

# Hepatic Radioembolization in the Management of Progressive Metastatic Neuroendocrine Tumors: A Survival and Biochemical Response Analysis



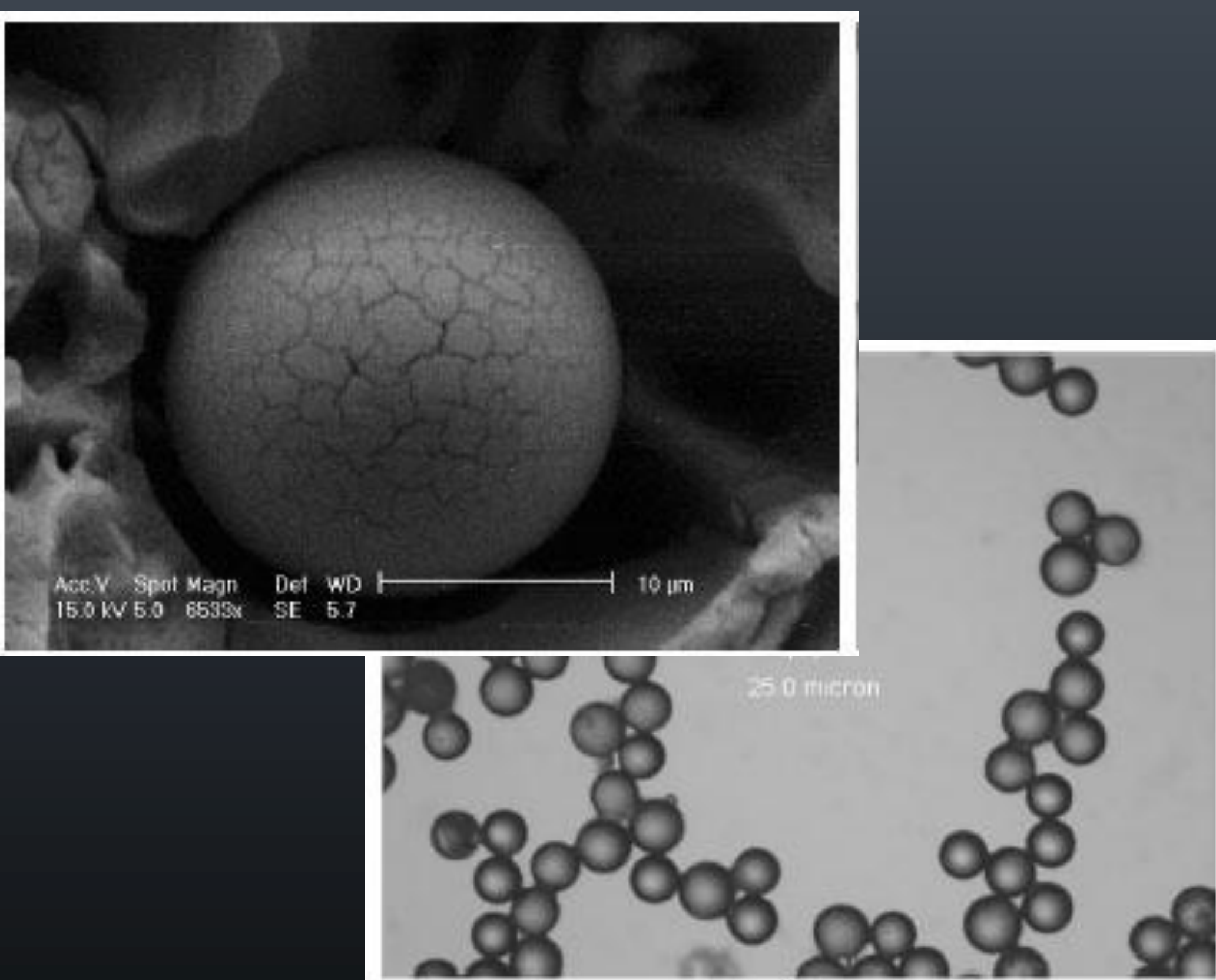
Khawaja Saad Jahangir, Ryan N. Majoria, Joseph Hagan, Saima Zohair Jahangir, Shibu Varughese, Brian Boulmay, Tara Lin, Richard Campeau, Yi-Zarn Wang, Phillip Boudreaux, Eugene Woltering, Lowell Anthony - Louisiana State University School of Medicine, Section of Hematology and Oncology - New Orleans

## Introduction

- Neuroendocrine tumors are rare slow growing malignancies which metastasize to liver and produce carcinoid syndrome.
- Conventional treatments include surgical resection with somatostatin analogues and chemotherapy with limited success.
- Radioembolization with Yttrium-90 microspheres (Y-90MS) is an emerging treatment option, but data on overall survival and biochemical response is lacking.

