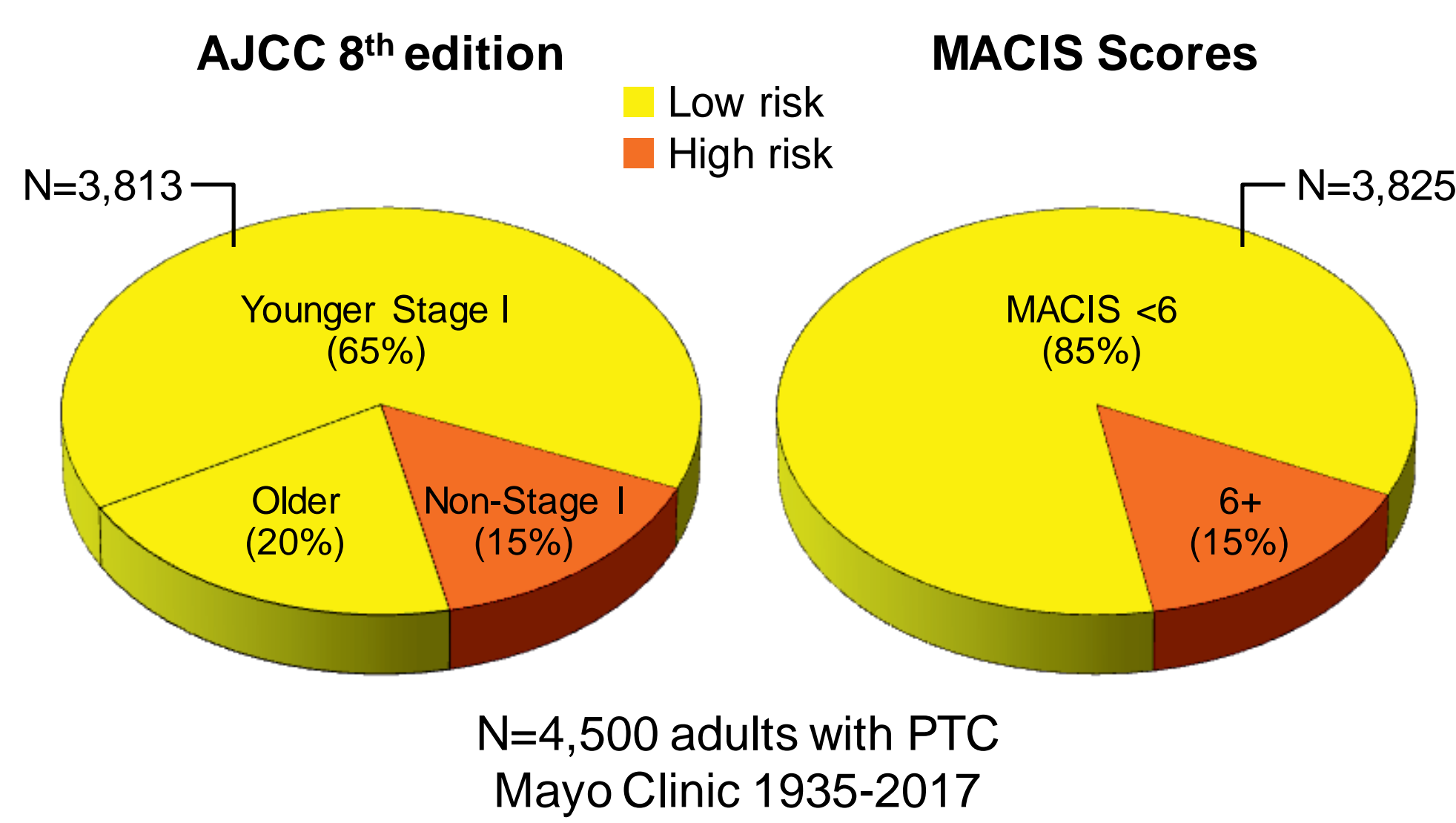


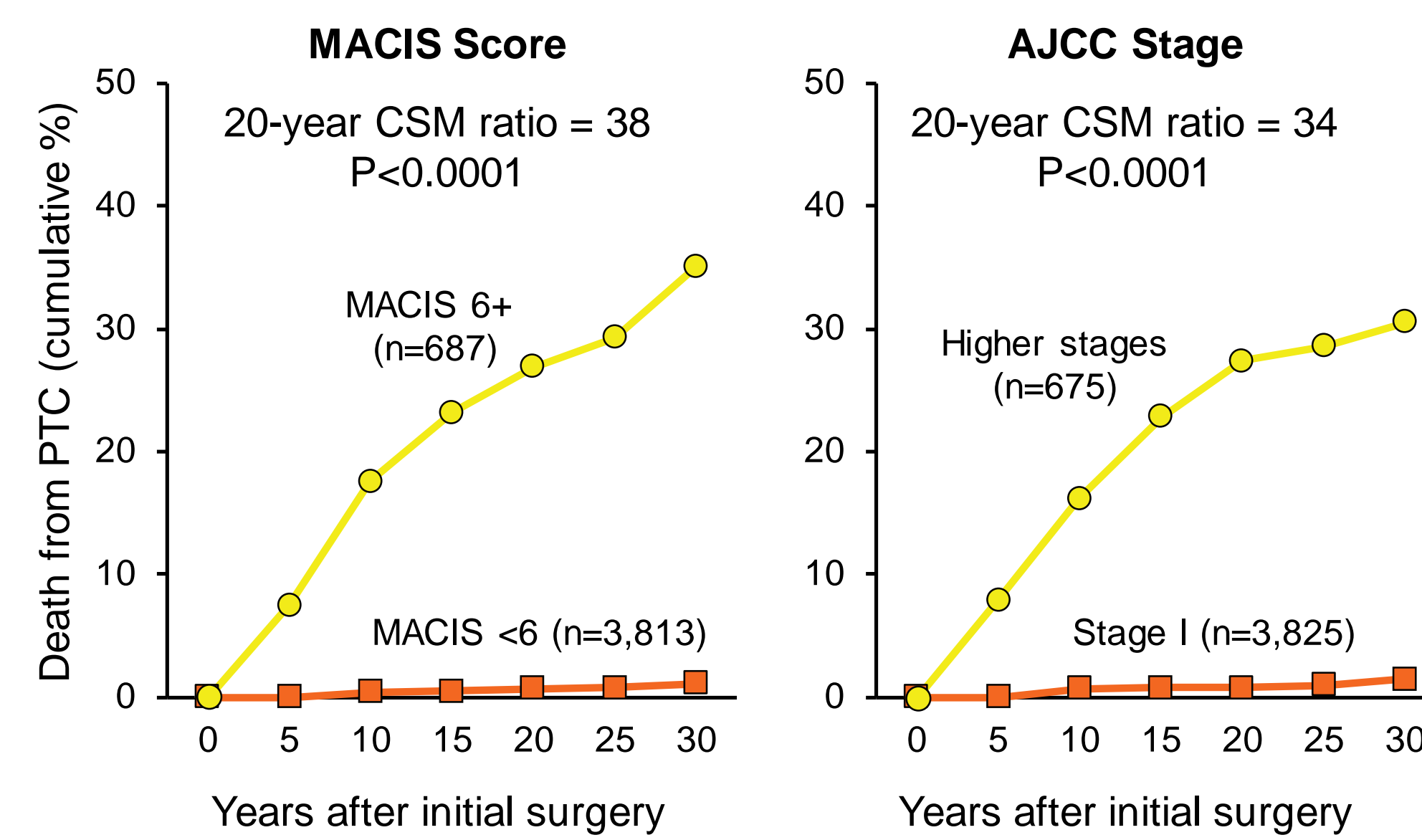
When locoregional recurrences (LRR) in papillary thyroid carcinoma (PTC) can be repeatedly eliminated by ultrasound-guided percutaneous ethanol ablation (UPEA) and appropriate use of dermatologic surgery, cervical skin metastases (SM) in low-risk PTC (LRPTC) can be associated with an excellent long-term prognosis

