



THYROIDPRINT: PRELIMINARY CLINICAL UTILITY EXPERIENCE

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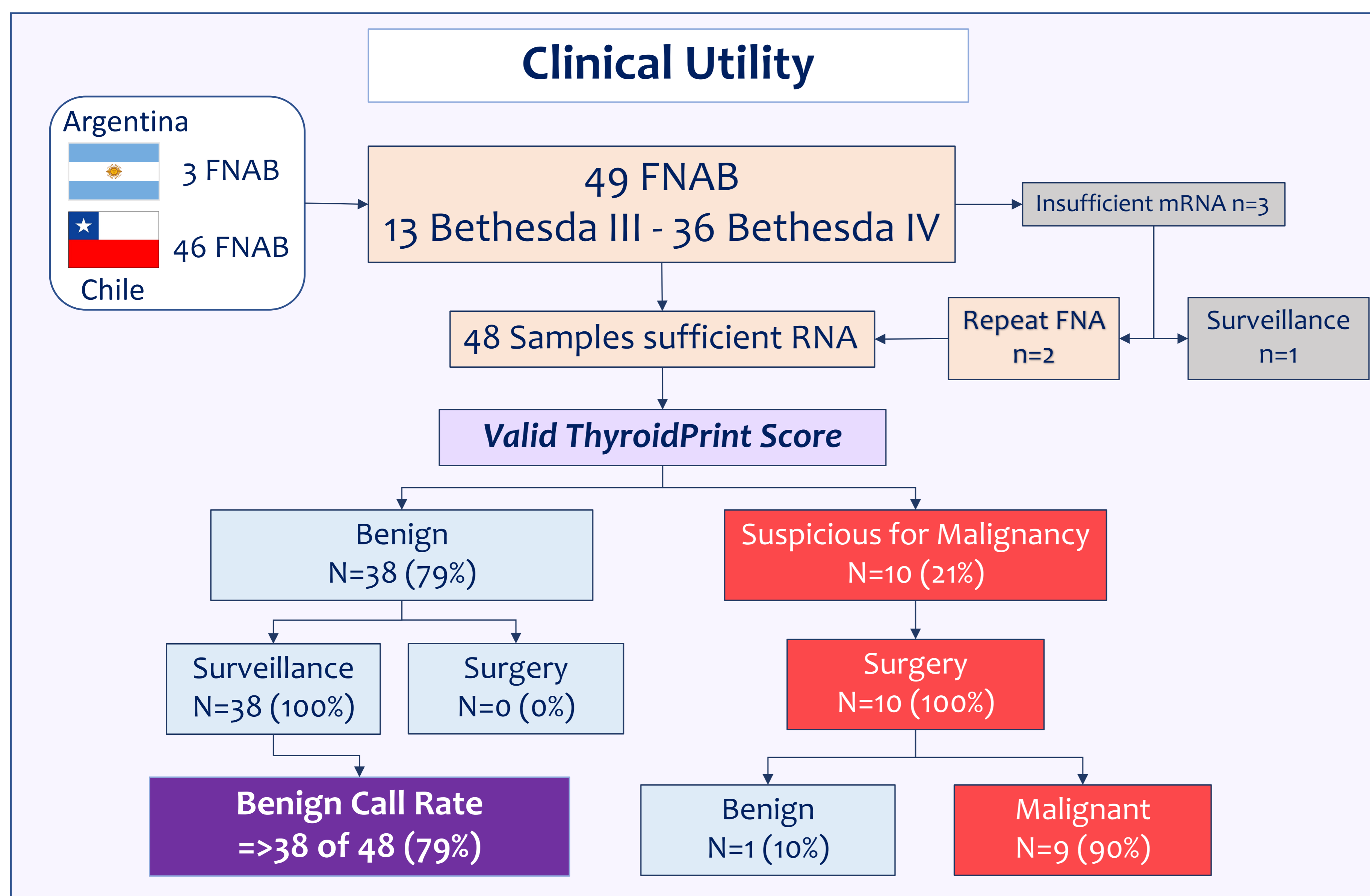
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Introduction: Molecular testing offers a promising tool to improve diagnostic certainty of patients with indeterminate thyroid nodules providing an alternative to reduce unnecessary surgery. ThyroidPrint is a 10-gene thyroid genetic classifier which has been shown to accurately predict benign nodules.

Objective: To evaluate the preliminary real world experience and impact of ThyroidPrint in the physician clinical decision for indeterminate thyroid nodules with a benign test report.

