

EP14.02: Postoperative Prognosis of Thymic Cancer and Its Association With Preoperative Nutritional Status and Skeletal Muscle Mass

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INTRODUCTION

- ✓ Preoperative nutritional status and skeletal muscle mass are associated with solid tumors.
- ✓ However, owing to the low incidence of thymic cancer, these associations are not well understood.

METHODS

Design:

- ✓ Preoperative nutritional status and skeletal muscle mass were assessed using the prognostic nutritional index (PNI) and psoas muscle index (PMI), respectively.
- ✓ $PNI = 10 \times \text{albumin (g/dL)} + 0.005 \times \text{lymphocyte count (/mm}^3\text{)}$
- ✓ PMI was calculated from the psoas muscle area at the L3 level on CT.
- ✓ Patients were classified into high- and low-PNI/PMI groups using the following cutoffs: PNI, 48; PMI, 6.36 cm²/m² for men and 3.92 cm²/m² for women.
- ✓ Postoperative pathological stage was determined according to the Masaoka and 9th edition TNM classifications.
- ✓ Overall survival (OS) and recurrence-free survival (RFS) were compared between the groups.

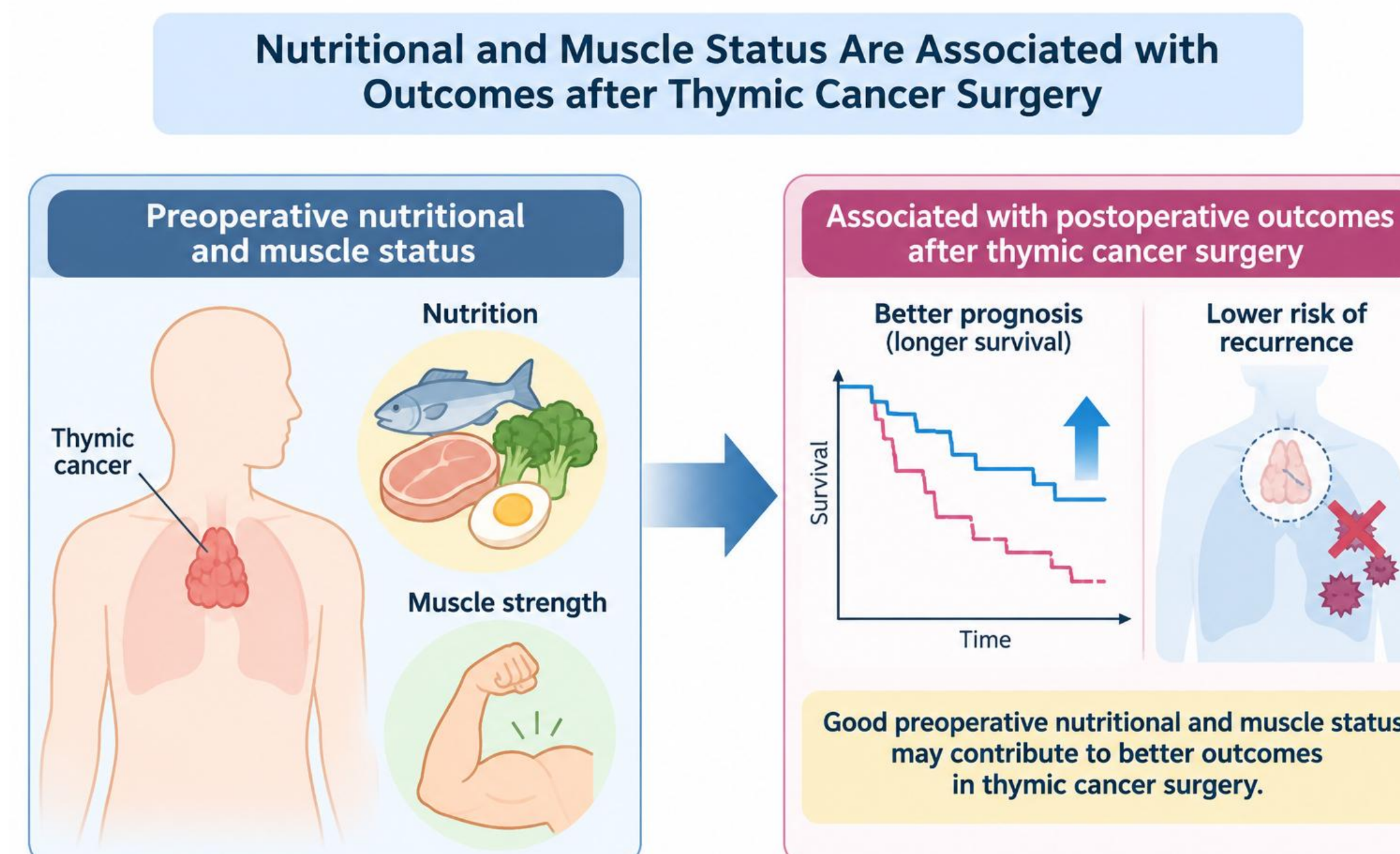
Psoas Muscle Index

L3 Muscle Mass of the Psoas Major(cm²)/height² (m²)



psoas muscle mass
 (measured by CT)

DISCUSSION AND CONCLUSION



- ✓ Preoperative nutritional status and skeletal muscle mass are potentially associated with the prognosis of thymic cancer.
- ✓ Nutritional management and rehabilitation during the perioperative period for thymic cancer could be important.