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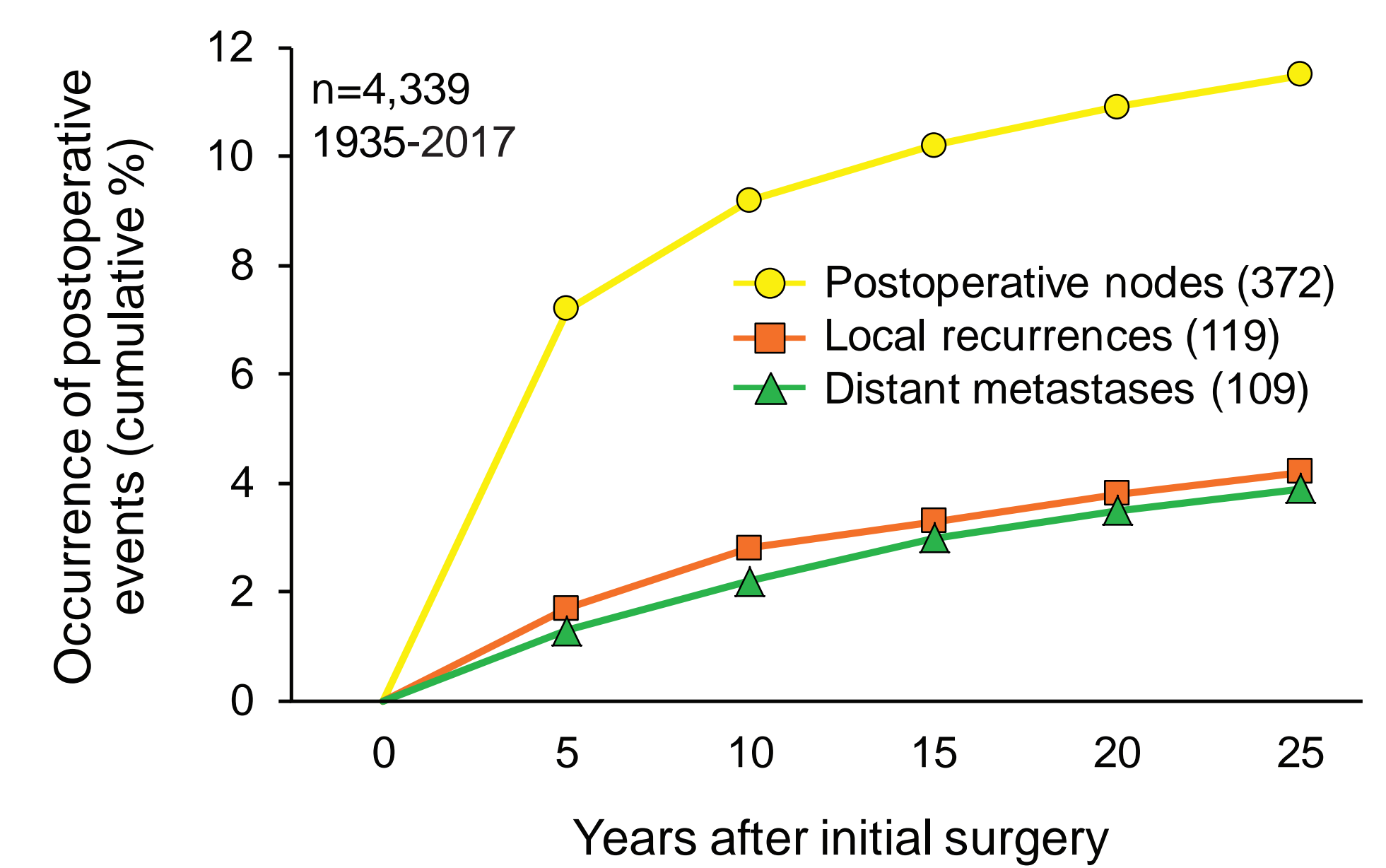
Prognostic Groups in PTC



CSM by MACIS or TNM



Tumor Recurrences in PTC



Clinical Case Part I: From Presentation with Neck Nodal Mass to 4 Years Post-op

- 2004: M48 after open bx for PTC had near-total thyroidectomy and neck nodal dissection
- 8mm primary tumor, 2 ipsilateral nodes; risk-categories: MACIS 4.08, TNM stage I (8th ed)
- Subsequent 2 RAI doses (total dose 12,506 MBq) resulting in negative whole body scans
- 2007: abnormal neck imaging led to neck dissection for further R sided neck nodal mets
- 2008: Tg 4.8 on T4 Rx; Pos USGB of R level III node despite 3 surgeries and 2 large RAI doses

