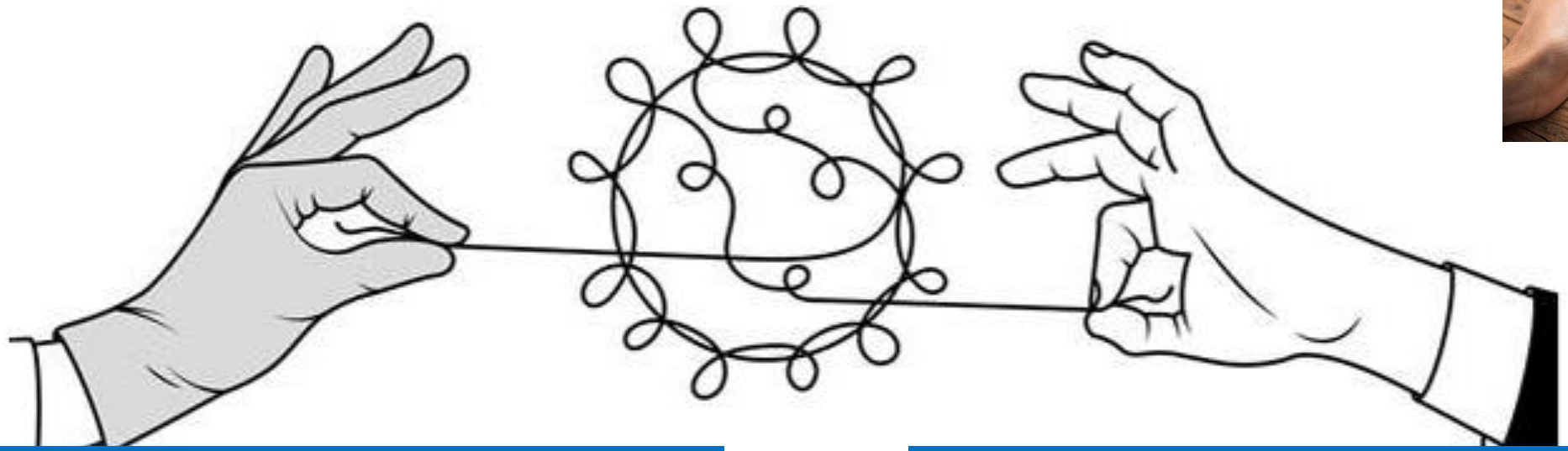
COVID-19 FUTURE OPERATIONS

Science for Resilience Conference:
Learnings from the Pandemic 2022

IMBA Institute of Molecular Biotechnology of the Austrian Academy of Sciences

universität wien

Covid Scenarios for the Fall of 2022 and Beyond



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COVID-19 FUTURE OPERATIONS

Covid-19: Szenarien für Herbst/Winter 2022 - und darüber hinaus

Zielgruppe: Politik und Umfeld

April 2022

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HINTERGRUNDPAPIER

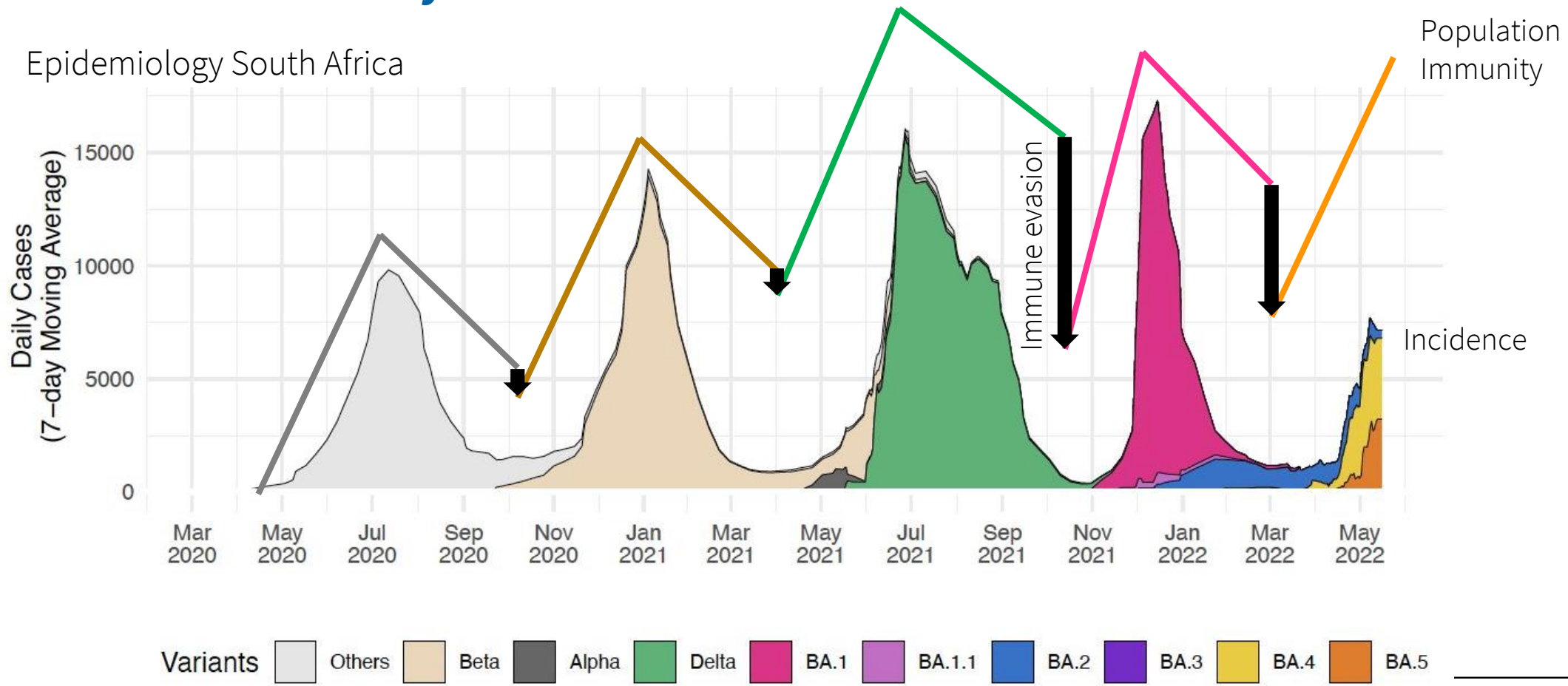
COVID-19 FUTURE OPERATIONS

1. What parameters influence the further development of the Covid-19 pandemic?

2. How to prepare from a psychosocial perspective?
   Communication and trust as parameters of a successful pandemic response

COVID-19 FUTURE OPERATIONS

Viral Evolution: Infectivity and immune evasion



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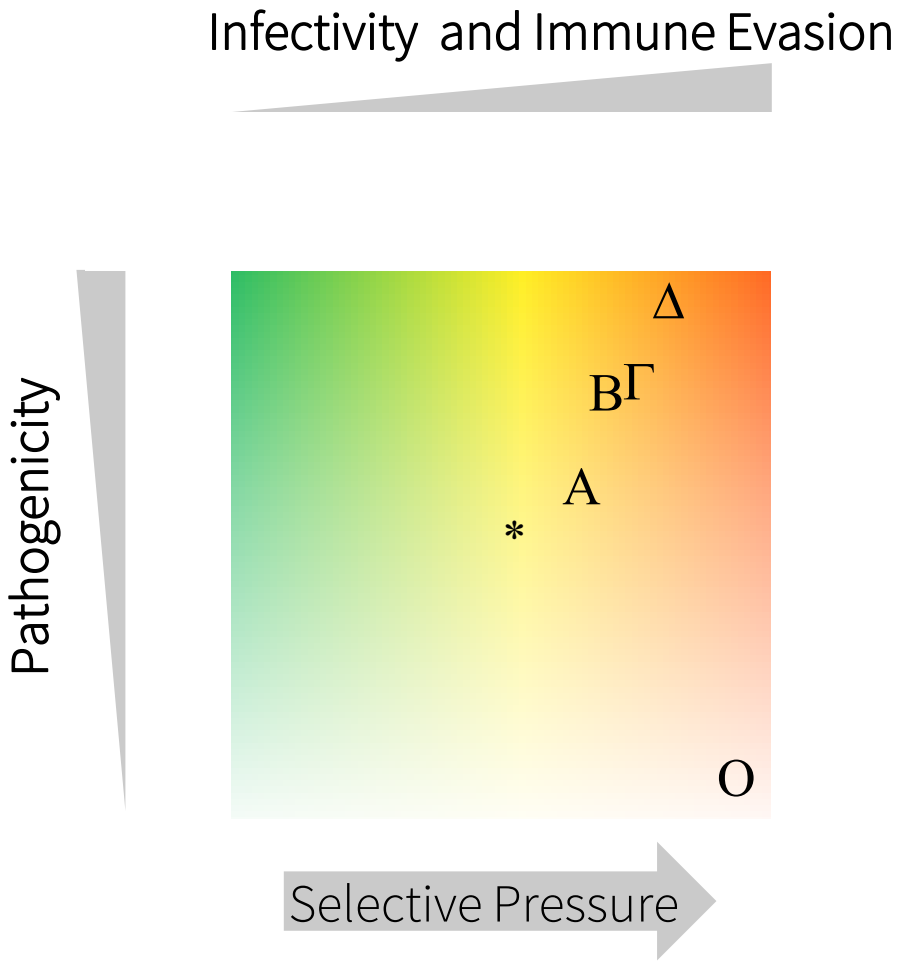
The space of options



