PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Cohort profile: VAScular and Chronic Obstructive Lung disease (VASCOL) - a longitudinal study on morbidity, symptoms, and quality of life among older men in Blekinge County, Sweden
AUTHORS	Olsson, Max; Engström, Gunnar; Currow, David; Johnson, Miriam; Sandberg, Jacob; Ekström, Magnus

VERSION 1 – REVIEW

REVIEWER	Gnatiuc, Louisa
	University of Oxford
REVIEW RETURNED	19-Jan-2021

GENERAL COMMENTS	Olsson et al describe a Swedish longitudinal study of vascular diseases and COPD of 1,900 male subjects aged 65 years or more at baseline assessment. The overlap between the two conditions is of scientific interest and evidence for that particular topic is needed. The additive value of the cohort lays on the bioassays and cardiac markers, thus presenting the cohort and the potential it has for research is important, however a few issues need some clarification and revision:
	 Why the recruitment age was 65 years or over? Recruitment in the middle-ages (eg 30 years and older) offers a better setting for studying vascular and respiratory risk factors among otherwise healthy adults. The study is somewhat limited by not having included women and a rather small sample size. Bigger data allows for more precise estimates of various phenotypes. How would this cohort add to the much wider data from the National Swedish Electronic Registers that already exist? Table 2 should include the summary values of the vascular-metabolic characteristics, including those from specific clinical measurements and bio-assays where available. A common symptom of COPD is cough, but it is unclear if cough-specific questions (presentation, content and intensity) have been included. Such information could help distinguish between chronic bronchitis and COPD in the absence of low lung function testing. The interest in breathlessness at older ages is clinically important, but wouldn't be more important to have studied such impairment and its preventable risk factors from younger ages?

REVIEWER	Corlateanu, Alexandru
	Universitatea de Stat de Medicina si Farmacie Nicolae
	Testemitanu, Respiratory medicine
REVIEW RETURNED	02-Mar-2021

GENERAL COMMENTS	Thank you for inviting me to review this manuscript on hot topic
	Cohort profile: VAScular and Chronic Obstructive Lung
	disease (VASCOL) - a longitudinal study on morbidity,
	symptoms, and quality of life among older men in Blekinge
	County, Sweden
	The manuscript is easy to read and all data and conclusions
	presenting huge interest with impact on clinical practice.

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

1) Why the recruitment age was 65 years or over? Recruitment in the middle-ages (eg 30 years and older) offers a better setting for studying vascular and respiratory risk factors among otherwise healthy adults.

The participants were recruited related to ultrasound screening for abdominal aortic aneurysm which was implemented for 65-year-old men in the county. VASCOL is focusing on health and risk factors among this group. However, we totally agree that including middle-aged adults and both men and women would offer advantages in studying risk factors of vascular and respiratory diseases and we have now clarified in strengths and limitation (page 12) section that future studies should include younger adults as well: "However, a limitation is that we cannot generalise for women or younger men and future data collections should therefore include these groups."

2) The study is somewhat limited by not having included women and a rather small sample size. Bigger data allows for more precise estimates of various phenotypes.

We agree that not including women is a limitation of the study, and we made stated this as a limitation as mentioned in answer to question 1. We agree that a bigger sample size would be benefited we e stated in the Planned data collection section (page 7) that future follow ups within the VASCOL study should also include women, and as a result, a bigger sample size: "To broaden the VASCOL study and reach a bigger sample size, future data collections should also invite women to participate."

3) How would this cohort add to the much wider data from the National Swedish Electronic Registers that already exist?

Data in the national Swedish electronic registries have high coverage and completeness but are limited in that they do not include any (or very limited) physiologic variables and no symptoms or other patient reported outcomes, which are included in VASCOL. We have now clarified the advantages/disadvantages of the National Swedish Electronic Registers in Planned data collection section (page 7): "The Swedish registry databases have high coverage and completeness, but are limited in that they are not including any (or very limited) physiologic variables and no symptoms or other patient reported outcomes. The VACSCOL study and the registry databases will therefore complete each other."

4) Table 2 should include the summary values of the vascular-metabolic characteristics, including those from specific clinical measurements and bio-assays where available.

Currently, the data on vascular-metabolic characteristics are not compiled and not ready for

presentation in this protocol paper, and will instead be reported in future VASCOL sub studies including vascular-metabolic data.

5) A common symptom of COPD is cough, but it is unclear if cough-specific questions (presentation, content and intensity) have been included. Such information could help distinguish between chronic bronchitis and COPD in the absence of low lung function testing.

Couch-specific questions were unfortunately not included in the VASCOL study. We have now clarified this as a limitation and propose it as a measurement in future follow ups in the VASCOL-study, under the Strengths and limitation section (page 13): "Also, cough was not measured, which is a common symptom of COPD. We therefore plan to include questions about former workplaces and cough in future follow ups."

6) The interest in breathlessness at older ages is clinically important, but wouldn't be more important to have studied such impairment and its preventable risk factors from younger ages?

Just as with risk factors for vascular and respiratory diseases, we agree that it would be interesting to study breathlessness in younger age groups. At the moment, we are planning a separate study regarding breathlessness that will include a wider age-group with both men and women.

Reviewer: 2

Thank you for inviting me to review this manuscript on hot topic Cohort profile: VAScular and Chronic Obstructive Lung disease (VASCOL) - a longitudinal study on morbidity, symptoms, and quality of life among older men in Blekinge County, Sweden. The manuscript is easy to read and all data and conclusions presenting huge interest with impact on clinical practice.

Thank you for your positive review of our paper.

We thank the reviewers for their valuable input on the manuscript and hope that it will be found suitable for publication in BMJ Open.