Clinical Case Part II: Nodal Mets Ablated with Ethanol during 2008 through 2017

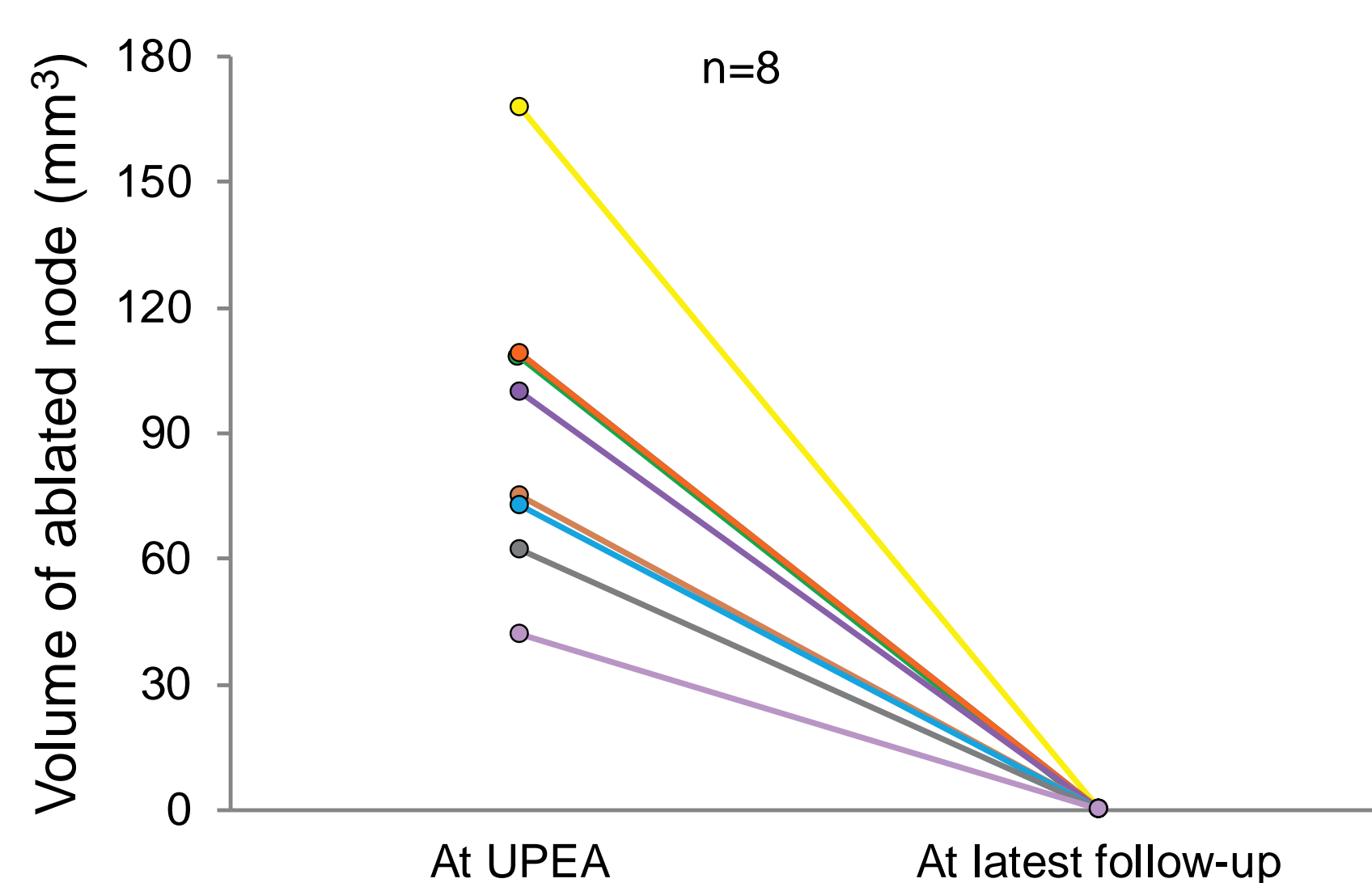
- 2008: Referred to Mayo for consideration of ethanol ablation of persistent neck nodal mets
- 2 separate nodes ablated, shrunken, avascular and subsequently disappeared on neck US
- 2010-2016: further successful ablation of another six R neck nodal metastases
- By 2017: none of the 8 ablated nodes identifiable; FDG-PET/CT body scans performed in 2009 and 2016 both negative

