

BOOK OF ABSTRACTS



Organização



Apoio



TÍTULO | *TITLE*

Livro de Resumos do 17.º Encontro de Investigação Jovem da U.Porto / *Book of Abstracts
Young Researchers Meeting of U.Porto*

Universidade do Porto

Vice-Reitor para a investigação e Inovação

Professor Doutor Pedro Rodrigues

ijup@reit.up.pt

ISBN

978-989-746-378-5

Design

Serviço de Comunicação e Imagem da U.Porto

22020 | Validation of the Adult Asthma Epidemiological Score: a secondary analysis of EPI-ASTHMA

Catarina Laranjeira¹; Cristina Jácome²; Rita Amaral^{2,3,4}; Filipa Bernardo⁵; Jaime Correia-de-Sousa⁶; João A Fonseca^{2,7,8}

Faculty of Medicine of the University of Porto, Porto, Portugal¹; CINTESIS@RISE, Department of Community Medicine, Information and Health Decision Sciences (MEDCIDS), Faculty of Medicine, University of Porto, Porto, Portugal²; Department of Cardiovascular and Respiratory Sciences, Porto Health School, Polytechnic Institute of Porto, Porto, Portugal³; Department of Women's and Children's Health, Pediatric Research, Uppsala University, Uppsala, Sweden⁴; AstraZeneca, Queluz, Lisboa, Portugal⁵; Life and Health Sciences Research Institute (ICVS), School of Medicine, University of Minho, Braga, Portugal⁶; MEDIDA, Porto, Portugal⁷; Allergy Unit, Hospital and Institute CUF, Porto, Portugal⁸

Background & Aim: The A2 score is an 8-question patient-reported outcome measure that has been validated for ruling in (score ≥ 4) and ruling out (score 0-1) asthma. However, this screening tool has been validated in a cohort similar to the derivation cohort used. This study aims to validate the predictive accuracy of the A2 score in a primary care population against general practitioner (GP) clinical assessment and to determine whether the proposed cut-offs are the most appropriate. **Methods:** This accuracy study is a secondary analysis of the EPI-ASTHMA population-based study. Random adult participants recruited from primary healthcare centers in Portugal were analyzed. Participants answered the A2 score by telephone interview. Those with an A2 score ≥ 1 (plus 5% with an A2 score of 0) were invited to a diagnostic visit carried out by a GP to confirm or not a diagnosis of asthma. Diagnostic accuracy was assessed using receiver operating characteristic (ROC) curves. **Results:** A total of 1283 participants (median 54 [p25-p75 43-66] years; 60% female) were analyzed. The A2 score showed high discriminatory power in identifying asthma, with an area under the ROC curve of 82.9 (95%CI 80.4-85.4)%. The proposed cut-off ≥ 4 was the most appropriate to rule in asthma (specificity 83.1%, positive predictive value 62.4%, accuracy 78%). Similarly, the proposed cut-off < 2 was the most suitable for excluding asthma (sensitivity 92.7%, negative predictive value 93.7%, accuracy 60.5%). **Conclusions:** The A2 score is a useful tool to identify patients with asthma in a primary care population.

Keywords: Asthma, Epidemiology, Diagnostic Screening, Patient-Reported Outcome Measure.

Acknowledgments

This study was sponsored and funded by AstraZeneca, Portugal.