# **Methodological Quality Of Clinical Practice Guidelines For The Management Of Antithrombotic Agents in Patients Undergoing GI Endoscopy: A Systematic Critical Appraisal Using The AGREE II Tool**

<sup>1</sup>James A Haley Veterans Hospital, Division of Gastroenterology, Tampa FL <sup>3</sup> University of South Florida College of Medicine, Division of Gastroenterology, Tampa FL

Wojciech Blonski<sup>1</sup>, Tea Reljic<sup>2</sup>, Jeffrey Gill<sup>1</sup>, Rene D. Gomez-Esquivel<sup>3</sup>, Brijesh Patel<sup>1</sup>, Ambuj Kumar<sup>2</sup> <sup>2</sup> University of South Florida College of Medicine, Research Methodology and Biostatistics Core, Tampa FL

### BACKGROUND

Several published clinical practice guidelines (CPGs) exist for the management of antithrombotic agents in patients undergoing GI endoscopy.

HEALTH

- However, to date, the quality of such CPGs has not been systematically appraised.
- The goal of this study was to identify and evaluate the quality of CPGs for the management of antithrombotic agents in peri endoscopic period published within last 6 years.

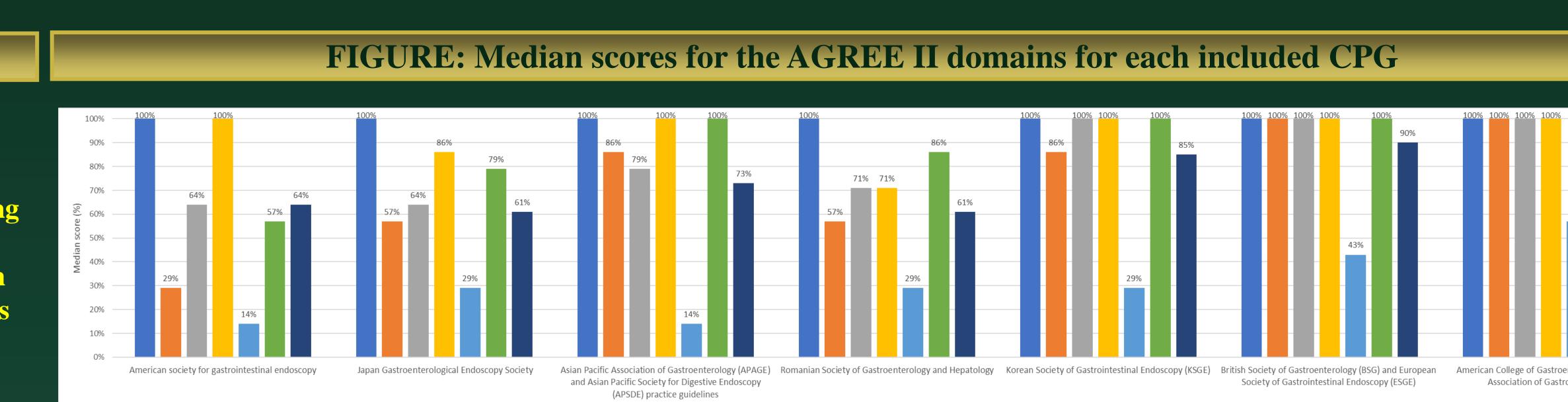
#### METHODS

- A systematic search of PubMed and Embase database was performed to identify eligible CPGs. Any CPGs published between January 1, 2016 and April 14, 2022 addressing management of antithrombotic agents in patients undergoing **GI endoscopy were eligible.**
- The Canadian Agency for Drugs and Technologies in Health (CADTH) broad filter for the CPG terms was used since it is the most sensitive filter.
- The quality of the CPGs was independently assessed by five reviewers using the Appraisal of Guidelines for Research & **Evaluation II (AGREE II) instrument.**
- **Domain scores were considered of sufficient quality when** >60% and of good quality when >80%.

