



TARTU
ÜLIKOOL



SOTSIAALMINISTEERIUM



Euroopa Liit
Euroopa
Regionaalarengu Fond



Eesti
tuleviku heaks

COVID-19 kulg ja tagajärjed: CORIVA kohortuuring

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CORIVA tööühm

Teadusnõukoja konverents 28.11.2023 Tallinnas

CORIVA uuring

Uuringu eesmärgiks on Eestis SARS-Cov-2 nakatunute haigestumise, haiguse kulu tõsidusastmete ja nakkuse tervisetagajärgede süsteemne analüüs

UURITAVAD



CORIVA uuring

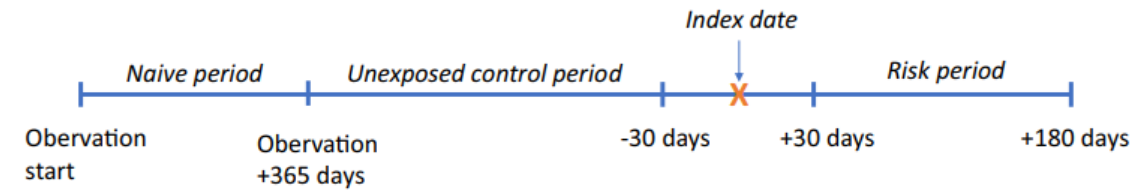
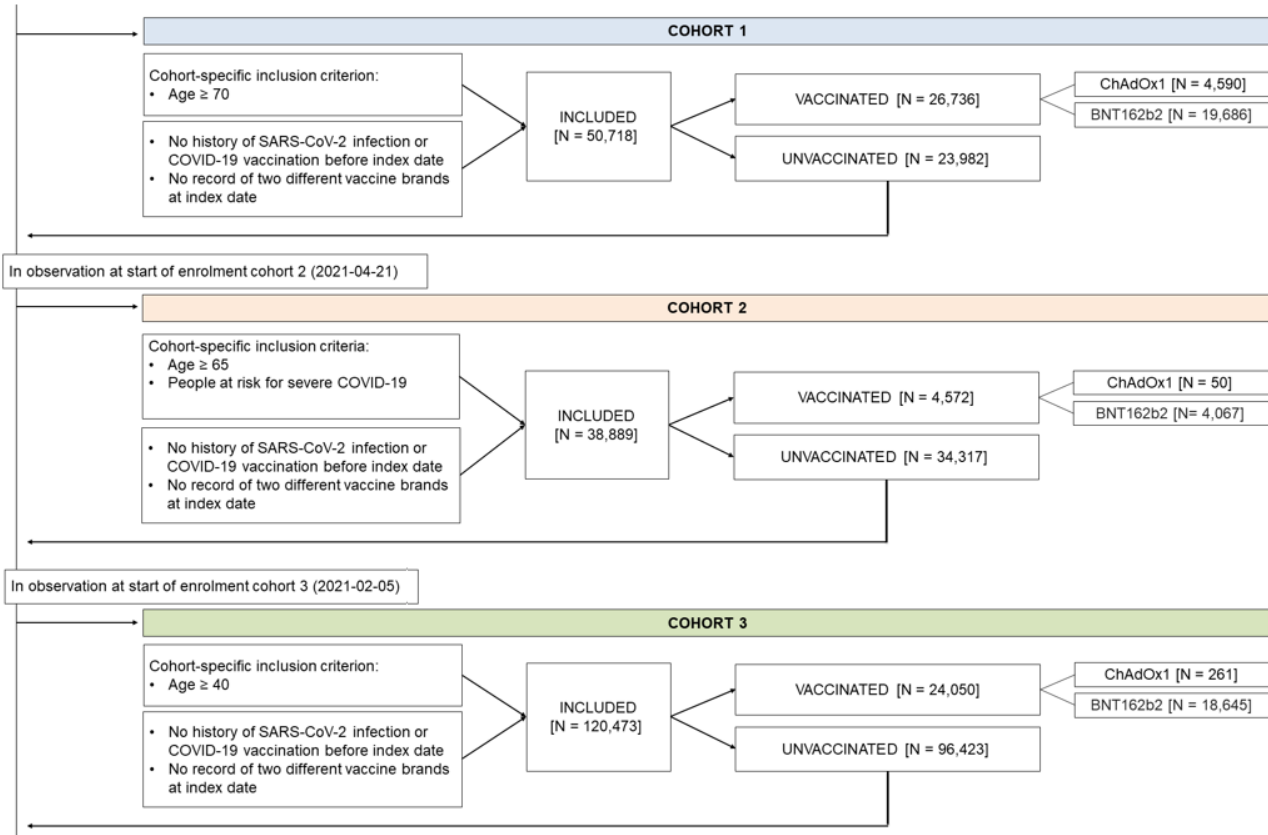
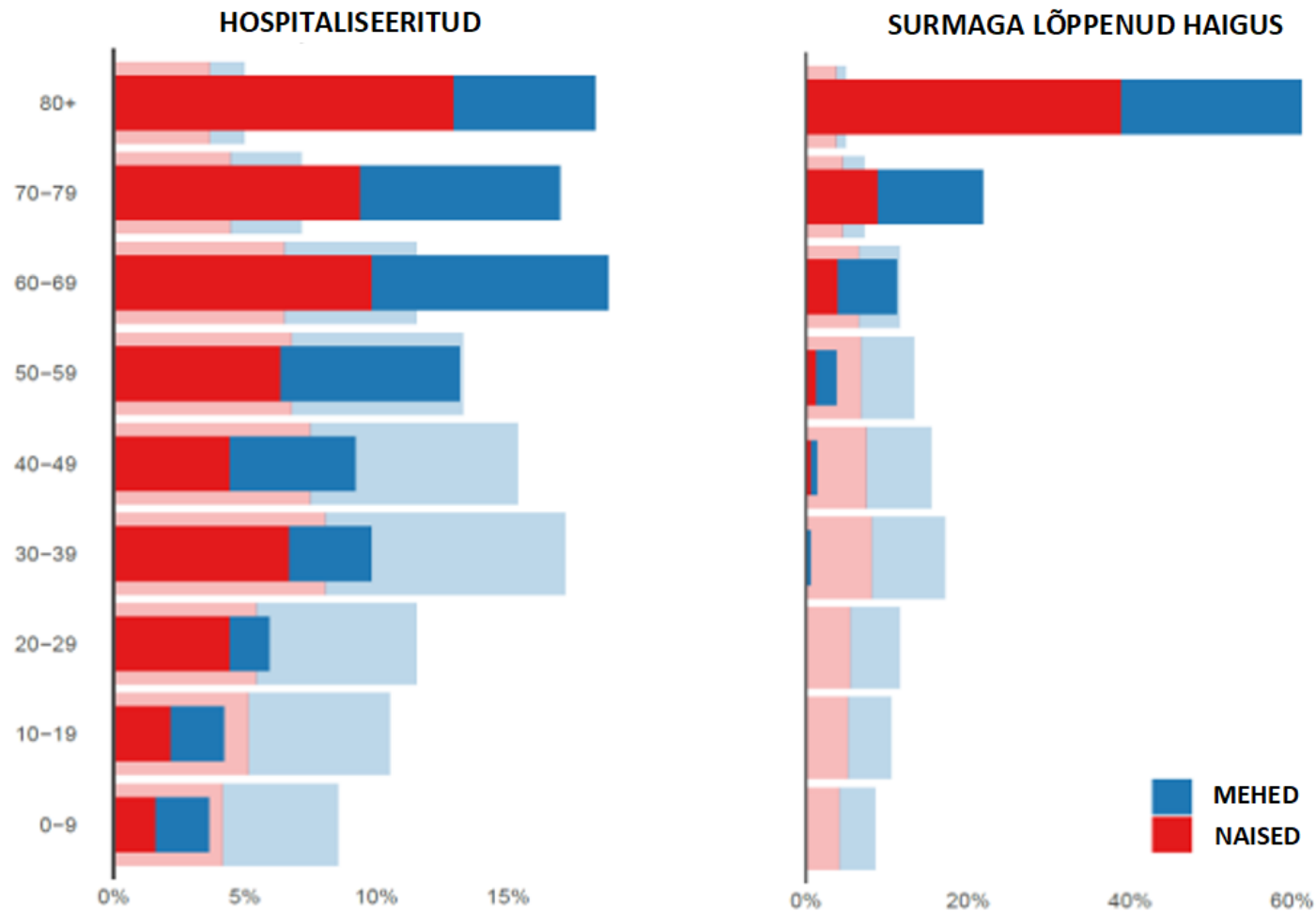


