

RESOLVED that shareholders of Moderna Inc. (“Moderna”) ask the Board of Directors to commission a third-party report to shareholders, at reasonable expense and omitting confidential and proprietary information, analyzing the feasibility of promptly transferring intellectual property and technical knowledge (“know-how”) to facilitate the production of COVID-19 vaccine doses by additional qualified manufacturers located in low- and middle-income countries, as defined by the World Bank.

SUPPORTING STATEMENT

Widespread vaccination is critical to achieving herd immunity and preventing the development of more transmissible and vaccine-resistant variants. Vaccine administration has been strikingly unequal. As of October 21, 2021, high-income countries have administered 134 doses, while low-income countries have administered only four doses, per 100 residents.¹ Vaccine inequity could cost the global economy over \$2 trillion.²

Moderna touts its agreement to sell 500 million doses to COVAX,³ and 110 million doses to the African Union.⁴ This is insufficient compared to global need. High-income countries account for a larger share of doses shipped by Moderna than any other manufacturer.⁵

Independent estimates indicate that Moderna will miss its 2021 production target of one billion doses by 33%. To ensure equitable access, Moderna should transfer the intellectual property and know-how associated with its vaccines to allow manufacture in low- and middle-income countries. Pressure, including by the U.S. government, is intensifying on Moderna to make such transfers.⁶

Moderna has committed not to enforce its COVID-19 vaccine patents during the pandemic,⁷ but other manufacturers cannot produce Moderna’s vaccine quickly without full technology transfer, including know-how regarding the manufacturing process. An effort to replicate Moderna’s vaccine by the World Health Organization’s mRNA Vaccine Technology Transfer Hub, which was recently established to facilitate technology transfer,⁸ has stalled because Moderna has not responded to requests to share know-how.⁹

¹ <https://ourworldindata.org/covid-vaccinations> (last visited Oct. 22, 2021)

² <https://www.cnbc.com/2021/08/27/vaccine-inequality-could-cost-the-global-economy-trillions-report.html>

³ <https://investors.modernatx.com/news-releases/news-release-details/our-global-commitment-vaccine-access>

⁴ <https://www.reuters.com/world/africa/exclusive-african-union-buy-up-110-million-moderna-covid-19-vaccines-officials-2021-10-26/>

⁵ <https://www.nytimes.com/2021/10/09/business/moderna-covid-vaccine.html>

⁶ <https://endpts.com/as-pressure-to-share-technology-mounts-biontech-selects-rwanda-for-latest-vaccine-site/>; <https://www.nytimes.com/2021/09/22/us/politics/covid-vaccine-moderna-global.html>

⁷ <https://investors.modernatx.com/news-releases/news-release-details/our-global-commitment-vaccine-access>

⁸ <https://www.who.int/news-room/articles-detail/establishment-of-a-covid-19-mrna-vaccine-technology-transfer-hub-to-scale-up-global-manufacturing>

⁹ <https://www.news24.com/news24/Africa/News/covid-19-who-backed-vaccine-hub-for-africa-to-copy-modernas-shot-20210914>

Though CEO Stephane Bancel has said other companies would take 12 to 18 months to produce Moderna's vaccine,¹⁰ quicker production is possible with full technology transfer: Lonza began producing it within six months after the transfer was announced.¹¹ Moderna's former director of chemistry estimates that modern factories could start manufacturing mRNA vaccines within a few months if sufficient know-how is transferred.¹² The New York Times has identified ten emerging market manufacturers that can produce the vaccine.¹³

Moderna has not yet selected a country for its announced African mRNA vaccine plant, and Bancel has said that it would take two to four years to construct and validate. Thus, it will not ameliorate current supply challenges.

We believe backlash from Moderna not sharing information needed to manufacture its vaccine in low- and middle-income countries could tarnish its reputation, threaten its social license to operate, and undermine relations with the U.S. government. We urge Moderna to analyze the feasibility of providing know-how to qualified manufacturers that could independently increase supply and help end the pandemic.

¹⁰ <https://www.nature.com/articles/d41586-021-02383-z>

¹¹ <https://jamanetwork.com/journals/jama/fullarticle/2781756>

¹² <https://www.project-syndicate.org/onpoint/big-pharma-blocking-wto-waiver-to-produce-more-covid-vaccines-by-joseph-e-stiglitz-and-lori-wallach-2021-05>; <https://www.devex.com/news/where-are-we-on-covid-19-after-a-year-of-trips-waiver-negotiations-101795>

¹³ <https://www.nytimes.com/interactive/2021/10/22/science/developing-country-covid-vaccines.html>