# Individual factors and beliefs determining COVID-19

## vaccination willingness

Laure Pauly<sup>a</sup>, Matthias Klee<sup>b</sup>, Ivana Paccoud<sup>b</sup>, Venkata P. Satagopam<sup>a,c</sup>, Soumyabrata Ghosh<sup>a</sup>, Joëlle V. Fritz<sup>d</sup>, Marc O'Sullivan<sup>d</sup>, Basile Rommes<sup>a</sup>, Paul Wilmes<sup>a</sup>, Rejko Krüger<sup>a,d,e</sup>, Anja K. Leist<sup>b</sup>, CON-VINCE Consortium, on behalf of ORCHESTRA working group



<sup>a</sup>Luxembourg Centre for Systems Biomedicine (LCSB), University of Luxembourg, 7 avenue des Hauts Fourneaux L-4362 Esch-sur-Alzette, Luxembourg; <sup>b</sup>Department of Social Sciences, Institute for Research on Socio-Economic Inequality, University of Luxembourg, 2 avenue de l'Université L-4365 Esch-sur-Alzette, Luxembourg; <sup>c</sup>ELIXIR-Luxembourg Node, Luxembourg Centre for Systems Biomedicine (LCSB), University of Luxembourg, Esch-Belval, Luxembourg; <sup>d</sup>Transversal Translational Medicine (TTM), Luxembourg Institute of Health, 1A-B, rue Thomas Edison L-1445 Strassen, Luxembourg; eDepartment of Neurology, Centre Hospitalier de Luxembourg, 120 Route d'Arlon L-1150 Strassen, Luxembourg

INTRODUCTION Timeline: 02/2020 12/2020 1st COVID-19 cases in 07/2021 1<sup>st</sup> vaccinations Luxembourg Invitation for vaccination against administered in 03/2020 12/2019 COVID-19 was sent out to every Luxembourg Luxembourg declared 1st COVID-19 resident of Luxembourg, eligible the state of crisis cases in China for vaccination 03/2020 WHO declares COVID-04-06/2021 19 a pandemic **CON-VINCE Annual** 04/2020 Follow-up assessment **CON-VINCE** was launched used for the present study to study spread of COVID-19 disease in Luxembourgish population Aim: **Identify hesitant groups** in order to develop strategies to increase Motivations for & population immunity against SARS-CoV-2 against vaccination

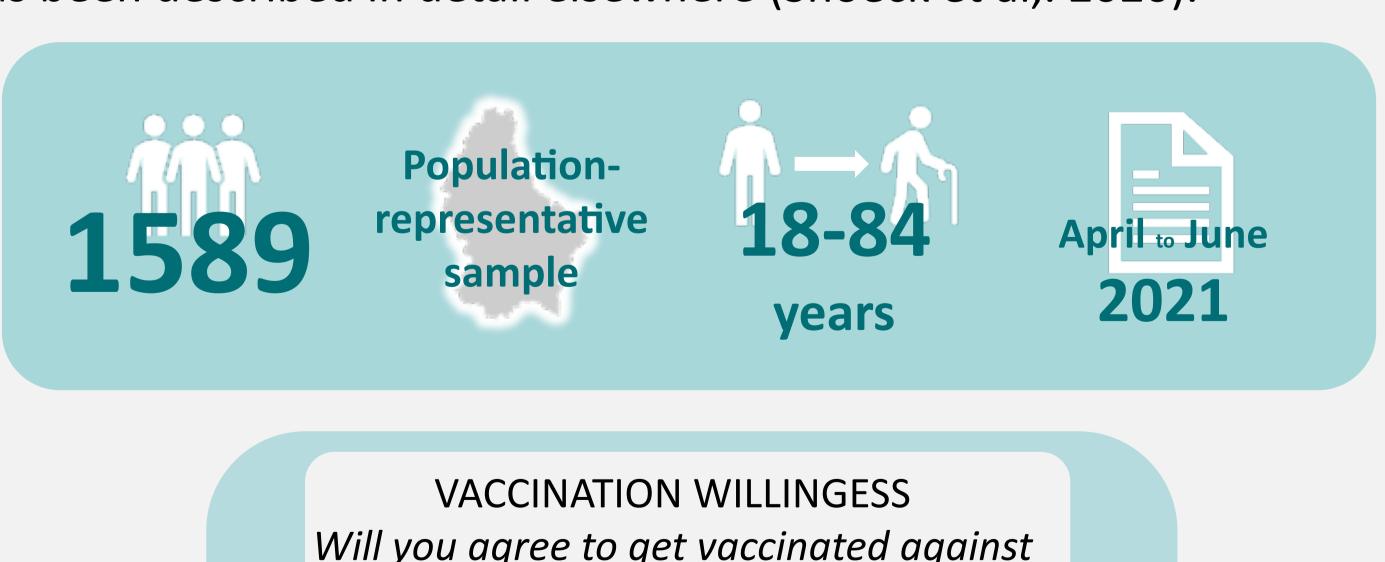
Despite knowledge, that high vaccination coverage rates are necessary

