

Genzyme's ERCC1 Analysis, an integral component in our comprehensive lung cancer panel, provides additional predictive power in guiding treatment decisions for patients with non-small cell lung cancer (NSCLC).

ERCC1 Analysis Aids in Therapeutic Decision Making

The evaluation of therapeutic markers, such as ERCC1, helps physicians individualize cancer therapy for their patients. Numerous studies have shown that evaluating the expression levels of excision repair cross-complementation group 1 (ERCC1) is important in the treatment decision making for patients with NSCLC.¹⁻⁶ These results can help identify patients that may benefit from platinum-based chemotherapy.

Chemotherapy and the Clinical Significance of ERCC1

- Platinum-based doublet chemotherapy is currently considered standard of care in advanced NSCLC.¹
- Recent studies have suggested that low expression levels of ERCC1 are related to a better response and survival benefit from cisplatin-based chemotherapy among patients with advanced NSCLC.^{1,2,3}
- Recent studies have also found that patients with completely resected NSCLC and ERCC1-negative tumors appear to benefit from adjuvant cisplatin-based chemotherapy, whereas patients with ERCC1-positive tumors do not.⁴

Clinical Studies Identify ERCC1 as a Predictive Marker in NSCLC

Time to Progression and Overall Survival

Clinical studies identified ERCC1 as a predictive marker in resected NSCLC receiving adjuvant cisplatin- or carboplatin-based chemotherapy.

Author	Treatment	Number of Patients	TTP (months)		Overall Survival (months)	
Hwang ⁵	cisplatin/ carboplatin*	71	ERCC1 +	15.8	ERCC1 +	20.5
			ERCC1 -	34.0	ERCC1 -	65.1
Fujii ²	cisplatin**	15	ERCC1 +	13.0	ERCC1 +	17.4
			ERCC1 -	31.5	ERCC1-	19.9
Olaussen ⁴	cisplatin	389	NA		ERCC1 +	50.0
					ERCC1-	56.0

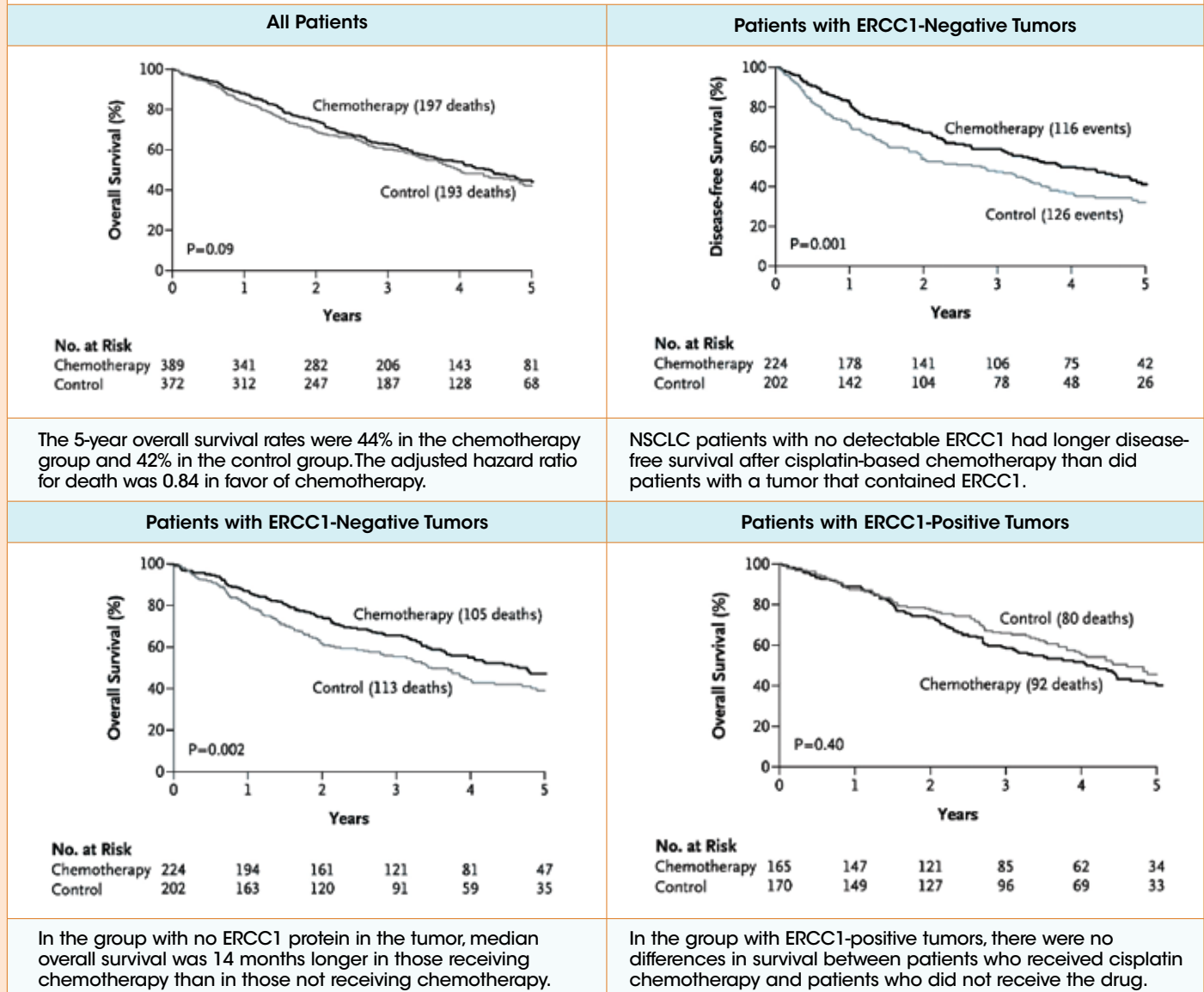
* - Neoadjuvant chemoradiotherapy; ** - Neoadjuvant chemotherapy; NA - Not Available

Increased Overall Survival in ERCC1 Negative Patients with NSCLC

Overall Survival

A retrospective clinical study demonstrated the effect of adjuvant cisplatin-based chemotherapy on disease-free and overall survival in ERCC1-negative versus ERCC1-positive early-stage, resected NSCLC.^{4,6}

Kaplan-Meier survival curves



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