




Editorial

Integrating evidence, consensus, and real-world practice in thyroid eye disease: A collaborative research agenda from Colombia

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Thyroid eye disease (TED), also known as Graves' orbitopathy, represents a paradigmatic clinical challenge within the spectrum of rare autoimmune diseases. Its relatively low incidence in moderate-to-severe forms, marked clinical heterogeneity, and the complexity of therapeutic decision-making limit the generation of robust and broadly applicable evidence across healthcare settings (1-3). In this context, the development of structured, context-adapted, and progressively integrated scientific tools becomes a priority.

This work is the result of a sustained collaborative effort among members of the Colombian Association of Endocrinology, Diabetes, and Metabolism (ACE, by its Spanish acronym), together with ophthalmologists and endocrinologists, aimed at strengthening the scientific framework available for the study and management of TED in our setting. Importantly, this

initiative does not represent an isolated academic product, but rather forms part of a structured research strategy that integrates evidence synthesis, formal consensus, and real-world data generation.

As a foundational step, the group conducted a comprehensive systematic review that synthesizes the current therapeutic landscape for active moderate-to-severe TED (4). This work consolidates available evidence on glucocorticoids, biologic therapies, and immunosuppressive agents, confirming consistent patterns—such as the central role of intravenous glucocorticoids—while also identifying areas of uncertainty, particularly regarding the comparative effectiveness of emerging therapies (4-5). Moreover, it highlights key limitations in the field, including heterogeneity in reported outcomes, the lack of head-to-head trials, and the underrepresentation of Latin American populations.

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Building upon this evidence base, the development of consensus recommendations using the RAND/UCLA Appropriateness Method represents a significant step toward standardizing clinical decision-making in areas of uncertainty (6). By integrating scientific evidence with expert judgment, this methodology allows for the assessment of the appropriateness and necessity of therapeutic interventions across clinically relevant scenarios. Notably, the value of this consensus lies not only in its recommendations but also in its contextual adaptation to healthcare systems with limited access to advanced therapies, thereby enhancing its applicability in settings such as Colombia. Furthermore, it reflects a multidisciplinary collaborative process that is aligned with the complexity of TED management.

However, tools based on secondary evidence and expert consensus must ultimately be complemented by real-world clinical data. In this regard, the development of a multicenter Colombian observational study represents a critical component of this research agenda. This study, designed using methodological principles comparable to those of the European Group on Graves' Orbitopathy (EUGOGO), aims to characterize the clinical evolution, therapeutic patterns, and factors associated with outcomes in patients with TED in routine clinical practice. Its multicenter and longitudinal design will generate locally relevant evidence and enable meaningful comparisons with international cohorts.

The methodological inspiration derived from the PREGO studies conducted by EUGOGO is particularly relevant. These studies have demonstrated that multicenter observational research is essential to understand temporal changes in disease presentation, referral patterns, and therapeutic strategies (7-9). Consistently, they have shown trends toward earlier diagnosis and less severe disease at presentation, likely reflecting increased clinical awareness and improved referral systems (8-9). Additionally, they underscore the importance of standardized data collection tools to ensure comparability across centers.

In this context, implementing a Colombian multicenter study aligned with EUGOGO

frameworks strengthens not only the internal validity of the generated data but also its potential for integration into international research networks. The standardization of clinical variables, including the Clinical Activity Score and severity classifications, as well as the use of structured case report forms, is an essential element in this process (7, 10).

More broadly, this initiative highlights a fundamental principle in rare disease research: The necessity of structured collaboration. The experience of EUGOGO has demonstrated that meaningful advances in Graves' orbitopathy depend on multicenter data aggregation and the harmonization of clinical and methodological criteria (10). Without such strategies, individual efforts remain fragmented and limited in impact.

Thus, the value of this project lies not only in its individual components—a systematic review, consensus, and an observational study—but also in the coherence of the strategy that integrates them. It represents a model of knowledge generation that moves from evidence synthesis to the development of recommendations and ultimately to validation in real-world clinical settings.

Looking forward, this approach offers several opportunities. It will allow the evaluation of adherence to consensus-based recommendations, the identification of variations in clinical practice, and the exploration of barriers to access, particularly regarding biologic therapies. Furthermore, it will contribute to positioning the Latin American experience within the global context, providing data that reflect healthcare realities distinct from those in which most current evidence has been generated.

In conclusion, this work represents a collaborative effort aimed at expanding and strengthening the scientific tools available for the management of TED. The integration of evidence, consensus, and real-world data constitutes a robust and necessary strategy to advance the understanding of this complex disease. Rather than a final endpoint, this initiative should be viewed as the beginning of a sustained research agenda with the potential for regional and global impact.

Authors' Contributions

Natalia Aristizábal-Henao: Conceptualization, Writing – original draft, Writing – review & editing; Carlos E. Builes-Montaño: Conceptualization, Writing – original draft, Writing – review & editing.

Ethics statement

As this manuscript is an academic editorial and does not involve research involving human participants, animals, or sensitive data, ethics committee approval was not required. The opinions and considerations presented are based on a critical appraisal of the currently available scientific evidence.

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Conflicts of interest

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Use of artificial intelligence (AI)

The authors declare that no artificial intelligence tools were used in the preparation of this manuscript.

Data statement

No data was collected in the development of this manuscript.

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