REFERENCES & ACKNOWLEDGEMENTS

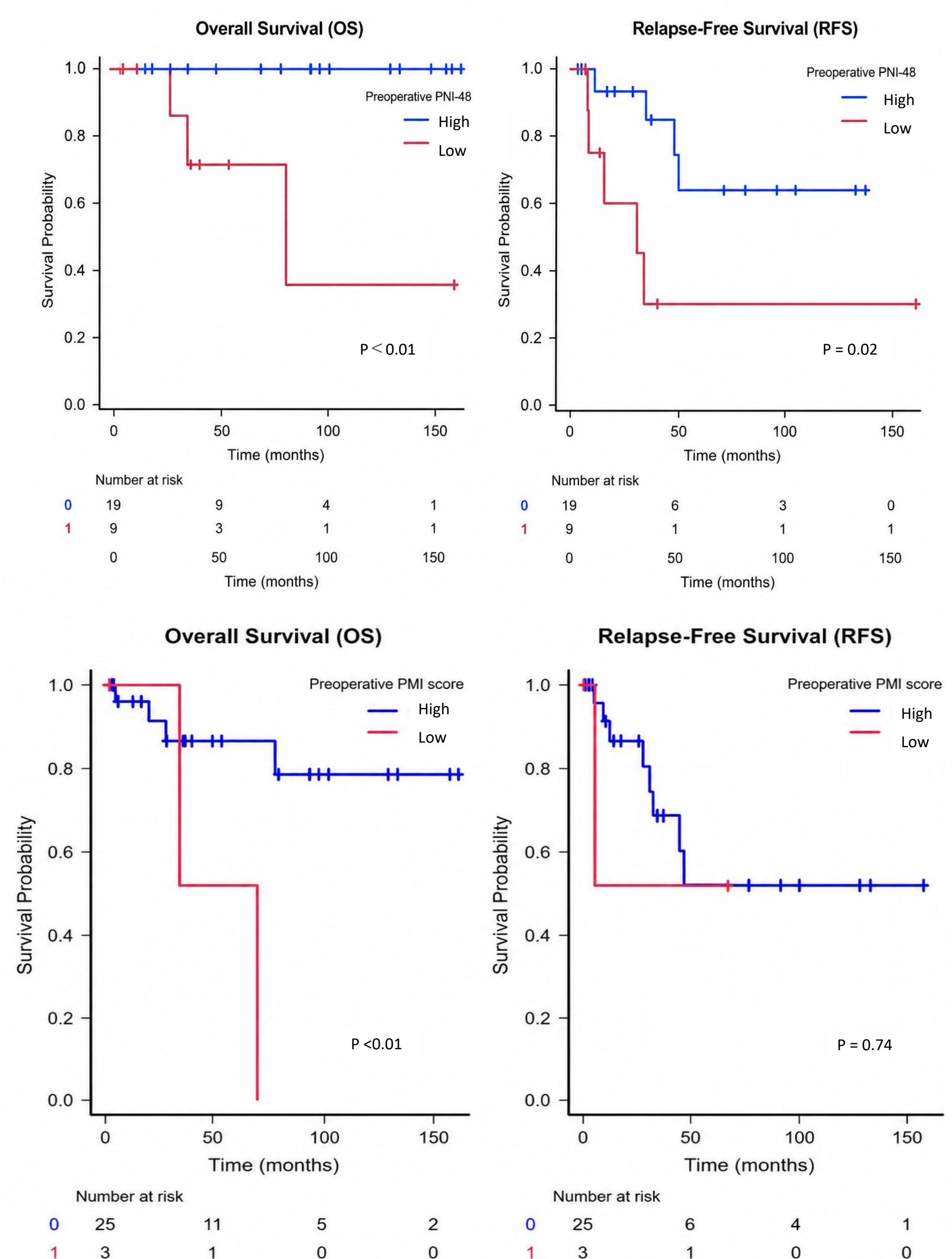
Artificial Intelligence (AI) Use Disclaimer

Use of AI: AI was used solely for the creation of illustrations and graphical elements in this poster. All scientific content, data analysis, and interpretation were performed by the authors.

RESULTS

- ✓ 28 patients were diagnosed with thymic cancer and underwent surgical resection.
- ✓ The median age: 67 years (range, 34–82 years)
- ✓ The median follow-up period: 38.4 months (range, 2.6–162 months)

Characteristic	n (%)
Masaoka classification	
Stage I	1 (3.6)
Stage II	15 (53.6)
Stage III	3 (10.7)
Stage IV	9 (32.1)
TNM classification (9th edition)	
Stage I	15 (53.6)
Stage II	3 (10.7)
Stage III	0 (0)
Stage IV	10 (35.7)
Histological type	
Squamous cell carcinoma	21 (75.0)
Neuroendocrine tumor	3 (10.7)
Carcinoid	2 (7.1)
Other	2 (7.1)
PNI	
>cutoff	19
<cutoff	9
PMI	
>cutoff	25
<cutoff	3



- ✓ No association was found between the stage and PNI or PMI.
- ✓ 20 patients received adjuvant therapy (such as radiotherapy or chemotherapy) during the perioperative period
- > However, there was no significant difference in the proportion of patients receiving adjuvant therapy between the two groups defined by PNI and PMI.