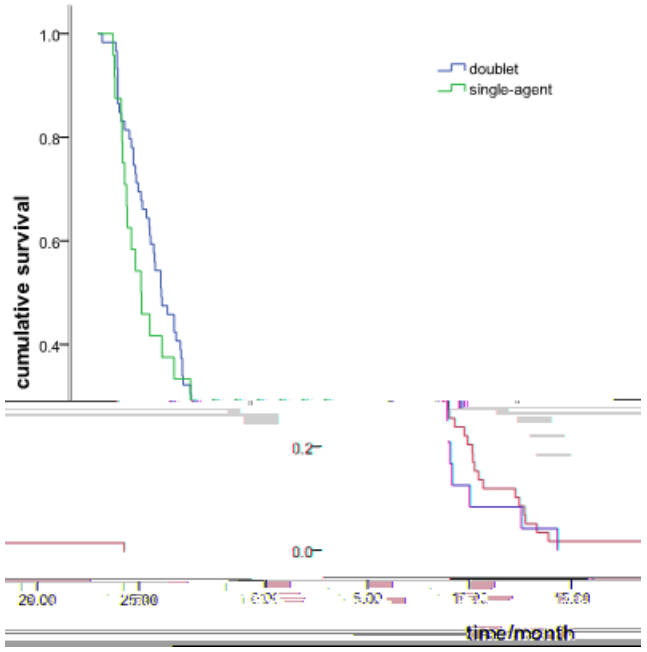

Figure 1: PFS in doublet and single-agent treatments group (3.10 months VS. 2.10 months, P=0.347).

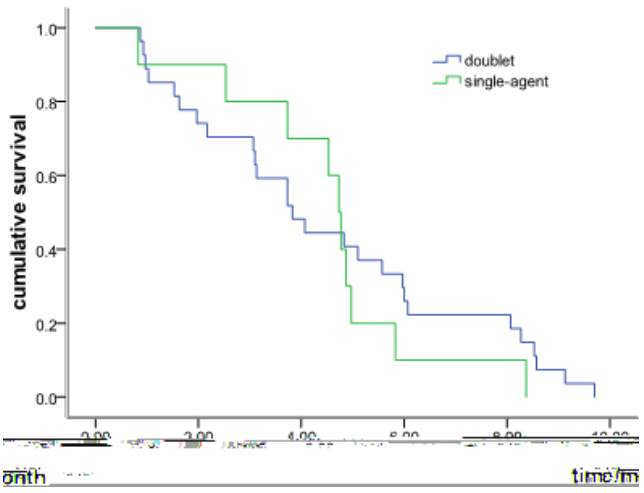

Figure 2: PFS of doublet and single-agent treatments group in sensitive recurrence patients (4.73 months VS. 3.83 months, P=0.543).

In the sensitive recurrence group, there were 27 patients with a doublet chemotherapy and 10 with single-agent treatment. T e Median PFS was 4.73 months (95% CI: 4.37-5.09) and 3.83months (95% CI: 2.65-5.02), respectively (P=0.543) (Figure 2).

In the refractory recurrence group, there were 32 patients with a doublets chemotherapy and 14 with single-agent treatment. T e median PFS was 2.57 months (95% CI: 2.19-2.93) and 1.40 months (95% CI: 1.13-1.64), respectively (P=0.048) (Figure 3). Response data for the single-agent and doublets group are shown in Table 2.

	All the patients (n=83)			Sensitive recurrence group (n=37)			Refractory recurrence group (n=59)		
	ArmA (n=24)	ArmB (n=59)	P	ArmA (n=10)	ArmB (n=27)	P	ArmA (n=14)	ArmB (n=32)	P
ORR	6 (25)	14 (23.7)	0.9	4 (40)	10 (37.0)	0.87	2 (14.3)	4 (12.5)	0.76
DCR	14 (58.3)	37 (62.7)	0.71	9 (90)	20 (74.1)	0.296	5 (35.7)	19 (59.4)	0.14
PFS	2.1	3.1	0.347	3.83	4.73	0.543	1.4	2.57	0.048
OS	5.51	6.93	0.39	7.56	9.21	0.54	5.11	6.79	0.45

ArmA: single-agent group; ArmB: doublet group; OS: from start of second-line treatment.

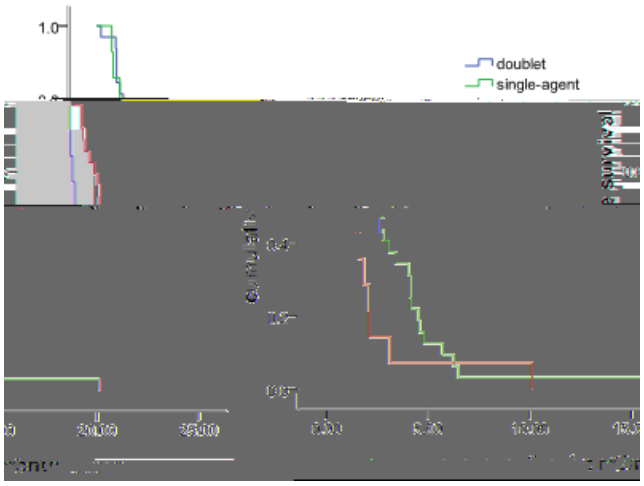

Figure 3: PFS of doublet and single-agent treatments group in the refractory recurrence patients (2.57 months VS. 1.40 months, P=0.048).

	PFS	95%CI	P
Sex			0.649
Male			