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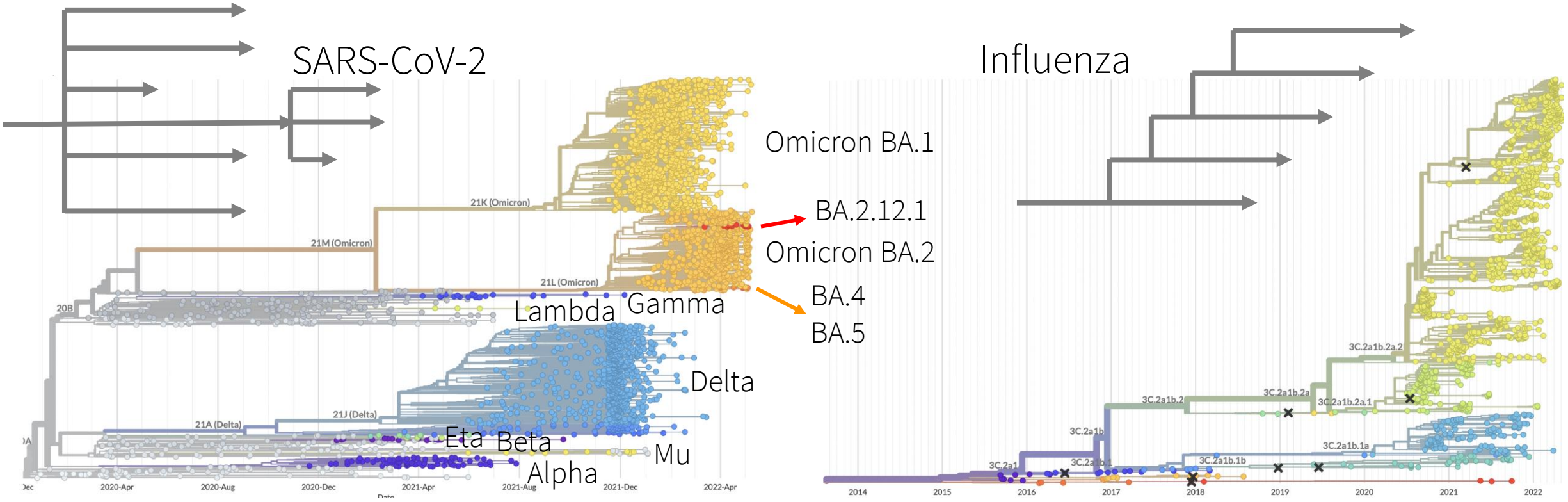
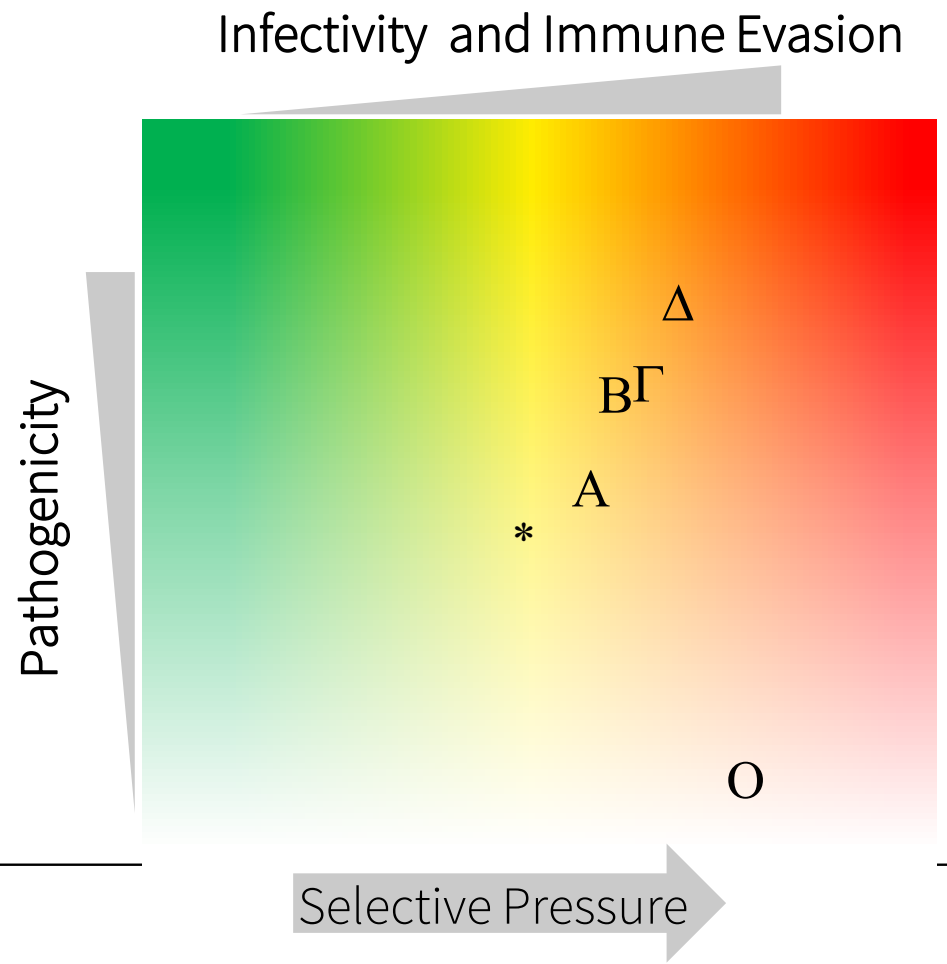
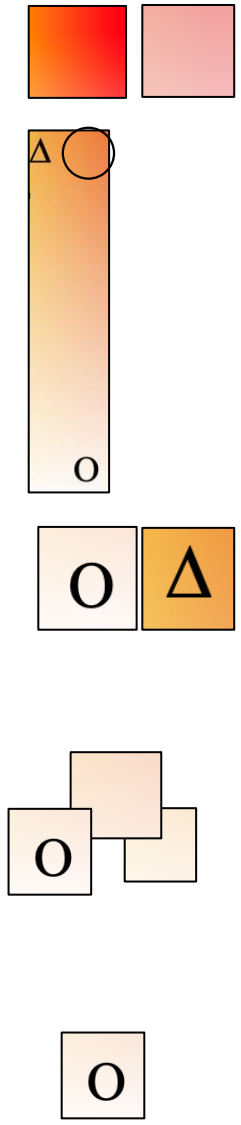
SARS-CoV-2 phylogeny so far…



COVID-19 FUTURE OPERATIONS

Realistic scenarios





5. We go beyond what was seen so far

4. We observe Omicron plus Delta variants

3. We observe Omicron or Delta variants

2. We observe Omicron-like variants (jumps)

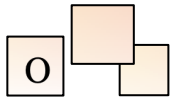
1. We remain in the Omicron clade (stairs)

COVID-19 FUTURE OPERATIONS

FUOP scenarios to stimulate imagination

Pandemic is over

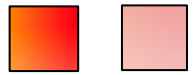
Endemic is reached



Transition to endemic

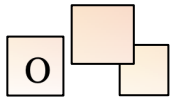
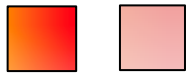
Pandemic continues

