Top news:

- WHO published an updated landscape analysis of COVID-19 vaccine candidates: 7
 candidate vaccines are now in clinical evaluation & 82 candidate vaccines are in preclinical
 evaluation. Dr Tedros once again highlighted the strain COVID-19 puts on immunisation
 efforts and malaria eradication efforts.
- Sanofi & Regeneron announced first clinical trials results of Kevzara: the drug showed no notable clinical benefits in phase 2 of the trial, the trial will now be amended so that only "critical" patients continue to be enrolled to receive Kevzara or a placebo.
- Roche's Actemra improves significantly clinical outcomes of patients with moderate or severe COVID-19 pneumonia in small-scale study in France.
- Shionogi announced to develop a recombinant protein vaccine for COVID-19.
- Later this week WHO will launch its second Strategic Preparedness and Response Plan, with an estimate of the resources needed for the next stage of the global response.

ACCESS & AFFORDABILITY

G20: Saudi G20 Presidency Welcomes the Launch of "Access to COVID-19 Tools (ACT)
 Accelerator" Initiative. The Saudi G20 Presidency welcomes the launch of the ACT
 Accelerator, a landmark, global and timely collaboration for the accelerated development,
 production and equitable access to new COVID-19 tools.

R&D

• Reuters: Special Report: Countries, companies risk billions in race for coronavirus vaccine. "The crisis in the world is so big that each of us will have to take maximum risk now to put this disease to a stop," said Paul Stoffels, chief scientific officer at J&J. "If it fails," Stoffels told Reuters, "it will be bad." Historically, just 6% of vaccine candidates end up making it to market, often after a years-long process that doesn't draw big investments until testing shows a product is likely to work. One underlying fear that even if a vaccine does prove effective, there won't be enough to go around. People involved in the global vaccine race told Reuters that the greatest incentive for countries to promise to share coronavirus vaccines may be the uncertainty around which ones will work. Since no country can be sure the candidates it backs will prove successful, committing to sharing with other nations can help assure they'll have an initial supply to inoculate health care workers and other critical populations.

MANUFACTURING/ SUPPLY OF MEDICINES

- **DW:** After coronavirus, don't write off China as world's factory. The coronavirus pandemic has exposed the overreliance of companies and governments on China for vital drugs and medical equipment such as face masks and ventilators. Although the current disruptions due to the pandemic haven't caused major drug shortages, largely thanks to companies maintaining 8-10 months of inventories, they have spurred calls to end China and India's stranglehold on the industry by relocating the production of medicines to the US and Europe.
- Chemical & Engineering News: COVID-19 is reshaping the pharmaceutical supply chain. The coronavirus pandemic may mark a rebalancing of where drugs are made as nations recognize a security imperative. But there is no doubt that China will continue to control a large swath of the global pharmaceutical supply chain for years to come, posing a

formidable risk. And industry watchers warn that the full impact of the COVID-19 pandemic won't be known for months.

GLOBAL ECONOMIC IMPACT

- **Bloomberg:** Global \$6 Trillion Slump May Be Optimistic, Economists Warn. The coronavirus pandemic will cause the global economy to shrink 4% in 2020, according to a Bloomberg Economics estimate that assumes a recovery starts in the second half of the year. Relative to expectations at the start of the year, the cost of lost output is more than \$6 trillion.
- Financial Times: Asia's emerging markets brace for economic fallout of coronavirus. "Asia is in the midst of a devastating recession," said Gareth Leather, senior Asia economist at Capital Economics, a research firm. "Even if the virus is contained, recoveries will be very gradual." Countries are better insulated than in 1997 financial crisis but uncertainty weighs heavily.
- **Financial Times**: Coronavirus set to push 29m Latin Americans into poverty. "We stand before another lost decade," said Alicia Bárcena, head of the UN's Economic Commission for Latin America and the Caribbean (ECLAC). The region already had seven years of bad economic performance even before the virus.

VACCINE/ TREATMENT DEVELOPMENT & DONATIONS

IFPMA Members

- The Japan Times: Shionogi to develop coronavirus vaccine, trials eyed for this year. The
 Osaka-based company has decided to develop a recombinant protein vaccine through its
 subsidiary UMN Pharma Inc. while also seeking to discover therapeutic drugs for the
 disease. Shionogi said it is looking to offer the vaccine for 10 million people.
- APHP: Tocilizumab improves significantly clinical outcomes of patients with moderate or severe COVID-19 pneumonia. A total of 129 patients were randomized: 65 to standard of care + tocilizumab (Actemra/Roche) and 64 to standard of care alone. A significantly lower proportion of patients reached the primary outcome in the tocilizumab arm. Results of this study will be submitted for publication in a peer-reviewed journal. The primary composite outcome was need for ventilation (non-invasive or mechanical) or death at day 14.
- STAT News: Closely watched arthritis drug disappoints as a Covid-19 treatment, studies show. In the preliminary Phase 2 analysis, Kevzara (Sanofi Regeneron) had no notable benefit on clinical outcomes when combining the "severe" and "critical" groups, versus placebo. The trial will now be amended so that only "critical" patients continue to be enrolled to receive Kevzara 400 mg or placebo. The result could have an impact not only for their treatment, Kevzara, but also for a similar drug from Roche, Actemra, that is being used off-label in many hospitals. It also may lower the odds that other repurposed medicines used against autoimmune diseases like rheumatoid arthritis will benefit Covid-19 patients.
- **Kyodo News:** <u>Japan to approve Remdesivir for coronavirus patients in May</u>. "The pharmaceutical approval (of remdesivir/Gilead) will be possible shortly," Abe told a parliamentary session on Monday.
- Novartis: Novartis in Canada initiates Community Strong COVID-19 response program.
 Novartis Pharmaceuticals Canada Inc. and Sandoz Canada Inc. announced \$500,000 will be given to community and patient groups as part of the companies' newly created Community Strong COVID-19 response program.