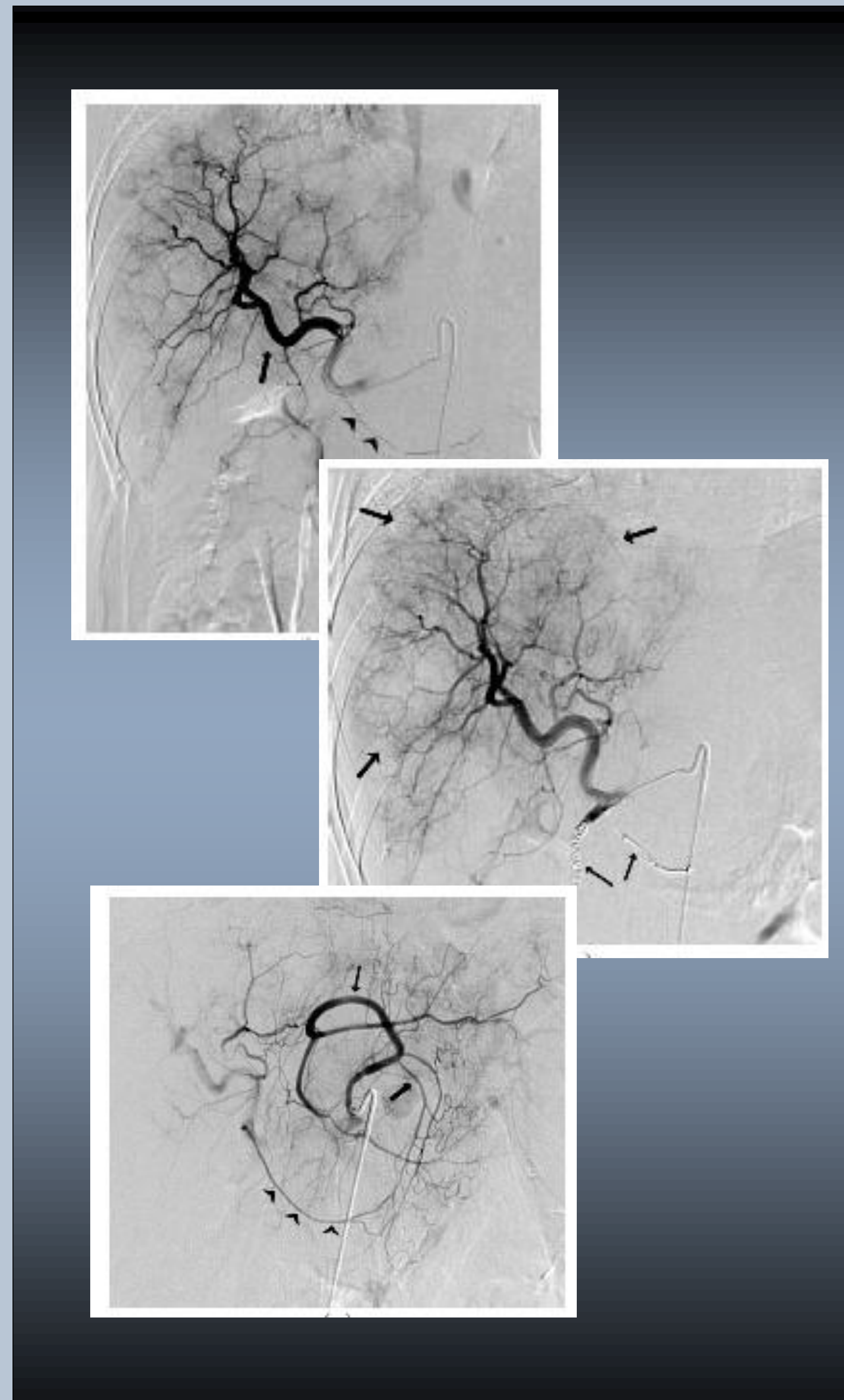
## Purpose

- Analyze effect of biochemical marker response on overall survival and progression free survival in patients undergoing palliative Y-90MS treatment for neuroendocrine tumors with liver metastasis refractory to conventional treatment.
- Analyze the response to therapy in Geriatric population and compare to younger cohorts.