Figure 1. Control and risk periods in the study.

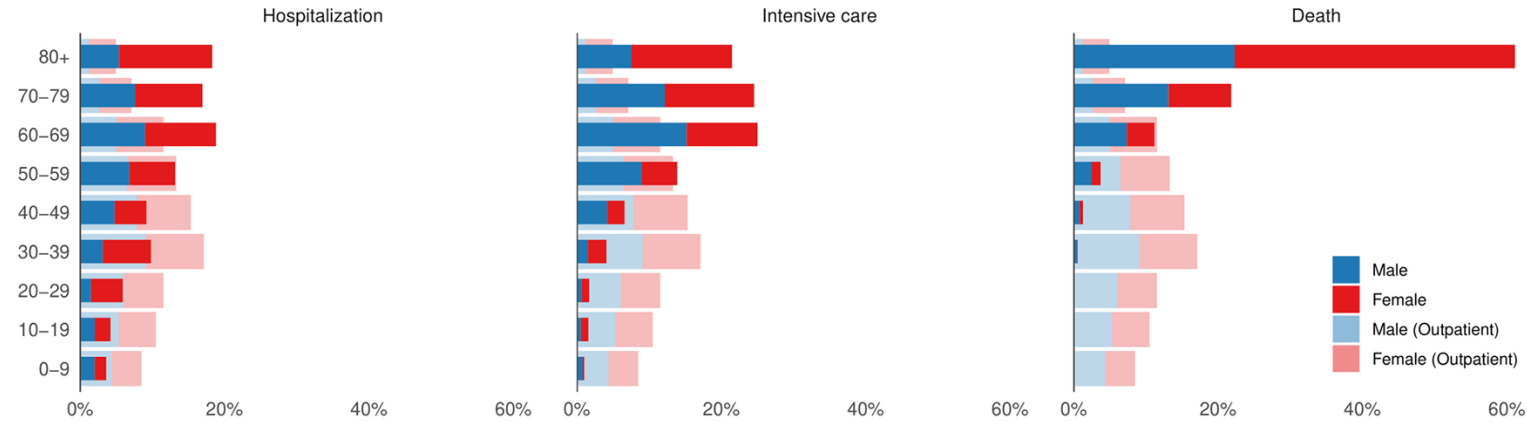
COVID-19 raskem kulg ...



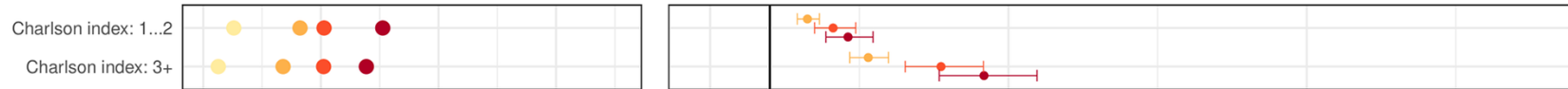
Naistel oli võrreldes meestega šans haiglaravile RRR 0,84 (95% CI 0,78–0,91) ja surmale 0,41 (95% CI 0,35–0,47). Erinevus meeste ja naiste vahel kasvas koos haiguse raskusega.