Pandemic escalates

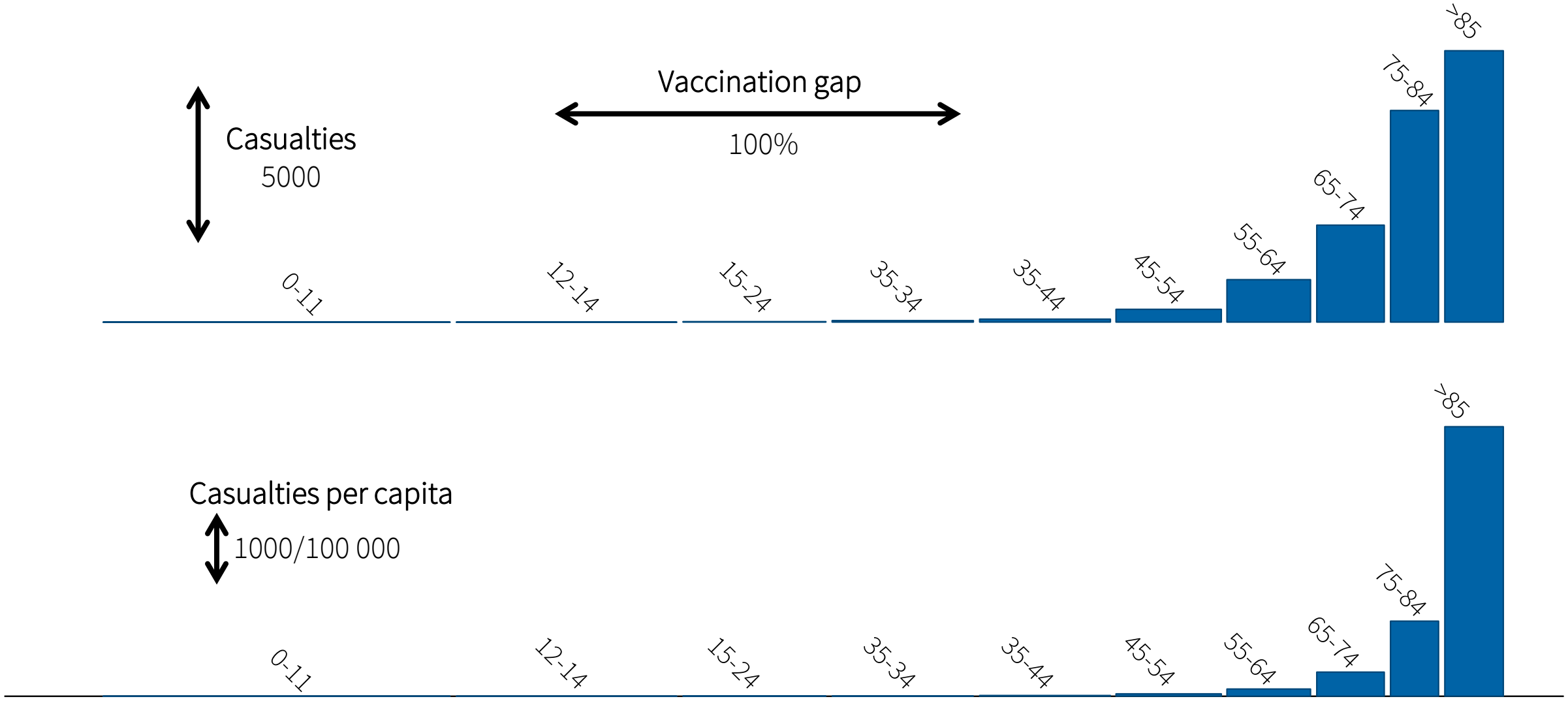


COVID-19 FUTURE OPERATIONS

FUOP scenarios to stimulate imagination: Vaccines

Pandemic is over	Endemic is reached	Transition to endemic	Pandemic continues	Pandemic escalates
				
Adapted vaccinations	Adaptation impossible	Adaptation impossible	Adaptation impossible	New vaccination

COVID-19 FUTURE OPERATIONS



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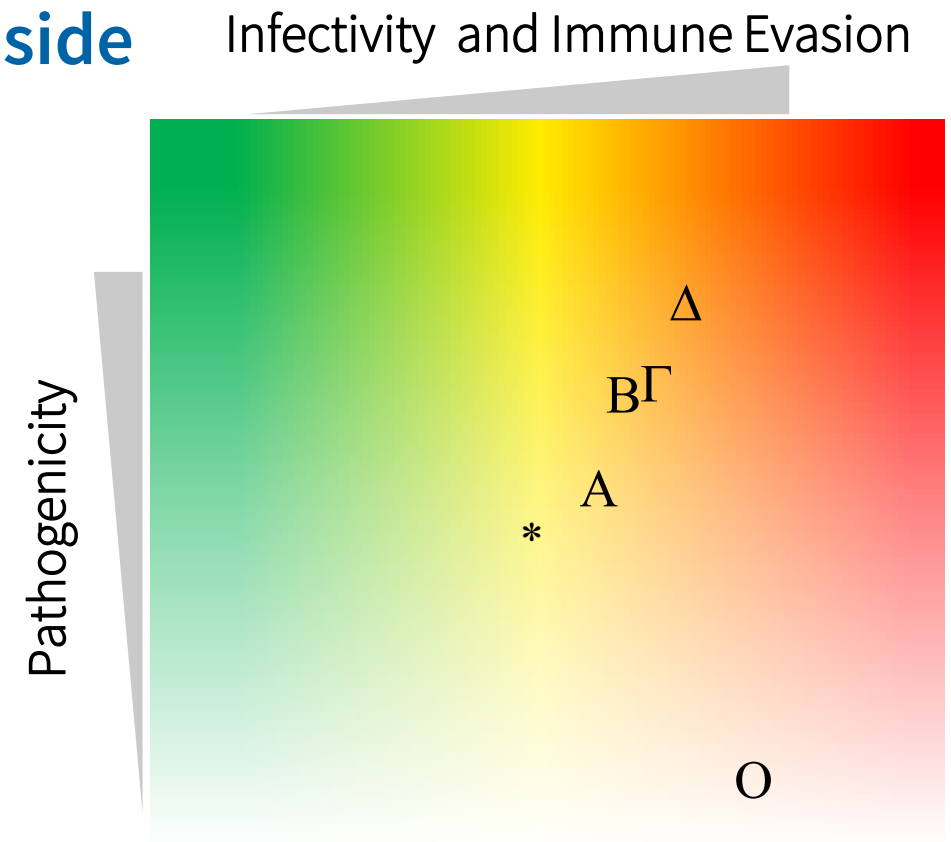
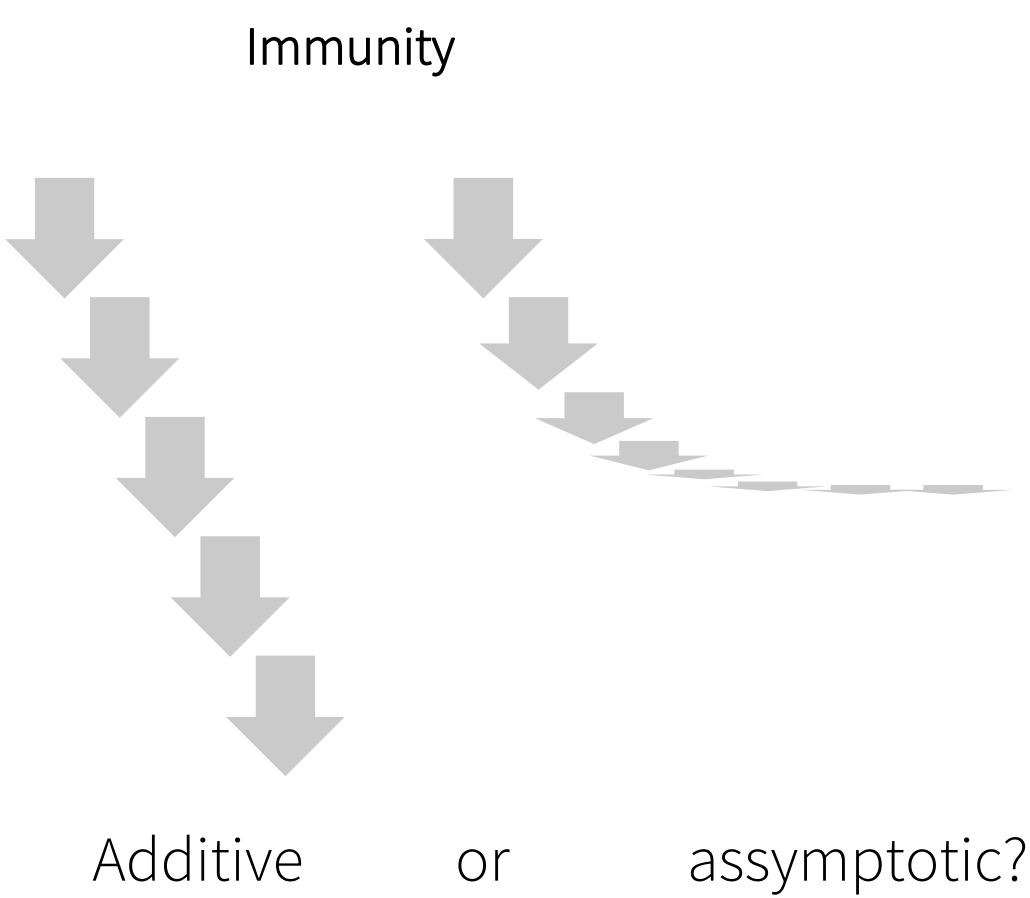
The human side





