



Corona Immunitas and associated studies

Swiss TPH Virtual Event Series 2022:

Cohorts and Long-Term Partnerships in Science

September 8, 2022, 10:30-12:00

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Switzerland wide program to assess the spread and impact of the pandemic

14 participating universities and health organisations

50'000 study participants

40 studies throughout Switzerland



Financed through public private funding

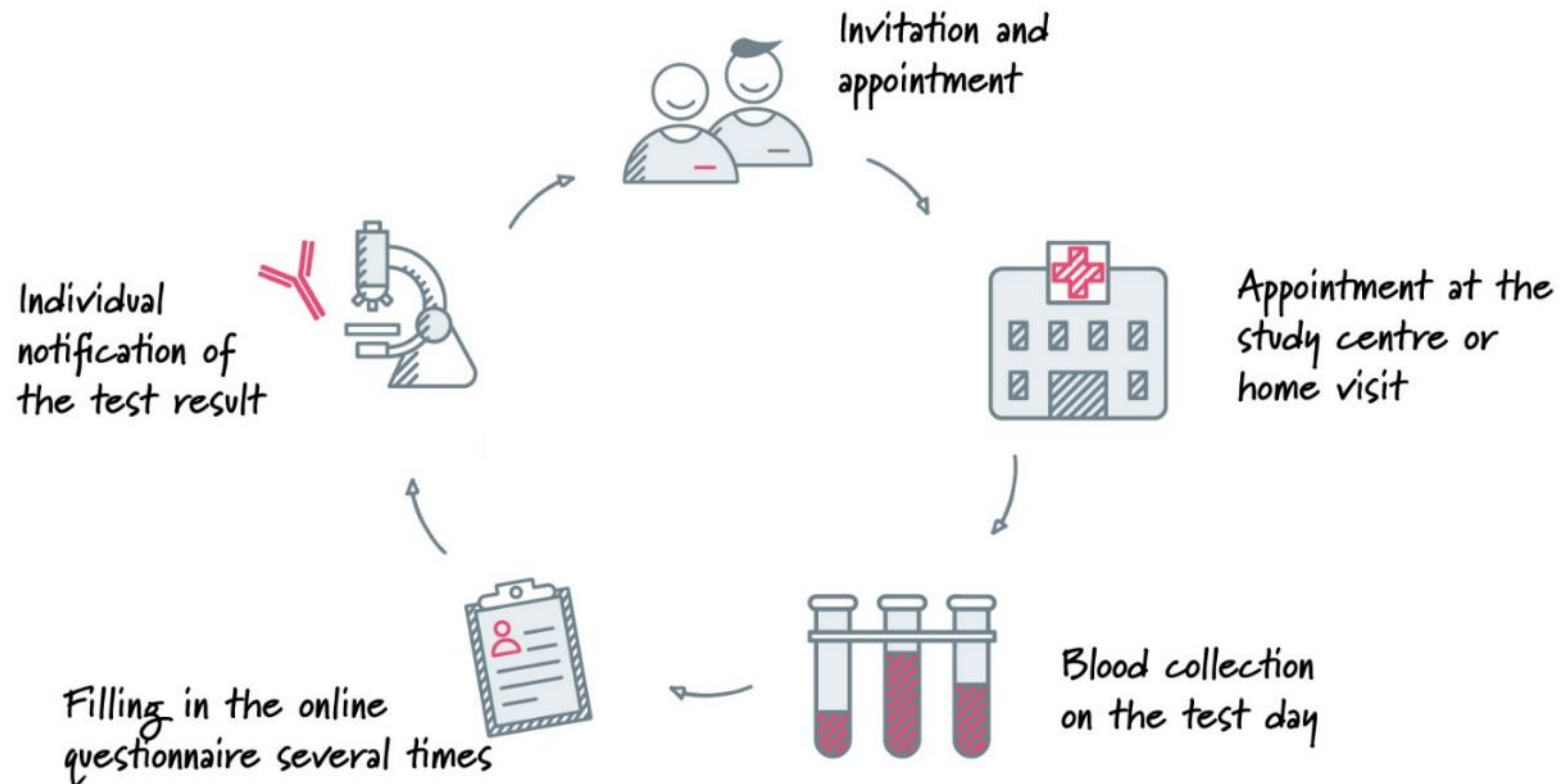
SSPH+ initiates and coordinates the programme