#### RESULTS

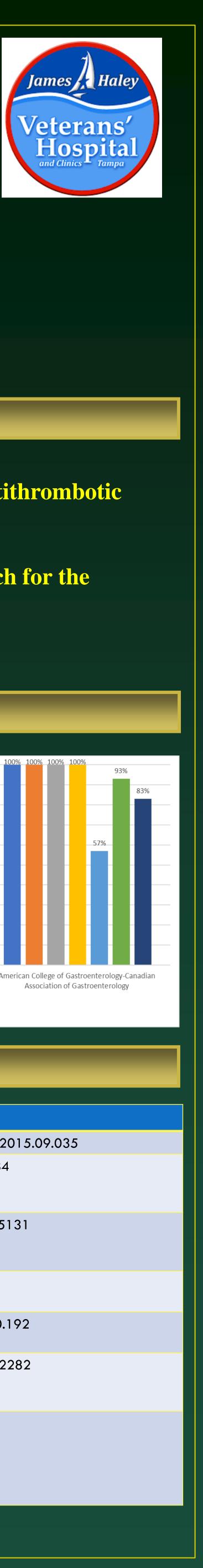
- The search yielded 343 citations of which 7 were CPGs and included for the critical appraisal (Table ) (one CPG was published in two journals).
- **Five CPGs were published by the gastroenterology** associations in Europe (n=2) and Asia (n=3) and two in the **United States.**
- The overall median score for the AGREE II domains was **100% for scope and purpose, 72% for stakeholder** involvement, 86% for rigor of development, 100% for clarity of presentation, 29% for applicability and 89% for editorial independence.

# CONCLUSIONS • The findings from our study show that the overall methodological quality of the CPGs for the management of antithrombotic agents in patients undergoing GI endoscopic procedures varies across various domains. **Out of 7 included CPGs, only one CPG included patient representatives in the CPG development process.** • These findings also emphasize on the need for following a consistent methodology and using a systematic approach for the development of CPGs to ensure reproducibility. There is a significant scope for improvement for methodological rigor and the applicability.



## **TABLE:** Clinical practice guidelines included in the critical appraisal

Authors	Title	Journal
Acosta et al.	The management of antithrombotic agents for patients undergoing GI endoscopy	Gastrointest Endosc 2016 Jan;83(1):3-16. doi: 10.1016/j.gie.2015.09.035
Kato et al.	Guidelines for Gastroenterological Endoscopy in Patients Undergoing Antithrombotic Treatment: 2017 Appendix on Anticoagulants Including Direct Oral Anticoagulants	Dig Endosc. 2018 Jul;30(4):433-440. doi: 10.1111/den.13184
Chan et al.	Management of patients on antithrombotic agents undergoing emergency and elective endoscopy: joint Asian Pacific Association of Gastroenterology (APAGE) and Asian Pacific Society for Digestive Endoscopy (APSDE) practice guidelines	Gut 2018 Mar;67(3):405-417. doi: 10.1136/gutjnl-2017-315131
Farcas et al.	Gastrointestinal endoscopy in patients on direct oral anticoagulants. A consensus paper of the Romanian Society of Gastroenterology and Hepatology	J Gastrointestin Liver Dis. 2018 Jun;27(2):179-187. doi: 10.15403/jgld.2014.1121.272.end
Lim et al.	Clinical Practice Guideline for the Management of Antithrombotic Agents in Patients Undergoing Gastrointestinal Endoscopy	Clin Endosc. 2020 Nov;53(6):663-677. doi: 10.5946/ce.2020.192
Veitch et al.	Endoscopy in patients on antiplatelet or anticoagulant therapy: British Society of Gastroenterology (BSG) and European Society of Gastrointestinal Endoscopy (ESGE) guideline update	Endoscopy. 2021 Sep;53(9):947-969. doi: 10.1055/a-1547-2282
Abraham et al.	American College of Gastroenterology-Canadian Association of Gastroenterology Clinical Practice Guideline: Management of Anticoagulants and Antiplatelets During Acute Gastrointestinal Bleeding and the Periendoscopic Period	<ol> <li>J Can Assoc Gastroenterol.2022 Mar 17;5(2):100-101.</li> <li>doi: 10.1093/jcag/gwac010.</li> <li>Am J Gastroenterol 2022 Apr 1;117(4):542-558.</li> <li>doi:10.14309/ajg.000000000016</li> </ol>



Scope and purpose
Stakeholder involvement
Rigor of development
Clarity of presentation
Applicability
Editorial independence
Overall score