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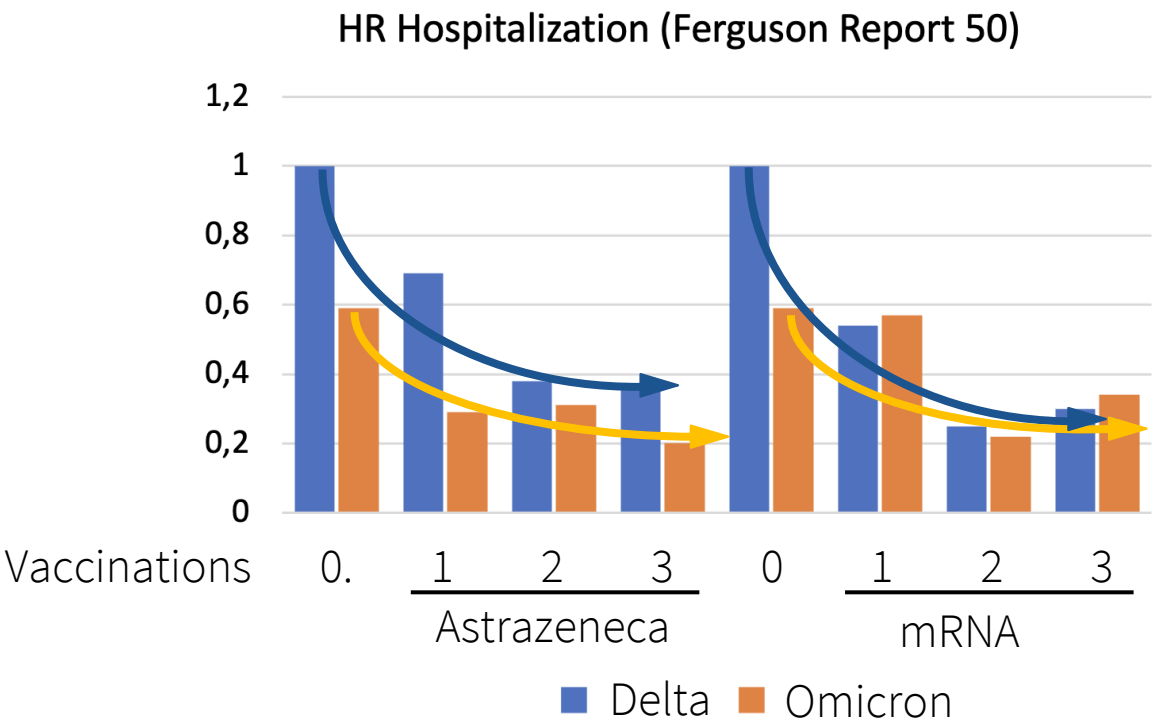
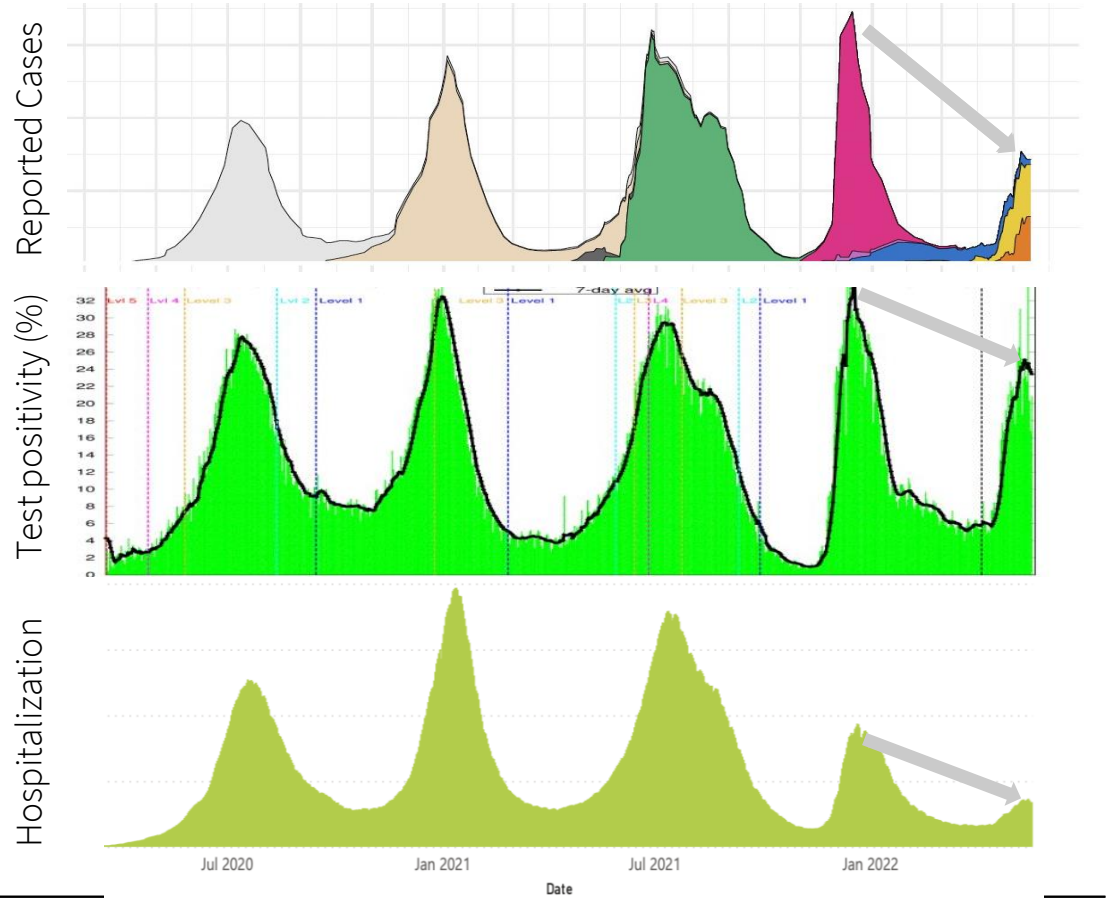
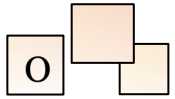
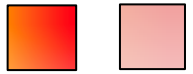
How much milder by repeaded exposure?





