



Longitudinal Study on Patient-Reported Outcomes in Patients Under Active Surveillance for Low-Risk Papillary Thyroid Carcinoma: Mitigating Anxiety Over Time

Hiroko Kazusaka, Masaomi Sen, Marie Saitou, Ryuta Nagaoka and Iwao Sugitani

Department of Endocrine Surgery, Nippon Medical School, Tokyo, Japan

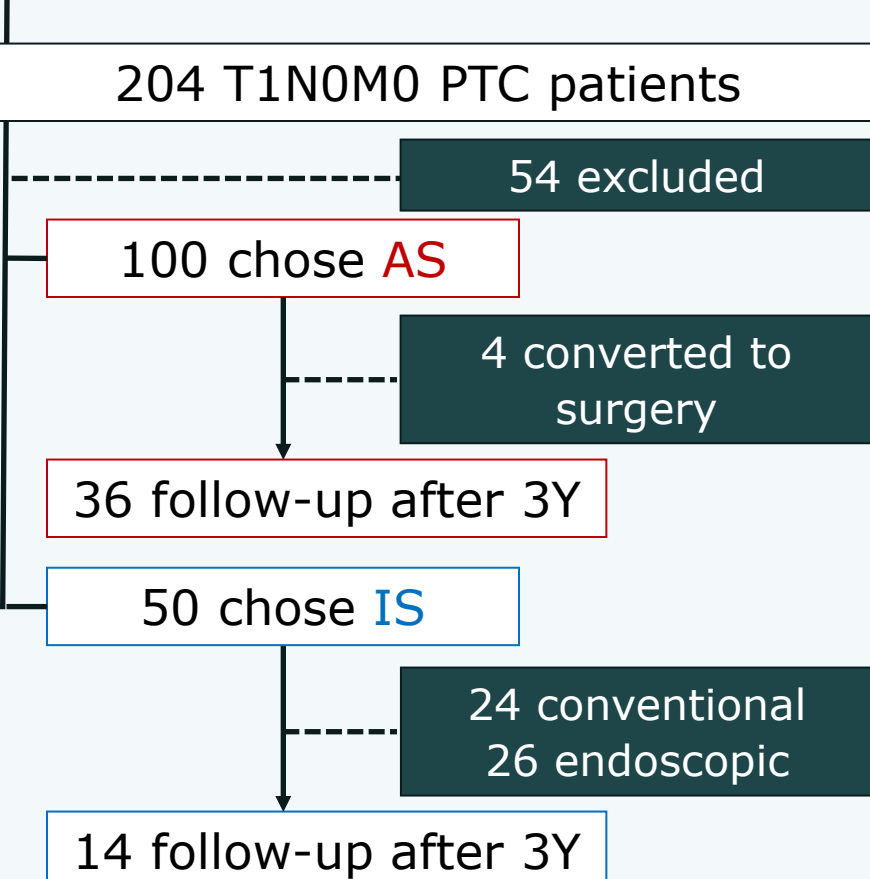
Introduction

- In our previous cross-sectional study¹, low-risk papillary thyroid carcinoma (PTC) patients under **active surveillance (AS)** experienced lower anxiety compared to those who underwent **immediate surgery (IS)**.
- The longer follow-up period, the less anxiety in **AS** patients.
- Objectives: Compare anxiety AS vs IS at the timing of shared decision-making (SDM) and 3 years after



Methods

From Jan. 2019 to Oct. 2023, 2,504 patients visited hospital



Design: Prospective & longitudinal study

Data Collection: 4 time points

- ✓ After SDM regarding management strategy
- ✓ 1Y, 2Y & 3Y follow-up visit

Questionnaires: 2 types of surveys

- ✓ STAI: State Anxiety (anxiety at the time of survey) & Trait Anxiety (dispositional anxiety across time & situations)
- ✓ Original Questionnaire: Assess patient's decision-making

¹Kazusaka H, et al. World J Surg 2023;47(5):1190-1198.

Conclusion 1: Timing of SDM

- Patients who chose **AS** had less state and trait anxiety than those who chose **IS**.
- Patients who opted for **AS** appeared to be swayed by their physician's recommendation, while those who chose **IS** were affected their own convictions.

Result 1: Timing of SDM

Table 1. Patient characteristics in AS and IS groups at the timing of SDM

	AS (n = 100)	IS (n = 50)	p value
Age, years	54.6 ± 11.7	43.7 ± 12.6	<.0001
Female, n (%)	79 (79.0%)	38 (76.0%)	0.68
Tumor size, mm: median (range)	8.9 (5.2–17.5)	10.5 (3.9–15.4)	0.0097
History of other malignancies, n (%)	20 (20.0%)	3 (6.0%)	0.03
Family history of thyroid disease, n (%)	20 (20.0%)	8 (16.0%)	0.66
Physician expertise (≥4 years), n (%)	65 (65.0%)	21 (42.0%)	0.0088
State anxiety, scores	40.3 ± 8.3	46.4 ± 11.0	0.0001
Trait anxiety, scores	39.8 ± 8.5	44.5 ± 12.5	0.0079

