

Diagnostic Reclassification and Clinical Impact of Amyloid PET in Routine Practice: A Decade of Experience from Latin America

Bustos Zamora, JI¹; Chrem Mendez, P¹; Sarandria, ME¹; Surace, E²; Bérnago, Y³; Allegri, RF¹; Vazquez, S³.

Affiliations: 1 Centro de Memoria, Fleni, Ciudad Autónoma de Buenos Aires, Argentina. 2 Laboratorio de enfermedades neurodegenerativas (LEN), Fleni, Ciudad Autónoma de Buenos Aires, Argentina. 3 Centro de imágenes moleculares (CIM), Fleni, Ciudad Autónoma de Buenos Aires, Argentina.

TAKE HOME MESSAGES

- Amyloid PET refined diagnosis through biologically plausible transitions across cognitive syndromes.
- Supports the integration of amyloid biomarkers into routine clinical care in the era of disease-modifying therapies.
- Real-world evidence from the largest Latin American amyloid PET cohort.
- More than one in two patients underwent diagnostic reclassification after PiB-PET.

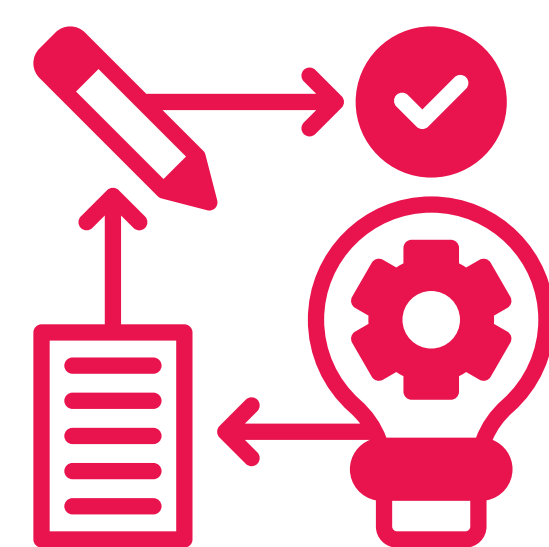
INTRODUCTION

Real-world evidence on the clinical impact of amyloid PET in Latin America is scarce. We evaluated its influence on diagnostic classification in routine practice during the era of disease-modifying therapies.

METHODS

1451 ¹¹C-Pittsburgh compound B (PiB) PET

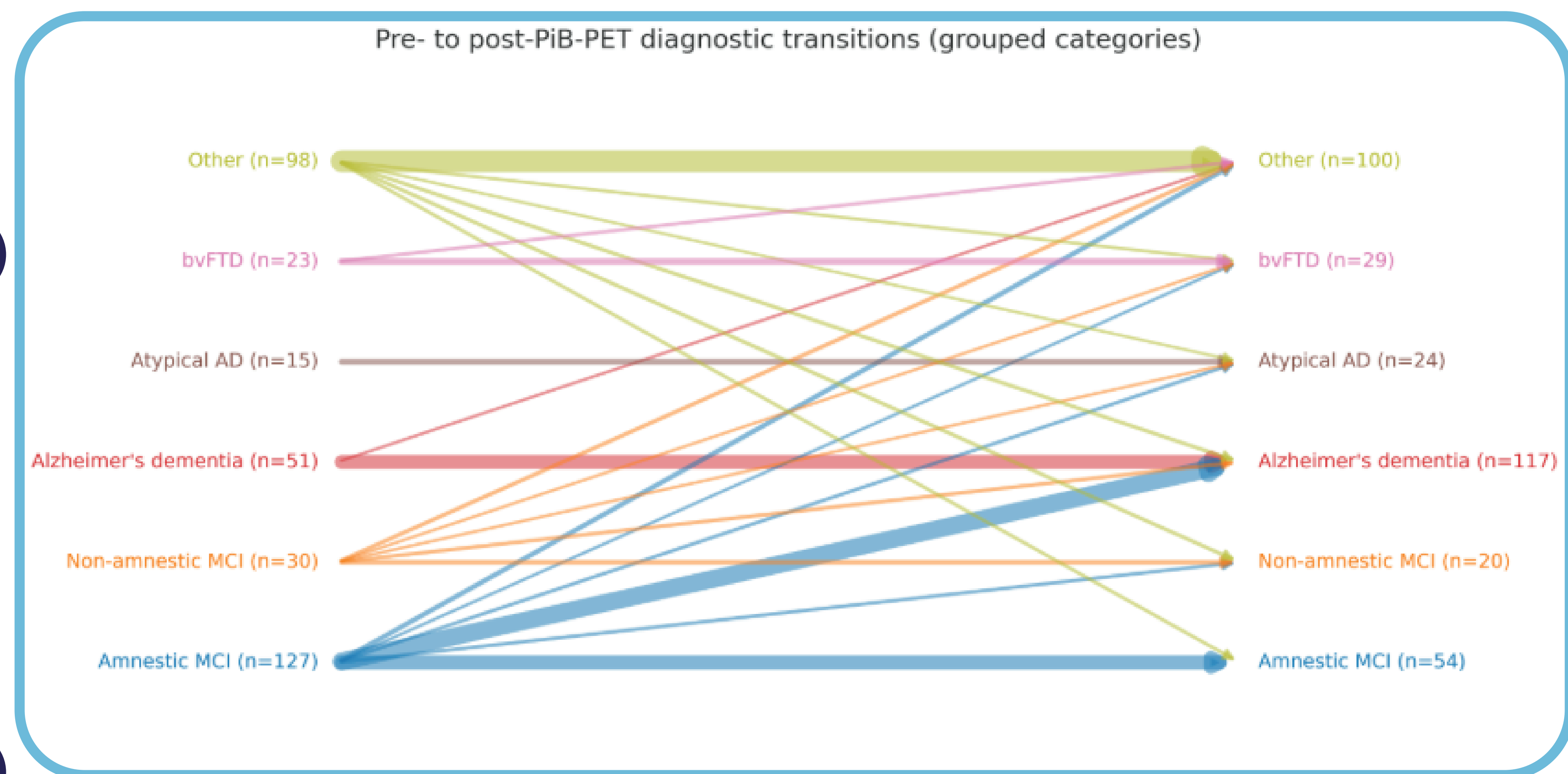
Performed between 2013 and 2023



Post-PET diagnostic classifications and PET-induced diagnostic changes were evaluated in patients with complete clinical follow-up (n = 256).

RESULTS

Among the 265 patients with evaluable pre- and post-PET diagnoses, amyloid PET changed the clinical diagnosis in 54.0% of cases. Diagnostic changes occurred most frequently in mild cognitive impairment and clinically ambiguous presentations, whereas established neurodegenerative syndromes remained largely stable.



Sankey diagram of pre- to post-PiB-PET diagnostic transitions. Line thickness is proportional to patient number; only transitions involving ≥3 patients are shown. Cases without clinical follow-up were excluded.

CONCLUSION

In routine clinical practice, amyloid PET substantially influenced diagnostic formulation, particularly in early-stage and clinically ambiguous presentations. These real-world data highlight the role of amyloid PET as a decisive tool for refining diagnosis and supporting biologically grounded clinical decision-making in Latin American healthcare settings.

