



POSTER 3292 : The Pan-Canadian Lung Cancer Observational Study (PALEOS): Strengthening Real World Evidence Generation through an expanding Lung Cancer Registry



O. Aseyev¹, P. Joubert², P. Wheatley-Price³, F. Gwadry-Sridhar⁴, S. Surapaneni⁵, S. Ma⁵, B. Sheffield⁶, K. Bisson⁶, A. Foo⁶, R. Saberi⁴, J. Brewster⁴, J. Bafaro², M. Richardson⁷, G. Liu⁸, P. Cheema⁶ and M.S. Kuruvilla⁵
¹Thunder Bay Regional Health Sciences Centre, Thunder Bay/ON/CA, ²Institut universitaire de cardiologie et de pneumologie de Québec – Université Laval), Quebec City/QC/CA, ³The Ottawa Hospital, Ottawa/ON/CA, ⁴PulseInframe Inc., London/ON/CA, ⁵London Health Sciences Centre, London/ON/CA, ⁶William Osler Health System, Toronto/ON/CA, ⁷Ottawa Health Research Institute, Ottawa/ON/CA, ⁸Princess Margaret Cancer Centre, University of Toronto, Toronto/ON/CA

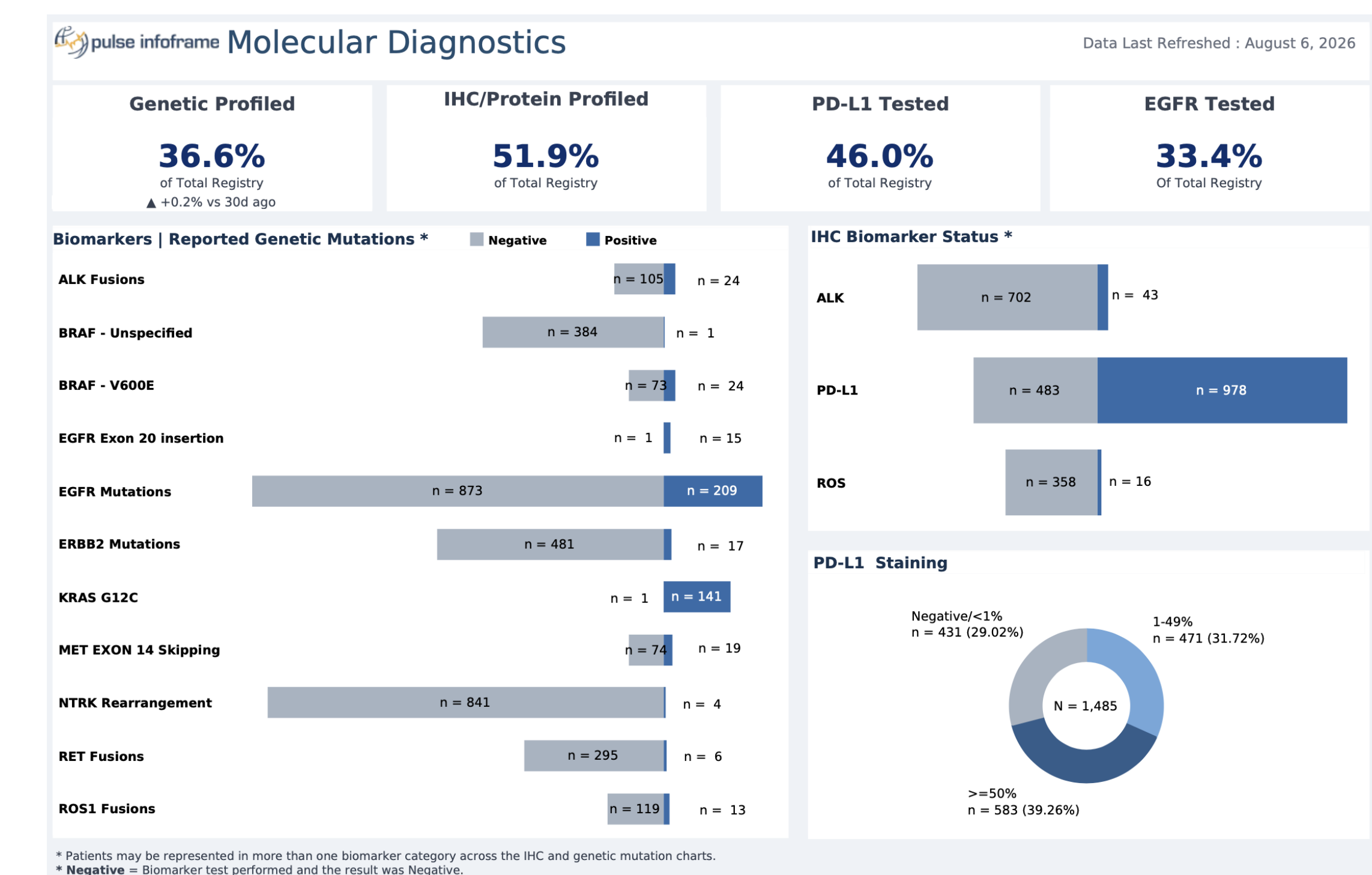
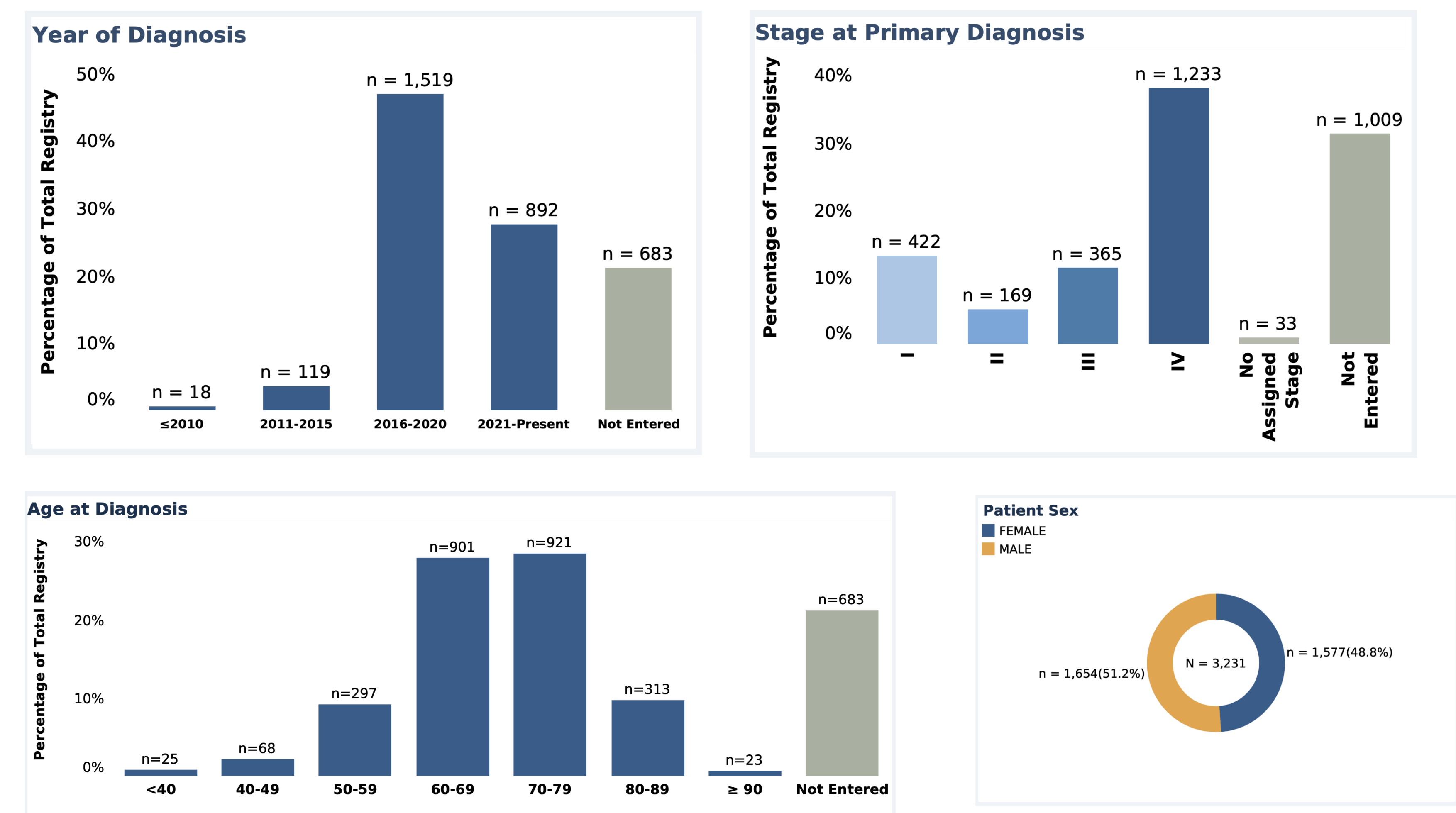
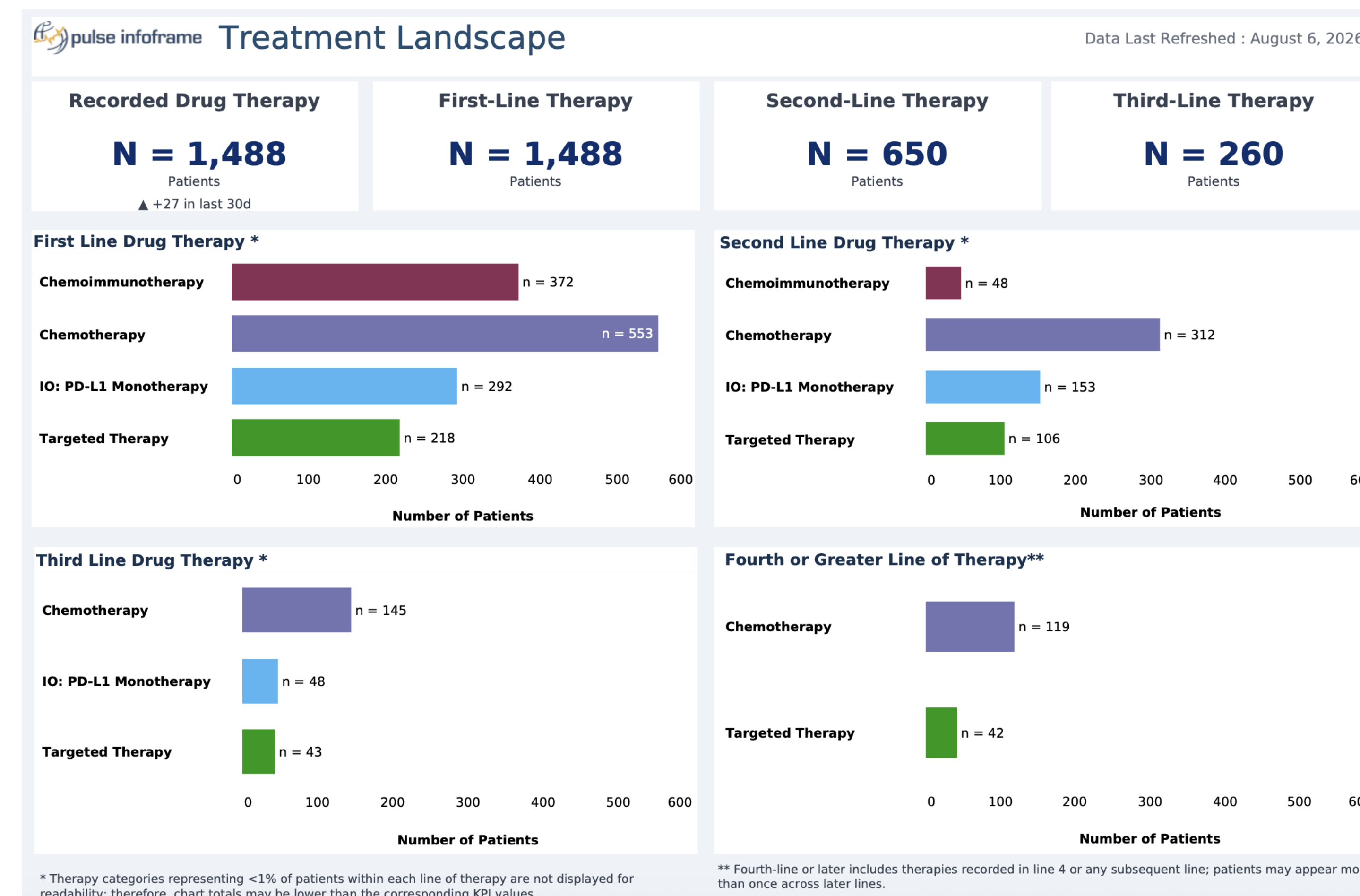
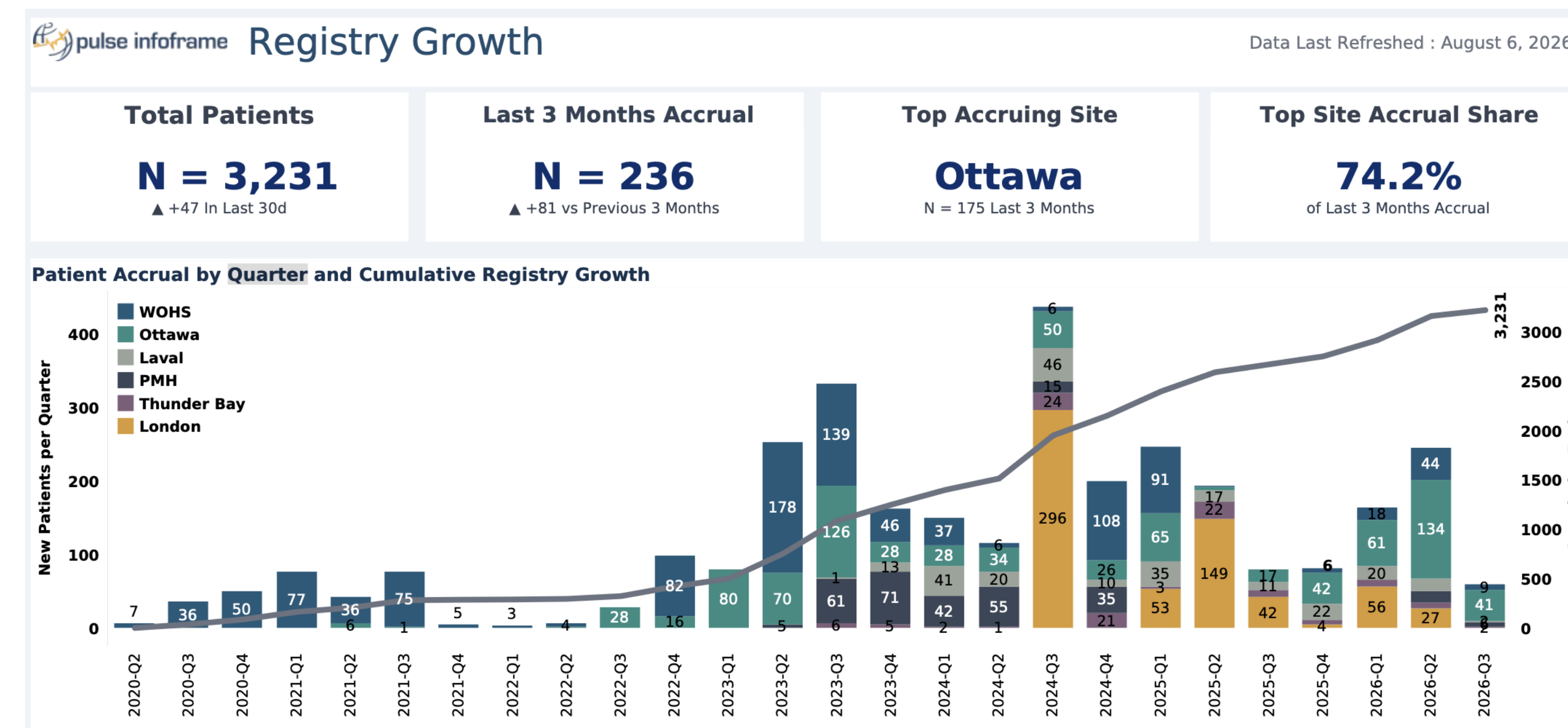
INTRODUCTION