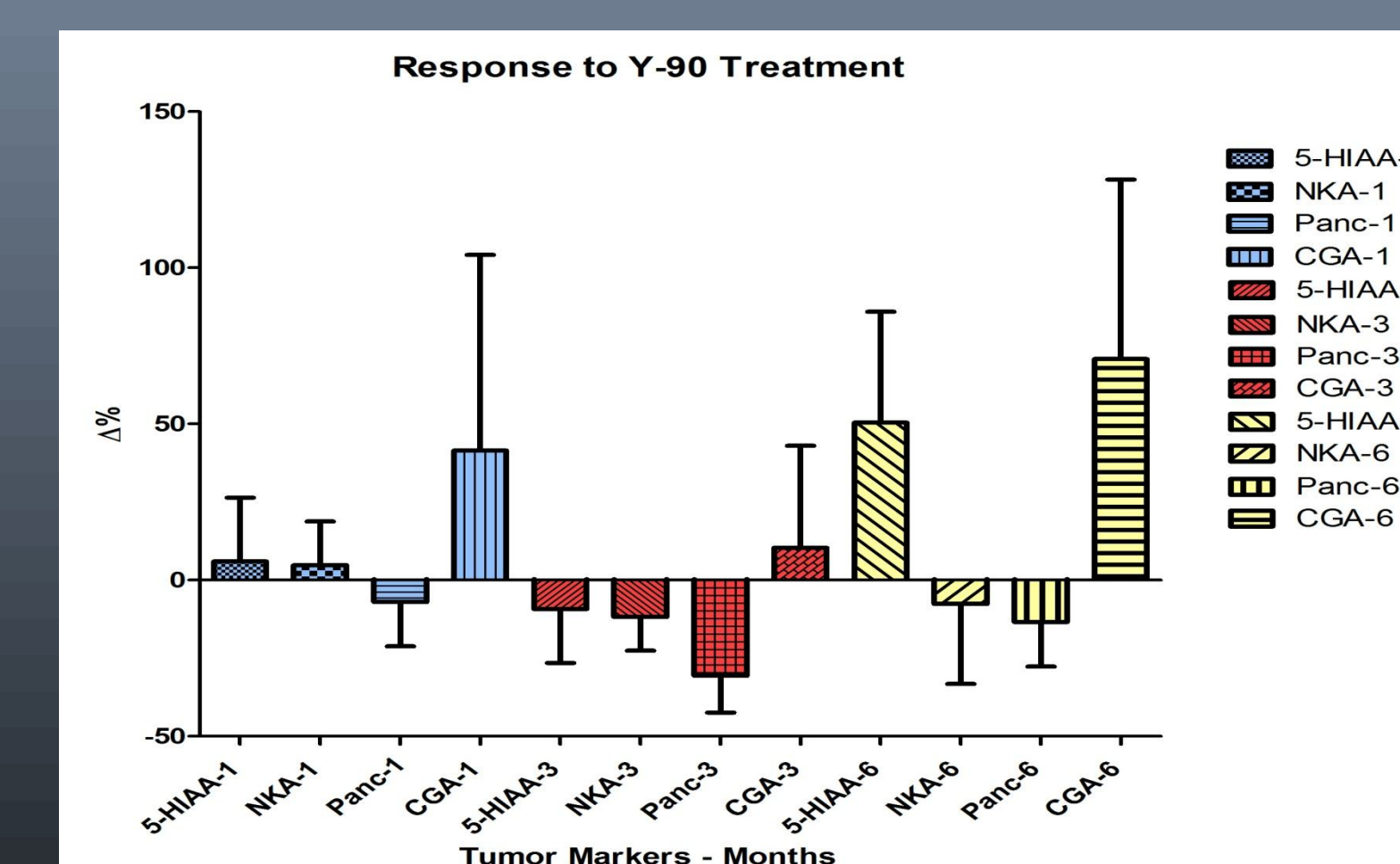
