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## A Year In Review

Bringing scientific breakthroughs to patients around the world.

In 2021, we broke new ground for patients with regulatory approvals for new medicines or indications, the delivery of our life-saving COVID-19 vaccine to populations around the world, and the introduction of a potentially game-changing oral treatment for COVID-19.



### Letter from Our Chairman & CEO



#### To Our Shareholders

2021 was a watershed year for Pfizer. A year in which we set all-time highs in all major areas of focus for our company.

- We reached an estimated 1.4 billion patients with our medicines and vaccines. That's roughly one out of every six people on Earth. Never before has Pfizer's patient impact been so wide-reaching.
- We initiated 13 pivotal clinical studies the highest number ever for Pfizer.
- We increased our investments in Research & Development (R&D) from \$8.9 billion in 2020 to \$10.5 billion in 2021.
- And we grew revenues to \$81.3 billion (reflecting 92% operational growth),
   Reported Diluted EPS to \$3.85, and Adjusted Diluted EPS to \$4.42."

During the year, we also continued to lead the battle against COVID-19. Throughout 2021, in collaboration with BioNTech, we brought our COVID-19 vaccine to more populations and further ramped up our manufacturing and distribution capabilities. As a result, the market share of our COVID-19 vaccine has continued to grow, representing 70% of all doses distributed across the U.S. and EU as of March 5, 2022.

Late in the year, our breakthrough oral treatment, Paxlovid™, became the first oral treatment for COVID-19 to receive an Emergency Use Authorization (EUA) from the U.S. Food & Drug Administration (FDA). As of March 7, 2022,

Paxlovid had received emergency or conditional authorization for use with certain populations in more than 50 countries. We are continuing our discussions with governments and regulators as we endeavor to bring this potential gamechanging treatment to patients around the world.

The success of our COVID-19 vaccine and treatment programs has not only made a positive difference in the world; I believe it has fundamentally changed our company and our culture forever. Colleagues across Pfizer are inspired by our achievements and more determined than ever to be part of the next breakthrough. And in a 2021 survey, 95% of our colleagues said they are proud to work for Pfizer, which ranks among the best in corporate America.

Our COVID-19 leadership also has fundamentally changed the way Pfizer is perceived externally by shining a light on the tremendous value our science can bring to society.

- We improved our ranking from fourth to second among large biopharma companies in the PatientView Global Survey.
- According to Morning Consult, 61% of Americans have a favorable view of Pfizer, which is up 33 points since January 2020.
- And just last month, Fortune ranked us fourth on its annual World's Most Admired Companies list – the highest ranking we have ever achieved.



## Moving at "Lightspeed" Across All Our Therapeutic Areas

While so much focus has been on our COVID-19 programs, we've never lost sight of the needs of other patients – patients whose needs are no less urgent. In fact, we are applying the "lightspeed" principles developed for our COVID-19 work to other therapeutic areas to help ensure we continue to move at the speed of science for the benefit of all our patients.

In 2021, our scientists' focus and determination led to many potential life-changing discoveries. This included creating a "template" for helping cancer-fighting molecules break through the blood-brain barrier to target cancer that has spread to the brain; potential breakthroughs that seek to address the underlying causes of inflammatory skin diseases; and a potential treatment for a serious metabolic disease that leads to unintentional weight loss, muscle wasting, and fatigue. We are using our vaccine expertise in an effort to tackle tick-borne illnesses such as Lyme disease and expanding our mRNA platforms to study the potential of the technology in helping to prevent flu and shingles, and to treat rare genetic diseases of the liver, muscle, and central nervous system. And with our collaborator, Vivet Therapeutics, we advanced a gene therapy candidate designed to address the root cause of a rare genetic disorder called Wilson disease.

## Pfizer's ESG Strategy: Creating Value for Multiple Stakeholders

During 2021, we also further enhanced our commitment to Environmental, Social, and Governance (ESG) principles. Pfizer's ESG strategy is focused on six areas where we see opportunities to create a meaningful and measurable impact over the next decade: product innovation; equitable access and pricing; product quality and safety; diversity, equity, and inclusion; climate change; and business ethics. We made great strides in each of these areas last year, and I would like to share three examples.

First, Pfizer last year published an industry-first retrospective analysis of demographic data of U.S. participants in 213 of our interventional clinical trials that initiated enrollment from

2011 through 2020. The analysis demonstrated that overall trial participation of Black or African American individuals was at the U.S. census level (14.3% vs. 13.4%), participation of Hispanic or Latino individuals was below U.S. census (15.9% vs. 18.5%), and female participation was at U.S. census (51.1% vs. 50.8%). We published this analysis to be transparent and for it to serve as a baseline as we measure progress in this area. Our goal is to achieve racially and ethnically diverse participation at or above U.S. census or disease prevalence levels (as appropriate) in all our trials. I would also point out that clinical trial diversity played an important role in our COVID-19 vaccine development program, where we ensured that historically underrepresented participants had access to our COVID-19 vaccine trials, and where we enrolled racially and ethnically diverse participants reflecting the patient population where the burden of disease has been higher.

Second, Pfizer has made significant progress in diversifying our colleague base, particularly at more senior-level positions. In the last three years, for example, we have increased the percentage of women at the vice president level and above globally from 32.3% at the end of 2018 to 41.5% at the end of 2021. Over that same timeframe, we have increased the percentage of minorities at the vice president level and above in the U.S. from 18.8% to 25%.

Third, we continue to make progress in helping to ensure our COVID-19 vaccine and oral treatment are accessible by everyone everywhere. I am thrilled to say that we remain on track to meet or exceed our goal of delivering at least two billion doses of our vaccine to low- and middle-income countries by the end of 2022 – having just met our goal of delivering the first one billion by the end of 2021. In terms of our oral COVID-19 treatment, we have signed a voluntary license agreement with the Medicines Patent Pool (MPP), which we hope will lead to expanded access, pending country regulatory authorization or approval, in 95 low- and middle-income countries that account for approximately 53% of the world's population.

For details regarding the impact of our ESG strategy on our business in 2021, you can find Pfizer's 2021 ESG Report here.



#### Positioned For Future Growth

Looking ahead, Pfizer is well positioned to continue to deliver meaningful value for patients, investors, and all stakeholders. This confidence is underpinned by the momentum of our business, the expected durability of our COVID-19 offerings, the strength of our internal R&D pipeline (which as of February 8, 2022 consisted of 89 potential new therapies and indications with 10 programs in registration and 27 in Phase 3 clinical trials), and, of course, by our ability to deploy capital into growth-focused business development to access external science.

Our business development focus largely will be in the therapeutic areas and platforms where we have the scientific skills and acumen to add substantial value and select the most successful targets. In addition, we feel that we have distinctive attributes such as world-class excellence in clinical development and unsurpassed manufacturing and commercial capabilities at scale that make us a very attractive partner for other life sciences companies.

In summary, 2021 saw Pfizer further cement its standing as a scientific and commercial powerhouse capable of taking on the world's most devastating diseases. In a year of unprecedented challenges, we realized unprecedented achievements. We are grateful to the colleagues, clinical investigators, research institutions, partners, and, of course, patients who have made these breakthroughs possible, and we look forward to many more successes in the year ahead.

Thank you for your continued support of our important work.

Albert Bourla

**Dr. Albert Bourla**Chairman & Chief Executive Officer

#### **Emergency Use Authorization Statement**

Paxlovid has not been approved, but has been authorized for emergency use by FDA under an EUA, for the treatment of mild-to-moderate COVID-19 in adults and pediatric patients (12 years of age and older weighing at least 40 kg) with positive results of direct SARS-CoV-2 viral testing, and who are at high-risk for progression to severe COVID-19, including hospitalization or death.

The emergency use of Paxlovid is only authorized for the duration of the declaration that circumstances exist justifying the authorization of the emergency use of drugs and biological products during the COVID-19 pandemic under Section 564(b)(1) of the Act, 21 U.S.C. § 360bbb-3(b)(1), unless the declaration is terminated or authorization revoked sooner.

We encourage you to read our 2021 Annual Report on Form 10-K, which includes our audited consolidated financial statements as of and for the year ended December 31, 2021, and the sections captioned "Risk Factors" and "Forward Looking Information and Factors that May Affect Future Results," for a description of the substantial risks and uncertainties related to the forward-looking statements included herein. Patient counts included herein are estimates derived from multiple data sources.



<sup>(</sup>i) Investments in R&D = Adjusted R&D expenses. See footnote ii.

<sup>(</sup>ii) Operational revenue growth excludes the favorable impact of foreign exchange. For additional information on the company's operational revenue performance, see the "Analysis of the Consolidated Statements of Income" in Management's Discussion and Analysis of Financial Condition and Results of Operations in the 2021 Annual Report on Form 10-K. Adjusted income and Adjusted diluted EPS are defined as U.S. GAAP Net income attributable to Pfizer Inc. common shareholders and reported EPS attributable to Pfizer Inc. common shareholders—diluted before the impact of purchase accounting for acquisitions, acquisition-related items, discontinued operations and certain significant items. Adjusted research and development (R&D) expenses is an income statement line item prepared on the same basis as, and therefore a component of, the overall Adjusted income measure. See the "Non-GAAP Financial Measure: Adjusted Income" section of Management's Discussion and Analysis of Financial Condition and Results of Operations in Pfizer's 2021 Annual Report on Form 10-K for an explanation of how management uses these non-GAAP measures, reconciliations to the most directly comparable GAAP measures and additional information.

### 2021 In Numbers

#### 1.4 Billion Patients

We reached an estimated 1.4 billion patients with our medicines and vaccines. That's more than one out of every six people on Earth.



#### >3 Billion Doses Produced

We were able to produce 3 billion doses of the Pfizer-BioNTech COVID-19 vaccine in 2021. (And we expect we can manufacture up to 4 billion doses in 2022).

#### 5 Million Severe Flu Cases

Influenza results in approximately five million cases of severe illness and up to 650,000 annual deaths worldwide. Current seasonal flu vaccines prevent only 40% to 60% of the disease in the best-matched seasons. We believe mRNA technology has the potential to improve this situation. The swift delivery of the world's first mRNA-based vaccine for COVID-19 demonstrates mRNA's viability as a flexible technology and we believe it has the potential to prevent or treat other diseases, including influenza, subject to regulatory approval.





#### 2B Doses: The Pfizer Pledge

We have pledged 2 billion doses of our COVID-19 vaccine to low- and middle-income countries over 2 years, via government supply agreements, COVAX, government partners' donation programs, and humanitarian assistance. In 2021, we achieved the first 1 billion doses and we are on track to surpass our 1 billion dose target in 2022.

#### 38,000 Pfizer Colleagues

More than 340 patient advocacy groups and 38,000 Pfizer colleagues participated in Pfizer's first-ever Patients in Focus, a week-long activation of our focus on the patient perspective to build Pfizer's understanding of the needs of all patients, bring colleagues together to discuss the patient-centric design, and showcase impactful patient advocacy efforts across the company.





#### 300 Bots

Digital is helping us unleash the power of our people — driving innovation, scaling new ways of working and helping colleagues grow their skill sets and access learning opportunities. For example, in finance and operations, we deployed more than 300 bots that reconcile data, create and distribute reports, and proactively identify errors.