Clinical Case Part III: Unexpected Development and Novel Rx for Skin Mets

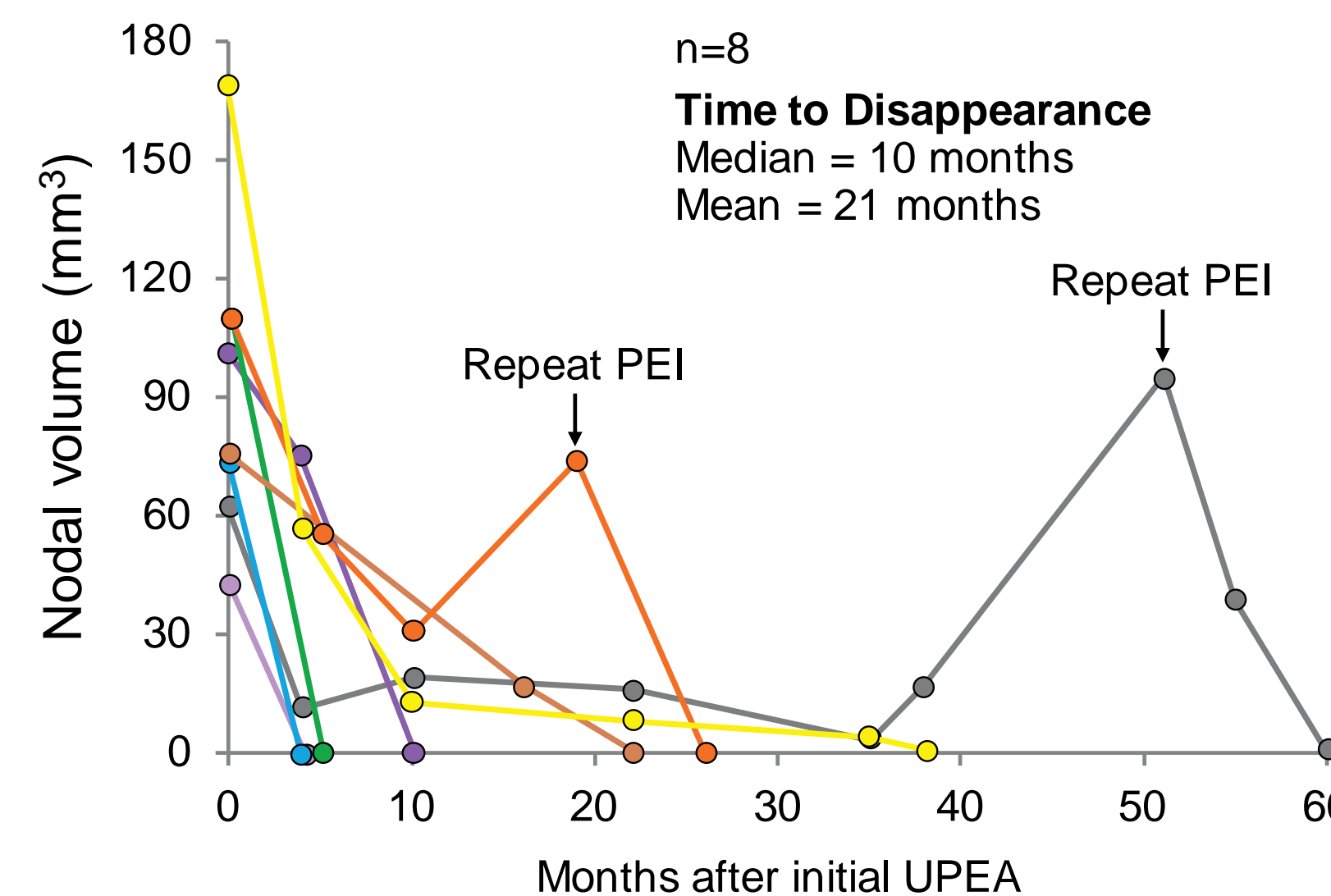
- 2016: seen by local dermatologist who excised skin papule; path c/w skin metastasis from PTC
- At Mayo no imaging evidence of distant spread
- 2017-18; two further skin mets excised by dermatologic surgeons, the first with Mohs micrographic surgery; neg margins achieved
- Oct 2018: no evidence of residual disease seen in neck and no lung mets at 14.5 postop years
- Latest Tg of 4.3 ng/ml w TSH of 0.2 mU/L.