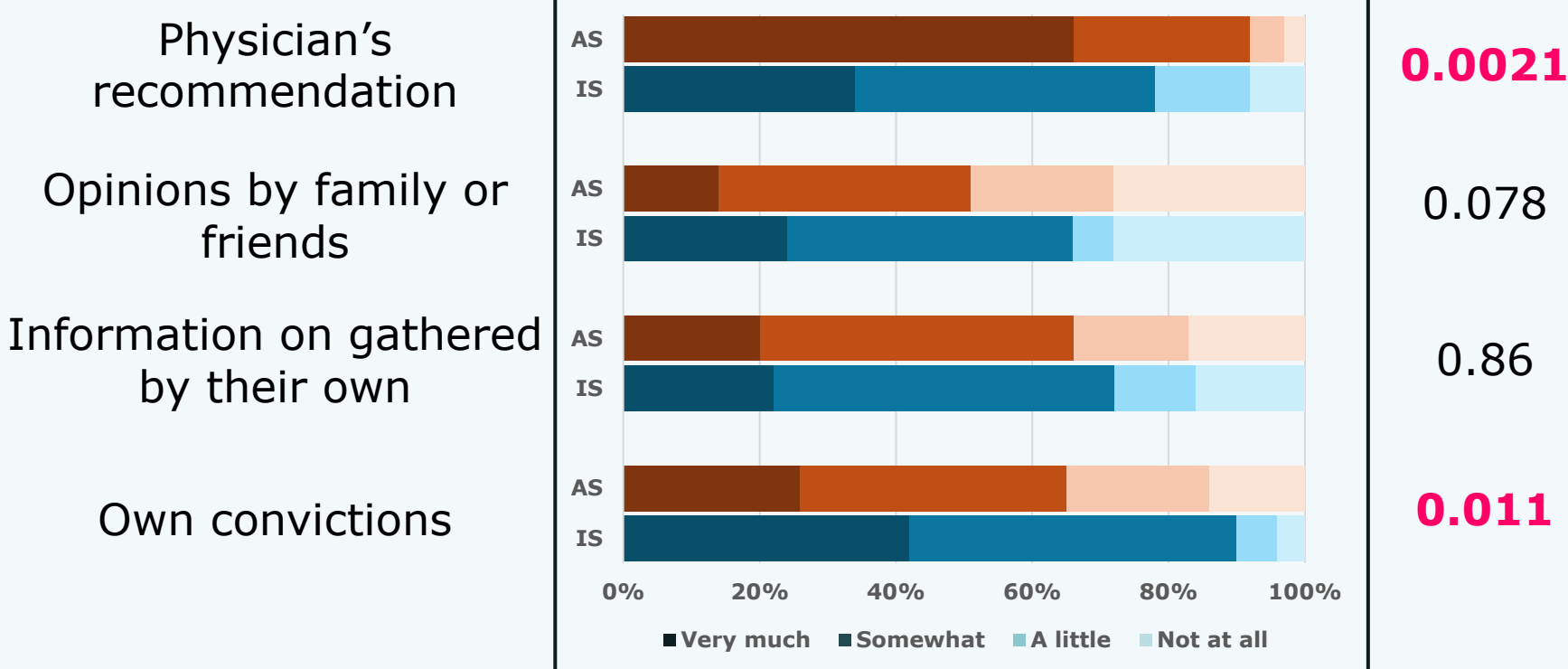


Fig 1. Distribution of decision-making among **AS** and **IS** groups: How did these factors affect the management choice for the cancer?

Conclusion 2: Over the course of 3Y

- State anxiety in **AS** patients significantly decreased after 3Y.
- State anxiety in **IS** patients decreased after 1Y but returned to pre-surgery levels by 3Y.

Result 2: Over the course of 3Y

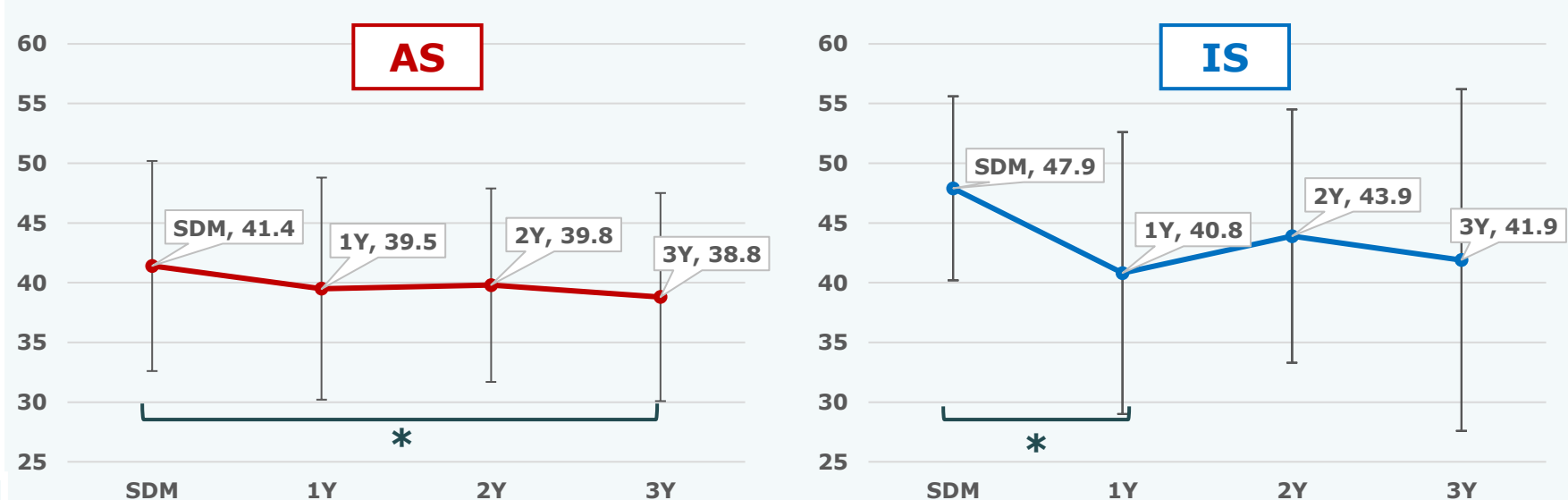


Fig 2. State anxiety score changes in **AS** and **IS** groups; *p <.05