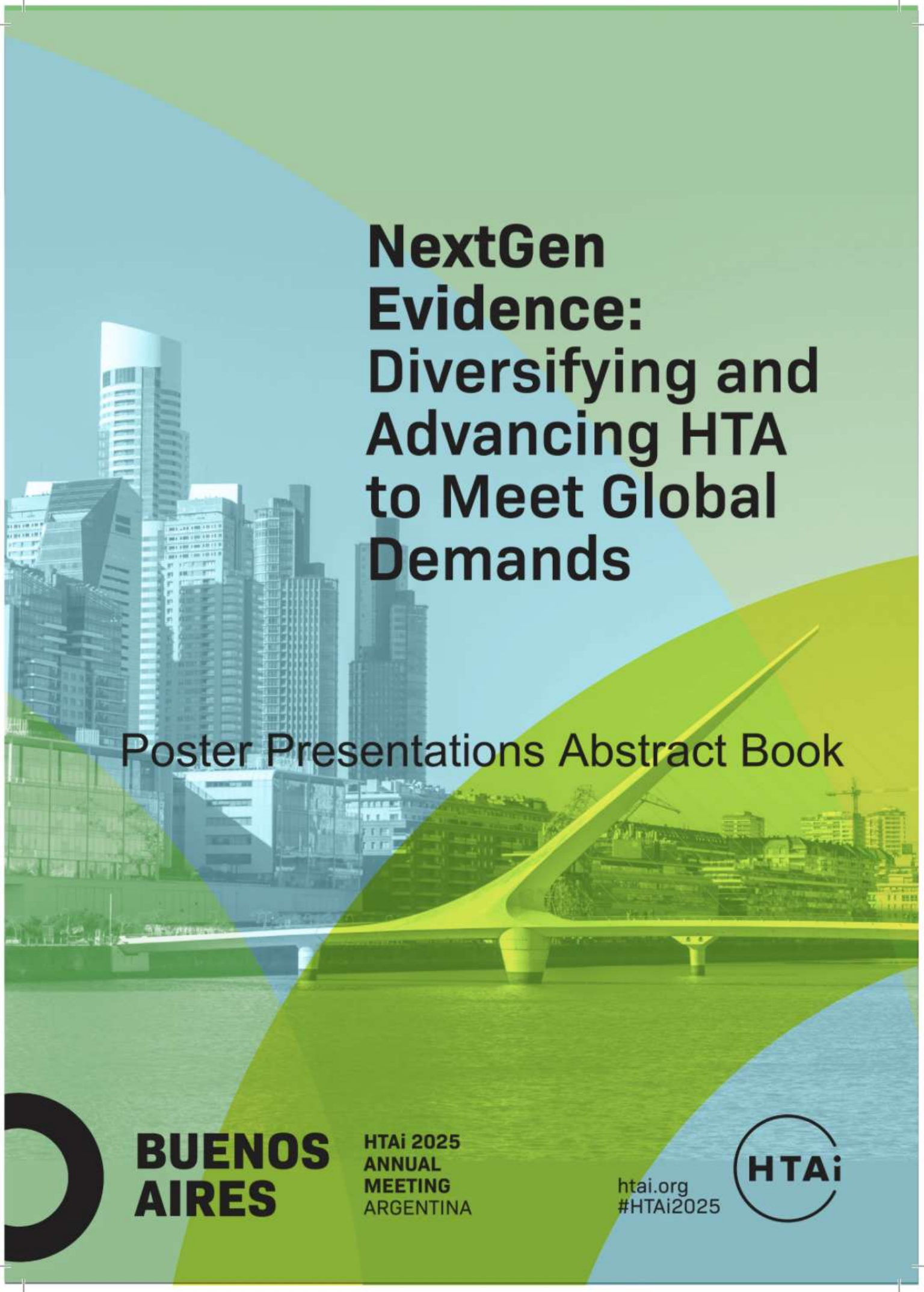

NextGen Evidence: Diversifying and Advancing HTA to Meet Global Demands

Poster Presentations Abstract Book

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PD09 Hospital-Based Health Technology Assessment: Evaluating Skirted Aortic Valves For Transcatheter Aortic Valve Implantation Endoprosthesis

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Introduction
Aortic valves for transcatheter aortic valve implantation (TAVI) vary in design. Traditional models without a skirt, used at the Amosov National Institute of Cardiovascular Surgery, have notable disadvantages. This study conducted a hospital-based health technology assessment (HB-HTA) to evaluate the feasibility of implementing skirted aortic valves to optimize resource utilization within the facility.

Methods
The State Institution "Amosov National Institute of Cardiovascular Surgery of the National Academy of Medical Sciences of Ukraine" (The Institute) conducted this project has part of a national pilot to introduce HTA in hospitals. The institute formed a multidisciplinary team of specialists with clearly defined roles and responsibilities. The team relied on the Ukrainian methodological guidelines for implementing HTA in hospitals that were approved in 2023 and derived from recommendations from AdHopHTA (Adopting Hospital-Based Health Technology Assessment) and DACEHTA (Danish Centre for Evaluation and Health Technology Assessment).

Results
The analysis of clinical effectiveness and safety showed that aortic valves with a skirt have advantages over those without a skirt for aortic valve replacement in patients with aortic stenosis. A systematic review of PubMed and Cochrane Library data highlighted reduced rates of paraprosthetic leakage (10–20 percent) and complications with skirted valves, minimizing the need for corrective interventions and further monitoring. Budget impact analysis revealed that implementing skirted valves reduces cost overruns and optimizes resource use. Transitioning to this model requires no structural changes and offers significant strategic and economic benefits.

Conclusions
Considering the clinical efficacy, safety, and economic feasibility of aortic valves with a skirt, their introduction into the Institute's practice is highly justified. These valves offer the potential to enhance long-term treatment outcomes, reduce the incidence of complications such as paraprosthetic leakage, and optimize resource utilization. This implementation represents a strategic step toward improving patient care and healthcare efficiency.