For the health of society



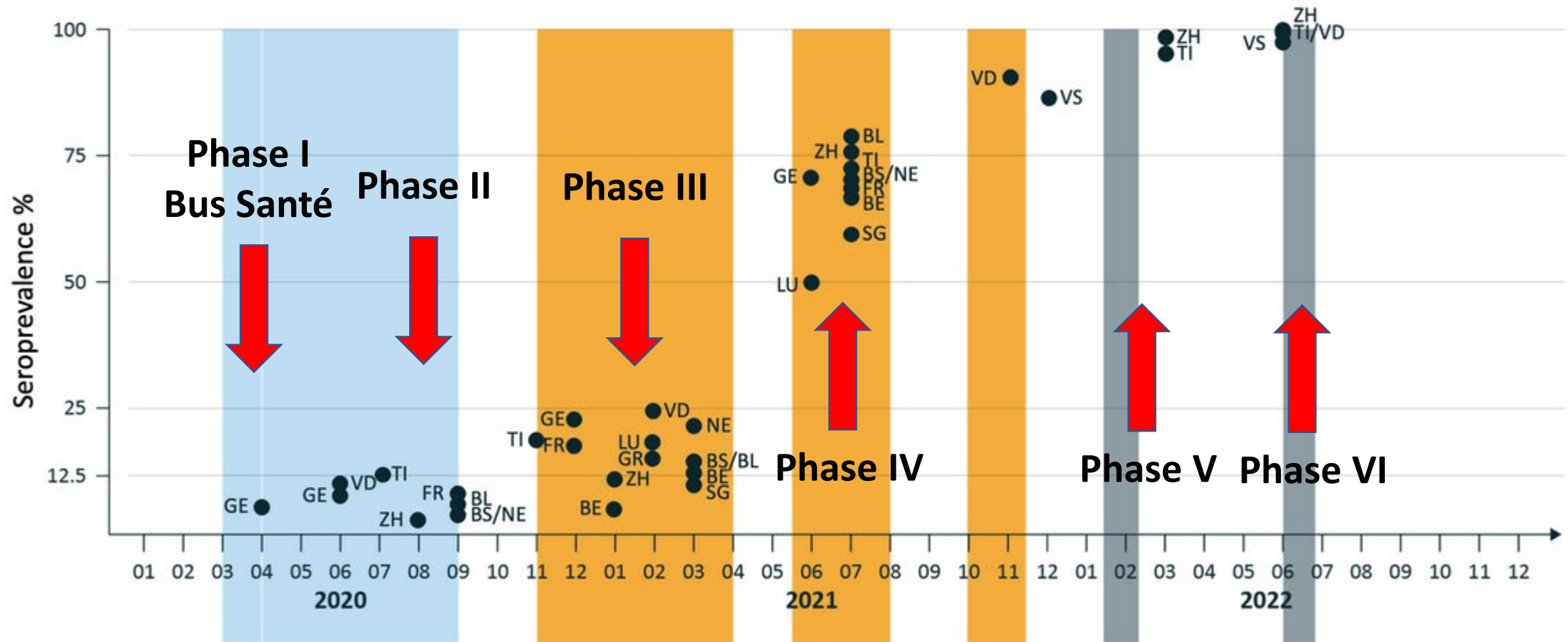


Key principles: Core protocol, maximise synergisms





Increase in seroprevalence (% with antibodies) until July 2022 in 20 to 64 year olds