COVID-19 FUTURE OPERATIONS

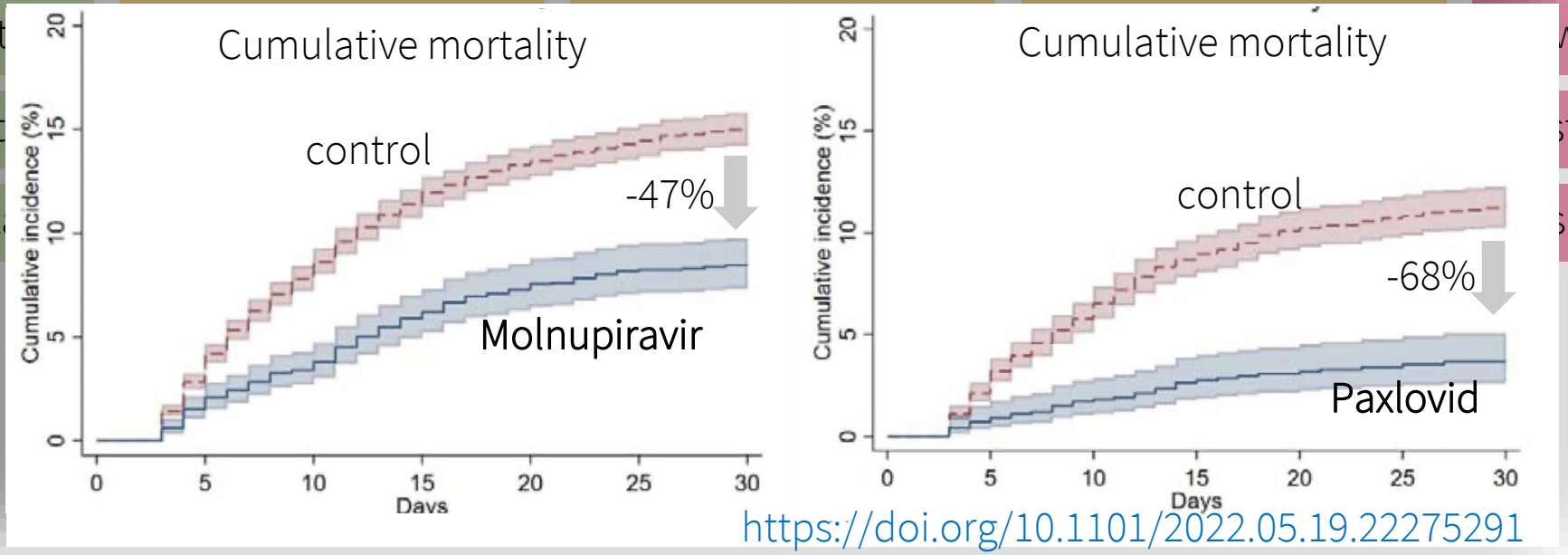
FUOP scenarios to stimulate imagination: Immunity

Pandemic is over	Endemic is reached	Transition to endemic	Pandemic continues	Pandemic escalates
				
Adapted vaccinations	Adaptation impossible	Adaptation impossible	Adaptation impossible	New vaccination
Additive immunity	Additive immunity	Additive immunity	Assymptotic immunity	Lost immunity?

COVID-19 FUTURE OPERATIONS

FUOP scenarios to stimulate imagination: Therapeutics

Pandemic is over	Endemic is reached	Transition to endemic	Pandemic continues	Pandemic escalates
Low incidence	Regular peaks, mild	Regular Peaks	Regular, Hospitalization	Very high - Zero Covid
Adapted vaccinat				w vaccination
Additive immunit				st immunity?
No therapy resist				sistance to therapy



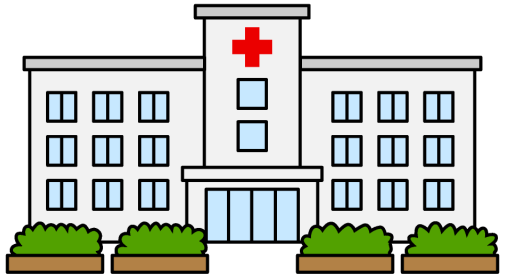
https://doi.org/10.1101/2022.05.19.22275291

COVID-19 FUTURE OPERATIONS

FUOP scenarios to stimulate imagination: Vulnerable Population

Pandemic is over	Endemic is reached	Transition to endemic	Pandemic continues	Pandemic escalates
Low incidence	Regular peaks, mild	Regular Peaks	Regular, Hospitalization	Very high - Zero Covid
Adapted vaccinations	Adaptation impossible	Adaptation impossible	Adaptation impossible	New vaccination
Additive immunity	Additive immunity	Additive immunity	Assymptotic immunity	Lost immunity?
No therapy resistance	Resistance tolerated	Resistance to therapy	Resistance to therapy	Resistance to therapy
Vulnerables “safe”	Vulnerables at risk	High risk	High risk	High risk

COVID-19 FUTURE OPERATIONS



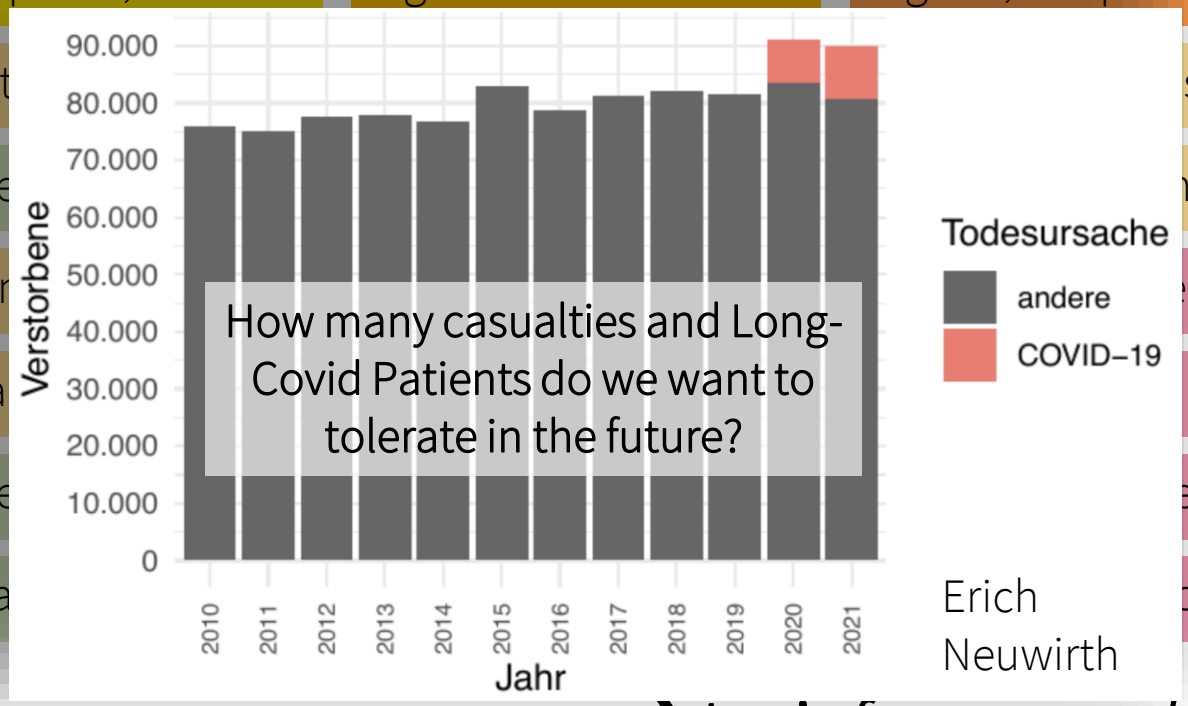
FUOP scenarios to stimulate imagination: Health care

Pandemic is over	Endemic is reached	Transition to endemic	Pandemic continues	Pandemic escalates
Low incidence	Regular peaks, mild	Regular Peaks	Regular, Hospitalization	Very high - Zero Covid
Adapted vaccinations	Adaptation impossible	Adaptation impossible	Adaptation impossible	New vaccination
Additive immunity	Additive immunity	Additive immunity	Assymptotic immunity	Lost immunity?
No therapy resistance	Resistance tolerated	Resistance to therapy	Resistance to therapy	Resistance to therapy
Vulnerable “safe”	Vulnerable at risk	High risk	High risk	High risk
Rare Hospitalizations	Small healthcare adapt.	Periodic hospital peaks	Healthcare challenged	Triage

COVID-19 FUTURE OPERATIONS

FUOP scenarios to stimulate imagination: Society and compliance

Pandemic is over	Endemic is reached	Transition to endemic	Pandemic continues	Pandemic escalates
Low incidence	Regular peaks, mild	Regular Peaks	Regular, Hospitalization	Very high - Zero Covid
Adapted vaccinations	Adaptat		ssible	New vaccination
Additive immunity	Additive		nunity	Lost immunity?
No therapy resistance	Resistar		erapy	Resistance to therapy
Vulnerable “safe”	Vulnera			High risk
Rare Hospitalizations	Small he		enged	Triage
No attention needed	Complia		cal	Compliance critical