#### Hope For 1 In 30,000

Wilson disease may be a rare genetic disorder, but its impact can be substantial. Found in approximately one in 30,000 people worldwide, Wilson disease is caused by a mutation on a single gene, leading to excessive and potentially lifethreatening build-up of copper in parts of the body. Currently, the condition can only be cured by liver transplant, but our new gene therapy partnership aiming to address the underlying cause may offer promise to patients and their families.

#### **Treatments For 27 Cancers**

Addressing and overcoming health care inequities around the world is a top priority for Pfizer. These inequities are most apparent in low- and middle-income countries where, historically, access to effective therapies has been difficult, if not impossible. Through our ongoing collaboration with the IDA Foundation, we're looking to change that and improve access to life-impacting treatments for more than 27 types of cancer.





#### 20 Rising Stars

In early 2021, we launched a Breakthrough Fellowship Program – a nine-year commitment to increase minority representation and enhance our pipeline of diverse leaders. A first of its kind program, it works to advance students and early career colleagues of Black/African American, Latinx/Hispanic and Native American descent with a goal of developing 100 Fellows by 2025. Our first cohort of 20 rising senior undergraduates completed the first phase of the program, a 10-week internship, in 2021.



Together with Myovant Sciences we celebrated the United States Food and Drug Administration approval of Myfembree®, a once-daily oral treatment offering relief to the estimated five million women in the U.S. suffering from symptoms caused by uterine fibroids – noncancerous tumors that develop in or on the muscular walls of the uterus.





### Our People



Albert Bourla
Chairman and Chief
Executive Officer



Vidia Roopchand
Principal Scientist, Viral
Vaccines, Pfizer Vaccine
Research and Development



Chief Sustainability Officer, Senior Vice President of Global Health and Social Impact, and President of The Pfizer Foundation

Caroline Roan



Maritza Lopez
Warehouse Inspector, Mexico

"During 2021, we reached an estimated 1.4 billion patients with our medicines and vaccines. Never before has Pfizer's patient impact been so wide-reaching. And while so much focus has been on the success of our COVID-19 vaccine and treatment, we've never lost sight of the needs of other patients – needs that are no less urgent."

"The cultural diversity on the Pfizer campus has allowed us to have different perspectives in our approach to vaccines research. We also have great diversity in our scientific backgrounds and when those two come together, we have a very unique way of approaching problems. I think we all come to work with one purpose in mind, and that is to make vaccines that will make the world a better place."

"At Pfizer, our breakthroughs don't just take place in the laboratory. We are committed to finding new and innovative ways to reach all patients with the vaccines and medicines they need to live healthy, productive lives."

"The most important thing about what we do is the patients who have confidence in our products. That's why we always commit to quality. I know that what I'm doing is for the welfare of other people...so that they can have a better quality of life."





**Christopher Stevo** 

Senior Vice President and **Chief Investor Relations** Officer

"Messenger RNA (mRNA) promises to revolutionize the field by being able to rapidly constitute and manufacture vaccines to address a number of diseases."



Eli Reiser

Senior Associate Scientist

"One of Pfizer's core values is excellence and there's a lot of support for it, but another one is courage and the willingness to speak up and say, 'Hey, I disagree.' I have felt comfortable doing that since I started, and the whole team is really open to that. We really are supporting each other and trying to improve our science in every way."



Ramcess Jean-Louis Connor Jarvis

Chief Diversity, Equity, and Inclusion Officer

"We approach DEI with the same Pfizer discipline applied to everything else we do — what gets measured, gets improved."



Senior Environmental Health and Safety Associate

"Having a job where I can tangibly see the positive difference and strides we are marking toward sustainability fulfills me."



## Bringing Breakthroughs to Patients in Need

Pfizer's growth strategy is driven by five "Bold Moves" that help us deliver breakthroughs for patients and create value for shareholders and other stakeholders. Over the course of 2021, we have made important progress on these Bold Moves.



#### Unleash the Power of Our People

We have built an inclusive, engaging work environment that recognizes and rewards both performance and leadership and empowers all colleagues to bring their best selves to work for the benefit of patients.

Read more about this Bold Move here.

#### In 2021, we:

- Showcased the pride felt by our purpose-driven scientists and colleagues to help recruit top talent
- Fostered a new generation of diverse leaders and embedded diversity, equity, and inclusion into our purpose
- · Expanded Pfizer colleague health and wellness resources



#### Deliver First-in-Class Science

We aim to create and source the best science in the world. We bring forward only our most promising and transformational products within our six therapeutic areas – with a focus on getting them to patients as quickly as possible, while never compromising quality or safety.

Read more about this Bold Move here.

#### In 2021, we:

- Developed the first FDA-authorized oral treatment for COVID-19
- Progressed 52 programs in our research and development pipeline (Phase 1 to registration), with a focus on oncology, inflammation & immunology, vaccines, rare disease, and internal medicine
- Secured FDA approvals or achieved clinical milestones in oncology, women's health, rare diseases, immunology, and more



#### Transform our Go-to-Market Model

We are partnering with others to address the patient affordability challenge by exploring new, flexible payment approaches, including value-based agreements and being bold in how we expand access to our medicines.

Read more about this Bold Move here.

#### In 2021, we:

- Partnered to improve cancer care in low- and middle- income countries
- Increased global COVID-19 vaccine access by expanding manufacturing capabilities and capacity
- Worked toward equitable and affordable access to COVID-19 vaccines and treatments for people around the world



#### Win the Digital Race in Pharma

We are using big data and such digital technologies as machine learning and artificial intelligence to expedite the drug discovery and development process and to enhance patient experiences and outcomes.

Read more about this Bold Move <u>here</u>.

#### In 2021, we:

- Put power in the hands of patients with smart technology
- Leveraged supercomputers and strategic partnerships to help uncover solutions for complex diseases
- Harnessed Digital innovation to accelerate our COVID-19 vaccine and treatment efforts



#### Lead the Conversation

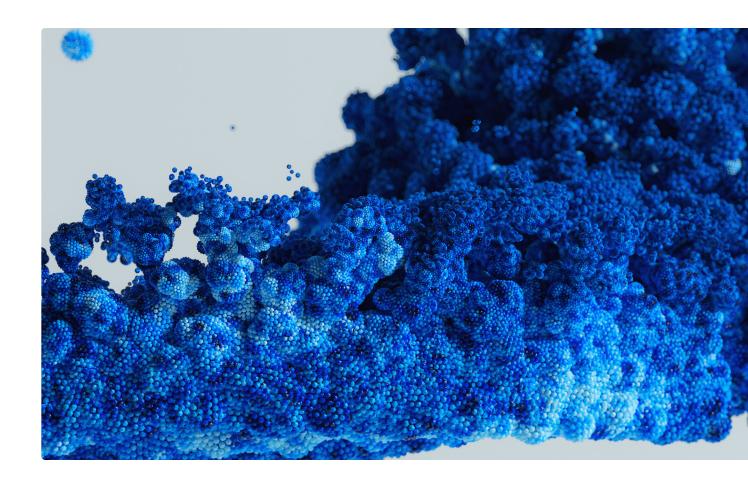
We engage with policymakers and other stakeholders to advocate for policies that allow innovation to flourish while ensuring patient access to the latest therapies – all while communicating the value our science brings to society.

Read more about this Bold Move <u>here</u>.

#### In 2021, we:

- Shared transparent information from the Pfizer-BioNTech vaccine trials to deepen public trust
- Ensured that patients' perspectives are considered in every facet of our work
- Collaborated with the atopic dermatitis community to share stories and take a deeper look at disparities





## 2021 Stories

Explore some of the most important breakthroughs from 2021.

U.S. Food and Drug Administration approvals in a rare disease and women's health, advancing treatment for dermatological conditions and our ongoing efforts to bring the Pfizer-BioNTech COVID-19 vaccine to countries in all regions of the world.



## Myfembree® Brings New Hope to Women with Uterine Fibroids

Once-daily oral treatment offers relief from heavy menstrual bleeding for women with uterine fibroids

In May 2021, Pfizer and Myovant Sciences' Myfembree® (relugolix, estradiol, and norethindrone acetate) became the first once-daily U.S. Food and Drug Administration (FDA) approved treatment for heavy menstrual bleeding associated with uterine fibroids in premenopausal women, with a treatment duration of up to 24 months.1 This milestone marked a critical step forward in a disease area that has previously had limited non-invasive treatment options and relied heavily on surgical procedures such as hysterectomies.2,3

An estimated five million women in the U.S. suffer from symptoms of uterine fibroids, which are noncancerous tumors that develop in or on the muscular walls of the uterus.4 Fibroids may cause symptoms such as heavy menstrual bleeding, which can limit women's daily activities and impact many aspects of their lives.3

In September, continuing the momentum from the Myfembree approval for women with uterine fibroids, the FDA accepted for review a supplemental New Drug Application (sNDA) for the management of moderate to severe pain associated with endometriosis,5 an often-painful pelvic condition affecting approximately six million women in the U.S with limited treatment options.6,7

These regulatory milestones, in conditions that have historically been stigmatized and underrecognized,8,9 underscore our commitment to bringing women new options to manage their reproductive health and advancing women's health overall.

\*For full efficacy and safety information about Myfembree, please see the full prescribing information here.



Myfembree (relugolix, estradiol, and norethindrone acetate) became the first once-daily FDA-approved treatment for heavy menstrual bleeding associated with uterine fibroids in premenopausal women and is currently under regulatory review for the management of moderate to severe pain associated with endometriosis.

- 1 Pfizer Inc. Myovant Sciences and Pfizer Receive FDA Approval for MYFEMBREE®, the First Once-Daily Treatment for Heavy Menstrual Bleeding Associated With Uterine Fibroids. May 26, 2021. https://www.pfizer.com/news/press-release-detail/myovant-sciences-and-pfizer-receive-fda-approval-myfembreer. Accessed December 8, 2021. NCBI. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4212348/. Published 2021. Accessed Accessed December 8, 2021.
- <sup>3</sup> Thieme Medical. https://www.thieme-connect.com/products/ejournals/html/10.1055/s-0037-1607264. Published. Accessed December 8, 2021.
- 4 U.S. Department of Health & Human Services, Office on Women's Health. https://www.womenshealth.gov/a-z-topics/uterine-fibroids. Published 2019. Accessed December 8, 2021.
- <sup>5</sup> Pfizer Inc. Myovant Sciences and Pfizer Announce FDA Acceptance of Supplemental New Drug Application for MYFEMBREE® for the Management of Moderate to Severe Pain  $Associated With Endometriosis. September 9, 2021. \\ \underline{https://www.pfizer.com/news/press-release/press-release-detail/myovant-sciences-and-pfizer-announce-fda-acceptance.}$ Accessed December 8, 2021.
- <sup>6</sup> Penn Medicine. Endometriosis. https://www.pennmedicine.org/for-patients-and-visitors/patient-information/conditions-treated-a-to-z/endometriosis</del>. Published 2022. Accessed December 8, 2021.
- 7 Chemical & Engineering News. The long road to relief from endometriosis. https://cen.acs.org/pharmaceuticals/drug-development/long-road-relief-endometriosis/96/i43. Published 2018. Accessed December 8, 2021.
- MDPI. Stigma and Endometriosis: A Brief Overview and Recommendations to Improve Psychosocial Well-Being and Diagnostic Delay. https://www.mdpi.com/1660-4601/18/15/8210/htm. Published 2021. Accessed December 8, 2021.
- <sup>9</sup> International Journal of Gynecology & Obstetrics. Epidemiology and management of uterine fibroids. https://obgyn.onlinelibrary.wiley.com/doi/full/10.1002/ijgo.13102?saml\_referrer. Published 2020. Accessed December 8, 2021.