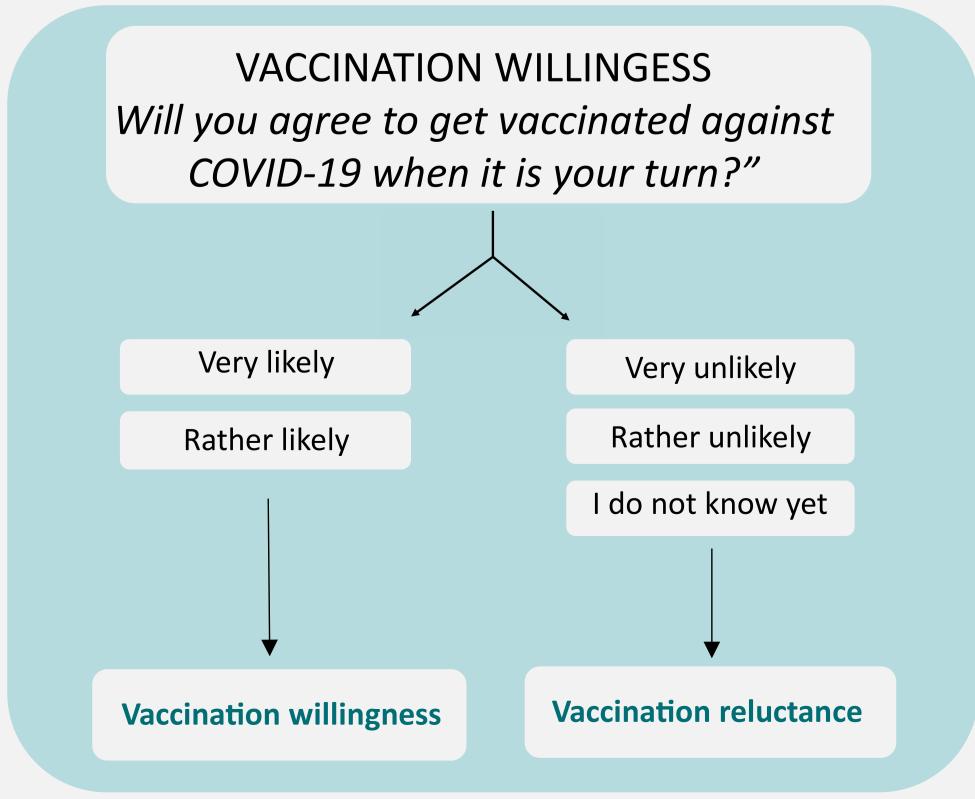
to reduce infections and transmissions of SARS-CoV-2 virus, a substantial part of the population has not yet decided to get vaccinated. To date, information is lacking to explain hesitancy in Luxembourg towards uptake of available COVID-19 vaccines.

#### METHODS

Beliefs vaccination towards were assessed with questions developed in the Research Luxembourg team, and a questionnaire based on results from a qualitative study by Dodd et al,. (2021). The protocol of the CON-VINCE study

has been described in detail elsewhere (Snoeck et al,. 2020).