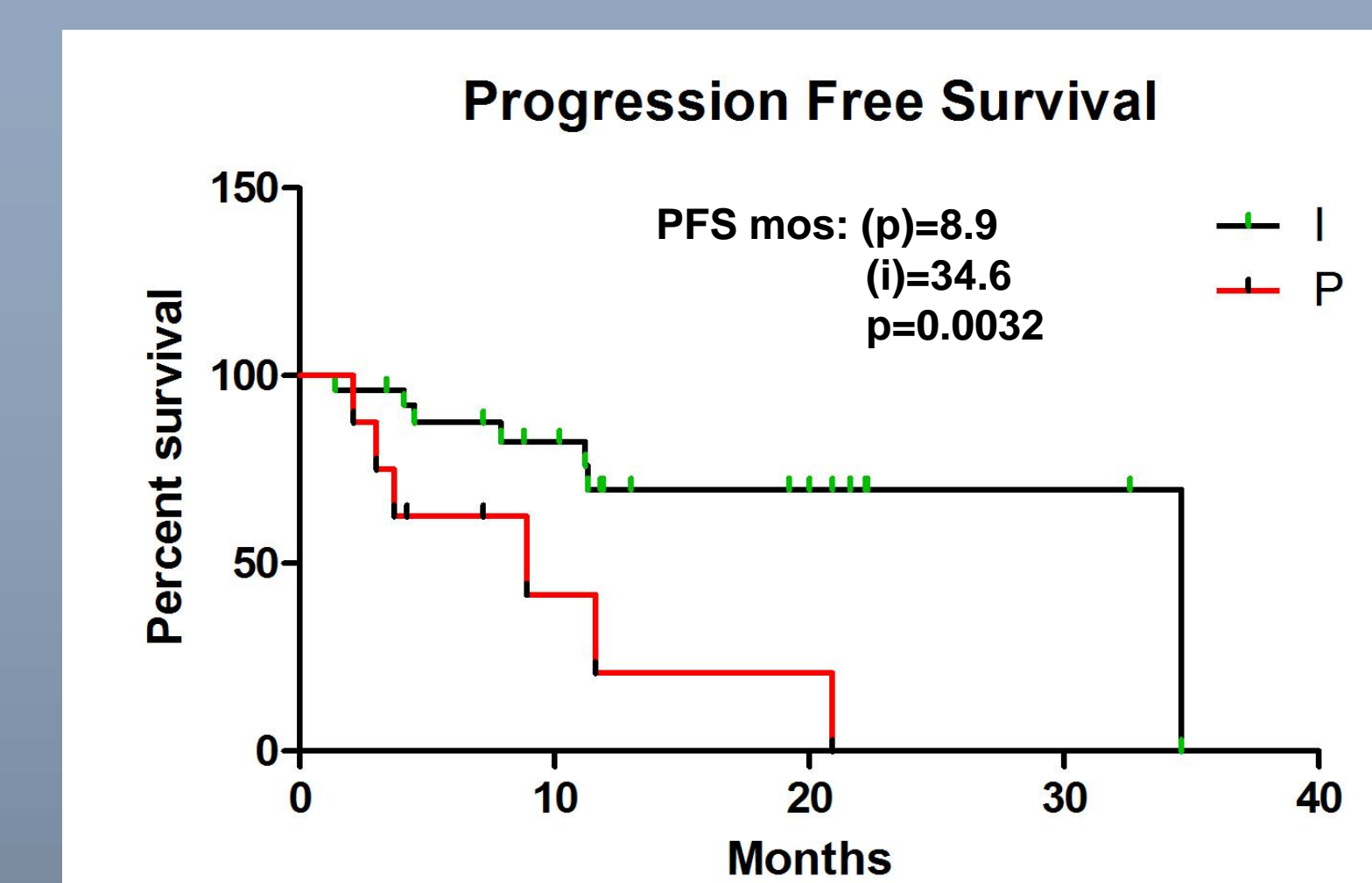
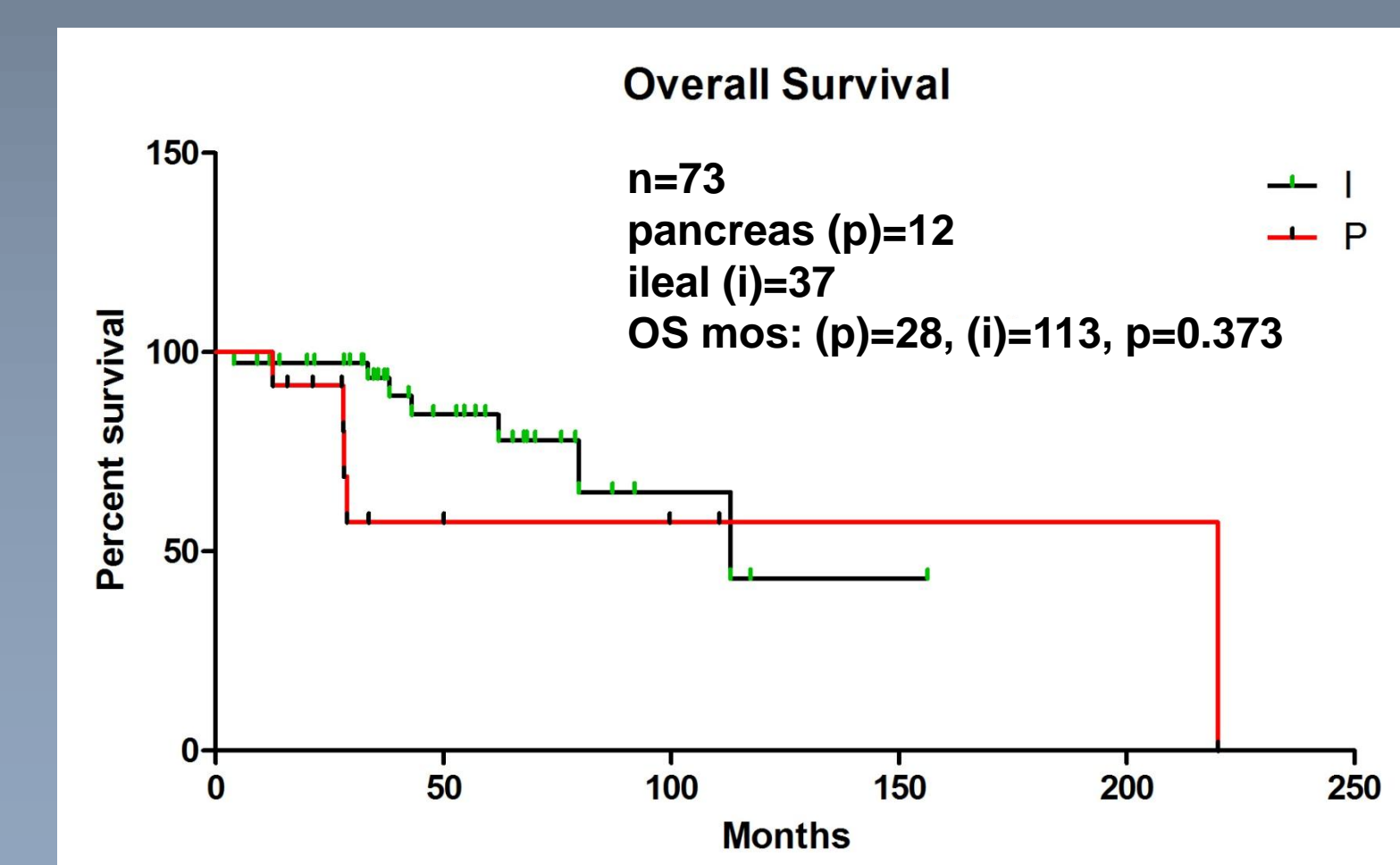