COVID-19 raskem kulg ...

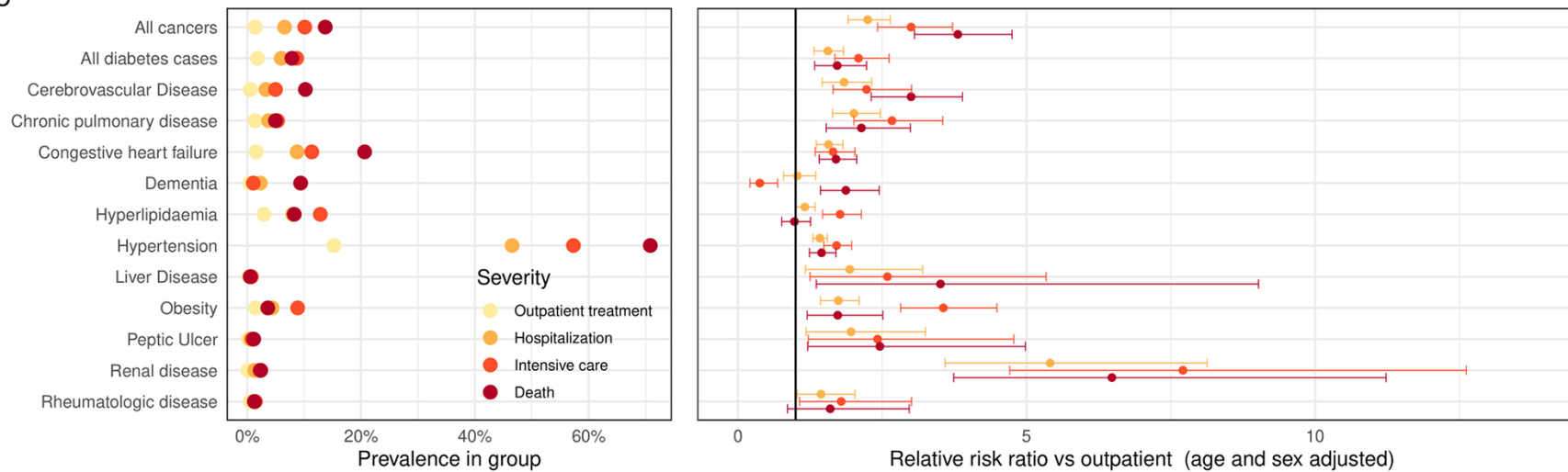
A



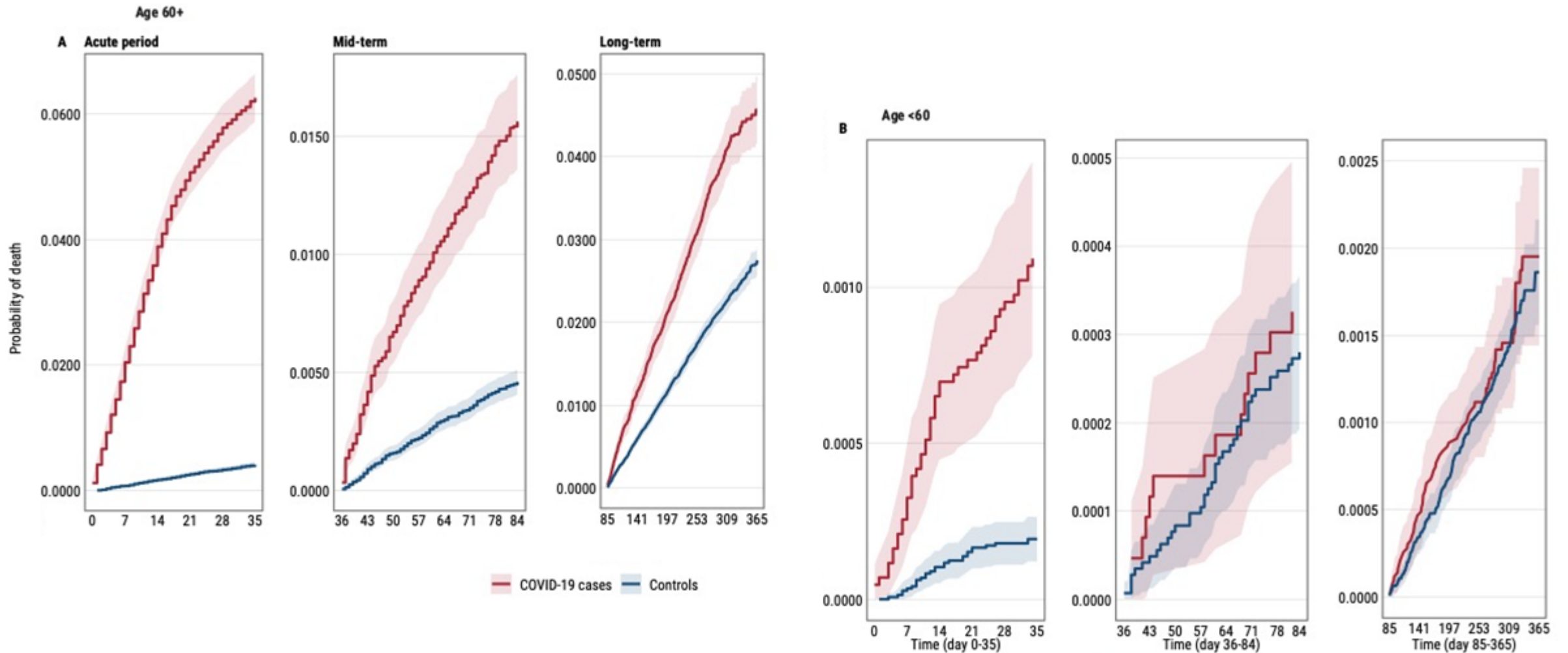
B



C



COVID-19 kaugtagajärjed (suremus 12 kuud peale nakatumist)