→ *Let’s focus on what we can change!*

COVID-19 FUTURE OPERATIONS

1. What parameters influence the further development of the Covid-19 pandemic?

2. How to prepare from a psychosocial perspective?
   Communication and trust as parameters of a successful pandemic response

COVID-19 FUTURE OPERATIONS

How to prepare from a psychosocial perspective? - Starting position

- After two years of pandemic, rising costs and a war in Europe, people are in a state of **emotional and psychological exhaustion, perceived uncertainty** is high **AND everyday life is demanded to be like "Its over – once again"**
- **Psychological and psychosocial problems have increased**, often become visible with a time delay after acute crisis states (e.g. depression, addiction, socio-economic problems) (e.g. Pieh et al., 2021; Sieberer et al., 2021)
- Probability that (probl. strict) **measures will be supported** and tolerance for incoherent communication **is decreasing**
- However, **the overall goal must be to minimize negative health and psychosocial consequences for everyone and to "win" the citizens for** the ongoing fight against COVID if necessary

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How to prepare from a psychosocial perspective? Communication and trust as parameters of a successful pandemic response

1. Trust as a central basis - regardless of the scenario that occurs
2. Basic principles of a (trust-promoting) communication strategy
3. Specific aspects of a communication strategy for autumn

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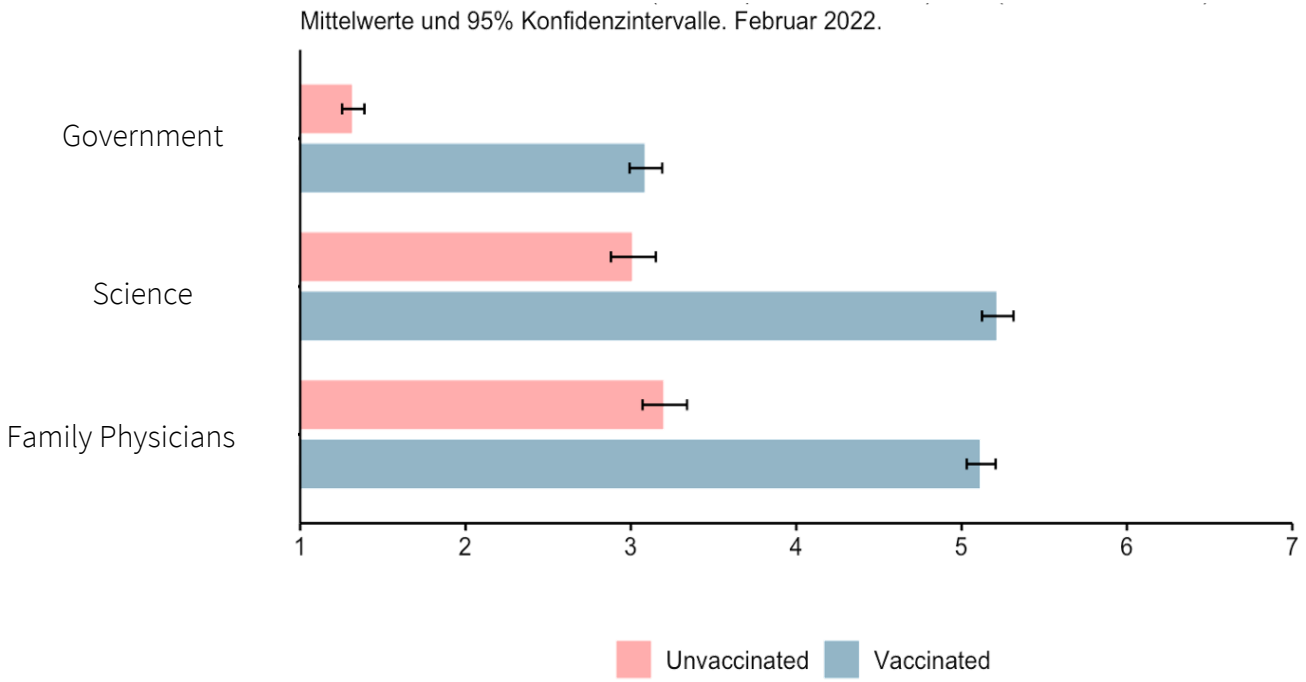
1. Trust as a central basis

- Acceptance of measures that do not directly and immediately serve one's own benefit is based on a high level of trust in the responsible persons, in politics, health care and decision-makers (otherwise: high costs, polarization, attempt to escape)
- Trust makes people capable of acting when uncertainty and complexity are high (too high, to individually cope with)
- High trust is e.g. related to higher willingness to vaccinate or lower belief in conspiracy theories (e.g. Betsch et al, 2018; 2019; Böhm, 2022)

COVID-19 FUTURE OPERATIONS

Trust in institutions and decision makers

How much trust do you have, that the following institutions are able to cope well with the Corona virus….



(Betsch et al., 2022; Böhm 2022; Sprengholz et al., 2022)

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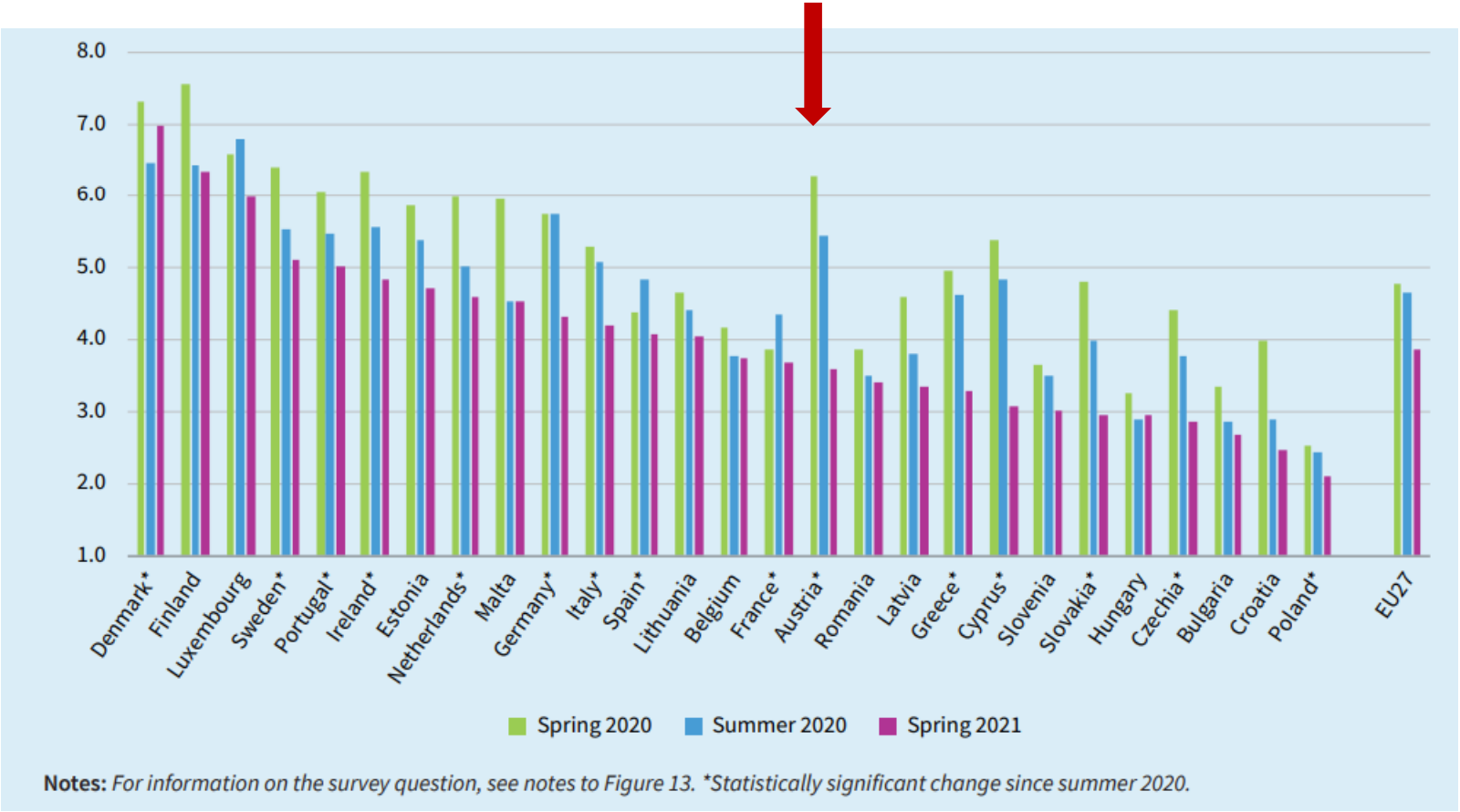
Trust in institutions and decision makers

