



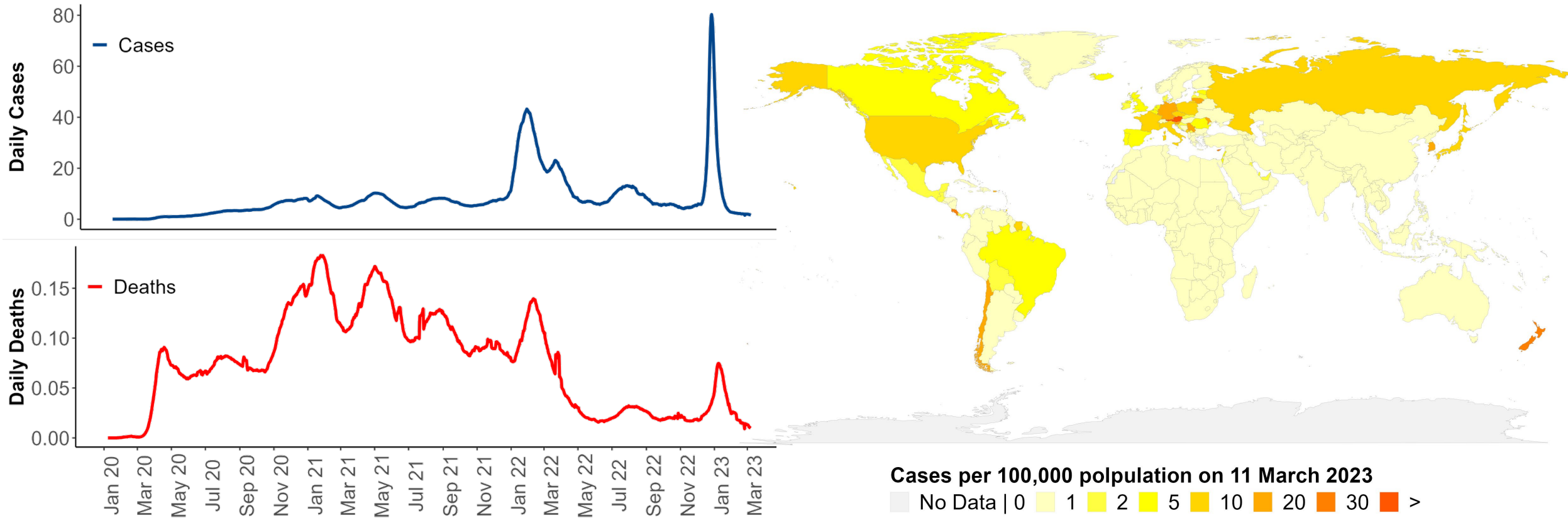
COVID-19 UPDATE

12 March 2023

1. Global Covid-19 pandemic at a glance

Time series of reported cases & deaths

7-day rolling average per 100,000 population



Source: World Health Organization (WHO) & Our World in Data | Data to 11 March 2023