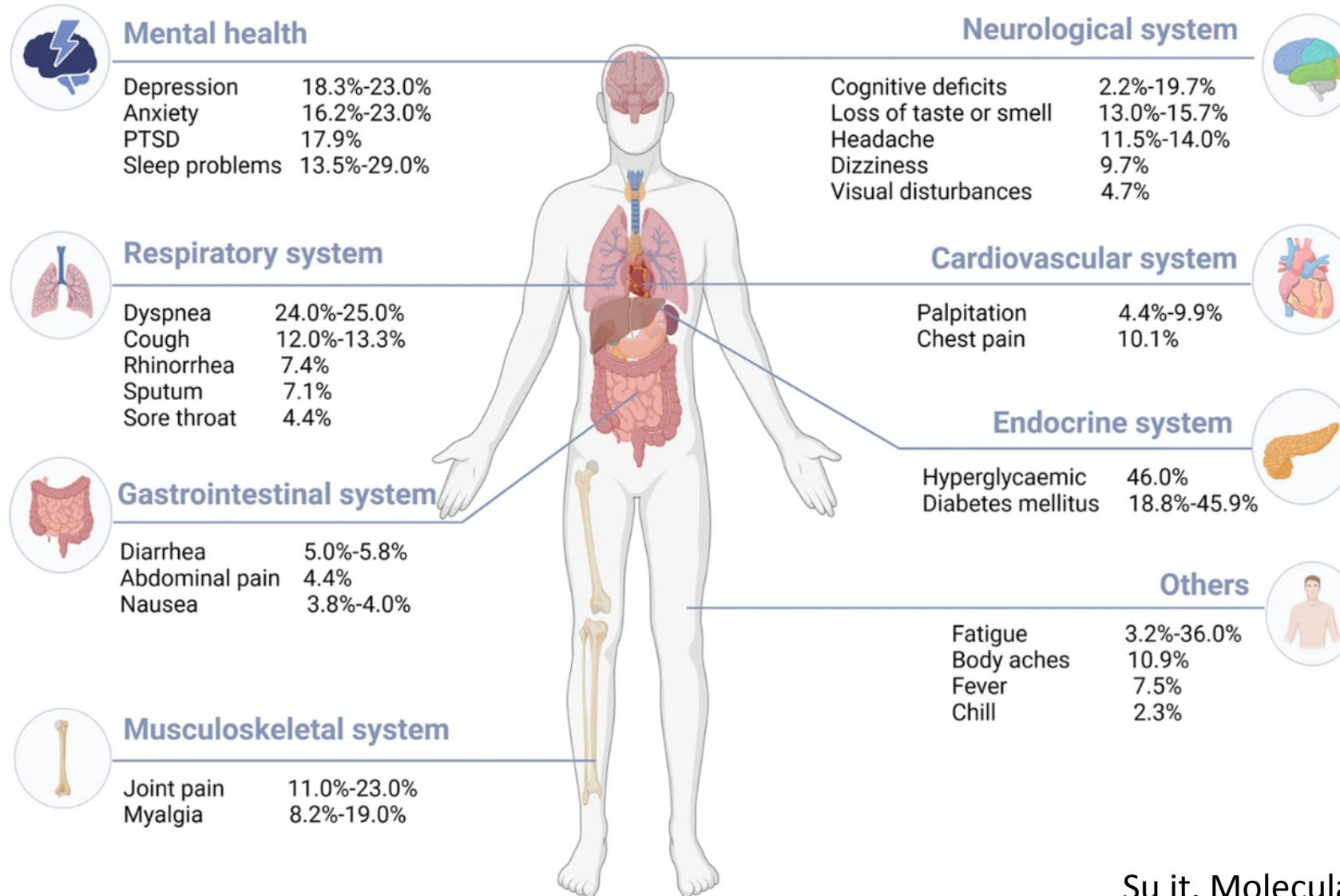


Pikk-COVID

Long COVID defined

- as **signs, symptoms, and conditions that continue or develop** after acute COVID-19 infection (CDC 2023)
- as the continuation or development of **new symptoms** 3 months after the initial SARS-CoV-2 infection, with these symptoms lasting for at least 2 months with no other explanation (WHO 2022)
- in individuals with a history of probable or confirmed SARS CoV-2 infection, usually 3 months from the onset of COVID-19 with **symptoms that last for at least 2 months and cannot be explained by an alternative diagnosis** (ECDC 2022)
- **signs and symptoms** that continue or develop after acute COVID-19. It includes both ongoing symptomatic COVID-19 (from 4 to 12 weeks) and post-COVID-19 syndrome (12 weeks or more) (NICE 2022)