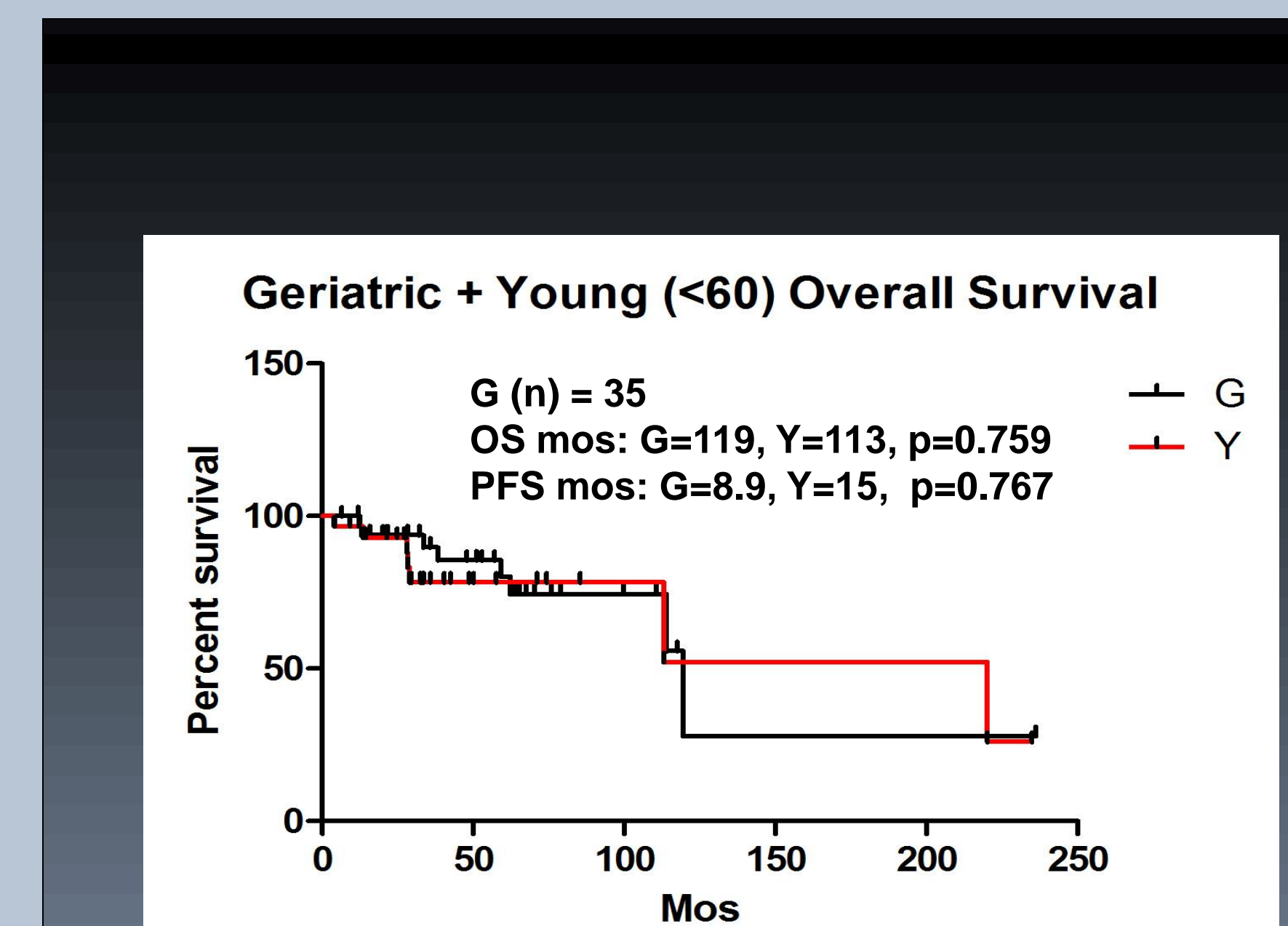