2. Covid-19 in South Africa

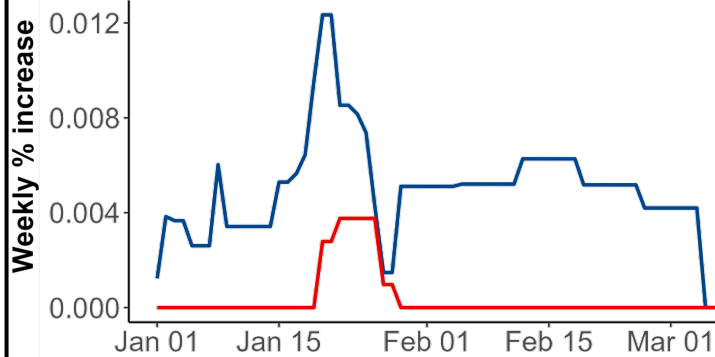
Current

4061578 reported cases

102595 deaths

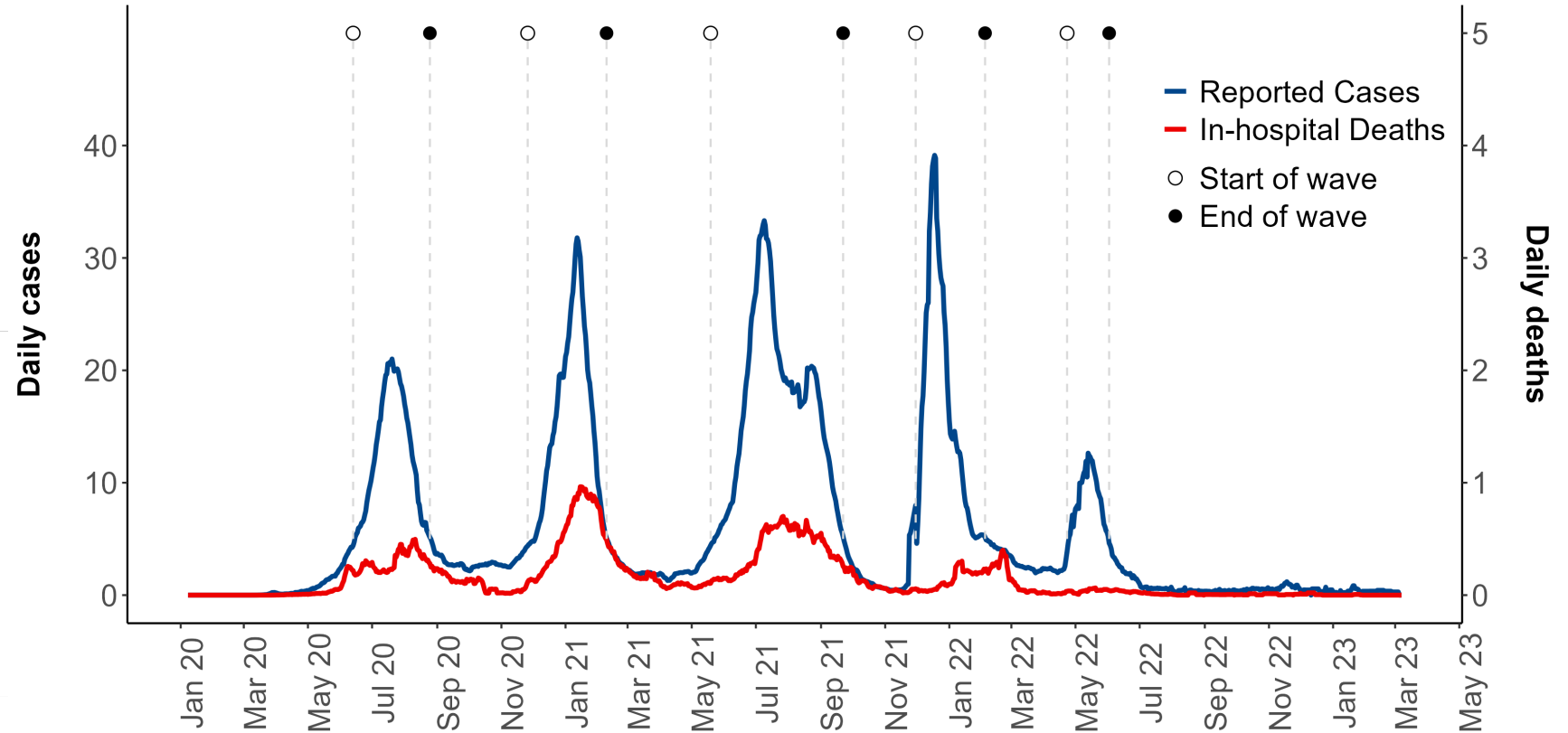
Since 01 January 2023

Reported Cases: 12998; Deaths: 27; CFR: 0.21%



Time series of reported cases & deaths

7-day rolling average per 100,000 population



Source: World Health Organization (WHO) & Our World in Data | Data to 11 March 2023

3. Does mild acute Covid-19 decrease the risk of Long Covid?

- **Long Covid affects even mild-moderate cases of SARS-CoV-2 infection** (Petersen et al., 2021. Clinical Infectious Diseases)
- **Long Covid is not associated with respiratory complications or initial disease severity** (Townsend et al., 2021. Ann Am Thorac Soc)
- **In individuals at low risk of COVID-19 mortality with ongoing symptoms, 70% have impairment in one or more organs 4 months after initial COVID-19 symptoms** (Dennis et al., 2021. BMJ Open)
- **Presence of >5 symptoms in the acute stage is associated with a higher risk of developing Long Covid** (Sudre et al., 2020. medRxiv <https://doi.org/10.1101/2020.10.19.20214494>.)
- **Simultaneous presence of >15 COVID-19 symptoms is related to a higher probability of severe long COVID-19** (Menezes Jr et al., 2022. Cureus)

4. Vaccination before SARS-CoV-2 infection reduced risk of long Covid



vaccines

Protective effect of COVID-19 vaccination against long COVID syndrome:
A systematic review and meta-analysis