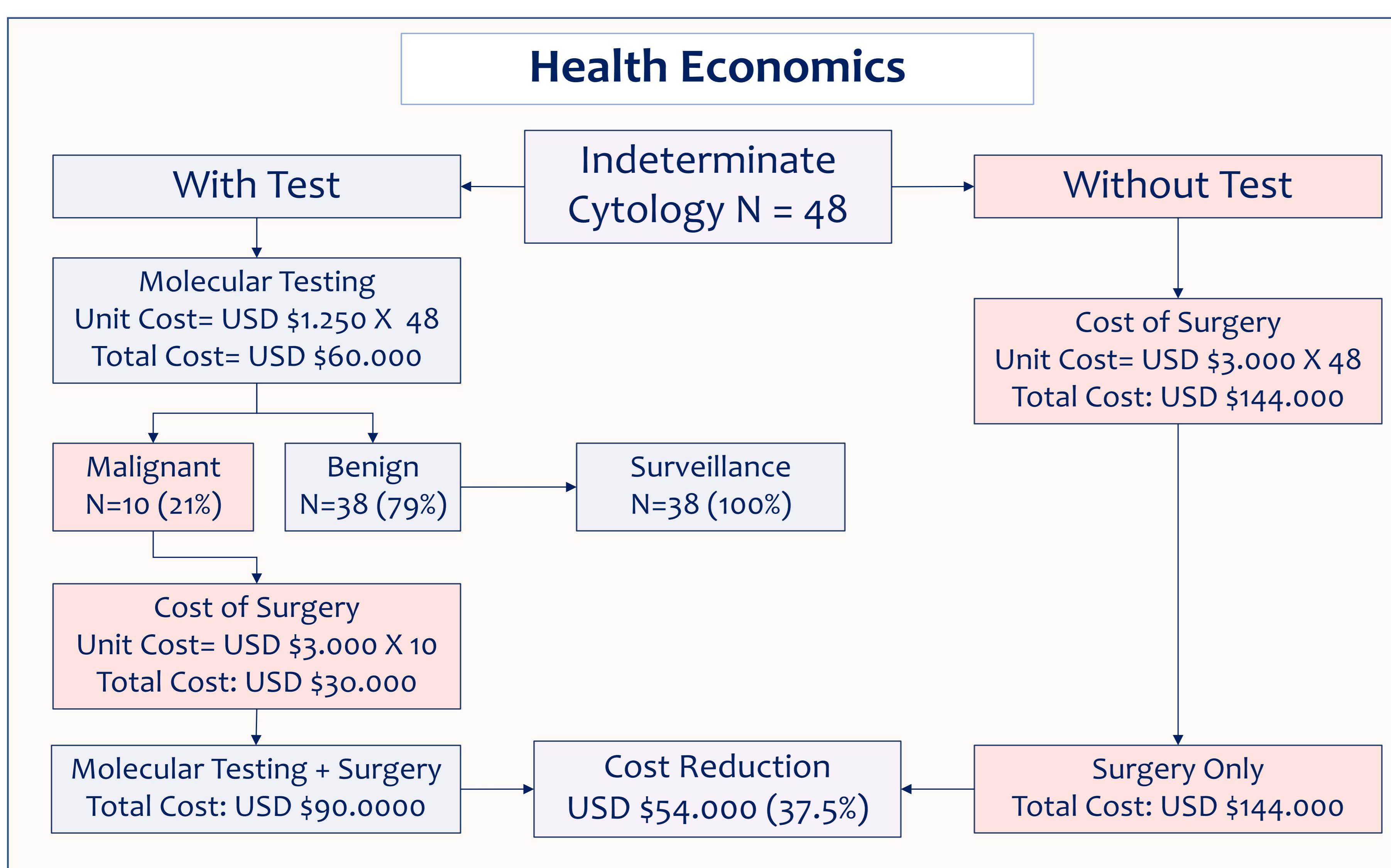
Methods: Data was prospectively collected for 49 patients with indeterminate thyroid nodules undergoing ThyroidPrint testing. Benign call rate, physician clinical decision and potential cost-savings analysis were analyzed.

Results



Results :

Of 49 samples, 46 (94%) had sufficient mRNA for analysis with the first FNAB. Two patients underwent repeat FNAB resulting in an adequate sample for testing. Thirty-eight of 48 cases with a valid ThyroidPrint score were benign yielding a **benign call rate of 79%**. All benign calls were recommended ultrasound follow-up in lieu of surgery. All 10 cases with suspicious calls underwent surgery, with 9 cases confirmed as cancer and 1 case as benign in the final pathology (**true positive rate of 90%**).



Results :

With a average cost of USD \$ 3.000 for surgery and USD \$ 1.250 for molecular testing, the cost reduction was 37.5% (USD \$ 144.000.000 (surgery for all) to USD \$ 90.000 (molecular testing for all + surgery for malignant calls)).

Conclusion

Conclusion: ThyroidPrint provides meaningful diagnostic value to physicians in the clinical setting of an indeterminate thyroid cytology, potentially reducing surgery and health costs by 79% and 37.5%, respectively. Although, this preliminary study is limited by the lack of follow-up to assess long-term net benefit and cost effectiveness, it provides initial evidence of the impact of genomic testing for indeterminate thyroid cytology in a Latin American cohort.