# Pursuing Breakthroughs for People with Immuno-Inflammatory Conditions

Pfizer continues to advance care for people living with atopic dermatitis and alopecia

Our Inflammation and Immunology team is helping people with chronic inflammatory dermatological diseases by discovering potential breakthrough medicines that address the underlying causes of immuno-inflammatory conditions. In 2021, we were proud to take significant strides in advancing the understanding of alopecia areata and atopic dermatitis, two diseases that can have a significant physical and emotional impact on patients and on the healthcare system overall.

#### **Atopic Dermatitis**

Atopic dermatitis, also known as atopic eczema or eczema, is one of the most common chronic inflammatory skin conditions, affecting people of all ages and genders around the world.<sup>3,4</sup> It appears as a rash or skin lesions, causes itching, and may worsen or flare over time.<sup>5</sup> More than "just a rash," atopic dermatitis can be a potentially debilitating condition that disrupts patients' daily lives and can negatively impact their emotional well-being.<sup>6,7</sup>

2021 was a landmark year in our journey to bring CIBINQO (abrocitinib), an innovative oral, once-daily Janus kinase (JAK) 1 inhibitor, to people suffering with moderate to severe atopic dermatitis. Milestones included the August <u>announcement</u> of positive top-line results from our head-to-head study comparing the efficacy of abrocitinib to the current standard-of-care treatment, as well as the first regulatory approvals for abrocitinib.

We couldn't be more excited for the potential impact CIBINQO may have on the lives of patients. In the third quarter of 2021, CIBINQO received marketing authorization from both the European Commission and the Japanese Ministry of Health, Labour and Welfare (MHLW). We are hopeful this momentum will continue with additional regulatory filings under review for abrocitinib around the globe.

#### Alopecia Areata

Alopecia areata is an autoimmune disease characterized by patchy hair loss, almost always involving the scalp, but sometimes also involving the face (eyebrows, eyelashes, beard), the whole scalp, or the whole body.<sup>1,2</sup> People suffering from alopecia areata experience symptoms when their immune cells attack healthy hair follicles, causing the hair to fall out.<sup>1,2</sup> Alopecia areata is associated with quality of life issues for many patients, who may suffer from psychological consequences, including feelings of depression and anxiety.<sup>1</sup>



Eczema Inside  $Out^{TM}$  is a program we created to inspire those affected by eczema (also called atopic dermatitis or atopic eczema) to communicate the full impact of this chronic inflammatory skin condition beyond the physical symptoms.

In August, we were thrilled to <u>announce</u> positive top-line results from a Phase 2b/3 trial demonstrating that the investigational treatment ritlecitinib improved scalp hair regrowth after six months of treatment versus placebo in people with alopecia areata. Before December, there were no approved treatments in the EU for this complex and potentially devastating disease, and we're delighted to have this potential therapy on the horizon in the U.S. and beyond.



#### **Educating on Atopic Dermatitis**

We remain committed to people living with atopic dermatitis and have been hard at work to expand our <a href="Eczema Inside Out">Eczema Inside Out</a> program to deliver educational materials designed for patients and caregivers. We know that living with the debilitating and disfiguring effects of atopic dermatitis can be a significant and underrecognized burden, and those facing these challenges need resources and to be heard.

This year we collaborated with the atopic dermatitis community to share stories and take a deeper look at disparities:

- On World Atopic Eczema Day, we partnered with SELF on <u>"The Real Burden of Eczema in People of Color,"</u> a virtual discussion among patients and experts dealing with symptoms and stigma, as well as addressing health disparities.
- We also partnered with CNN International on "Health Equity for Skin of Color Starts With Representation," a report providing insights on the disproportionate impact of atopic dermatitis on people of color.



Every Color is Primary is a physician-oriented program designed to help ensure patients of every skin color with dermatological conditions feel seen and understood. The spectrum of skin color and features is something to celebrate, and these differences can also relate to disease prevalence, how diseases present, and how patients are impacted.



<sup>&</sup>lt;sup>1</sup> Villasante Fricke AC, Miteva M. Epidemiology and burden of alopecia areata: a systematic review. Clinical, Cosmetic and Investigational Dermatology. 2015;8:397-403. doi:10.2147/

<sup>&</sup>lt;sup>2</sup> Pratt CH, King LE, Messenger AG, Christiano AM, Sundberg JP. Alopecia areata. Nature reviews Disease primers. 2017;3:17011. doi:10.1038/nrdp.2017.11.

Weidinger S, Beck LA, Bieber T, Kabashima K, Irvine AD. Atopic dermatitis. Nat Rev Dis Primers. 2018;4:1. doi.org/10.1038/s41572-018-0001-z.

<sup>&</sup>lt;sup>4</sup> Silverberg JI. Public health burden and epidemiology of atopic dermatitis. Dermatol Clin. 2017;35:283-289.

<sup>&</sup>lt;sup>5</sup> Anderson RT, Rajagopalan R. Effects of allergic dermatosis on health-related quality of life. Curr Allergy Asthma Rep. 2001;1:309-315.

<sup>6</sup> Na CH, Chung J, Simpson EL. Quality of life and disease impact of atopic dermatitis and psoriasis on children and their families. Children (Basel). 2019;6:133. doi:10.3390/children6120133.

<sup>&</sup>lt;sup>7</sup> Zuberbier T, Orlow SJ, Paller AS, et al. Patient perspectives on the management of atopic dermatitis. J Allergy Clin Immunol. 2006;118(1):226-232.

## Partnering to Improve Cancer Care in Low- and Middle-Income Countries

Collaboration with IDA Foundation focuses on equitable access to quality cancer care

Addressing and overcoming inequities in health care around the world is a top priority for Pfizer. These inequities are most apparent in low- and middle-income countries where, historically, access to effective therapies has been difficult, if not impossible. Through our ongoing collaboration with the IDA Foundation, we're working to change that and improve access to important cancer treatments.

As part of our commitment to looking beyond our backyard and giving back to where the need is the greatest, Pfizer's Global Commercial Access Partnerships team is collaborating with the <u>IDA Foundation</u> to reduce the global impact of cancer and expand equitable access to quality medicines across 70 low- and middle-income countries in Africa, Latin America, and

The goal of this partnership is to provide patients with greater access to innovative and life-impacting treatment options for more than 27 types of cancer - from highly treatable forms of breast, cervical, and prostate cancer to others where these essential therapies have the potential to keep families together for longer.

"Working with IDA Foundation to expand our reach across almost 70 countries is an important step, but this is just the start of our commitment," said Michelle Akande, Vice President, Global Commercial Access Partnerships at Pfizer. "We know that improving patient outcomes and strengthening health systems transcends access to medicines and vaccines, and we will continue to partner to introduce and scale transformational, holistic approaches to help ensure that everyone has access to quality cancer care - no matter where they live, or what they earn."

Our partnership with the IDA Foundation builds directly on key successes and learnings from our long-standing work with the American Cancer Society and Clinton Health Access Initiative to expand access to quality cancer treatments in sub-Saharan Africa. We are proud of what can be accomplished through private-public partnerships of this type and how we're doing our part to achieve equity in care and help patients living with cancer in these countries achieve positive health outcomes.



Pfizer's partnership with the IDA Foundation is enabling greater access to innovative and life-impacting treatment options for more than 27 types of cancer. Photo credit: IDA Foundation / Tyrone DeJesus.



# Developing Potential Cancer Treatments to Cross the Blood-Brain Barrier

As cancer treatments have advanced, there are new challenges for researchers to tackle

Every year, an estimated 200,000 patients with cancer in the U.S. are diagnosed with brain metastases<sup>1</sup> — or the spread of cancer cells from their original site to the brain — and when cancer spreads to the brain, it can become more deadly.<sup>2</sup> Brain metastasis is more prevalent in certain cancers: between 10 and 30 percent of melanoma, lung, and breast cancers will metastasize to the brain.<sup>3</sup>

Many available cancer treatments have difficulty crossing over the blood-brain barrier, a tightly packed layer of cells that prevents toxins and other harmful substances from getting into the central nervous system, which consists of the brain and spinal cord. Though essential, this "security wall" for the brain can become an Achilles' heel for some treatments — but our researchers are dedicated to identifying ways to beat this therapeutic challenge.

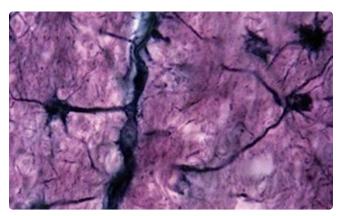
## "Ultimately, it takes a team of people who are just so focused and determined to see their work impact patients."

S. Michael Rothenberg, M.D., Ph.D., Vice President and Head of Early Oncology Clinical Development

Our Research and Development site in Boulder, Colorado, includes a team of scientists working tirelessly to identify innovative molecules that may be able to safely and effectively cross the blood-brain barrier. Their mission is to develop next-generation targeted therapies that have the potential to not just penetrate the blood-brain barrier, but to remain there and more effectively treat cancer that has spread to the brain.

"It takes a mastery of chemistry, a mastery of 3-D structures, a mastery of a lot of sophisticated science and technology. But, ultimately, it takes a team of people who are just so focused and determined to see their work impact patients," said S. Michael Rothenberg, M.D., Ph.D., Vice President and Head of Early Oncology Clinical Development at Pfizer Boulder Research and Development. "That's what we have here in Boulder."

The team has made progress on multiple fronts, including creating a "template" for brain penetrance — a set of characteristics that we believe every potential cancer-fighting



Pfizer researchers are working diligently to discover how targeted therapies for cancer can cross the blood-brain barrier to treat cancer that spreads to the brain.

molecule should possess to help it cross the blood-brain barrier.

The team is also working to develop several potentially brainpenetrant molecules that target different gene mutations. One drug candidate currently being investigated for patients with a type of melanoma, known as BRAF-mutant melanoma, recently entered a Phase 1 clinical trial.

"Current BRAF inhibitors are limited by poor brain penetrance," said Rothenberg. "Given that, we believe this molecule has the potential, if successful, to represent a significant advance over standard-of-care regimens in melanoma and other BRAF-driven cancers."

In addition to our potentially first-in-class, brain-penetrant inhibitor in BRAF-driven cancers, the team is developing molecules that target genetic mutations known as cMET alterations, which have been found in lung cancer patients, and HER2 alterations, which are prevalent in both lung and breast cancers.

"Drugs that can effectively cross the blood-brain barrier have huge potential benefits, and we hope we will be able to bring additional treatment options to patients in need," adds Dylan Hartley, Ph.D., Vice President, Boulder Research and Development.



<sup>&</sup>lt;sup>1</sup> National Cancer Institute. "Common Cancer Sites — Cancer Stat Facts." <a href="https://seer.cancer.gov/statfacts/html/common.html">https://seer.cancer.gov/statfacts/html/common.html</a>. Accessed November 24, 2021.