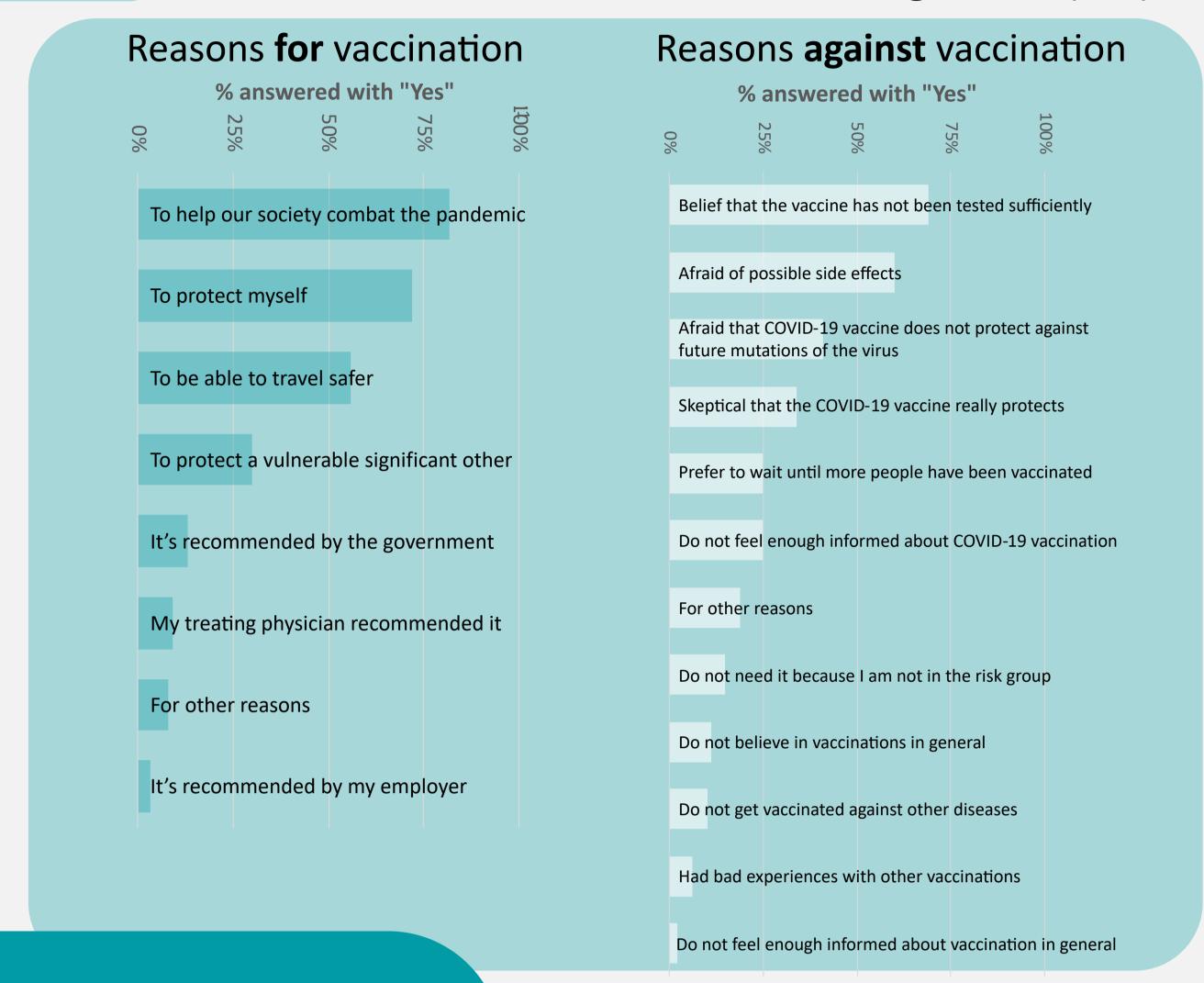






Only very few of the vaccination-reluctant respondents reported that they did not believe in vaccination in general (2%).