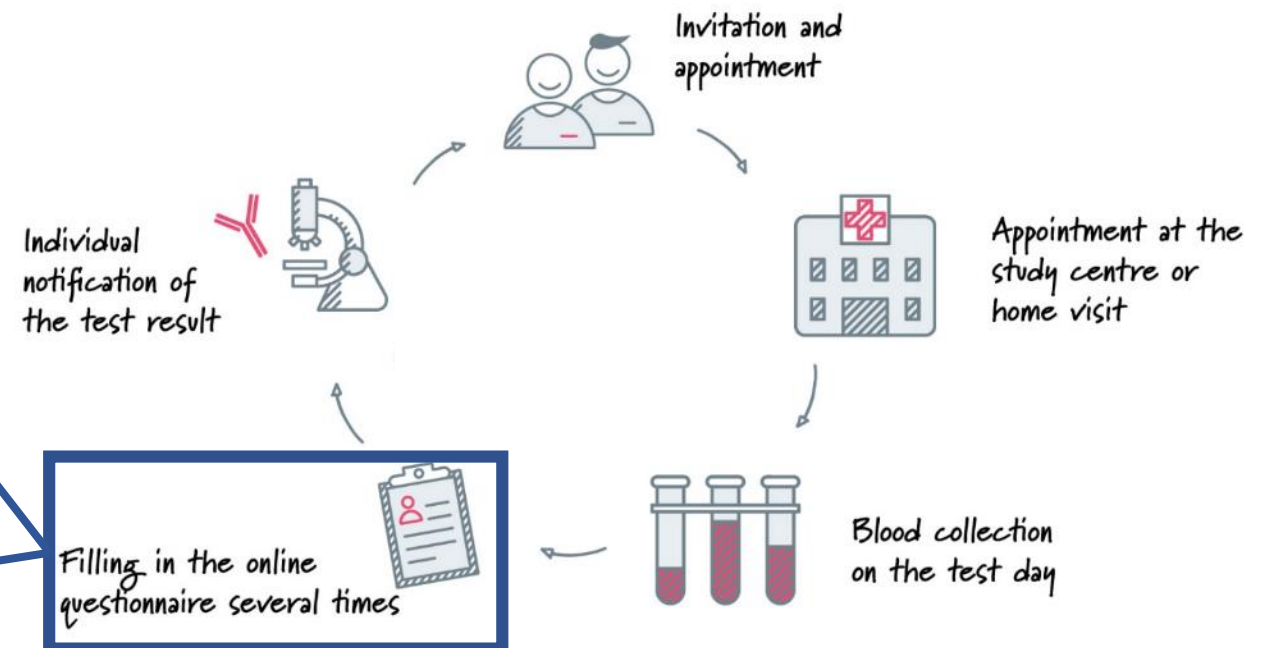
Corona Immunitas Digital Cohort – monitoring population behaviour during the pandemic

Weekly surveys (short):

- Onset of symptoms
- Covid-19 tests
- Adherence to preventive measures

Monthly surveys (more extensive):

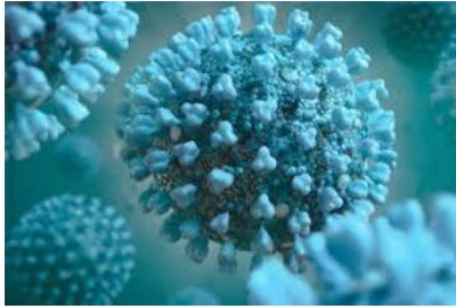
- Perception of health, economic, societal risks
- Mental health, feelings of loneliness
- Use of SwissCovid app
- Vaccination/vaccine hesitancy





Opportunities for additional studies

Impact of SARS-CoV-2 Virus



Impact of Containment Measures



Corona Immunitas Ticino **F1**

tested population: region

general population age 5-100 and family members

number of tested persons **n=3'000**

Main Goal
To measure seroprevalence and the impact of the COVID-19 epidemic on individuals, communities, and society at large

Ticino Study **F3**

Nursing home healthcare workers (COV-953)

tested population: region

nursing home healthcare workers

number of tested persons **n=900**

Main Goal
To estimate the seroprevalence of SARS-CoV-2 among nursing home staff and evaluate the impact of the pandemic on their health and wellbeing

SérocoVID **B3**

Food retail employees

tested population: region

food retail employees

number of tested persons **n=240**

Main Goal
To investigate seroprevalence in food retail worker employees, as they work in a highly exposed sector due to the proximity to customers and other employees

COVCO-Basel **D1**

Bevölkerungsbasierte SARS-CoV-2-Kohortenstudie Basel Landschaft und Basel-Stadt

Getestet wird: Region

Allgemeine Bevölkerung und Familienmitglieder

Anzahl getesteter Personen **n=10'000**

Ziel der Studie
Untersuchen der SARS-CoV-2-Immunität in der bevölkerungsbasierten Stichprobe und der gesellschaftlichen Auswirkungen der SARS-CoV-2-Schutzmassnahmen

Ciao Corona **E2**

tested population: region

school children age 5-16 and school employees

number of tested persons **n=10'550**

Main Goal
To investigate seroprevalence and its temporal changes, clustering of cases within classes, schools, districts, symptoms, risk factors in a representative cohort of children and adolescents shortly after reopening of the school system and thereafter

Zurich Study **E7**

SARS-CoV-2-COHORT (ZSAC)

tested population: region

persons tested pos. for CoV-19 and close contacts

number of tested persons **n=2'000**

Main Goal
To determine long-term clinical outcomes and immune responses after Coronavirus infection (COVID-19), assess the influence of virus genetics, and examine the spread of the Coronavirus in the population of the Canton of Zurich