<sup>&</sup>lt;sup>2</sup> Hu J, Kesari S. Strategies for overcoming the blood-brain barrier for the treatment of brain metastases. CNS Oncol. 2013;2(1):87–98. doi: 10.2217/cns.12.37

<sup>&</sup>lt;sup>3</sup> Valiente M. et al. The Evolving Landscape of Brain Metastasis. Trends Cancer. 2018;4(3):176-196. doi: 10.1016/j.trecan.2018.01.003.

## A Spotlight on Our Oncology Research Hub in La Jolla, California

A passionate and dedicated team is focused on finding groundbreaking therapeutic options for patients with cancer

At our Global Research and Development site in La Jolla, California, a dedicated team of scientists is focused on discovering and developing potentially new groundbreaking therapies to treat many forms of cancer, including breast cancer — the most common invasive cancer worldwide, with over two million individuals impacted each year.1

Aggressive chemotherapy was the go-to treatment for most breast cancer patients 15 to 20 years ago. Today, we understand much more about how cancer cells change over time, accumulating mutations that allow them to avoid and resist therapies. This has led to significant advancements in a new set of treatment options, called targeted therapies.

Targeted therapies have the potential to treat specific types of breast cancer and can work in different ways, such as by activating the body's immune system, killing cancer cells or stopping their replication, or overcoming their resistance to treatment. Our scientists are focused on continuing to learn how tumor cells work and how they mutate to help them discover new and better targeted therapies that can hopefully disrupt the ability of cancer cells to adapt and proliferate. The speed at which tumor cells mutate and the variety of mutations that can develop is the puzzle oncology researchers must unlock.

"Patients are the inspiration behind the work we do, and we know that every breakthrough we can find will hopefully impact a person, their family, and their community."

Astrid Ruefli-Brasse, Ph.D., Vice President of Tumor Biology, Pfizer Oncology

"I am incredibly proud of the work my team is conducting to identify novel therapeutic options that could have a lifechanging impact on patients living with cancer," said Astrid Ruefli-Brasse, Ph.D., Vice President of Tumor Biology, Pfizer Oncology. "Patients are the inspiration behind the work we



Natasha Homji Mishra, Senior Director and Asset Team Leader, Pfizer Oncology, discusses clinical trial design with a colleague in La Jolla. Visit VICE News for the full video.

do, and we know that every breakthrough we can find will hopefully impact a person, their family, and their community. It's inspiring to know our scientists are behind that."

Today, we have an industry-leading portfolio of 24 approved innovative cancer medicines and biosimilars across more than 30 types of cancer, and we expect up to 14 potential approvals by 2025 or 2026 across our oncology portfolio. As we continue to pursue new and targeted therapies for indications in cancer, we remain guided by both our relentless focus on the science and our research teams' commitment to delivering the most impactful treatment options for the patients who need them most.

Learn more about our site in La Jolla on Vice here.

<sup>1</sup> World Health Organization. Breast Cancer Fact Sheet. https://gco.iarc.fr/today/data/factsheets/cancers/20-Breast-fact-sheet.pdf. Accessed August 18, 2021.



## Forging New Pathways to Treat **Unintentional Weight Loss**

Researchers are working to find solutions for people with both cancer and cachexia, a serious metabolic condition

Patients living with certain chronic illnesses, such as cancer, congestive heart failure, or chronic obstructive pulmonary disease (COPD), often develop a serious metabolic condition called cachexia, which can cause unintentional weight loss, loss of appetite, muscle wasting, and/or fatigue. 1, 2, 3 This wasting disorder can severely impact patients' quality of life and, in some cases, hinder their ability to continue treatment for their primary illness.3

For patients, the impact of cachexia on daily life is far-reaching. During a Cancer Support Community patient-focused drug development meeting we sponsored in 2021, patients described the emotional and physical impacts of losing their appetites and later their ability to handle daily living tasks, such as getting out of bed and taking a shower. Caregivers also shared the challenges of watching loved ones go through this transformation.

These real-life insights from people affected by cachexia are helping scientists determine how to address the disease in a meaningful way. With patient input, our efforts are aimed at tackling multiple symptoms at once, understanding that improving appetite and reversing muscle wasting both play a critical role in improving quality of life.

"Novel science is emerging to increase our understanding of how these pathways interact with one another."

Danna Breen, Ph.D., Associate Research Fellow

Our lead cachexia program focuses on a novel mechanism, growth differentiation factor-15 (GDF-15), a cellular signaling protein linked to appetite and energy regulation. Patients with late-stage illnesses, particularly cancer, have elevated levels of this signaling protein. It's believed that GDF-15 interacts with receptors in the brain related to appetite control, causing loss of appetite and nausea.

In pre-clinical models, scientists have found that a GDF-15-blocking antibody could help restore appetite, improve body composition and promote weight gain in mice. While the research is still early, scientists hope these results could translate to cancer patients, who often need to limit their chemotherapy doses due to loss of body weight. "We're either using one target with a lot of horsepower or multiple targets in combination that could treat multiple aspects of the disease," said Danna Breen, Ph.D., an Associate Research Fellow in Pfizer's Internal Medicine Research Unit.



Cachexia, which can cause muscle wasting, occurs in the late stages of many chronic illnesses, including cancer.

Pfizer is currently conducting a Phase 1 study to better understand the safety, tolerability and pharmacological activity of an investigational GDF-15 antibody when administered to patients with cancer and cachexia.

Our scientists are also pursuing separate cachexia programs to combat other forms of anorexia and unintentional weight loss, which are designed to be complementary to the GDF-15 antibody. "Novel science is emerging to increase our understanding of how these pathways interact with one another," said Breen. "Hopefully, this will lead us to identify the most effective therapies."

With a patient-centered approach, researchers could potentially tailor cachexia treatment combinations based on patients' needs. "We're really hoping to improve patient quality of life," added Breen.

<sup>&</sup>lt;sup>3</sup> "Tackling the Conundrum of Cachexia in Cancer." National Cancer Institute. https://www.cancer.gov/about-cancer/treatment/research/cachexia. Published November 1, 2011 Accessed December 6, 2021.



<sup>&</sup>lt;sup>1</sup> Lok C. Cachexia: The Last Illness. Nature. 2015;528:182-183.

<sup>&</sup>lt;sup>2</sup> "Definition of Cachexia and Sarcopenia" Society of Sarcopenia, Cachexia and Wasting disorders. https://society-scwd.org/cachexia-definition/. Accessed December 6, 2021.

## **Delivering Dosing Options for Patients** With a Rare Neurological Disease

Pfizer is helping to advance the treatment of CIDP

From conditions affecting millions of people to rare disorders impacting just a few, we are committed to supporting a range of treatment solutions that make a difference in the lives of the patients we serve. The February 2021 U.S. Food and Drug Administration (FDA) approval of Panzyga® (Immune Globulin Intravenous [Human] - ifas 10 percent Liquid Preparation) as a treatment for adults with a neurological disease of the peripheral nerves called chronic inflammatory demyelinating polyneuropathy (CIDP) is one example of how we're helping to transform the care of patients living with rare diseases.1



Panzyga was FDA approved in February for the treatment of CIDP in adults.

"Each patient with CIDP has different treatment needs, and we have found that having one approved dosing option is not always optimal," said Angela Lukin, Global President, Hospital Therapeutic Area at Pfizer. "The approval of this new indication with additional dosing options helps address an unmet patient need by providing healthcare providers with the ability to choose an approved dose that's right for patients."

CIDP is a rare disorder of the peripheral nerves characterized by gradually increasing symmetrical motor and sensory loss and weakness associated with loss of deep tendon reflexes. The number of new cases of CIDP each year is about one-two per 100,000 people.<sup>2</sup> Given the debilitating nature of CIDP, the approval of Panzyga with dosing options enables physicians to address specific patient needs.

Most individuals with CIDP will require long-term treatment and, if left untreated, about one-third will eventually require the use of a wheelchair.3 Early recognition and proper treatment are critical in helping patients avoid significant disability, and we are proud of our role in meeting the different treatment needs of these patients and fundamentally transforming what it means for them to live with a rare disease.

This is the third indication for Panzyga, which was approved by the FDA in 2018 for the treatment of primary immunodeficiency in patients two years of age and older and chronic immune thrombocytopenia in adults. Our continued investment in supporting this important therapy reflects our ongoing dedication to advancing science across a spectrum of diseases.

Pfizer Inc. and Octapharma AG are parties to a license agreement pursuant to which Pfizer is granted rights to market and commercialize Panzyga in the U.S. Octapharma manages all clinical programs and regulatory filings and retains exclusive rights to commercialize this product globally outside of the U.S.

<sup>&</sup>lt;sup>2</sup> GBS/CIDP Foundation International. What is Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)?. https://www.gbs-cidp.org/cidp/?utm\_source=google&utm\_ medium=cpc&gclid=CjwKCAiAs92MBhAXEiwAXTi25zZiFuHlGdEFRRg3Rctumodjh3QqT5AIm6nGLVCsoSMylX\_v13AYkhoCXrAQAvD\_BwE. Accessed November 19, 2021. <sup>3</sup> Johns Hopkins Medicine. Chronic Inflammatory Demyelinating Polyradiculoneuropathy. https://www.hopkinsmedicine.org/health/conditions-and-diseases/chronic-inflammatorydemyelinating-polyradiculoneuropathy. Accessed December 3, 2021.



<sup>&</sup>lt;sup>1</sup> Please see full prescribing Information, including BOXED WARNING for Panzyga available at <a href="http://labeling.pfizer.com/ShowLabeling.aspx?id=12355">http://labeling.pfizer.com/ShowLabeling.aspx?id=12355</a>.

## On the Fast Track to a More Targeted Treatment for Rare Disease

Novel gene therapy candidate, targeting root cause of Wilson disease, receives U.S. FDA Fast Track designation

Wilson disease may be rare, but its impact can be substantial. Affecting approximately one in 30,000 people worldwide,1 Wilson disease is caused by a mutation on a single gene -ATP7B - leading to excessive and potentially life-threatening buildup of copper in the liver, brain, eyes, and other parts of the body. Current treatment options focus on clearing this copper buildup.2 While these treatments offer some benefit for patients, a more holistic approach is needed to address the condition. A new investigational gene therapy aims to address the underlying cause of Wilson disease and deliver a functioning copy of the gene to the liver, which may offer promise to patients and their families.

We are collaborating with Vivet Therapeutics, a French biotech company, to develop an investigational adeno-associated virus (AAV) gene therapy to treat Wilson disease. Vivet's therapeutic candidate, known as VTX-801, recently received Fast Track designation from the U.S. Food and Drug Administration (FDA), a process designed to facilitate development and expedite the review of potential medicines that are being developed to treat serious conditions addressing an unmet need.3

"The FDA's decision to grant VTX-801 Fast Track designation underscores the urgent need for new therapeutic options to address this devastating disease which, if left untreated, can be fatal," said Seng H. Cheng, Senior Vice President and Rare Disease Research Unit Chief Scientific Officer, at Pfizer.

