### PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

#### **ARTICLE DETAILS**

TITLE (PROVISIONAL)	EPI-ASTHMA study protocol - a population-based multicentre
	stepwise study on the prevalence and characterisation of patients
	with asthma according to disease severity in Portugal
AUTHORS	Jácome, Cristina; Brito, Dinis; João, Catarina; Lopes, Filipa;
	Santos, Janete; Amorim, Liliana; Barbosa, Maria João; Pardal,
	Marisa; Teixeira, Pedro; Bernardo, Filipa; Fonseca, Joao A.;
	Correia-de-Sousa, Jaime

#### **VERSION 1 – REVIEW**

REVIEWER	Hassan, Maged
	Alexandria University Faculty of Medicine, Chest Diseases
	Department
REVIEW RETURNED	22-Jun-2022

GENERAL COMMENTS	The authors have formulated a protocol for a study to measure the prevalence of asthma and in particular difficult to treat and severe subtypes in Portugal. The protocol is very well written and the planned study addresses an important subject which evolves over time; that is the prevalence of a chronic respiratory disease. In my opinion the methods are sound and are well described. I have only minor comments/suggestions to the authors as follows:  - The study ID and registration date on Clinitrials.gov are incorrect. Please amend.  - The authors refer to the GINA guidelines for the definition of 'severe' and 'difficult to treat' asthma. I suggest the authors briefly describe the diagnostic criteria for each entity.  - The study dates are mentioned as 2021-2022. This means the study has already started. If so, I suggest the authors mention the actual start date and at what stage the study is at the moment.  - The authors mention that an 'interim analysis' by region will be conducted after all stages have been completed. Do they mean to say a subgroup analysis?  - In table 2 the abbreviation ETS is not expanded in the table footnotes. Please expand.  - I think it is important to mention whether the funding body has had any role in the design of the study and whether they will be involved in the conduct or reporting of the study.

REVIEWER	Soyiri, Ireneous
	University of Hull, Hull York Medical School
REVIEW RETURNED	05-Jul-2022
GENERAL COMMENTS	The protocol paper is well designed and the anticipated analysis

also well described. I believe this population-based study, when

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completely implemented would contribute new knowledge to help characterise asthma.

## **VERSION 1 – AUTHOR RESPONSE**

The authors have formulated a protocol for a study to measure the prevalence of asthma and in particular difficult to treat and severe subtypes in Portugal. The protocol is very well written and the planned study addresses an important subject which evolves over time; that is the prevalence of a chronic respiratory disease. In my opinion the methods are sound and are well described. I have only minor comments/suggestions to the authors
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are sound and are well described. I have only minor comments/suggestions to the authors
have only minor comments/suggestions to the authors
comments/suggestions to the authors
as follows:
The study ID and registration date on   Thank you for pointing this error out   Please see: Abstract>Trial
Clinitrials.gov are incorrect. Please for us. The study ID and registration registration (page 3, lines
amend. date have now been amended. 55).
The authors refer to the GINA
guidelines for the definition of and described in more detail the analysis > Diagnosis criteria
'severe' and 'difficult to treat' asthma.
I suggest the authors briefly describe with severe and difficult to treat lines 225-237).
the diagnostic criteria for each entity. asthma. We have now added GINA
definitions of uncontrolled, difficult to
treat and severe asthma and also the

	way we plan to operationalise these	
	definitions. A subheading " Diagnosis	
	criteria and definitions " has been	
	added to the " methods and analysis"	
	section.	
The study dates are mentioned as	Thank you for your suggestion. Indeed,	Please see: Methods and
2021-2022. This means the study has	the data collection of the study has	analysis> Study Design
already started. If so, I suggest the	already started. The study will be	(page 5, 1 <sup>st</sup> paragraph).
authors mention the actual start date	conducted in a total of 38 primary care	
and at what stage the study is at the	centres and data collection was	
moment.	concluded in 4 of them. We have now	
	added the study's starting date as well	
	as its current status.	
The authors mention that an 'interim	Interim analysis will be conducted to	Please see: Methods and

analysis' by region will be conducted	monitor the safety of study procedures	analysis > Data storage,
after all stages have been completed.	and completeness of data collection .	blinding and statistical
Do they mean to say a subgroup	However, we agree that this needs to	analysis plan (page 12, line
analysis?	be clarified. We added a more detailed	264).
	clarification to the text.	
In table 2 the abbreviation ETS is not	Indeed, only the acronym was	Please see: Table 2. >
expanded in the table footnotes.	mentioned. We added the	Footnotes (page 11)
Please expand.	corresponding words -	
	ETS=Environmental tobacco smoke.	
I think it is important to mention	We have now specified the role of the	Please see: Statements >
whether the funding body has had	funding body. This study was designed	Funding (page 16, line 362-
	T .	

any role in the design of the study	by two academic institutions	363)
		(000)
and whether they will be involved in	(University of Minho and University of	
the conduct or reporting of the study.	Porto) together with AstraZeneca	
	Portugal - Evidence Generation team.	
	Nevertheless, the funding body will	
	have no influence on the conducting	
	and reporting of the study. Moreover,	
	the funding body did not influence the	
	writing of the paper. This has now been	
	clarified.	
	Reviewer 2	
The protocol paper is well designed	Thank you for your kind words and	-
and the anticipated analysis also well	appreciation of our work.	
described. I believe this population-		
based study, when completely		
implemented, would contribute new		
knowledge to help characterise		
asthma.		

## **VERSION 2 – REVIEW**

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	VERSION 3 – REVIEW
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## **VERSION 4 – AUTHOR RESPONSE**

# **VERSION 5 – REVIEW**

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KEVIEW KETOKNED	
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GENERAL COMMENTS	

## **VERSION 5 – AUTHOR RESPONSE**