Pika COVID-i sümptomid



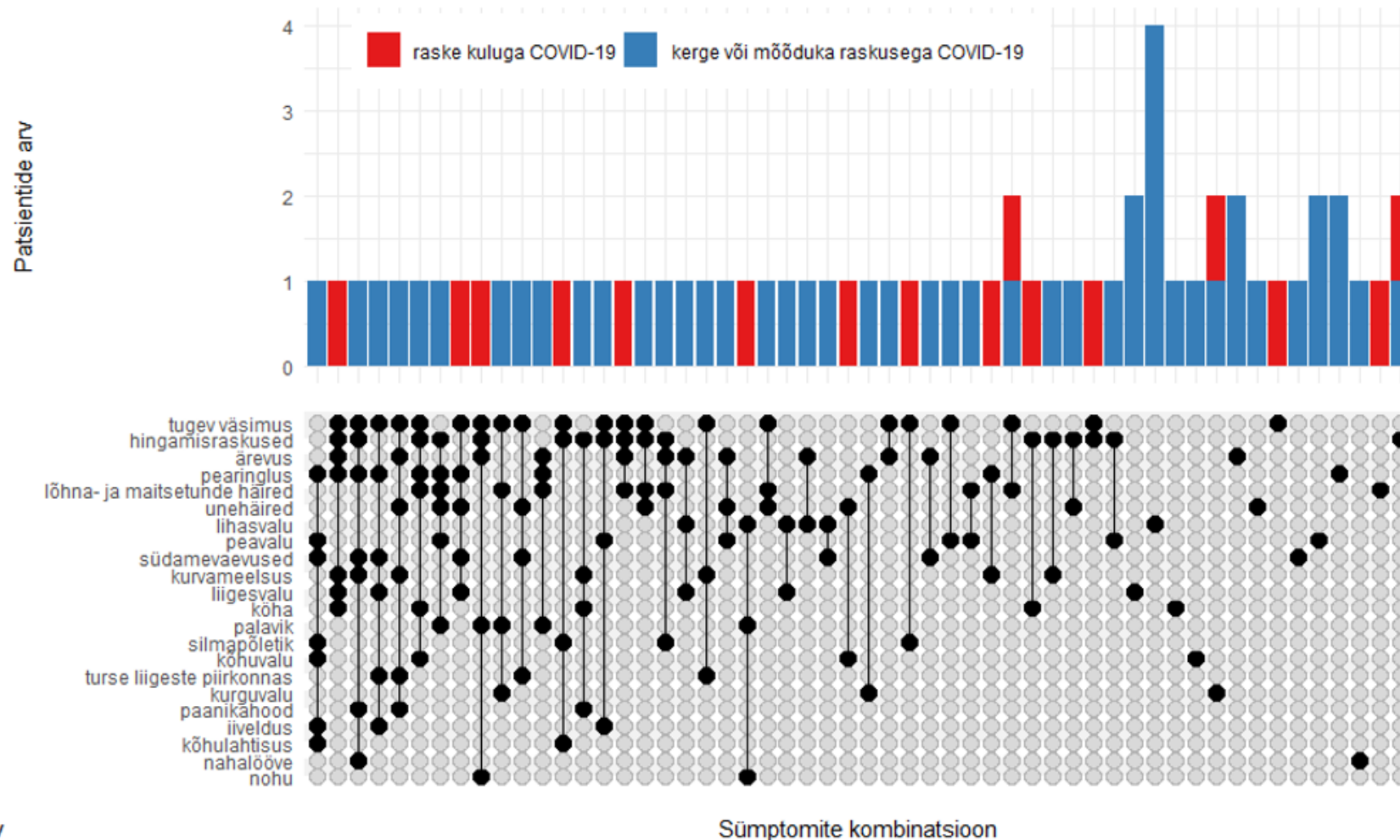
Pikk-COVID: uued sümptomid

Pika COVID-19 sagedus 21,6%

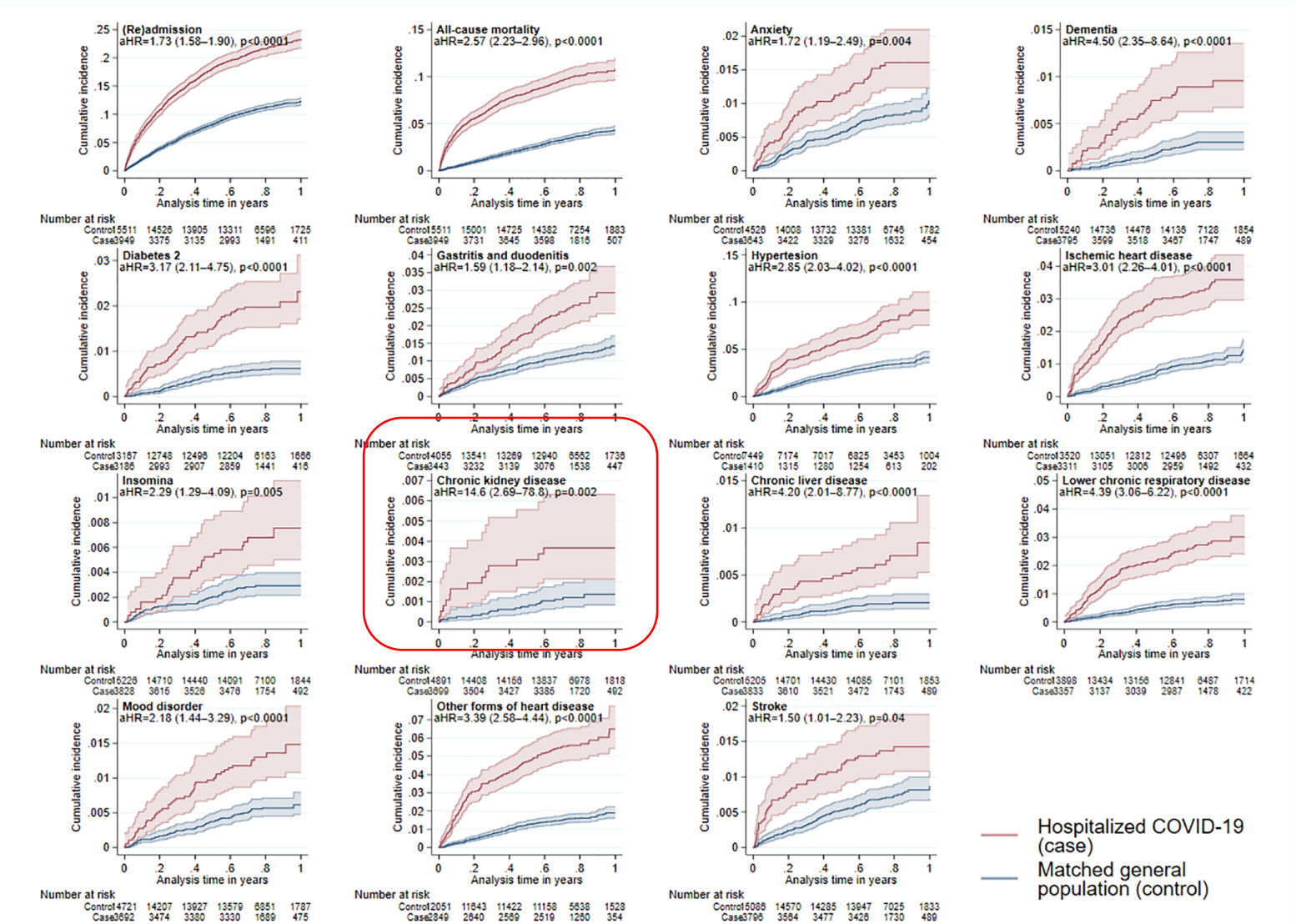
Pika COVID-19 esinemissagedus ägedat haigust kergelt või keskmise raskusega põdenutel ja raskelt põdenutel ei erine (21,9% vs. 20,8%; $p = 0,8$)