Through this collaboration - which brings together the scientific expertise of both companies as well as our state-ofthe art gene therapy manufacturing capabilities - Pfizer and Vivet hope to advance this potential therapy more rapidly for patients living with this rare, inherited liver disorder. VTX-801 is currently under investigation in a Phase 1/2 clinical trial, called GATEWAY, to determine its safety, tolerability, and durability.

"Wilson disease can be debilitating, difficult to diagnose, and complicated to manage," Cheng said. "We believe in the promise of gene therapy to target the root cause of this disease and to make a meaningful difference in the lives of patients, utilizing a novel treatment approach."



Wilson disease is caused by a mutation on a single gene, leading to excessive and potentially life-threatening buildup of copper in the liver.

<sup>&</sup>lt;sup>3</sup> Pfizer. VTX-801 Receives U.S. FDA Fast Track Designation for the Treatment of Wilson Disease. https://www.pfizer.com/news/press-release/press-release-detail/vtx-801-receives-usfda-fast-track-designation-treatment. Published 2021. Accessed December 8, 2021.



<sup>&</sup>lt;sup>1</sup> American Society of Gene + Cell Therapy. Wilson Disease. https://patienteducation.asgct.org/disease-treatments/wilson-disease. Published 2021. Accessed December 8, 2021.

<sup>&</sup>lt;sup>2</sup> Pfizer. A Rare Disease Halts a Navy Pilot's Dreams, But Gives Him a New Mission as Patient Advocate. https://www.pfizer.com/news/hot-topics/a\_rare\_disease\_halts\_a\_navy\_pilot\_s\_ dreams\_but\_gives\_him\_a\_new\_mission\_as\_patient\_advocate. Published 2022. Accessed December 8, 2021.

## Unlocking the Potential of mRNA for Flu

An mRNA vaccine for flu could potentially allow for better strain match, potency/efficacy and reliability of supply

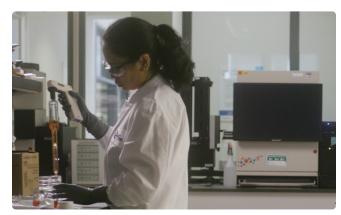
Influenza (flu) causes approximately five million cases of severe illness and 290,000 to 650,000 deaths worldwide each year.1 Current seasonal flu vaccines prevent only 40 percent to 60 percent of the disease in the best-matched seasons.2

Messenger RNA, or mRNA, has the potential to improve this situation. For decades, mRNA therapeutics seemed more promise than reality. But Pfizer and BioNTech's swift development and delivery of the world's first mRNA-based vaccine for COVID-19 highlighted mRNA as a potent vaccine platform, and we believe this technology has the potential to help prevent or treat other diseases, including flu.

"Since 2018, we have been working to develop a potential mRNA influenza vaccine, driven by our deep understanding of infectious diseases and our extensive experience in researching, developing, and implementing new vaccine technologies to help prevent infectious diseases," said Kathrin U. Jansen, Ph.D., Senior Vice President and Head of Vaccine Research & Development at Pfizer. "The COVID-19 pandemic allowed us to demonstrate the immense scientific opportunity that mRNA might have for a variety of diseases. Influenza remains an area where we think a vaccine with improved efficacy in any given season could make a real difference in people's lives, and we believe mRNA is the ideal technology to take on this challenge."

Relative to the technologies used to manufacture the flu vaccines currently available that require the use of chicken eggs or mammalian cells, the manufacturing processes for any potential mRNA-based flu vaccine, if successfully developed and licensed, would also be simpler and faster. These traditional technologies, where the virus must replicate, take months, creating a potential stumbling block for fast delivery of seasonal vaccines. Because mRNA can be manufactured in a relatively short time frame, an mRNA vaccine for flu could potentially allow for manufacturers to better match the strains in circulation in any given season, perhaps leading to greater efficacy, subject to regulatory approval.

In September 2021, we announced that the first participants were dosed in a Phase 1 exploratory clinical trial to evaluate the safety, tolerability, and immunogenicity of a single dose quadrivalent mRNA vaccine against influenza in healthy adults.



mRNA technology could help get the flu vaccine right, every year.

In addition, the study is designed to address fundamental questions that will help in the design of the vaccine. Our mRNA influenza vaccine program is the first in a planned wave of programs leveraging mRNA technology for influenza.

We believe mRNA represents a new frontier in health care, and we are committed to continuing to advance the technology to unlock its full power for the benefit of patients everywhere.

<sup>&</sup>lt;sup>2</sup> Centers for Disease Control and Prevention. Vaccine Effectiveness: How Well do the Flu Vaccines Work? October 25, 2021. https://www.cdc.gov/flu/vaccines-work/vaccineeffect.htm. Accessed December 3, 2021



<sup>&</sup>lt;sup>1</sup> World Health Organization. Influenza (Seasonal). https://www.who.int/news-room/fact-sheets/detail/influenza-(seasonal). Accessed December 3, 2021.

## Bringing Vaccine Science to Tick-Borne Diseases

## Combining a 45-year heritage and a new collaboration to tackle the growing footprint of tick-borne illnesses

While the world, including Pfizer, has been focused on vaccines for COVID-19, we have not lost sight of the many other diseases that continue to affect people globally. In 2021, a key focus for us continued to be working to help prevent certain tick-borne diseases, which are increasingly prevalent across North America and Europe. As people's interest in spending time outdoors in nature increases,¹ whether on vacations or closer to home, helping to protect against diseases caused by certain ticks has become even more important.

Vaccination is available, in certain markets, to help protect people from some harmful diseases that can be a risk while spending time outdoors, such as tick-borne encephalitis (TBE).<sup>2</sup> However, for Lyme disease, another prevalent tick-borne infection, there is currently no approved vaccine for humans.<sup>3</sup> That's something we're aiming to change through one of our collaborations.

#### **Targeting Lyme disease with VLA15**

Lyme disease is an infection caused by Borrelia burgdorferi bacteria, which is transmitted to humans by infected Ixodes (deer) ticks.<sup>4</sup> Despite a high number of infections, there are currently no available vaccines to help prevent Lyme disease,<sup>3</sup> which is why we are committed to addressing this important public health need.

In April 2020, we announced a collaboration with Valneva,<sup>5</sup> a specialist vaccine company focused on infectious diseases, to develop and commercialize a Lyme disease vaccine candidate VLA15, which is currently in Phase 2 clinical trials. As of November 15, 2021, Pfizer assumed responsibility from Valneva for the Investigational New Drug Application (IND) for VLA15 with the U.S. Food and Drug Administration (FDA).

VLA15 is the only active Lyme disease vaccine candidate currently in clinical development. This investigational vaccine uses an established mechanism for Lyme disease vaccines, targeting the outer surface protein of B. burgdorferi. VLA15 was granted Fast Track designation by the FDA in July 2017,6 and has demonstrated strong immune system response and safety data in pre-clinical and clinical studies so far. "The prevalence and geographic reach of Lyme disease is growing, underscoring the major medical need for vaccination

against the disease," said Kathrin U. Jansen, Ph.D., Senior Vice President and Head of Vaccine Research & Development at Pfizer. "We are proud to continue the development efforts in our quest to potentially protect people from Lyme disease in the future."



Phase 2 clinical trials for VLA15 are ongoing, and we are working closely with Valneva on the next development steps.

#### TicoVac™ reaches a new milestone 45 years on

Meanwhile, we continue to bring our tick-borne encephalitis (TBE) vaccine, TicoVac, to where it's needed most.

TBE is a rare but serious viral infection of the brain and spine,<sup>7</sup> most commonly transmitted to humans through the bite of an infected tick.<sup>2</sup> It can be a serious condition with possible long-term consequences.<sup>7,8</sup> To date, ticks infected with the TBE virus have been reported in more than 30 countries across Europe and in Japan.<sup>2</sup>

There are a number of steps an individual can take to help protect themselves from TBE when in a risk area, such as applying effective insect repellent and wearing long-sleeved clothing. However, according to the World Health Organization, vaccination is considered the most effective prevention measure for TBE. 10



In August 2021, 45 years after its first approval in Austria under the brand name FSME-Immun®, TicoVac was approved by the FDA for active immunization to prevent TBE in individuals one year of age and older.<sup>11</sup> TicoVac is currently the only FDA-approved vaccine to help protect U.S. adults and children against the TBE virus when visiting or living in TBE-endemic areas. Many people may benefit from TicoVac, including military troops stationed abroad.

"This vaccine has helped to protect millions of people in TBE-endemic regions since its first approval outside the U.S. 45 years ago," said Nanette Cocero, Ph.D., Global President of Pfizer Vaccines. "We are proud to deliver the first vaccine to help protect people in the U.S. against TBE if they are traveling to any risk areas, so they are able to spend time outdoors without worrying about the impact of this potentially serious disease."



Infected ticks have the potential to cause a number of diseases in humans, including tick-borne encephalitis (TBE) and Lyme disease.

U.S. Food and Drug Administration. TICOVAC Prescribing Information. http://labeling.pfizer.com/ShowLabeling.aspx?id=15600. Accessed December 3, 2021.



<sup>&</sup>lt;sup>1</sup> Booking.com. Booking.com predicts the top trends for the future of travel. October 2020. <a href="https://partner.booking.com/en-gb/click-magazine/bookingcom-predicts-top-trends-future-travel">https://partner.booking.com/en-gb/click-magazine/bookingcom-predicts-top-trends-future-travel</a>. Accessed December 3, 2021.

<sup>&</sup>lt;sup>2</sup> Dobler G, Erber W, Bröker M, Schmitt HJ, eds. The TBE Book. 4th ed. Singapore: Global Health Press; 2021. https://tbenews.com/tbe/. Accessed December 3, 2021.

<sup>&</sup>lt;sup>3</sup> U.S. Centers for Disease Control and Prevention. Lyme disease. Why is CDC concerned with Lyme disease? <a href="https://www.cdc.gov/lyme/prev/vaccine.html">https://www.cdc.gov/lyme/prev/vaccine.html</a>. Accessed December 3, 2021.

 $<sup>^{\</sup>rm 4}\,$  Stanek G et al. Lyme Borreliosis. The Lancet. 2012;379:461–473.

<sup>&</sup>lt;sup>5</sup> Valneva and Pfizer Joint Press Release. Valneva And Pfizer Announce Collaboration To Co-Develop And Commercialize Lyme Disease Vaccine, VLA15. <a href="https://investors.pfizer.com/investor-news/press-release-details/2020/Valneva-and-Pfizer-Announce-Collaboration-to-Co-Develop-and-Commercialize-Lyme-Disease-Vaccine-VLA15/default.aspx.">https://investors.pfizer.com/investor-news/press-release-details/2020/Valneva-and-Pfizer-Announce-Collaboration-to-Co-Develop-and-Commercialize-Lyme-Disease-Vaccine-VLA15/default.aspx.</a> Accessed December 3, 2021.

<sup>&</sup>lt;sup>6</sup> Valneva Press Release. Valneva Receives FDA Fast Track Designation for its Lyme Disease Vaccine Candidate VLA15. https://valneva.com/press-release/valneva-receives-fda-fast-track-designation-for-its-lyme-disease-vaccine-candidate-vla15/. Accessed December 3, 2021.

<sup>&</sup>lt;sup>7</sup> Kaiser R. Tick-borne encephalitis. Infect Dis Clin North Am. 2008;22(3):561-75.