Trust in national governments by country and survey round, EU 27 (%), Eurofound 2021

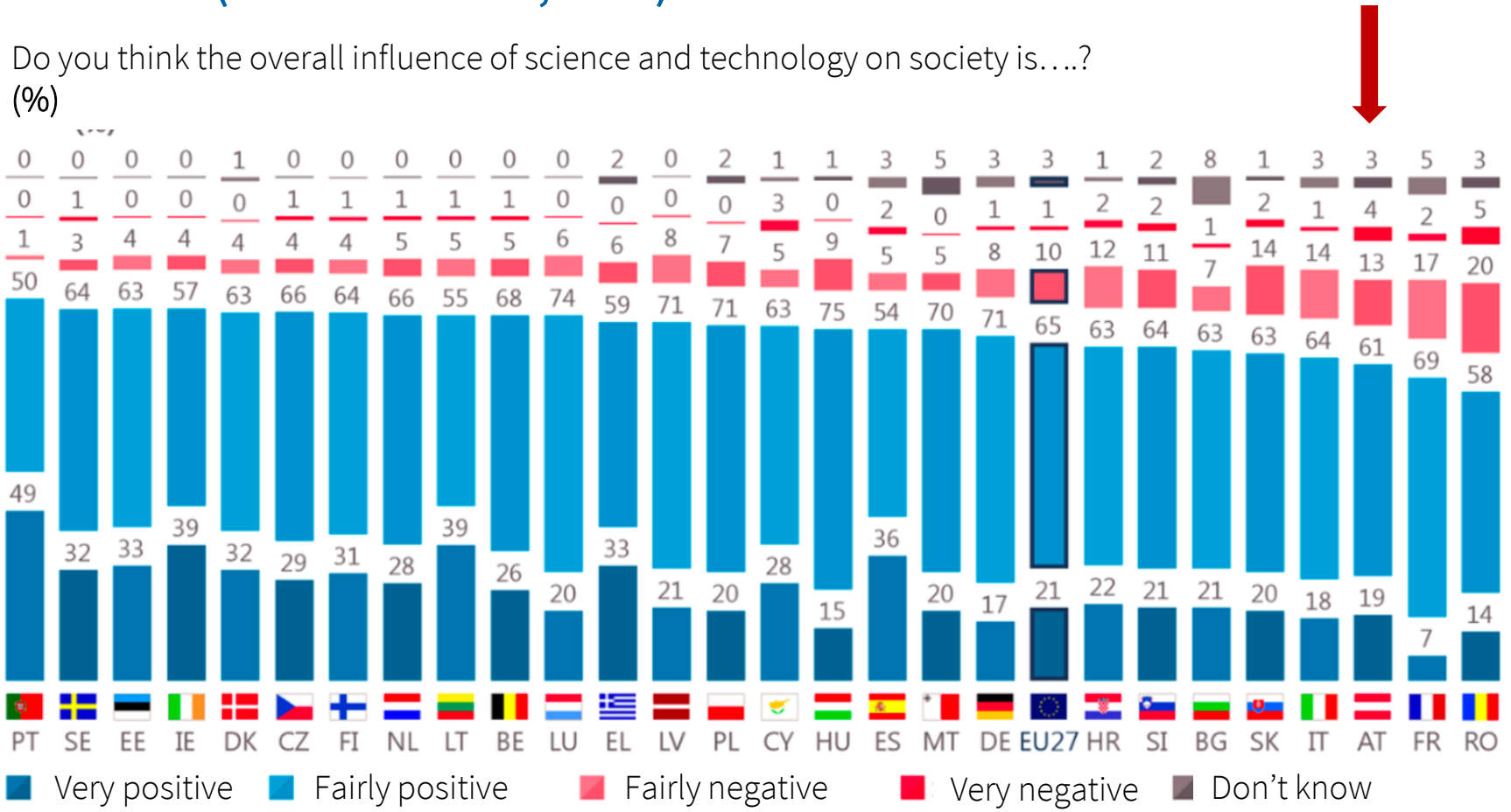


Notes: *For information on the survey question, see notes to Figure 13. *Statistically significant change since summer 2020.*

COVID-19 FUTURE OPERATIONS

Trust in Science (Eurobarometer, 2021)

QA6 Do you think the overall influence of science and technology on society is….?
(%)



https://www.citizen-science.at/blog/oesterreich-und-die-wissenschaft-eine-komplizierte-beziehung

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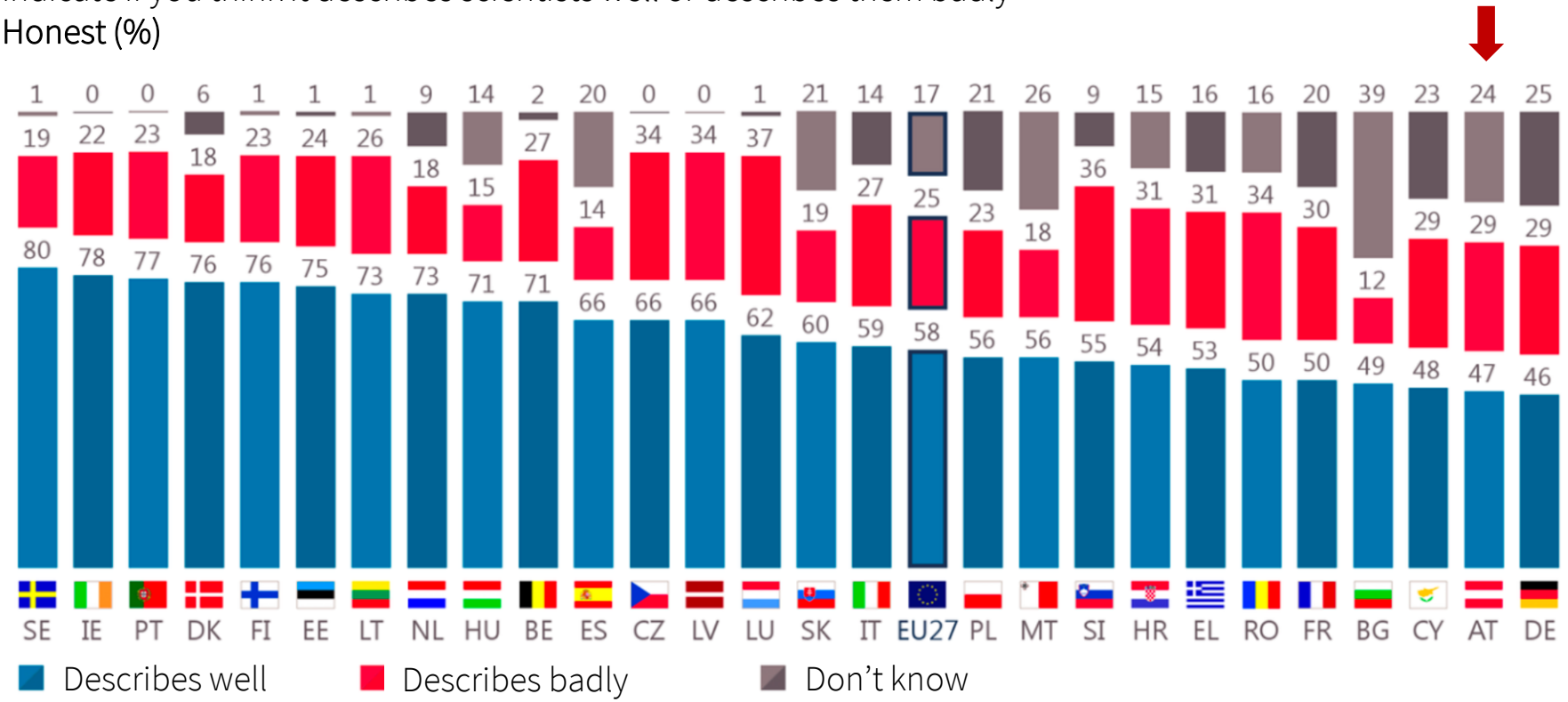
Trust in Science (Eurobarometer, 2021)

