

P14.03: A Relook at the WHO Classification of Thymoma and its Association with Survival in a Mixed Asian Population

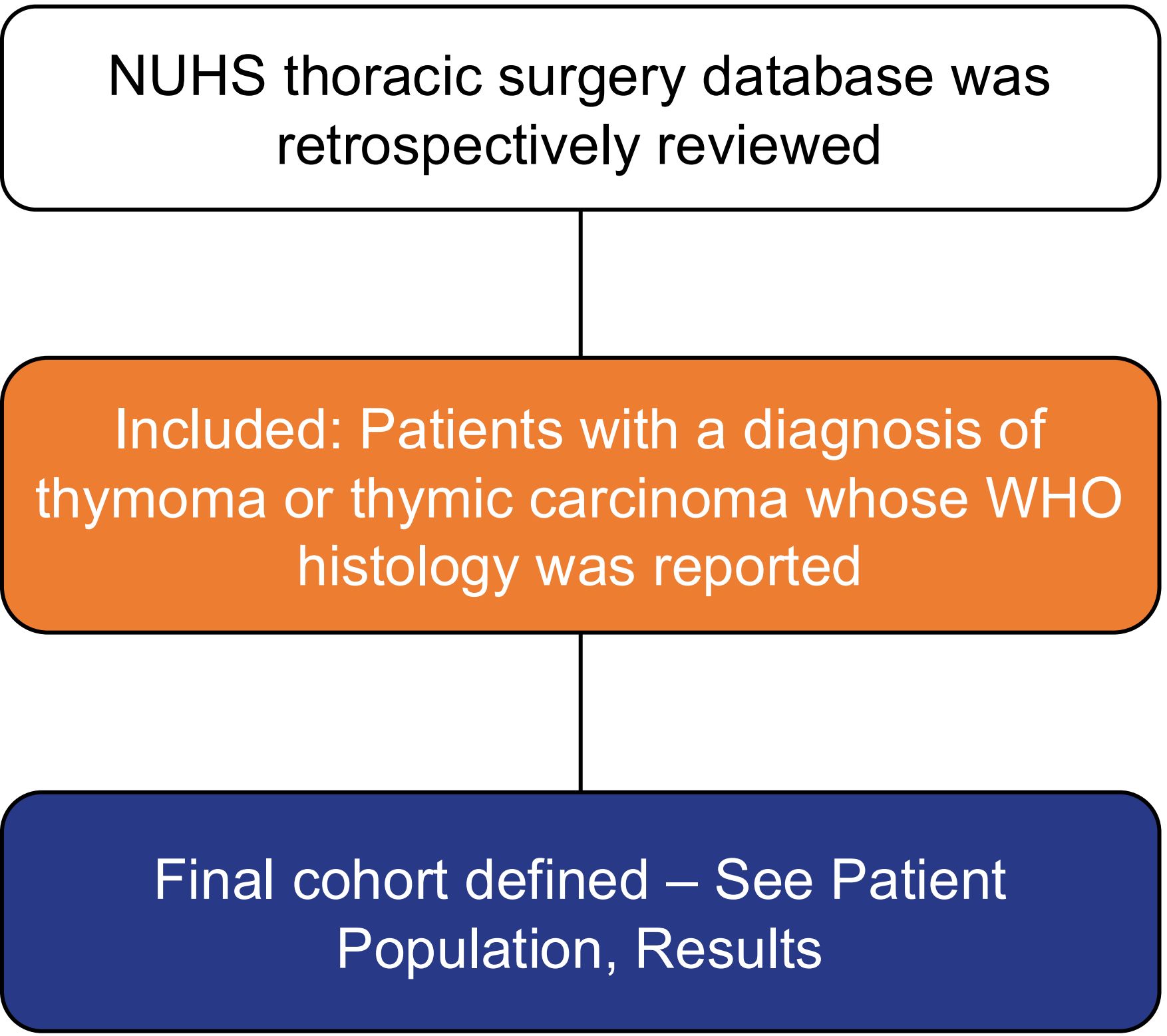
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INTRODUCTION

- Although thymomas are the most common anterior mediastinal tumours in adults, they comprise <1% of all human neoplasms (1).
- Singapore has one of the highest age-standardised incidence rates of thymic epithelial tumours worldwide (4).
- WHO classification of thymoma histology, together with tumour staging and resection status, is used as a prognostic factor for recurrence and survival rates in patients with thymoma (1).
- Previous research suggests that type A and AB thymomas are associated with better prognosis and lower stage; whereas type B3 and C thymomas are associated with worse prognosis and higher stage (1 - 3).

METHODS

Design:



Parameters:

- Variables reviewed: Age, gender, ethnicity
- Disease recurrence, overall survival (OS) and disease-free survival (DFS) assessed up to 5 years post-treatment
- Data analysis performed using Chi-square test, statistical significance set at $p \leq 0.050$

DISCUSSION AND CONCLUSION

Actionable Take Away Message:

- Our results align with previous research that demonstrates type A and AB thymomas have better prognosis compared to type B3 and C.
- WHO classification should be interpreted alongside staging based on current Masaoka-Koga and recently published TNM 9th edition classifications.