Lindquist L, et al. Tick-borne encephalitis. The Lancet. 2008;371:1861–1871.

<sup>&</sup>lt;sup>9</sup> Travel Health Pro. Country information. Tick borne encephalitis. https://travelhealthpro.org.uk/disease/173/tick-borne-encephalitis. Accessed December 3, 2021.

World Health Organization Regional Office for Europe & European Centre for Disease Prevention & Control. Tick-borne encephalitis in Europe. <a href="https://www.ecdc.europa.eu/sites/portal/files/media/en/healthtopics/vectors/world-health-day-2014/Documents/factsheet-tick-borne-encephalitis.pdf">https://www.ecdc.europa.eu/sites/portal/files/media/en/healthtopics/vectors/world-health-day-2014/Documents/factsheet-tick-borne-encephalitis.pdf</a>. Accessed December 3, 2021.

## Generating New Data to Help Support Vaccination Adherence

Top-line study results support potential for co-administration of PREVNAR 20™ and seasonal flu vaccine in single appointment in line with CDC guidance

Top-line results from a phase 3 clinical trial we conducted demonstrated that PREVNAR 20™ (Pneumococcal 20-valent Conjugate Vaccine) and a seasonal influenza (flu) vaccine has the potential to be administered at the same time without affecting the immune protection provided by either vaccine or changing the safety profile.

On June 8, 2021, the U.S. Food and Drug Administration (FDA) approved PREVNAR 20, our pneumococcal 20-valent conjugate vaccine, for the prevention of invasive disease and pneumonia in adults aged 18 years or older.9 PREVNAR 20 represents the first approval of a conjugate vaccine that helps protect against 20 serotypes responsible for the majority of invasive pneumococcal disease and pneumonia, 1,2,3,4,5,6,7 including seven responsible for 40 percent of pneumococcal disease cases and deaths in the U.S.8

"Both PREVNAR 20 and the influenza vaccine are important for helping protect adults against pneumococcal pneumonia and the flu, respectively; however, vaccination rates decline when someone needs to make multiple appointments to receive these vaccines," said Luis Jodar, Ph.D., Senior Vice President and Chief Medical Officer, Pfizer Vaccines. "The results of this trial provide support for current Centers for Disease Control and Prevention (CDC) clinical guidance allowing co-administration during a single doctor or pharmacy appointment, so that more adults are able to help protect themselves against both of these respiratory diseases."

This study is one example of our commitment to help improve vaccine adherence among recommended populations, as well as further vaccine development to help address needs across certain respiratory diseases.



We are committed to helping protect more adults across many respiratory diseases.

- 1 U.S. Centers for Disease Control and Prevention. Active Bacterial Core (ABCs) surveillance. National Center for Immunization and Respiratory Diseases. Atlanta, GA.
- <sup>2</sup> Ladhani, SN, Collins S, Djennad A, et al. Rapid increase in non-vaccine serotypes causing invasive pneumococcal disease in England and Wales, 2000–17: a prospective national observational cohort study. Lancet Infect Dis. 2018;18(4):441-451
- <sup>3</sup> Menéndez R, España PP, Pérez-Trallero E, et al. The burden of PCV13 serotypes in hospitalized pneumococcal pneumonia in Spain using a novel urinary antigen detection test. CAPA study. Vaccine. 2017;35(39):5264-5270.
- <sup>4</sup> Azzari C, Cortimiqlia M, Nieddu F, et al. Pneumococcal serotype distribution in adults with invasive disease and in carrier children in Italy: Should we expect herd protection of adults through infants' vaccination? Hum Vaccin Immunother. 2016;12(2):344-350.
- <sup>5</sup> Pivlish T. Impact of PCV13 on invasive pneumococcal disease (IPD) burden and the serotype distribution in the U.S. Centers for Disease Control and Prevention. Advisory Committee on Immunization Practices, October 24, 2018.
- <sup>6</sup> European Centre for Disease Prevention and Control. Invasive pneumococcal disease. In: ECDC. Annual epidemiological report for 2016. Stockholm: ECDC; 2018.
- Beall B, Chochua S, Gertz RE Jr, et al. A population-based descriptive atlas of invasive pneumococcal strains recovered within the U.S. during 2015-2016. Front Microbiol. 2018;19(9).
- <sup>8</sup> Pfizer Inc. NCT03828617 Study Design. Available at <u>www.clinicaltrials.gov</u> under the identifier NCT03828617.
- 9 U.S. Food and Drug Administration. PREVNAR 20 Prescribing Information. https://labeling.pfizer.com/ShowLabeling.aspx?id=15428. Accessed March 7, 2022.



# Improving Patient Health Outcomes with Digital Technology

Smart technology enhances adherence to anti-cancer therapy

Smart technologies are changing the way we live our lives, from providing daily reminders (and inspiration) to measuring our physical activity to managing our grocery lists and so much more. At Pfizer, we are committed to exploring what is possible with smart technology to impact the course of disease and help improve patient outcomes.

In one example, smart technology is helping adult patients with chronic myelogenous leukemia improve clinically appropriate adherence to therapy. In June 2021, Pfizer introduced a Smart Pill Bottle pilot program for BOSULIF® (bosutinib). The smart pill bottle informs the patient's pharmacy team if a dose has been missed, prompting them to follow up with the patient as appropriate. Currently, several specialty pharmacy providers in the U.S. are participating in this innovative program.

Supporting patients in this way is important. A study in the Journal of Hematology Oncology Pharmacy notes that the "common assumption that adherence to oral anticancer agents would be higher, due to the severity of the disease, has been proven untrue," and that non-adherence can have consequences for disease progression and outcomes.¹

Pfizer Digital is proud to be on the leading edge of developing and utilizing smart technology that makes measurable differences in the lives of the patients we serve. We look forward to announcing additional ways we are expanding our digital offerings to improve the patient experience in 2022 and beyond.



Smart pill bottles can help improve patient adherence to their medications.



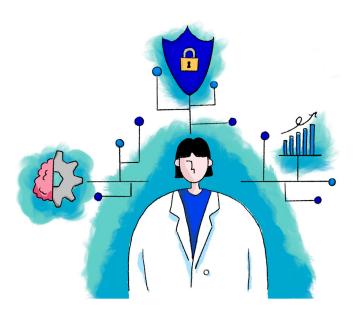
<sup>&</sup>lt;sup>1</sup> Hansen LA. Impact of nonadherence to cancer therapy. J Hematol Oncol Pharm. 2012. Online First.

## Digital is Unleashing the Power of our People

Leveraging digital to help colleagues foster innovation with new ways of working to drive our purpose

Digital is transforming every aspect of our business at Pfizer – from the way we discover and develop medicines, to the way we improve health outcomes and the way we do our work faster and easier – so we can deliver breakthroughs as quickly as possible. "We are simplifying and automating transactional processes to make room for meaningful work," said Lidia Fonseca, Chief Digital and Technology Officer, Pfizer. "And, we are providing access to cutting-edge learning experiences that prepare colleagues for the future, so they can develop innovations that drive our purpose."

In 2019, we identified 100 million annual transactions primed for automation and, by the end of 2021, we automated 90 percent of our transaction volume, exceeding our goal of 75 percent. We have delivered hundreds of automations across the company that empower our colleagues, allowing them to focus on their highest priority work. In finance and global business services, we deployed more than 300 robotic process automations that have decreased manual process errors and improved process throughput. Our sales representatives can now scan bar codes to quickly add a sample during a sales call and monitor inventory quantities, a first-in-industry solution that creates a better experience and eliminates potential errors.



We know that to innovate on behalf of our patients, we must prepare Pfizer colleagues for the future, continuously broadening their skill sets. In 2021, we launched the new Pfizer Learning Academy, a state-of-the-art experience powered by machine learning that adapts to each colleague's unique learning needs. It includes personalized recommendations, insights and resources based on the colleague's current role and aspirations. Colleagues can access the Academy on multiple devices to learn anywhere, anytime. The experience includes social and collaborative learning, allowing colleagues to share recommendations. The Pfizer Learning Academy is transforming learning at Pfizer and is a catalyst toward a learner-led culture that enables all colleagues to maximize their potential while helping achieve our Purpose and Bold Moves.



Technology has even touched the expansion of the Pfizer footprint. In October 2021, we officially opened a new facility in Thessaloniki, Greece, which includes the Center for Digital Innovation (CDI). The CDI has already been instrumental in creating state-of-the-art solutions to improve patient outcomes, while also sourcing the best talent from around the world. Three hundred and fifty highly qualified colleagues with cutting-edge digital skills and competencies in machine learning, artificial intelligence, data science, robotic process automation, agile project management, cybersecurity, cloud, and architecture joined the Pfizer family. In fact, we are creating a new, leading-edge center of excellence in quantum computing, an up-and-coming field that we believe will accelerate innovation to enhance patient health outcomes.

Pfizer colleagues are staying ahead of the curve, leveraging the best of digital, data, and technology to power science and innovation in support of our purpose: breakthroughs that change patients' lives.



2021 Stories

# Pfizer Global Supply Colleagues Are Making the Impossible Possible

Meet four Pfizer Global Supply colleagues who bring their talents, skills and passion to work every day

Every day, thousands of colleagues across the Pfizer Global Supply (PGS) network bring their talents, backgrounds, and passion to work, to help deliver breakthroughs that change patients' lives. These colleagues represent Pfizer's Values – Courage, Excellence, Equity, and Joy – in action. Meet four of them.



**Stefaan Vanderhaegen**Aseptic Manufacturing Director, Belgium

Stefaan always knew that PGS colleagues make a difference in patients' lives – but seeing his team work tirelessly to manufacture and distribute the Pfizer-BioNTech COVID-19 vaccine gave it a new meaning.

"More than ever, relatives and friends acknowledge the worldwide impact Pfizer has," said Stefaan. "People outside of work have contacted me to thank all our colleagues and emphasize how important our work is."

Stefaan is responsible for part of the manufacturing operations at one of PGS's largest sites, and he spends as much time as possible on the shop floor (which, according to Stefaan is "where the magic happens") to understand where support is needed.

"In addition to regularly scheduled production meetings, I spend most of my time thinking about and discussing how we can improve things, both on an operational level, and as an organization for our people," added Stefaan.



**Stephen Wright**Operational Excellence Implementation Lead,
United States

Stephen helps to train, develop and instill Continuous Improvement concepts throughout PGS. But for Stephen, his work at Pfizer isn't just a "clock in and clock out" kind of thing. He is actively involved in Pfizer's Global Black Community (GBC) – a colleague resource group committed to creating an environment where all colleagues can reach their full potential

and celebrate their contributions, while being their best and most authentic selves.

When COVID-19 vaccinations were being rolled out for colleagues in early 2021, members of the GBC played a key role in building trust and encouraging vaccinations among the site's diverse colleague population. Stephen was one of the first GBC members to sign up for the vaccine, and he encouraged others to do so.

"Because African-American communities had been hit hard by COVID-19, the GBC recognized the powerful role we could play in demonstrating the importance of being vaccinated," said Stephen. "I didn't want to simply receive the vaccine and move on; I wanted to do my part to encourage my fellow colleagues and their families to get vaccinated."