QA12a.5 The following is a list of characteristics that can be associated with scientists today. For each characteristic, indicate if you think it describes scientists well or describes them badly

Honest (%)



(European Commission, 2021)

https://www.citizen-science.at/blog/oesterreich-und-die-wissenschaft-eine-komplizierte-beziehung

COVID-19 FUTURE OPERATIONS

Need for action with regard to next autumn: Promoting trust

High relevance of a systematic consideration of preconditions for trust:

- Competence: Factually sound knowledge (based on transparent involvement of experts) should be the base for decisions and should be appropriately communicated to the population; it should be spoken "with one voice“
- Transparency: Openness and comprehensible language with clear terms, strategies, rules and criteria for success, which also provides honest information about possible costs and efforts
- Good will: Interests of affected persons are placed in the focus
- Integrity: Actors inform themselves honestly and carefully and behave authentically. Moreover, they should not give the impression that they are pursuing their own interests or that they are dependent on others

COVID-19 FUTURE OPERATIONS

Need for action with regard to next autumn: Promoting trust

From a psychosocial perspective, **it is strongly recommended that any policy-level measurement planning should be systematically embedded in a larger flanking process dedicated to trust-building factors** - and this should start NOW

For details see:

„Psycho-soziale Rahmenbedingungen für eine hohe Beteiligung an den COVID-19 Maßnahmen ‚Monitoring' und ‚Impfung'"
https://futureoperations.at/fileadmin/user_upload/k_future_operations/20201212_Expert_Opinion_FOP_AG_Gesellschaft_Psychosoziales_Final.pdf

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2. Basic principles of a (trust-promoting) communication strategy

- Clear and comprehensible goals as the basis for coherent communication
- Clear communication of how the goals are to be achieved and how one can contribute to the achievement of the goal (make capable of action!)
- Credibility: Goals must not seem arbitrary, should apply to the whole of Austria (no "country patchwork")
- Defining goals is by no means trivial - a systematic process is necessary:
  - How to define a goal?
  - Who should be involved?
  - Necessary for this: Evaluation of the previous coping strategy and process reflection necessary to avoid previous mistakes - data-based

COVID-19 FUTURE OPERATIONS

2. Basic principles of a (trust-promoting) communication strategy

- Sustainable and forward-looking action and timely communication of goals as well as measures; co-planning implementation
- Coherence in communication of basic objectives promotes autonomous adaption of specific measures (“Courage for the gap")
- Consider the basic needs in every step and for every measure: Competence, autonomy and social inclusion (Deci & Ryan, 2000)
  Responsibility/Autonomy in goal achievement should be strengthened and better communicated.
- Individuals must have opportunities for self-determination to feel effective (again).

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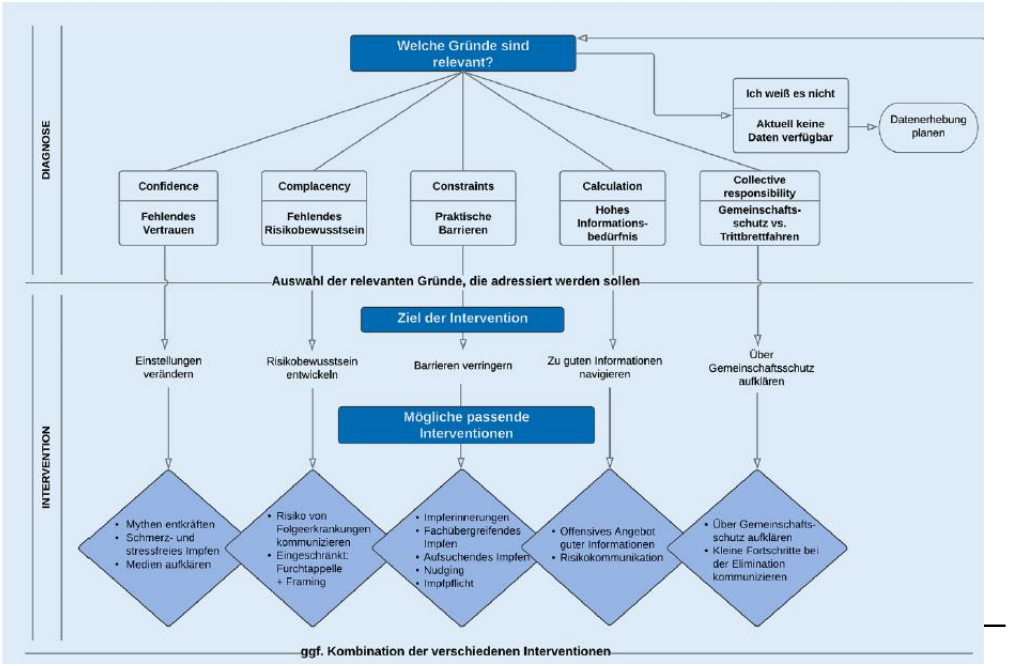
3. Specific aspects of a communication strategy for autumn

- Target group-specific communication and measures
- **Optimization of vaccination communication:** create clarity about target groups, de-emotionalize communication, emphasize the common ground instead of the differences, reduce polarization in a targeted manner

(Betsch et al., 2018; 2019)

- **Consider and involve supporters of the last two years:** exhaustion states also here, underline reasons and necessity for following measures (even if effect did not occur as desired), stop beginning resignation by making successes visible
- **Create clarity:** Communicate effectiveness and interaction of measures in simple language and with robust statements (graphs, examples, understandable quantitative information), explain impact of compliance with measures (compliance)



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FAZIT

Resume

- **Finally, individuals DECIDE** whether they support measures, forego immediate benefits, accept sacrifices
- **You have to "meet people where they are"** - COVID and the war in Europe make us feel insecure, questions all our routines in live, many feel exhausted **- decision-making under uncertainty needs a lot of trust and has many emotional aspects**
- People **need to feel effective** and able to act
- Specific consequences for **different (vulnerable) groups** and dealing with the increasing **polarization in society** are very relevant
- **Transparency and credibility** is needed and there is a high desiderate for reasoned, consistent overall concepts that are well implemented and foster trust - work on this must start now

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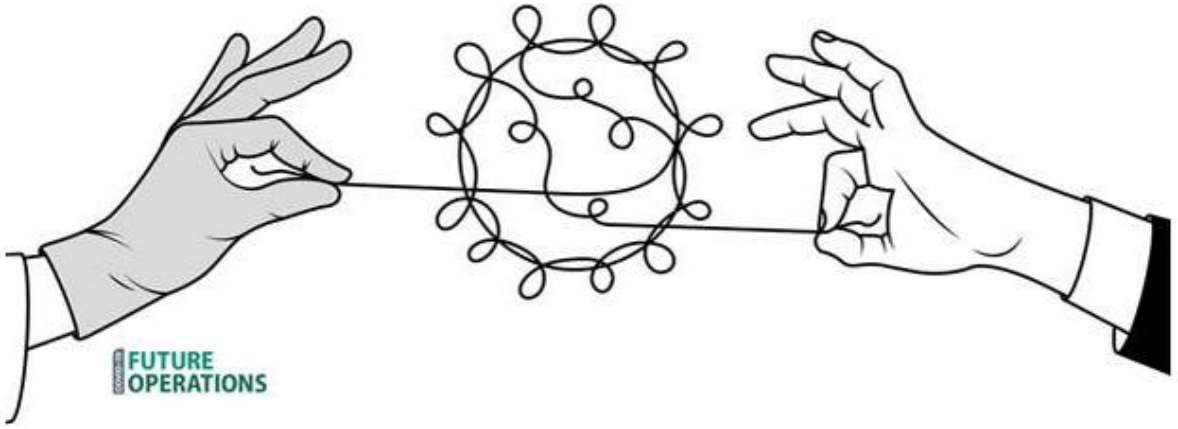
For details:

- 23.5., 18:00-19:30 - Panel Discussion 1 – Vulnerable Populationen: Psychosoziale Bedingungen, Diversität und Inklusion (in German)
- 24.5., 09:00-10:30 - What are the best approaches to increase trust, to improve communication, and to reduce polarization? (Thematic Session 5)
- 24.5., 14:00-15:30 - How do we make daycare and schools "safe" in spite of the pandemic? - Panel Discussion (Thematic Session 7)



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