RESULTS



### Most common reasons to agree/disagree to get vaccinated:

for vaccination: to help the society and to protect oneself



against vaccination: fear that vaccine had not been tested sufficiently and fear of long-term vaccine side effects

### The most common reasons

for vaccination:

- to help the society
- to protect oneself against vaccination:
- vaccine not tested sufficiently
- fear of long-term vaccine side effects

### DISCUSSION

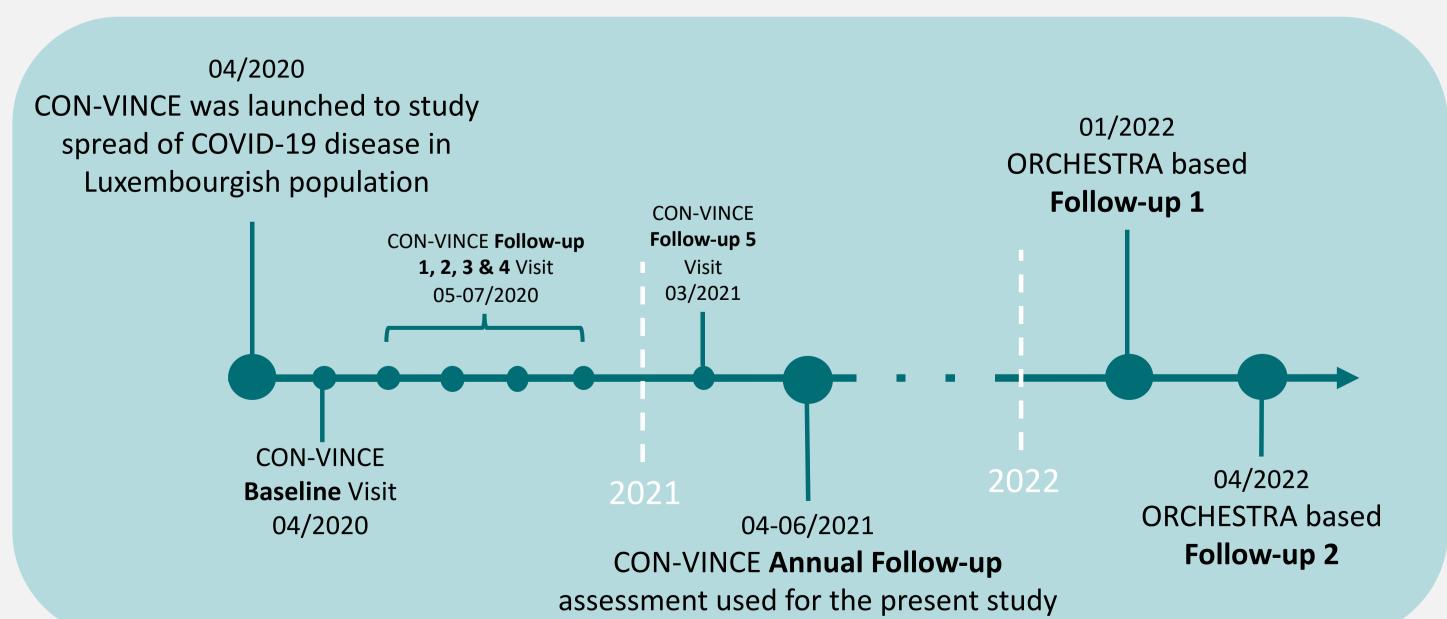
At the current state, statistics of the European Centre for Disease Prevention and Control (ECDC) show that:

69% Luxembourg

84% total population in **Portugal** are fully vaccinated

The present study identified motivations for and against COVID-19 vaccination in the Luxembourgish population. Public health messages should highlight safety and importance of the vaccine.

#### **Outlook:**



Part of the H2020-funded international ORCHESTRA project, research into comparing these results on Pan-European level, we will continue to study vaccination and booster shots uptake in the Luxembourgish population.



ORCHESTRA has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101016167.