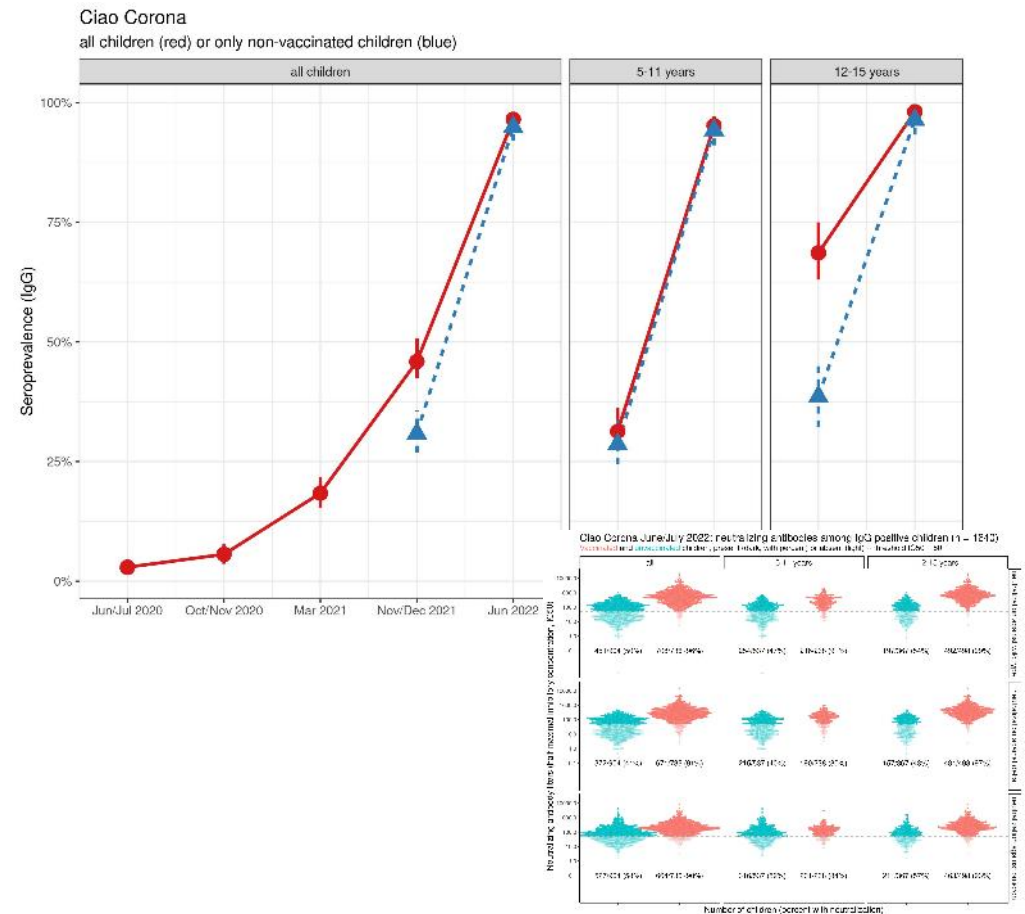
Ciao Corona – Prospective school based cohort study since June 2020



55 schools
275 classes,
2500 children



www.ciao-corona.ch





Zurich Coronavirus Cohort Study (ZSAC)

Zurich Study
SARS COV-2-COHORT (ZSAC) **E7**

tested population: region

persons tested pos. for CoV-19 and close contacts

number of tested persons **n=2'000**

Main Goal
To determine long-term clinical outcomes and immune responses after Coronavirus infection (COVID-19), assess the influence of virus genetics, and examine the spread of the Coronavirus in the population of the Canton of Zurich