**Maritza Lopez** Warehouse Inspector, Mexico

Maritza's main responsibility is to organize completed boxes of product using forklift equipment, restock product, take inventory, and organize medical samples that are given to physicians, among other tasks – always complying with Pfizer's high quality standards, while working safely and efficiently.



Maritza Lopez, Warehouse Inspector, Mexico



Certain skills and regular trainings are required to operate the various equipment Maritza uses – from the order picker, to the electric skate, to the counterbalance and the double reach. Maritza says it takes time and practice to operate the equipment correctly, and that annual refresher courses help keep her skills sharp.

"The most important thing about what we do is the patients who have confidence in our products. That's why we always commit to quality," she said. "I know that what I'm doing is for the welfare of other people...so that they can have a better quality of life."



#### **Connor Jarvis**

Senior Environmental Health & Safety (EHS) Associate, United States

For Connor, what started as a childhood passion for nature turned into an exciting and rewarding career. As an EHS Associate, no two days are exactly the same. At the start of the week, he could be reviewing storm water mitigation practices at a construction site, and at the end of the week he could be in a manufacturing clean room weighing in on a root cause investigation.

"Having a job where I can tangibly see the positive difference and strides we are making toward sustainability fulfills me."

Connor Jarvis, Senior Environmental Health & Safety Associate

"A continuous flux of new operations and cutting-edge science at our facility brings new questions and challenges each day," said Connor. "Having a job where I can tangibly see the positive difference and strides we are making toward sustainability fulfills me."

In addition to his main responsibilities, Connor also leads his site's Wildlife Team, which oversees 72 acres of the site's property dedicated to land conservation, habitat preservation, and the enablement of local biodiversity. Connor says having a wildlife preserve on site not only benefits the environment, but also helps facilitate important conversations with colleagues about the role we all play in sustainability.

"It's a testament to the importance of the environmental culture of a site along with its technical competency in impact reduction," added Connor. "The hope is that these wildlife areas give colleagues the opportunity to see that environmental stewardship can encompass much more than turning the lights out or fixing a faucet. It's a lifestyle in which we actively care for the environment through our daily choices."



## Fueling Tomorrow's Breakthrough Therapies Through the Power of Data at Scale

Leveraging supercomputers to mine for solutions to complex diseases

Genomics - and single-cell ribonucleic acid sequencing (scRNAseq) in particular - continue to play an increasingly vital role in the discovery of novel drugs and vaccines. Sequencing RNA provides fundamental insights into the regulation of genomes. Interpreting large-scale, complex transcriptomics data is critically important to understanding the molecular and cellular basis of disease.

"Data analytics and insights, powered by artificial intelligence and machine learning, are key to speed and innovation," says Lidia Fonseca, Chief Digital and Technology Officer, Pfizer.

Pfizer has been on the leading edge of innovation, leveraging large scale data and advanced technology platforms to fuel tomorrow's breakthrough therapies.

Pfizer has developed a state-of-the-art supercomputing center that is being used by our scientists to accelerate our research and development efforts. Researchers have run large scale models and simulations to predict the structure of COVID-19 oral candidates, optimize mRNA manufacturing processes, improve storage stability of mRNA vaccine, and create scientific images and documents for U.S. Food and Drug Administration (FDA) filings.

In addition, this year, Pfizer partnered with Seven Bridges, an industry-leading bioinformatics provider, to support the development of a scRNAseq data management and collaboration solution, which carries a very large data footprint. In combination with Pfizer's cloud-based environment, research teams can analyze, compute and interpret large scale data sets to conduct bioinformatic analyses that support clinical discovery efforts.

This partnership underscores the growing importance of efficient genomic data management, visibility and retrieval. The agreement is introducing avenues to expand Pfizer's cloud platforms and capabilities, a key component of Pfizer's integrated digital cloud and advanced analytics strategy.

Pfizer's evolving capabilities and partnerships are maximizing the value of our data and empowering Pfizer to accelerate the delivery of breakthroughs that change patients' lives.



Single-cell RNA sequencing plays an increasingly important role in drug and vaccine discovery and development.



# COVID-19 Vaccination: Deepening the Public's Trust Through Science

Addressing vaccine hesitancy through scientific rigor and data transparency

Immunization is the single most important public health advancement in history, after clean water.¹ We are proud to have a rich legacy in vaccine research and development. For decades, we have played a pivotal role in helping to eliminate deadly infectious diseases like smallpox and polio globally. We've designed novel vaccines based on new delivery systems and technologies that have helped prevent bacterial infections. Now, with our collaboration partner, BioNTech, we've successfully developed a breakthrough vaccine against COVID-19 using mRNA, or messenger RNA.

While billions of people worldwide are vaccinated against COVID-19, some people remain vaccine-hesitant. Many factors influence vaccine decision-making, including cultural, social, political, and vaccine-specific factors. People may also want to know more about how COVID-19 vaccines were developed and authorized, as well as how we and health agencies established their safety profiles and effectiveness.<sup>2</sup>

We remain committed to being transparent when it comes to sharing information of our ongoing COVID-19 vaccine trials. To date, we've published data on the safety and efficacy of the Pfizer-BioNTech COVID-19 vaccine from various global studies in leading peer-reviewed journals.

Additionally, real-world effectiveness data, including that from Israel, have continued to provide important information on the safety and effectiveness of our COVID-19 vaccine against infection and severe disease. Data from these real-world studies have helped shape local decision-making in numerous countries for regulatory approvals, vaccine schedules, and authorization of booster doses.

Altogether, we believe clinical and real-world data are critical to understanding the true value of vaccines in combatting this deadly disease. Looking ahead, we will continue to share data from our ongoing COVID-19 clinical studies and real-world analyses.



The Pfizer-BioNTech COVID-19 vaccine is recommended by the CDC for use in the U.S. It has been approved by the United States Food and Drug Administration (FDA) for people 16 years of age and older and authorized under emergency use authorization for people five through 15 years old.

Emergency uses of the vaccine have not been approved or licensed by FDA, but have been authorized by FDA, under an Emergency Use Authorization (EUA) to prevent Coronavirus Disease 2019 (COVID-19) in individuals 5 years of age and older. The emergency uses are only authorized for the duration of the declaration that circumstances exist justifying the authorization of emergency use of the medical product under Section 564(b)(1) of the FD&C Act unless the declaration is terminated or authorization revoked sooner. Please see EUA Fact Sheets at <a href="https://www.cvdvaccine-us.com">www.cvdvaccine-us.com</a>.

<sup>&</sup>lt;sup>2</sup> U.S. Centers for Disease Control and Prevention. Building Trust in COVID-19 Vaccines. 2021. https://www.cdc.gov/vaccines/covid-19/vaccinate-with-confidence/building-trust.html. Accessed November 8, 2021.



<sup>1</sup> Greenwood B. The contribution of vaccination to global health: past, present and future. Philos Trans R Soc Lond B Biol Sci. 2014;369(1645):20130433.

# Expanding COVID-19 Manufacturing Efforts to Increase Global Vaccine Access

Highlighting our 2021 efforts to increase vaccine supply

When the COVID-19 pandemic first began, the challenge for Pfizer and BioNTech wasn't just developing an effective vaccine and securing regulatory authorization but figuring out how we were going to produce and deliver it by the billions of doses in record time. This was no small feat, but we proved that the impossible was in fact possible. To date, Pfizer has invested more than \$2 billion at risk on our COVID-19 vaccine development program – \$500 million of that went toward scaling up our manufacturing capabilities, so that we were ready to supply the Pfizer-BioNTech COVID-19 vaccine when it was authorized in December 2020. Pfizer successfully manufactured over 3 billion doses of the Pfizer-BioNTech COVID-19 vaccine in 2021, and we expect we can manufacture an additional 4 billion doses in 2022.



Pfizer Puurs colleagues preparing pediatric shipments.

We have continued to find ways to scale up our manufacturing capabilities to increase global vaccine supply. This includes but isn't limited to expanding our global network to include 11 of Pfizer-owned and contractor sites, reducing the production time for a batch from 110 to 60 days, and performing ongoing stability studies, improving storage and stability to provide

pharmacies and other vaccination centers greater flexibility in storing and administering the vaccine. We are also proud to share that we had a 99 percent success rate in getting our vaccine deliveries to their destinations.

Thanks to the ongoing efforts of our colleagues and partners, as of December 31, 2021 we were able to deliver more than 2.6 billion vaccines to 166 countries and territories in every region of the world. The work does not stop here though; efforts are continuously underway to further increase global vaccine supply.

We also have worked to expand our capacity by leveraging new suppliers and contract manufacturers. Pfizer and BioNTech's global COVID-19 vaccine supply chain and manufacturing network now spans four continents and includes more than 20 contract manufacturing organizations (CMOs) who are or will be supporting the global Pfizer-BioNTech COVID-19 vaccine supply chain. Two such contract manufacturing agreements to further accelerate access around the world announced this year include:

- In July 2021, we announced a landmark agreement with the Biovac Institute in South Africa to manufacture the Pfizer-BioNTech COVID-19 vaccine exclusively for the 55 member states that make up the African Union.
- In August 2021, Pfizer and BioNTech also announced the signing of a letter of intent with Eurofarma Laboratórios SA, a Brazilian biopharmaceutical company, to manufacture the Pfizer-BioNTech COVID-19 vaccine for distribution within Latin America.

From day one of the pandemic, Pfizer's goal has been to provide equitable access of the Pfizer-BioNTech COVID-19 vaccine to people all over the world. These international collaborations are proof points of the tireless work being done to further accelerate vaccine access to countries that need it.

Emergency uses of the vaccine have not been approved or licensed by FDA, but have been authorized by FDA, under an Emergency Use Authorization (EUA) to prevent Coronavirus Disease 2019 (COVID-19) in individuals 5 years of age and older. The emergency uses are only authorized for the duration of the declaration that circumstances exist justifying the authorization of emergency use of the medical product under Section 564(b)(1) of the FD&C Act unless the declaration is terminated or authorization revoked sooner. Please see EUA Fact Sheets at <a href="https://www.cvdvaccine-us.com">www.cvdvaccine-us.com</a>.



## Broadening Access to the COVID-19 Vaccine

#### A commitment to bringing our vaccine to the world

2020 was a year we will never forget. While we were met with incredible suffering and loss, there were also many examples of courage, hope and pride. We couldn't think of a better example of all three than when we, in partnership with BioNTech, received the first authorizations for our COVID-19 vaccine in individuals 16 years of age and older at the end of 2020.

Since then, we've continued to follow the science, working around the clock to broaden individual access to the vaccine. Through these efforts, we were able to do the following in many countries around the world in 2021:1.2

- Expand regulatory authorizations of the vaccine to include individuals 12 through 15, and then 5 through 11, years of age
- Receive authorizations for third shots for those immunocompromised and also booster doses for adults 16 years and older in the U.S. (now authorized for 12 and older as of January 2022) and 18 years and older in the European Union, with other authorizations varying by country

Further, we continue to explore effectiveness and safety of the Pfizer-BioNTech COVID-19 vaccine in ages 2 to 5 years.