- Real-world evidence (RWE) complements data from randomized clinical trials (RCTs) in the landscape of oncology drug approval.
- RCTs, while remaining a gold standard for generating evidence for optimal therapy, can fail to capture complexities of diverse populations, long term safety, or treatment sequencing.
- Regulatory agencies, such as Health Canada, FDA and EMA encourage integration of high-quality RWE
- The Pan-Canadian Lung Cancer Observational Study (PALEOS) addresses this need at scale

METHODS

- PALEOS (NCT04706754) is a multicenter, longitudinal, observational registry study being conducted at several Canadian centres across multiple provinces, collecting retrospective and prospective data
- Current participating sites cover a catchment area representing approximately 30% of the Canadian population, ensuring a representative mix of urban and rural communities.
- The registry captures up to 500 distinct variables, including granular clinical and demographic data, diagnostic and molecular profiling, treatment pathways and healthcare resource utilization patterns
- Uniquely, PALEOS incorporates validated patient-reported outcomes (PROMs) using the EQ-5D-5L and FACT-L instruments
- Eligibility Criteria: ≥ 18 years; documented lung cancer diagnosis since 2000; Unless consent waived, able to consent.
- Approved by Ethics Board with landmark approval of waiver of consent to study attrition prior to 1st line Rx

RESULTS



CONCLUSIONS

- PALEOS has successfully established a scalable and robust framework to evaluate the natural history, diagnostic patterns, and therapeutic outcomes of NSCLC across diverse Canadian subpopulations.
- By integrating deep molecular data with longitudinal clinical and patient-reported outcomes, PALEOS serves as a critical national resource.
- PALEOS is uniquely positioned to support regulatory submissions, inform regional and national funding decisions, and ultimately facilitate the translation of real-world evidence into equitable, data-driven, and multidisciplinary lung cancer care on a global scale.

Learn more about how you could get involved by contacting
Dr. Sara Kuruvilla at sara.kuruvilla@lhsc.on.ca or
Dr. Parneet Cheema at parneet.cheema@williamoslerhs.ca or
the team at Pulse Inframe Inc. at contact@pulseinframe.com

ACKNOWLEDGEMENTS



Scientific Committee