Atsuyuki Watanabe ^a, Masao Iwagami ^{b,c}, Jun Yasuhara ^d, Hisato Takagi ^e, Toshiki Kuno ^f

- **PubMed and EMBASE databases (Sep 2022) – observational studies**
 - 6 studies (536,291 unvaccinated patients; 84,603 patients vaccinated before SARS-CoV-2 infection)
 - 6 studies (8,199 long COVID patients vaccinated after SARS-CoV-2 infection)
- **Two-dose vaccination vs no vaccination before SARS-CoV-2 infection**
 - lower risk of long COVID
 - lower risk of persistent fatigue and pulmonary disorder
- **20% of those with ongoing long COVID symptoms experienced symptomatic improvement after vaccination (2 weeks – 6 months)**

5. Paxlovid reduces risk of developing Long Covid

medRxiv
THE PREPRINT SERVER FOR HEALTH SCIENCES

Nirmatrelvir and the Risk of Post-Acute Sequelae of COVID-19

Yan Xie^{1,2}, Taeyoung Choi^{1,2}, and Ziyad Al-Aly^{*1,2,3,4,5}

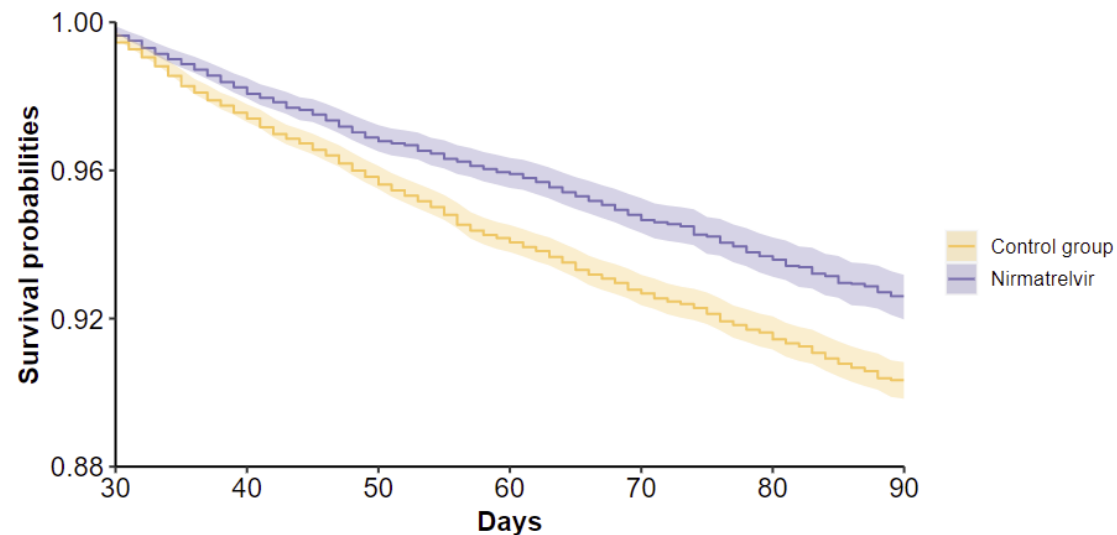


Figure. Post-acute sequelae of COVID-19

- Cohort study
 - Patients treated with oral nirmatrelvir <5 days after the positive test (n=9217)
 - Control group (n=47,123)
- Nirmatrelvir reduced risk of Long Covid by 26% (Hazard ratio = 0.74) regardless of vaccination status and history of prior infection

6. Metformin may reduce risk of Long Covid

medRxiv
THE PREPRINT SERVER FOR HEALTH SCIENCES

Outpatient treatment of Covid-19 with metformin, ivermectin, and fluvoxamine and the development of Long Covid over 10-month follow-up.

Carolyn T. Bramante, MD, MPH¹; John B. Buse, MD, PhD²; David Liebovitz, MD³; Jacinda Nicklas, MD, MPH⁴; Michael A. Puskarich, MD⁵; Ken Cohen, MD⁶; Hrishikesh Belani, MD, MS⁷; Blake Anderson, MS⁸; Jared D. Hulino, PhD⁹; Christopher Tironelli, MD, MS¹⁰; Jennifer

- **COVID-OUT randomized, placebo-controlled trial (US)**
- **1323 participants**
→ **1070 followed up >9 months**
- **Treatment with metformin during acute Covid-19 infection (within <4 days of symptom onset) prevented over 40% of Long Covid cases**

