

# Monocentric Evaluation Of Surgical And Oncological Outcomes Of Locally Advanced Thymic Tumours: Robotic Vs Open Surgery

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**Objective:** Thymic malignancies are rare diseases. The therapy for locally advanced and metastatic neoplasm is not universally established. Surgery remains the gold standard, integrated into a multidisciplinary approach, and radical surgical resection is considered the most important prognostic factor. Currently, open surgery is still the surgical approach of choice in the most advanced stages.

This study aims to compare the short-term and long-term results of patients with locally advanced thymic tumours who underwent robotic and open surgery.

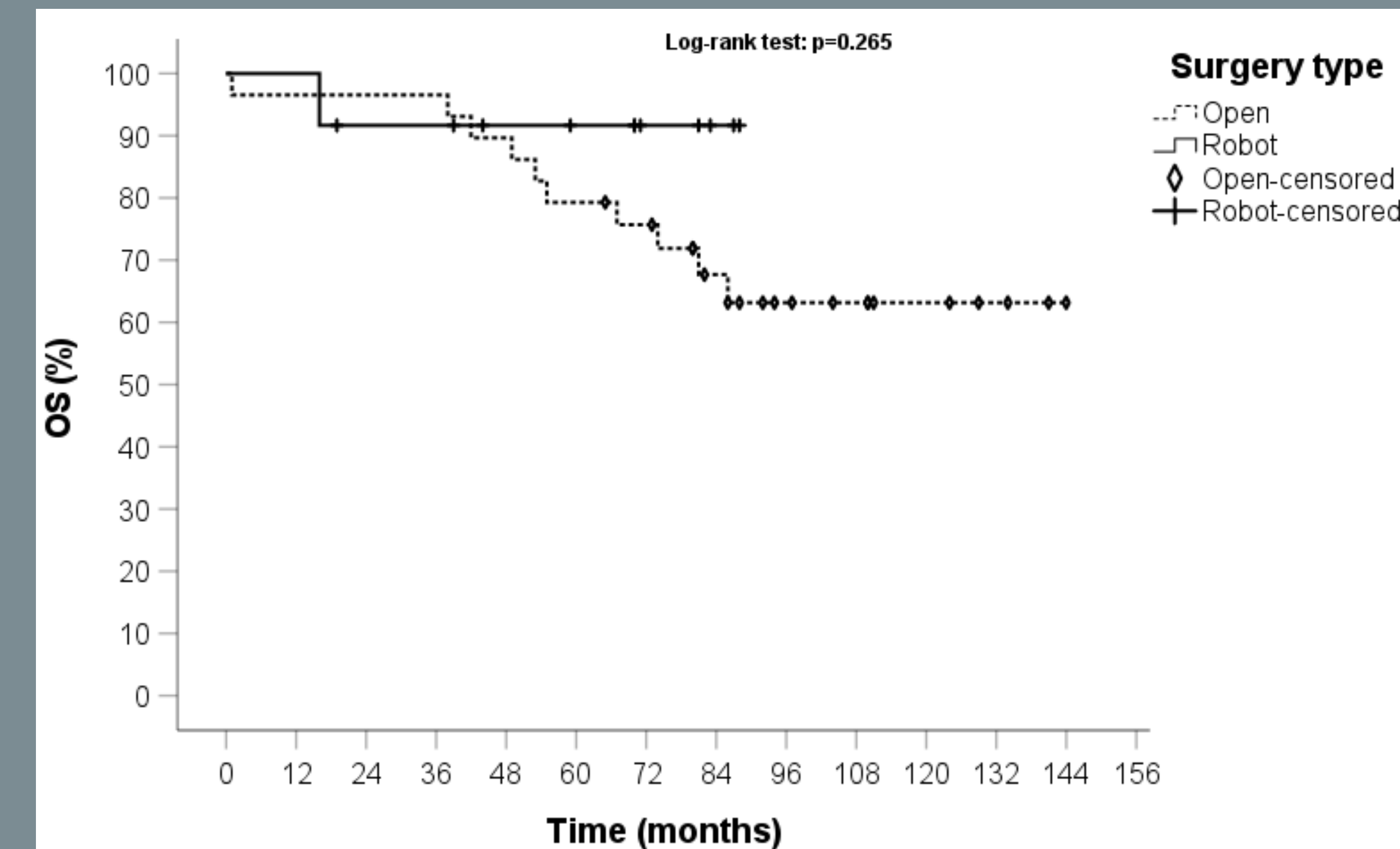
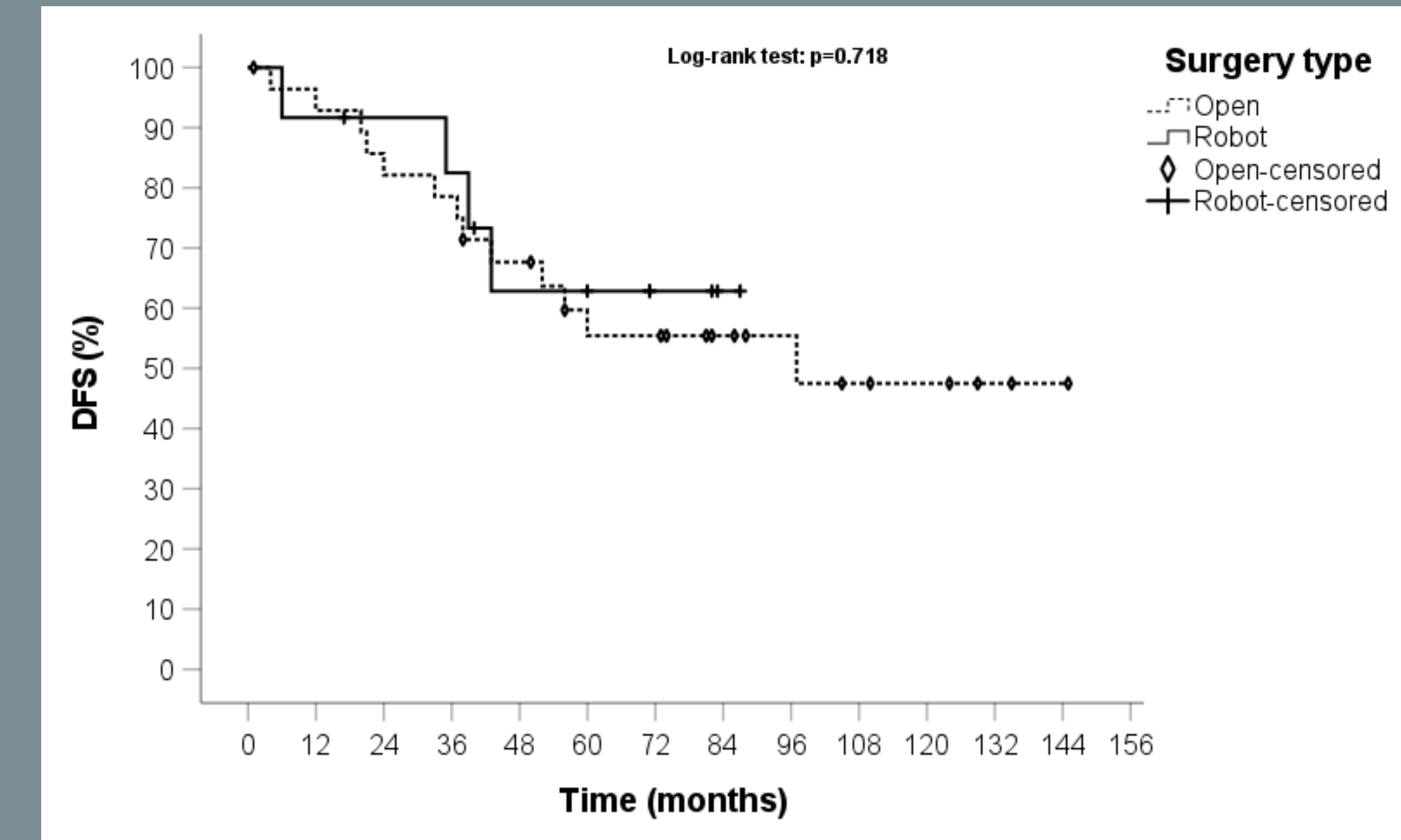
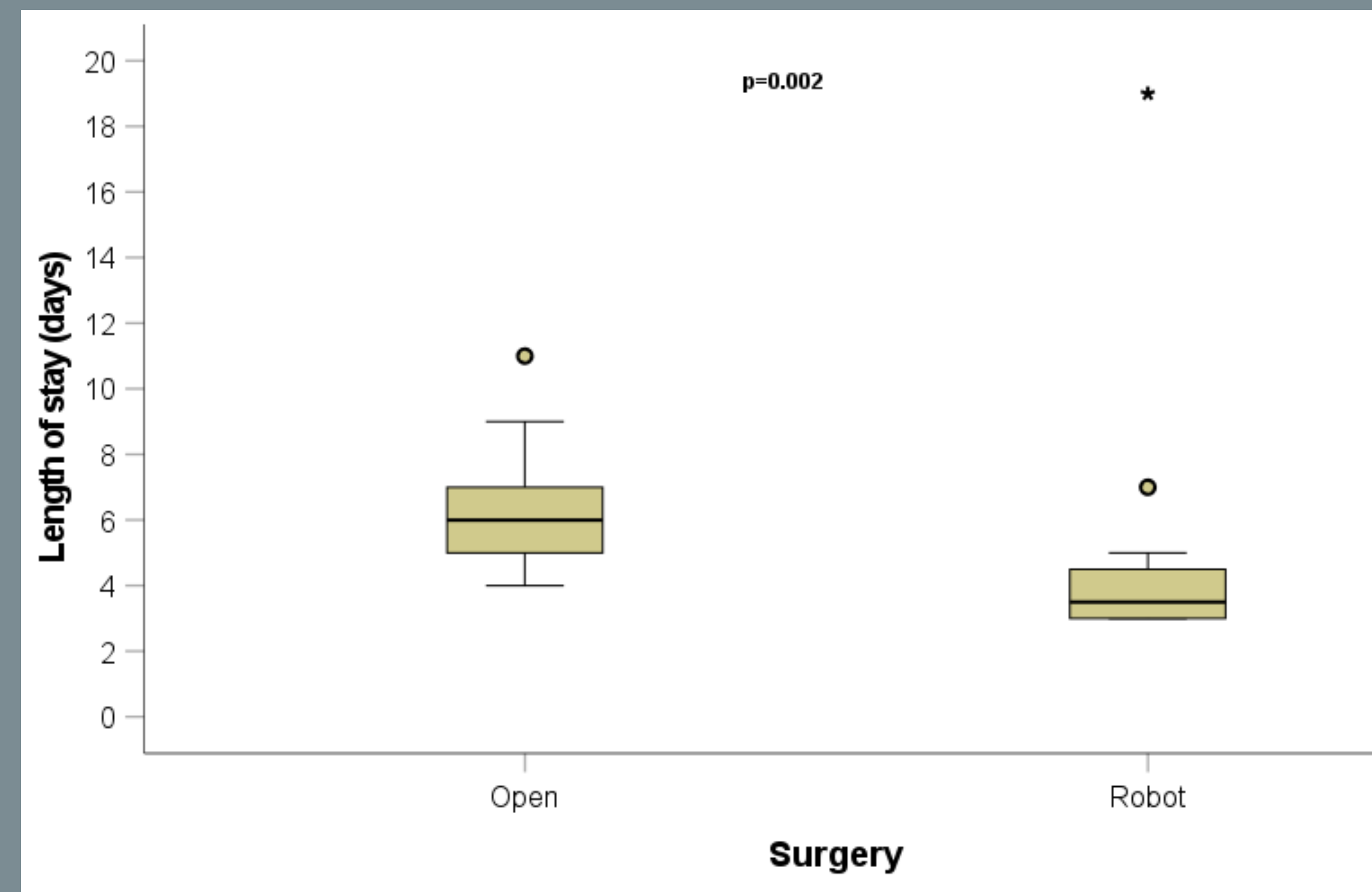
**Methods:** Retrospective study  
41 patients (Masaoka stage III-IVa-IVb) who underwent extended thymectomy with radical intent (R0) from March 2011 to August 2021:  
-29 (71%): open approach (6 thoracotomy, 11 sternotomy, 2 hemclamshell)  
-12 (29%): robotic approach

We analyzed:

- Patient characteristics and postoperative outcomes
- Perioperative results: myasthenia gravis (MG) diagnosis, operating time, length of hospital stay, complication rate
- Oncological results: disease-free survival (DFS), overall survival (OS)

**Results:** Between robotic and open surgery:

- Robotic patients: a statistically significant shorter length of stay (p:0.002)
- No statistically significant differences in the evaluation of DFS and OS, and in terms of intra and postoperative complications
- Stage IV and adjuvant chemotherapy are negative prognostic factor for DFS
- Thymic carcinoma and stage IV are negative prognostic factor for OS, while MG didn't seem to be a negative prognostic factor for OS and DFS



**Conclusions:**

Radical surgery -> favourable prognosis.  
Robotic thymectomy -> faster recovery and comparable oncological outcomes than open surgery