## Methods

- Single institution retrospective analysis of patients given Y-90MS therapy for neuroendocrine tumors with liver metastasis.
- Toxicity profile, physical, biochemical and radiographic factors associated with treatment and response were examined.
- Biochemical markers were recorded pre-Y-90MS and post-Y-90MS treatment at 1, 3, 6 & 18 month intervals.
- Overall survival, progression free survival and biochemical response rate was determined.



## Results



Outcome	Predictor	P-Value
Overall Survival	AA vs. W	0.917
	F vs. M	0.057
Progression Free Survival	Small Bowel vs. Others	<0.001
	Ki-67 Index	0.0017

- NKA at 6 mos  $\alpha$  radiographic progression, HR=1.05, p=0.047
- Pre-Rx KPS was greater for alive pts, median KPS=85 vs median KPS=72 for pts who died, p=0.040

## Conclusion

- Y-90MS therapy is an effective treatment option resulting in significant overall survival and progression free survival irrespective of race and age.
- Higher pre treatment Karnofsky Performance status is a marker of better outcome.
- There is greater Progression Free Survival for Small Bowel tumors than pancreatic tumors.
- Females tended to have better Overall Survival than males.
- Ki-67 Index is inversely proportional to Progression Free Survival.
- NK level at 6 months is predictive of progressive disease.

## Références

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