Meestel 3,3 korda väiksem šans

Enamate sümptomite arvu puhul COVID-19 ägedas faasis mõnevõrra suurem šans (13%)

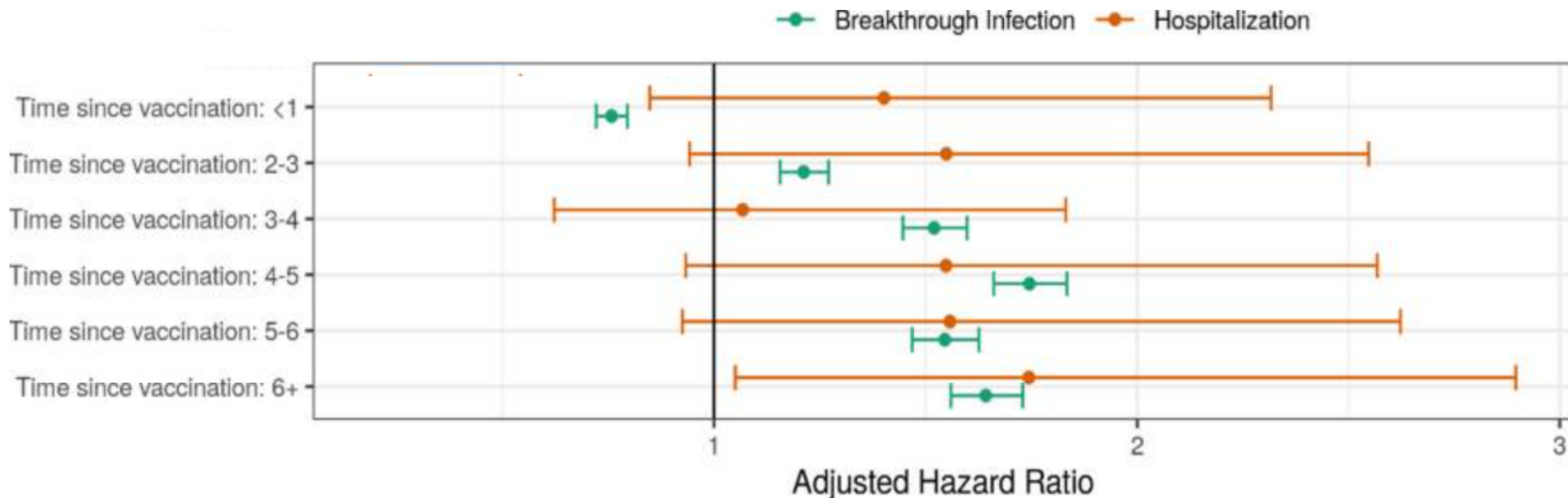


Used haigestumised peale rasket COVID-19

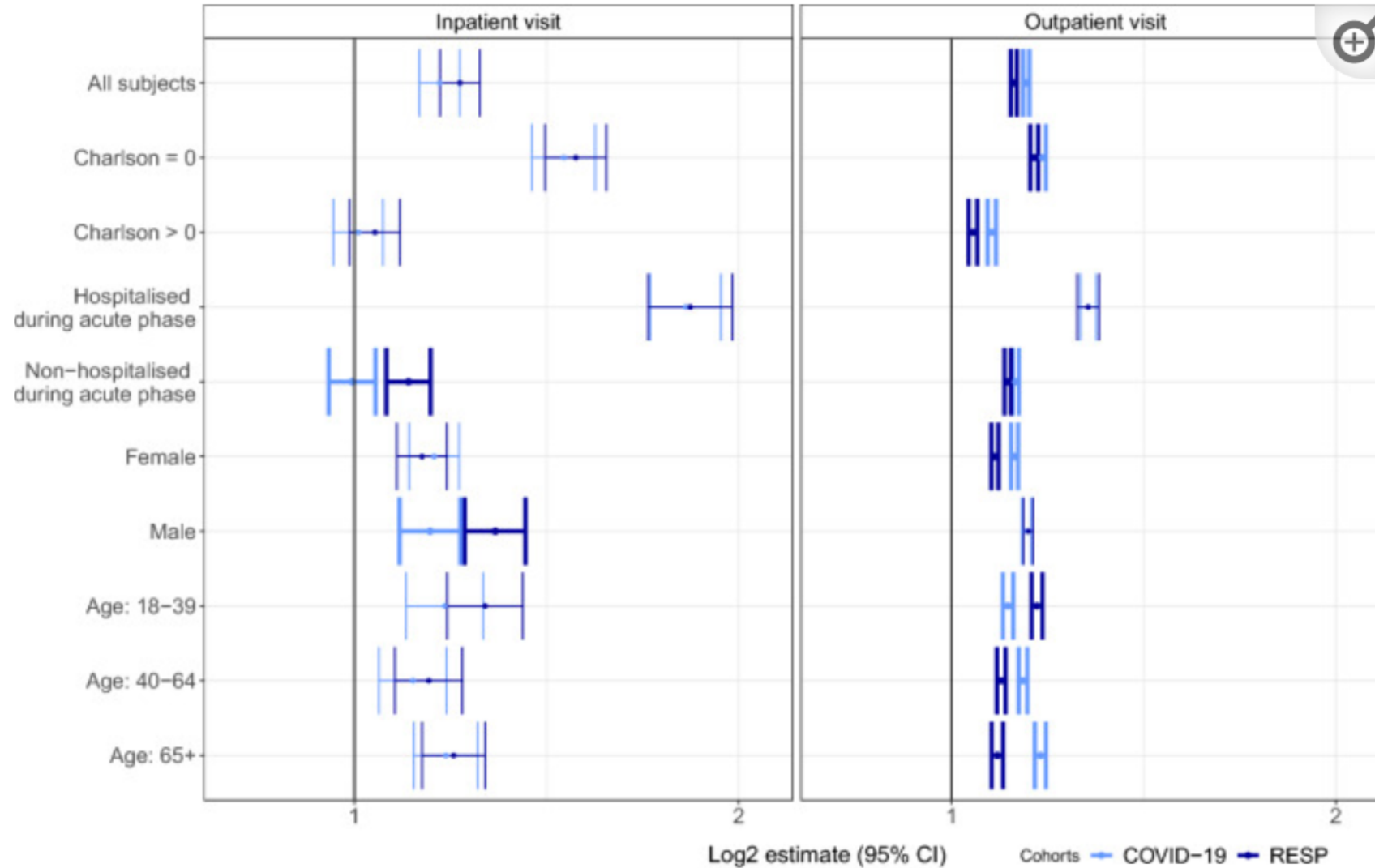


Vaktsinatsioon, läbimurdenakkus

Uuritavad: 184,132 inimest, vaktsinatsiooni eelse SARS-CoV-2 nakkuseta
Läbimurde SARS-CoV-2 n = 29688, 8.0 (95% CI 7.9–8.1/10,000 inimpäeva)
Raske läbimurde SARS-CoV-2 n = 355, 0.09 (95% CI 0.08– 0.10/10,000 inimpäeva)



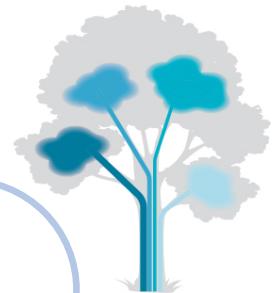