Recurrent PTC in Eleven Neck Sites Controlled by Outpatient Procedures

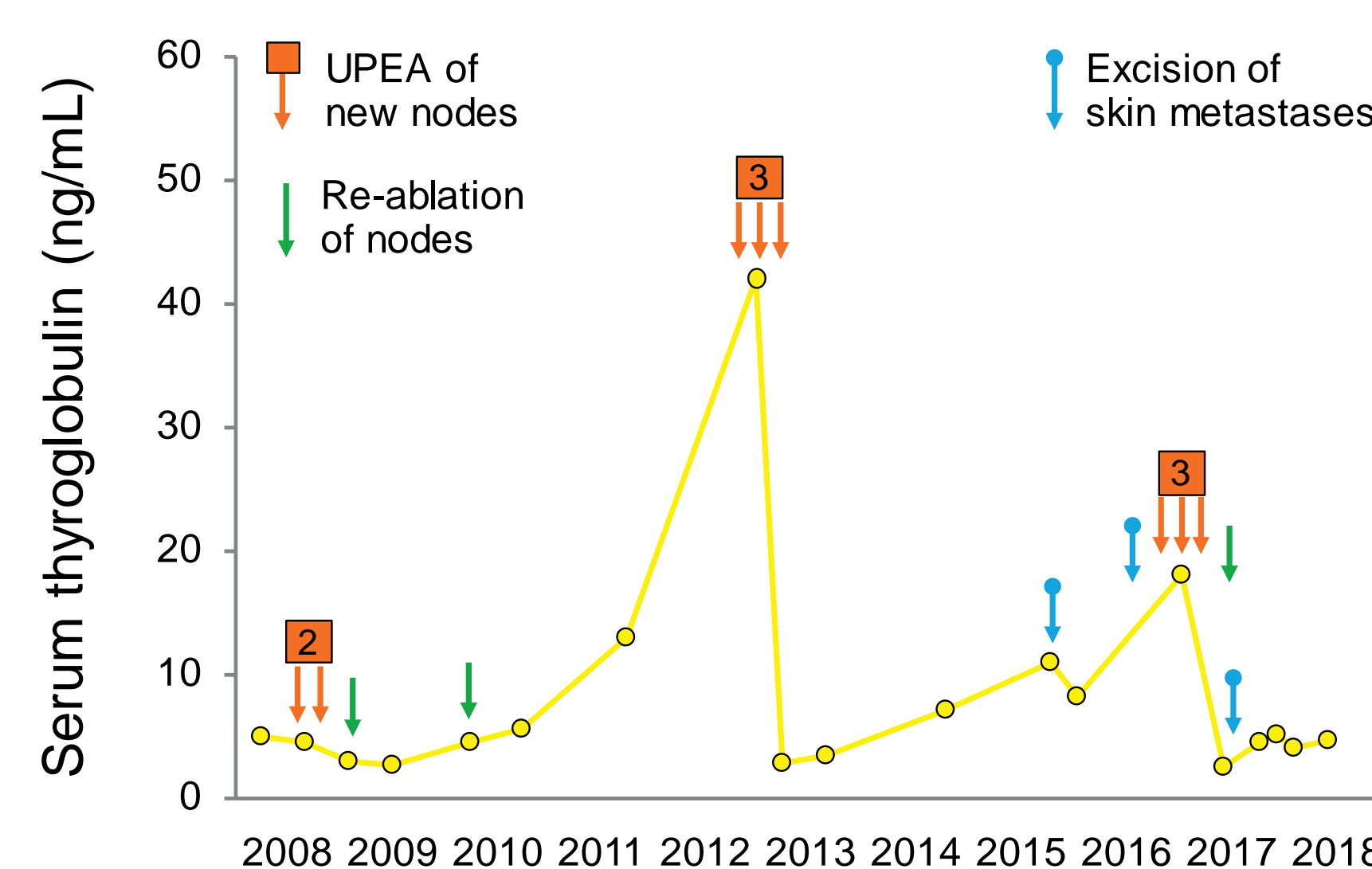
Impact of Ethanol Ablation on Metastatic Neck Nodal Volumes



Impact of Ethanol Ablation on Metastatic Neck Nodal Volumes



Changes in Serum Tg During Decade at Mayo



Conclusions

- Despite 3 neck surgeries and 12,506 MBq of RAI, this man with low-risk PTC (MACIS <6 stage I PTM) developed 8 separate sites of neck nodal mets and 3 sites of skin mets
- All 11 sites effectively and cheaply treated as outpatient procedures without morbidity
- In contrast to earlier reports in the dermatologic literature, this case is unusual since he is likely to survive long after his present 14.7 postop yrs
- Ethanol ablation and dermatologic surgery may well have roles to play in local control of PTC

References

1. Hay ID, Charboneau JW. The coming of age of UPEA of selected neck nodal metastases in WDTC. JCEM 2011; 96:2717-20.
2. Hay ID, Lee RA et al. Long-term outcome of UPEA in 25 patients with locally advanced PTC. Surgery 2013; 154:1448-54.
3. Dahl PR, Hay ID et al. Thyroid carcinoma metastatic to the skin: a cutaneous manifestation of a widely disseminated disease. J Am Acad Dermatol 1997; 36:531-7.