Others

- BBC News: <u>Coronavirus: How India will play a major role in a Covid-19 vaccine</u>. US Secretary of State Mike Pompeo said that India and the US were working together to develop vaccines against the coronavirus.
- New York Post: New York clinical trial testing heartburn medication as coronavirus treatment. More than 150 people so far are taking part in the study, which began earlier this month and is being conducted by the Feinstein Institutes for Medical Research, the research arm of Northwell Health.
- Kalinga TV: Researchers develop molecule for potential COVID-19 drug in India. Shiv Nadar
 University in Greater Noida announced that its researchers have created a molecule that
 has the potential to be developed into a drug that can cure Acute Respiratory Distress
 Syndrome (ARDS) in COVID-19 patients.

PRICING

• Pink News: Drug used in HIV treatment triples in price after being rejected for coronavirus use. The drug crofelemer, marketed as Mytesi, is used to treat diarrhoea that can be caused by anti-viral drugs, specifically Remdesivir. This isn't the first time critical drugs needed by HIV patients have been impacted by the coronavirus pandemic.

DIAGNOSTICS

Politico US: <u>Unreliable antibody tests flood the market as FDA waives quality reviews</u>. But
many of the tests available now aren't accurate enough. Some are giving too many false
positive results, which could mislead some people into thinking they have already been
infected. Public health experts say the FDA shouldn't have waived its reviews of antibody
tests and are calling on it to crack down. To date, the FDA has granted a formal emergency
use authorization, in which it reviews data from manufacturers, to just seven of the tests.

COVID-19 & AFRICA

• Metro: Africa at 'beginning' of coronavirus pandemic with 40% rise in cases. The WHO has said there could be 10,000,000 cases of coronavirus in Africa within just three to six months unless the rate of infection is contained.

EARNINGS & COVID-19

Market Screener: Bayer: Starts Year With Strong 1Q Performance, Say Analysts. Bayer said
1Q sales rose to 12.85 billion euros from EUR12.25 billion, beating analysts' expectations
of EUR12.61 billion. Bayer's pharmaceuticals business benefited from coronavirus-related
stock piling for some products like Xarelto, while others like Eylea were negatively affected
by the pandemic, says Bryan Garnier. "In all, Pharmaceuticals were more or less in line
with expectations and do not warrant specific comments."

EPIDEMIOLOGY

- Financial Times: <u>US</u>, <u>China researchers collaborate in hunt for virus origin</u>. Ian Lipkin, director of the Center for Infection and Immunity at the Mailman School of Public Health at Columbia University, said he was working with a team of Chinese researchers to determine whether coronavirus emerged in other parts of China before it was first discovered in Wuhan in December. The effort relies on help from the Chinese Center for Disease Control and Prevention.
- **Bloomberg**: Coronavirus Lingers in Air of Crowded Spaces, New Study Finds. At two hospitals in Wuhan, China, researchers found bits of the virus's genetic material floating in

the air of hospital toilets, an indoor space housing large crowds, and rooms where medical staff take off protective gear. The study, published Monday in the journal Nature Research, didn't seek to establish whether the airborne particles could cause infections.

POST-COVID-19

• The Guardian: Halt destruction of nature or suffer even worse pandemics. The coronavirus pandemic is likely to be followed by even more deadly and destructive disease outbreaks unless their root cause – the rampant destruction of the natural world – is rapidly halted, the world's leading biodiversity experts have warned.

WHO – Daily COVID-19 update, 27 April

Statement of Dr Tedros from today's media briefing here.

- The launch of the Access to COVID-19 Tools Accelerator on Friday was a powerful demonstration of that solidarity.
- WHO is deeply grateful to the many world leaders and partners who have come together to ensure no-one misses out on life-saving vaccines, diagnostics or therapeutics.
- Developing a COVID-19 vaccine has been accelerated because of previous work WHO and partners have done over several years on vaccines for other coronaviruses including SARS and MERS.
- Although COVID-19 is taking a heavy toll, WHO is deeply concerned about the impact the pandemic will have on other health services, especially for children.
- Gavi, the Vaccine Alliance, has estimated that at least 21 low- and middle-income countries are already reporting vaccine shortages as a result of border closures and disruptions to travel.
- To coincide with World Malaria Day, a new modelling analysis published last week estimates the potential disruption to malaria services from COVID-19 in 41 countries in sub-Saharan Africa. In the worst-case scenario, the number of malaria deaths in sub-Saharan Africa could double.
- WHO continues to be concerned about the increasing trends in Africa, Eastern Europe, Latin America and some Asian countries. As in all regions, cases and deaths are underreported in many countries in these regions because of low testing capacity.
- Later this week WHO will launch its second Strategic Preparedness and Response Plan, with an estimate of the resources needed for the next stage of the global response.
- Tomorrow, Dr Tedros will be participating in a webinar for parliamentarians hosted by WHO, the Inter-parliamentary Union, and the United Nations Office for Disaster Risk Reduction, to discuss the role parliaments can play to reduce risks, strengthen emergency preparedness and increase resilience.

WHO: DRAFT landscape of COVID-19 candidate vaccines – 26 April 2020

- 7 candidate vaccines in clinical evaluation
- 82 candidate vaccines in preclinical evaluation

WHO: WHO Working Group – Solidarity core protocol for therapeutics

• Objective: To develop a Core protocol to engage multiple sites/ countries, multi-arm randomized controlled trial to rapid provide reliable evidence about the efficacy and safety for each experimental arm and dosage against standard of-care control arm.