COVID-19 vs teised ägedad respiratoorsed infektsioonid



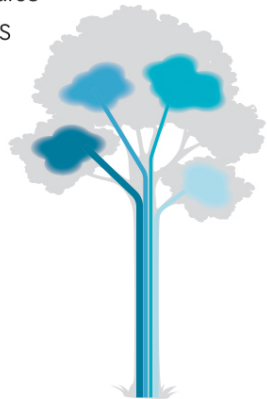
Hybrid vigor immunity with COVID-19 vaccines

Hybrid vigor can occur when different plant lines are bred together and the hybrid is a much stronger plant. Something similar happens when natural immunity is combined with vaccine-generated immunity, resulting in 25 to 100 times higher antibody responses, driven by memory B cells and CD4⁺ T cells and broader cross-protection from variants.

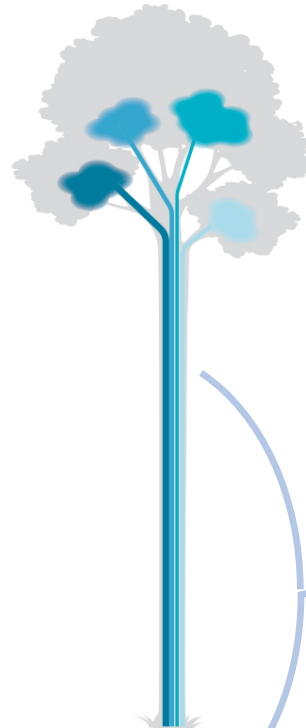
- Memory B cells ● Antibodies
- CD4⁺ T cells ● CD8⁺ T cells