Future Direction for Research

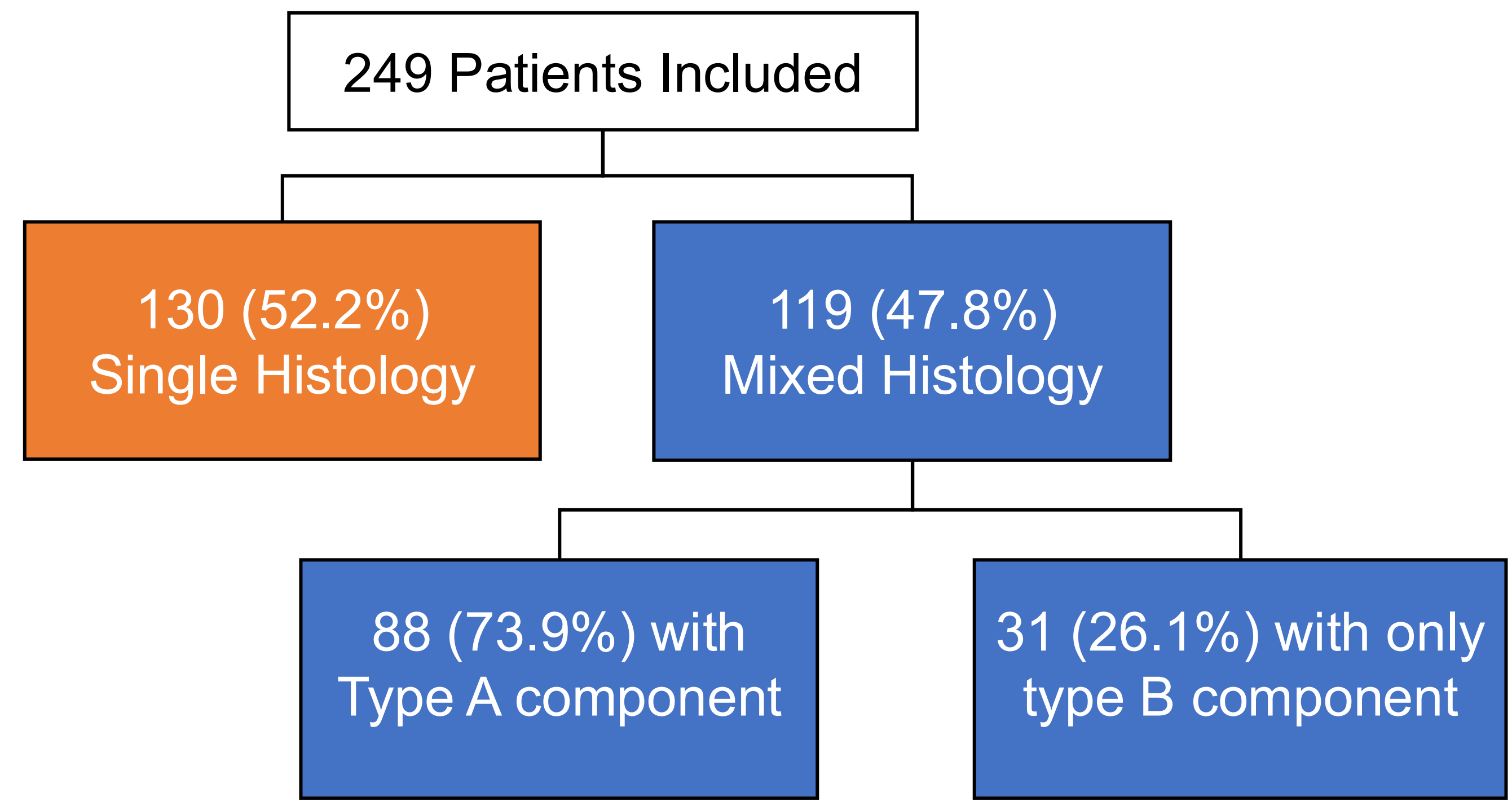
- More study can be done into the implications of mixed thymoma histology on prognosis.

REFERENCES & ACKNOWLEDGEMENTS



RESULTS

Patient population



Characteristic		Patients, n (%)
Age (years)		56.88 ± 13.85
Gender (n = 249)	Male	112 (45.0%)
	Female	137 (55.0%)
Ethnicity (n = 225)	Chinese	175 (77.8%)
	Malay	30 (13.3%)
	Indian	8 (3.6%)
	Caucasian	4 (1.8%)
	Others	8 (3.6%)

Mixed Histology

- Patients with mixed histology thymoma were significantly **more likely** to develop **recurrence** (OR 3.78, 95% CI 1.62-8.78, $p < 0.001$)
- **Type AB** thymoma is associated with significantly more **stage 1 disease** than those with only type B component (OR 2.86, 95%CI 1.10-7.41, $p = 0.009$)
- **No mortality up to 5 years** was observed in mixed histology patients with only type B component

Single Histology

- **Type B3** thymoma is associated with significantly **lower OS** at 3 years (OR 0.23, 95% CI 0.06-0.93, $p = 0.050$) and 5 years (OR 0.20, 95% CI 0.06-0.72, $p = 0.018$)
- **Type A** thymoma is associated with significantly **higher DFS** at 5 years (OR 1.55, 95% CI 1.30-1.84, $p = 0.040$)
- **Type C** thymoma or thymic carcinoma is associated with significantly **lower DFS** at 5 years (OR 0.31, 95% CI 0.10-1.00, $p = 0.046$)