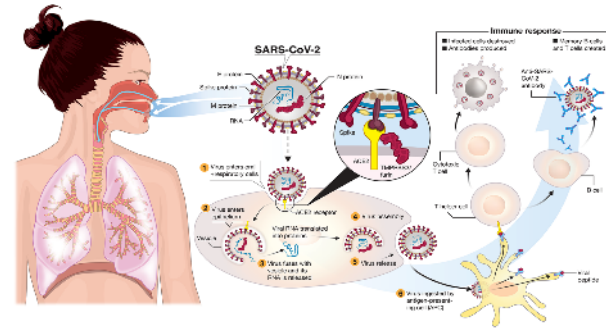
Reported cases



Random sampling and invitation

N=446, 03-07 2020
N=1106, 08-12 2020

Development immune reaction



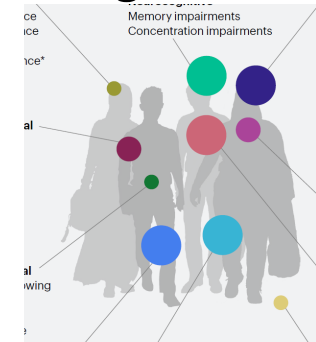
Isolation & Quarantine



Evaluation Contact tracing and Swiss Covid App



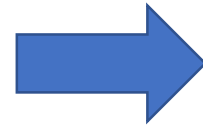
Long COVID





Long Covid – the opportunity to systematically study post viral syndromes

Emerges in pandemics and clinical practice but difficult to study until...



