

# Presence of Extra-Hepatic Disease Should not Preclude Transarterial Chemoembolization for Metastatic Carcinoid

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## BACKGROUND

Transarterial chemoembolization (TACE) is the locoregional therapy of choice for the management of patients with inoperable carcinoid liver metastases. Often, metastatic disease is not limited to the liver. The impact of extra-hepatic disease (EHD) on response and outcomes following TACE has not been described.

## METHODS

- We reviewed 198 patients that underwent TACE for incurable carcinoid liver metastases.
- Two groups were identified by the presence or absence of extra-hepatic disease at the time of TACE.
- Patient and tumor variables were compared.
- Response to TACE defined as:
  - Radiographic: decrease in tumor number, size and/or enhancement.
  - Biochemical:  $\geq 20\%$  reduction in pancreastatin levels.
  - Symptom: reduction in carcinoid-related symptoms and/or decrease in need or dose of octreotide.

## RESULTS

- Patients of similar age, gender, and presentation (Table 1)

Table 1. Demographics

Variables	No EHD N=69	EHD N=129	P value
Mean Age (Range)	56 (16-83)	55 (27-87)	0.87
Gender M:F	27:42	67:62	0.1
Comorbidities	30 (43%)	24 (19%)	<0.05
Carcinoid Syndrome	43 (62%)	84 (65%)	0.75
Primary Resected	40 (58%)	58 (45%)	0.1

- Similar complication rates after TACE.
- No difference in symptomatic, biochemical, or radiographic response after TACE. (Table 2)

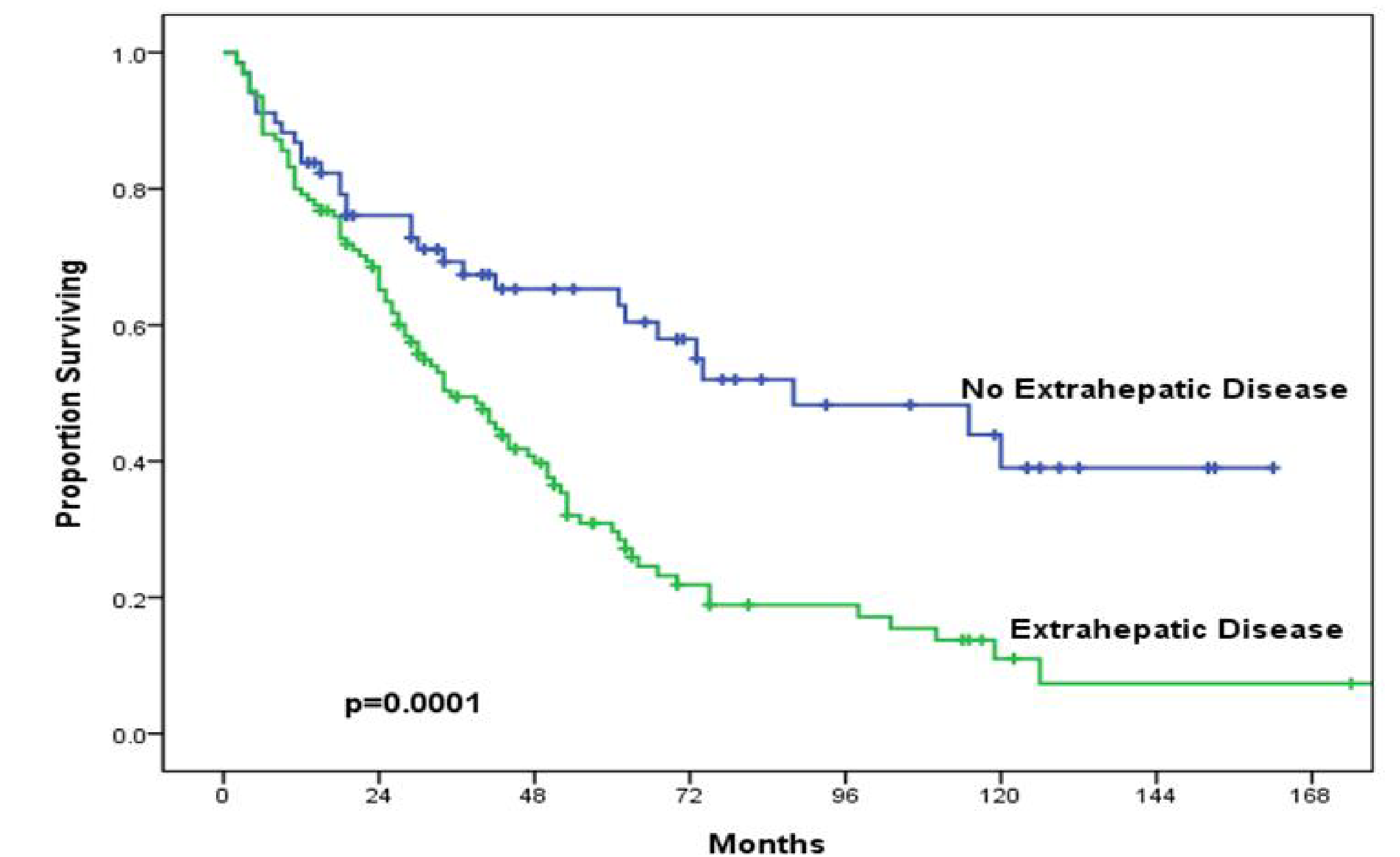
Table 2. Response to TACE

Variables	No EHD N=69	EHD N=129	P value
Complications	16%	20%	0.56
Symptom Response	71%	76%	0.46
Biochemical Response	90%	78%	0.25
Radiographic Response	46%	35%	0.17

- Overall survival was significantly longer after TACE in patients without extra-hepatic disease. (Table 3 and Figure)

Table 3. Overall Survival after TACE

	No EHD	EHD
Median	88 months	35 months
2 years	76 %	69 %
5 years	65 %	30 %
10 years	39%	11%



## CONCLUSIONS

Patients with extra-hepatic metastatic disease from carcinoid tumor experienced shorter overall survival following TACE compared to those without extra-hepatic disease.

Similar symptomatic, biochemical and radiographic response to TACE is achievable compared to those with disease confined to the liver.

Meaningful response to TACE is possible and should be considered in patients with carcinoid liver metastases and extra-hepatic disease.