Natural immunity

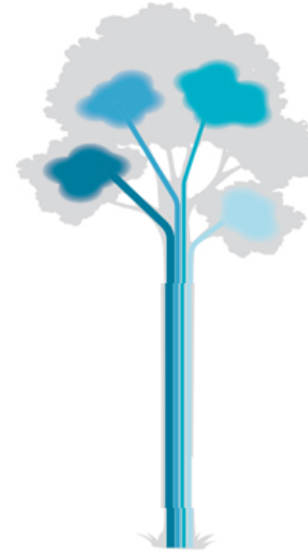


Vaccine immunity



Hybrid immunity

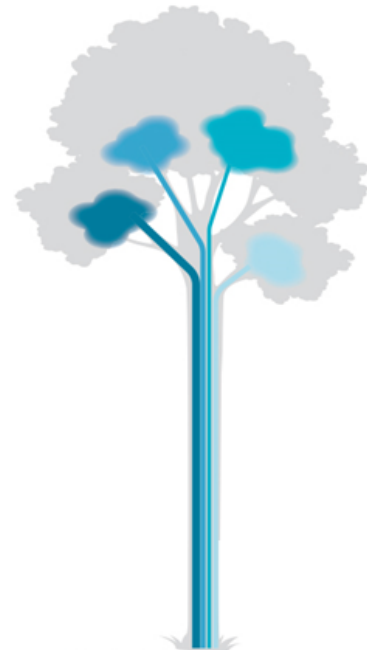
Crotty 2021



Natural immunity



Vaccine immunity



Hybrid immunity

SARS-CoV-2 spetsiifiline immuunsus

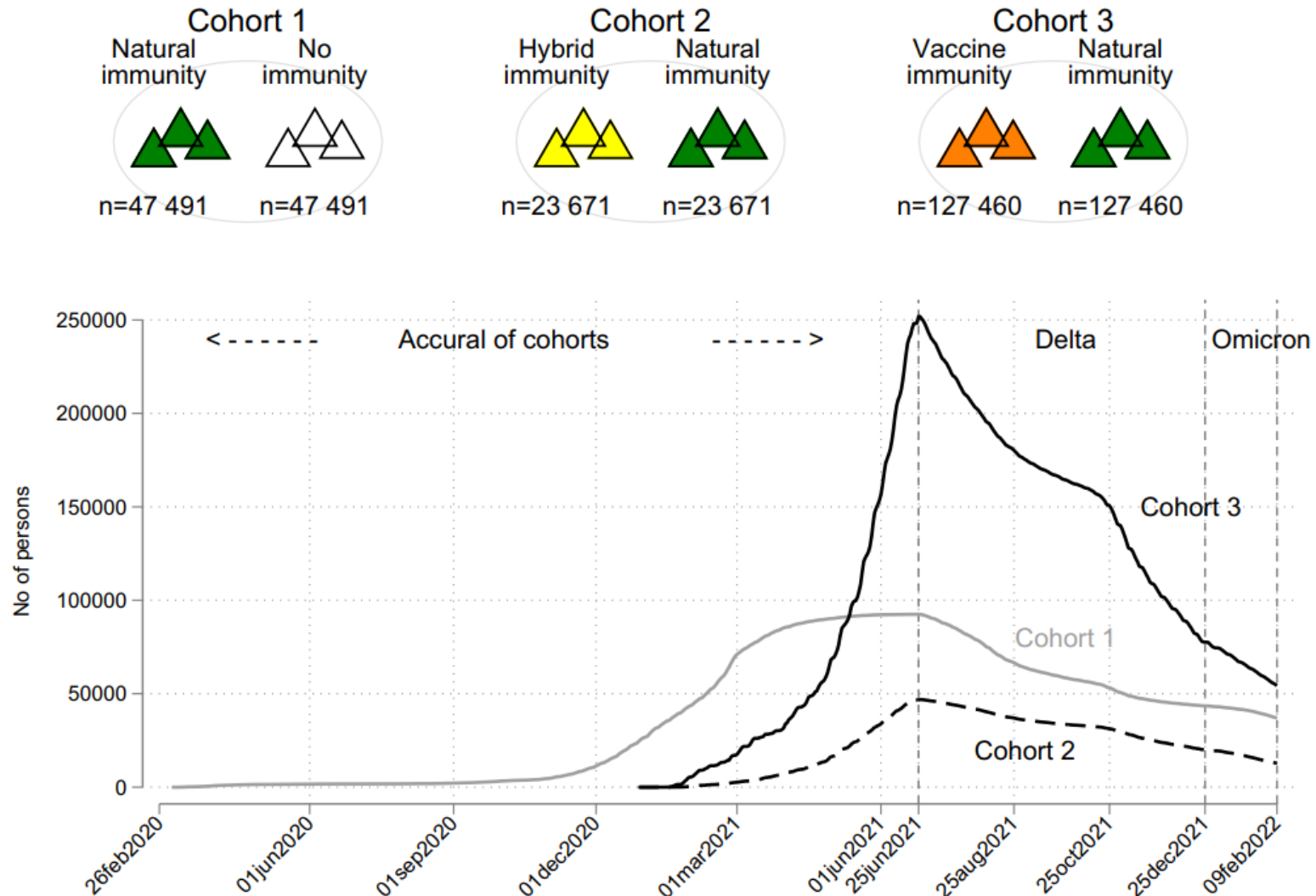


Figure 1. Study cohorts and inclusion to the cohorts.

COVID-19 and raske COVID-19

	Hübriid vs naturaalne	Vaktsiin vs naturaalne	Naturaalne vs spets imm puudumine
Delta			
COVID-19	0.6 (0.5, 0.8)	4.9 (4.5, 5.4)	0.17 (0.15, 0.18)
Raske COVID-19	*	7.2 (4.0, 12.8)	0.05 (0.03, 0.11)
Omikron			
COVID-19	1.1 (0.9, 1.2)	1.1 (1.1, 1.2)	1.3 (1.2, 1.3)
Raske COVID-19	0.07 (0.04, 12.7)**	2.0 (0.6, 6.3)	0.01 (0.04, 0.26)

*Hübriidse immuunsusega inimeste hulgas ei olnud juhtusid

** Hübriidse immuunsusega inimeste hulgas üks juht



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Lili Milani

- Konverentsi korraldamist rahastatakse Euroopa Liidu COVID-19 pandeemia reageerimise raames
- Konverentsi korraldab Tartu Ülikool koostöös Sotsiaalministeeriumiga



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