... the Corona virus pandemic

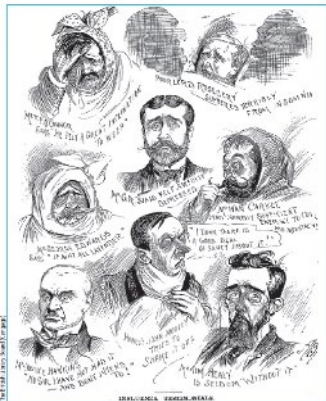
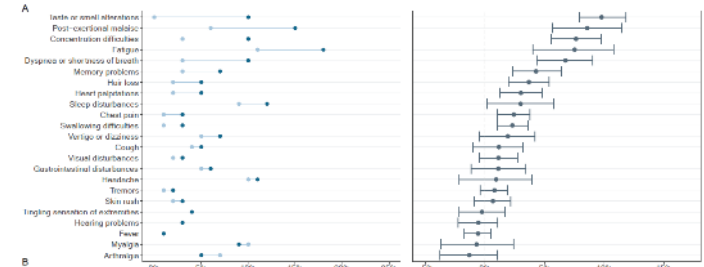
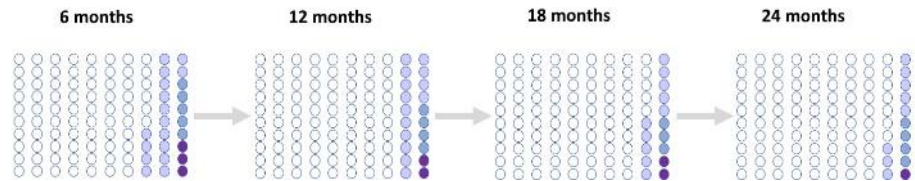
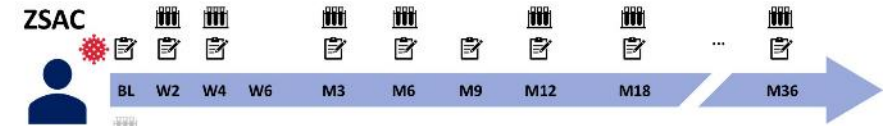
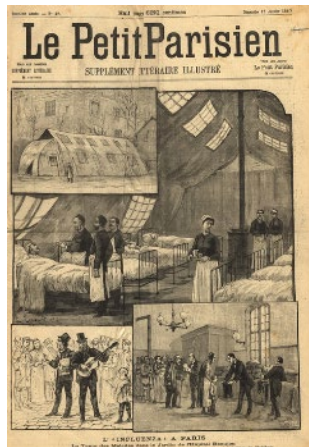
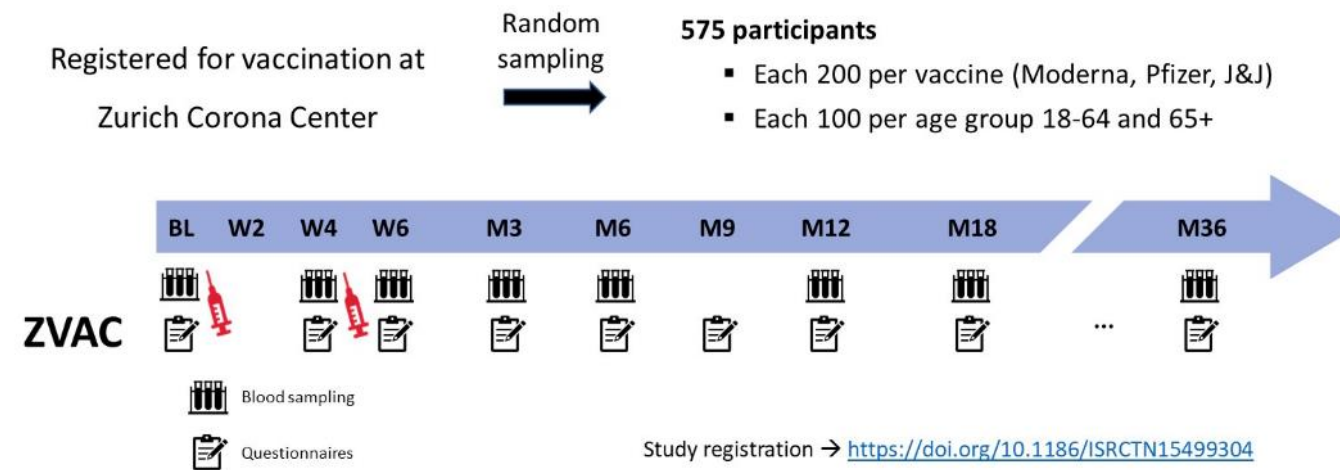
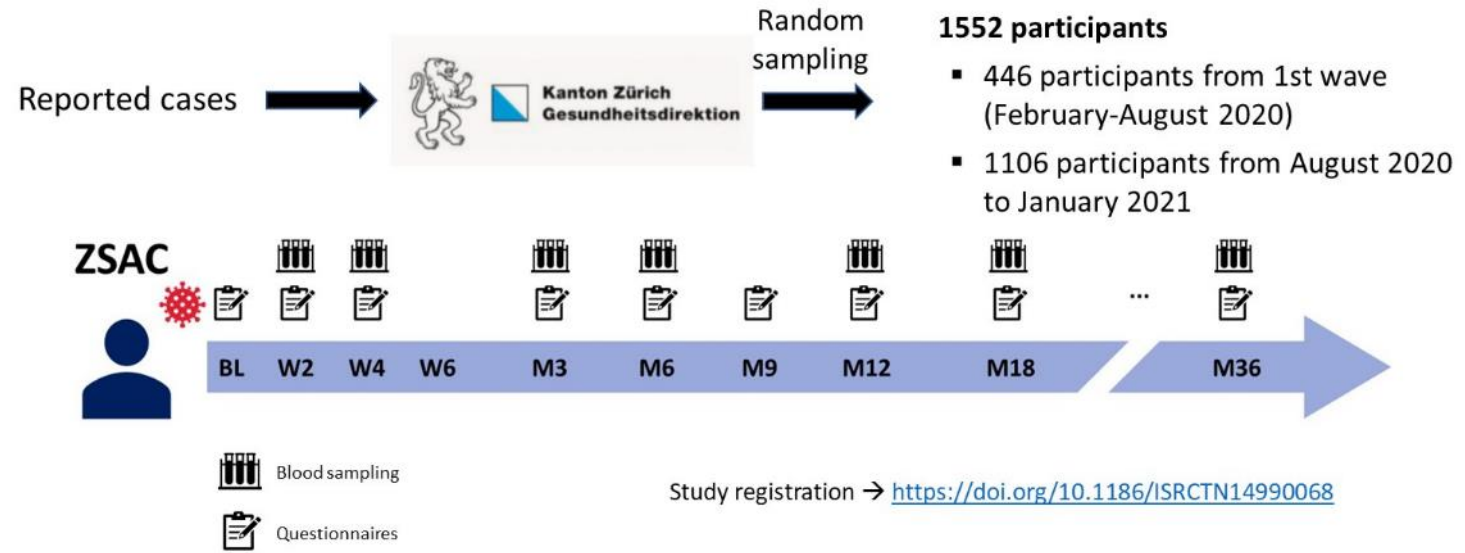


Figure: "Influenza testimonial" in Moonshine, March 30, 1895





Study designs of ZSAC & ZVAC






Science to policy and public



Federal and cantonal level

 Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Home Affairs DHA
Federal Office of Public Health FOPH

**C
GDK
S**

Konferenz der kantonalen Gesundheitsdirektorinnen und -direktoren
Conférence des directrices et directeurs cantonaux de la santé
Conferenza delle direttrici e dei direttori cantonali della sanità

International level



World Health Organization

Public



Science in a minute Youtube channel
<https://www.youtube.com/channel/UC6esmpftoDxewev-1pT4ARg>

<https://www.ciao-corona.ch/>