We are incredibly proud of all we were able to accomplish in 2021, but the work is not over. We are continuing to work on ongoing COVID-19 trials, including studying and monitoring the emergence of new variants, so that we can always stay vigilant as we fight the virus.<sup>3</sup>

We are also dedicated to helping ensure low- and middle-income countries receive vaccines and have committed to distributing 2 billion doses by the end of 2022. We are working with governments, health institutions and non-profit organizations to distribute the vaccine equitably. For us, the question is not who should get the vaccine, but what do we need to do so that countries globally can have access to it.



Pfizer scientists and other colleagues were instrumental in making the vaccine available to people of all ages and all over the world in 2021.



Watch the full video on Youtube here.

Emergency uses of the vaccine have not been approved or licensed by FDA, but have been authorized by FDA, under an Emergency Use Authorization (EUA) to prevent Coronavirus Disease 2019 (COVID-19) in individuals 5 years of age and older. The emergency uses are only authorized for the duration of the declaration that circumstances exist justifying the authorization of emergency use of the medical product under Section 564(b)(1) of the FD&C Act unless the declaration is terminated or authorization revoked sooner. Please see EUA Fact Sheets at <a href="https://www.cvdvaccine-us.com">www.cvdvaccine-us.com</a>.

<sup>&</sup>lt;sup>3</sup> Pfizer Inc. Our Science: Studies To Address Emerging Variants. https://www.pfizer.com/science/coronavirus/vaccine/emerging-variants. Accessed December 8, 2021.



<sup>&</sup>lt;sup>1</sup> Pfizer Inc. Pfizer And BioNTech Receive First U.S. Authorization For Emergency Use Of COVID-19 Vaccine In Adolescents. May 10, 2021. <a href="https://www.pfizer.com/news/press-release/press-release-detail/pfizer-and-biontech-receive-first-us-authorization">https://www.pfizer.com/news/press-release/press-release-detail/pfizer-and-biontech-receive-first-us-authorization</a>. Accessed December 8, 2021.

<sup>&</sup>lt;sup>2</sup> Pfizer Inc. Pfizer-BioNTech COVID-19 Vaccine COMIRNATY® Receives Full U.S. FDA Approval For Individuals 16 Years And Older. August 23, 2021. <a href="https://www.pfizer.com/news/press-release-detail/pfizer-biontech-covid-19-vaccine-comirnatyr-receives-full">https://www.pfizer.com/news/press-release-detail/pfizer-biontech-covid-19-vaccine-comirnatyr-receives-full</a>. Accessed December 8, 2021.

## Working to End the Pandemic For People All Over the World

Pfizer is committed to working toward equitable and affordable access to COVID-19 vaccines and treatments for people around the world

Pfizer is actively working with governments and health partners around the world toward fair and equitable access to COVID-19 vaccines and treatments. We're also providing expertise and resources to help strengthen health care systems that need greater support. To accelerate efforts to reach vulnerable populations, we have pledged to provide 2 billion doses of our COVID-19 vaccine to low- and middle-income countries in 2021 and 2022 – at least 1 billion doses each year.



Pfizer-BioNTech COVID-19 vaccine doses arrive in Kigali, Rwanda.

To do this, we have established direct supply agreements with country governments and supply agreements with supranational organizations like the World Health Organization-led COVAX Facility as well as partnerships with wealthy nations to provide doses to countries in need and humanitarian donations to reach refugee populations.

In 2021, Pfizer and BioNTech reached an agreement with the U.S. government (USG) to provide one billion doses of our COVID-19 vaccine at the not-for-profit price — 200 million doses in 2021 and 800 million in 2022. The U.S. government is donating these doses to Africa and to the 92 COVAX Advanced Market Commitment (AMC) low- and lower-middle- income countries. The first USG-donated shipment reached Rwanda on August 18, 2021, and, since then, we have worked closely with the U.S. government, the COVAX Facility and country governments to supply doses to populations in need, reaching nearly 80 countries in just the first four months of the initiative.

In addition to the USG program, we have worked closely with the European Union to coordinate their donation of vaccine doses from excess supply to countries in need.

To reach vulnerable refugee populations as part of a collaboration with the Jordanian Ministry of Health and United Nations High Commissioner for Refugees (UNHCR), Pfizer and BioNTech donated 200,000 vaccine doses to the country to replace the doses Jordan had administered to refugees from its national supply. This donation is intended to help Jordan to effectively and efficiently manage a national vaccination program to reach its entire population while ensuring that additional support is provided to protect the most vulnerable. Additionally, as part of the companies' collaboration with Lebanon's Ministry of Health and UNHCR, Pfizer and BioNTech will also donate up to 600,000 vaccine doses to Lebanon to replace doses administered from its national supply. The first shipment with 100,000 doses reached Lebanon in September 2021. The remaining doses will be delivered when requested by the country.

The Pfizer Pledge

## 2 billion

doses to low- and middle-income countries over 2 years via:

Government supply agreements

COVAX

2021 Stories

Government partners' donation programs

Humanitarian assistance

## 1 billion

doses achieved in 2021... and on track to surpass our 1B target in 2022



Because we know that it is not just vaccines that will help bring an end to this pandemic, but vaccinations, we are working closely with global health partners to provide expertise and resources that strengthen healthcare systems where greater support may be needed and support country efforts to deliver and administer vaccines to remote and underserved populations.

Why Pledge To Low- And Middle-Income Countries?

These countires are home to:

75% of the world's population

62% of the world's poor

## 1.3 billion

people living in poverty

We have expanded our partnership with drone delivery service Zipline, Inc. to distribute vaccines requiring cold chain, including our COVID-19 vaccine to some of the most remote areas of Africa. In Ghana, a country where around 40 percent of the population lives in rural areas, Zipline's drones will bring doses to many of these areas. Zipline plans to replicate this novel delivery model in other countries, moving next to Nigeria where there are similar challenges reaching remote regions.

Looking ahead to the potential introduction of our COVID-19 oral treatment candidate, Pfizer is focused on strategies to help ensure that this novel treatment, if authorized or approved, can reach those most in need. In November 2021, Pfizer and the Medicines Patent Pool (MPP), a United Nationsbacked public health organization working to increase access to life-saving medicines for low- and middle-income countries, announced the signing of a voluntary license agreement for Pfizer's COVID-19 oral antiviral treatment. MPP will grant

sub-licenses to qualified generic medicine manufacturers to facilitate additional production and distribution of the treatment to up to approximately 53 percent of the population living in in low- and lower-middle-income countries as well as some upper-middle-income countries with a disproportionate number of people living in poverty.



Covid-19 Vaccine drop from Zipline drone in Ghana.



 ${\tt COVID-19}\ vaccine\ delivery\ outside\ of\ rural\ Health\ Center\ in\ Ghana.$ 

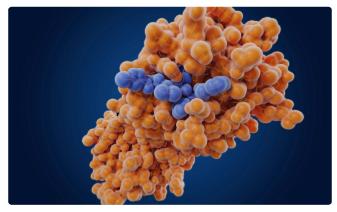


# Charting a New Course for a COVID-19 Treatment

Pfizer forges new path to help treat COVID-19 with breakthrough therapeutic for patients

As COVID-19 continues to impact millions around the world, treatment options are still limited. At Pfizer, our scientists have focused on the discovery and development of a novel COVID-19 oral treatment that can now be prescribed at the first sign of infection or, subject to clinical success and authorization or approval, to avoid disease development following exposure to the virus.

Working with the utmost urgency to help lessen the impact of this devastating disease, we initiated this antiviral program – which originated and advanced in our labs – at the start of the pandemic, building a dedicated, multidisciplinary drug discovery team and using state-of-the-art computational and structure-based drug design capabilities to identify the right candidate to progress into the clinic. Within 16 months, we advanced that candidate from initial discovery efforts to regulatory submission for Emergency Use Authorization, one of the fastest development timelines in Pfizer history and a remarkable timeline for a small molecule therapy.



SARS-CoV-2 main protease and an inhibitor.

On December 22, the U.S. Food and Drug Administration (FDA) authorized the emergency use of Paxlovid™ (nirmatrelvir [PF-07321332] tablets and ritonavir tablets) for the treatment of mild-to-moderate COVID-19 in adults and pediatric patients (12 years of age and older weighing at least 40 kg [88 lbs]) with positive results of direct SARS-CoV-2 viral testing, and who are at high risk for progression to severe COVID-19, including hospitalization, or death.

This therapy is comprised of the first orally administered protease inhibitor specifically designed to target SARS-CoV-2, and several global Phase 2/3 trials commenced in the second half of 2021. Final results from the first of those trials, shared in December 2021, showed an 89 percent reduction in risk of hospitalization or death in high-risk patients, compared to placebo, within three days of symptom onset, with no deaths in the treatment group. In a secondary endpoint, the therapy reduced the risk by 88 percent, compared to placebo, with no deaths when treated within five days of symptom onset. Treatment-emergent adverse events were comparable between our oral therapy (23 percent) and placebo (24 percent), most of which were mild in intensity. These results were consistent with the interim analysis, which was announced in November 2021.

"Safe and effective treatment options represent the next big step in the fight against COVID-19 and will arm health care providers with the potential to save more lives."

Annaliesa Anderson, Senior Vice President and Chief Scientific Officer, Bacterial Vaccines and Hospital

"Given the tremendous toll COVID-19 is taking on communities around the world, we knew we needed a development program with an ambitious global footprint, including nearly 7,000 participants from diverse backgrounds in North and South America, Europe, Africa, and Asia," reflected James Rusnak, Senior Vice President and Chief Development Officer, Internal Medicine and Hospital. "Together with investigators at hundreds of sites, we're working to move science forward, aiming to deliver a critical tool to help combat this pandemic."

"Safe and effective treatment options represent the next big step in the fight against COVID-19 and will arm health care providers with the potential to save more lives," said Annaliesa Anderson, Senior Vice President and Chief Scientific Officer, Bacterial Vaccines and Hospital. "We believe this novel, athome therapeutic may help fill a critical treatment gap to reduce illness severity, hospitalizations, and death."



Understanding the substantial need for both vaccines and treatment, we shouldered a significant financial risk to provide a breakthrough for patients that could help forge a new path to treating this disease.

"We have made a significant at-risk investment to support the manufacture and distribution of this new treatment for patients around the world," shared Angela Lukin, Global President, Hospital, who also noted our commitment to working with governments and other groups, such as the Medicines Patent Pool, to help ensure access to all those who need treatment. "We're working hard to get this treatment into the hands of patients as quickly as possible."

Paxlovid<sup>™</sup> has not been approved, but has been authorized for emergency use by FDA under an EUA, for the treatment of mild-to-moderate COVID-19 in adults and pediatric patients (12 years of age and older weighing at least 40 kg (88 lbs)) with positive results of direct SARS CoV-2 viral testing, and who are at high-risk for progression to severe COVID-19, including hospitalization or death.

The emergency use of Paxlovid™ is only authorized for the duration of the declaration that circumstances exist justifying the authorization of the emergency use of drugs and biological products during the COVID-19 pandemic under Section 564(b)(1) of the Act, 21 U.S.C. § 360bbb-3(b)(1), unless the declaration is terminated or authorization revoked sooner.

- <sup>1</sup> Pfizer Inc. Pfizer Receives U.S. FDA Emergency Use Authorization for Novel COVID-19 Oral Antiviral Treatment. December 22, 2021. https://www.pfizer.com/news/press-release-detail/pfizer-receives-us-fda-emergency-use-authorization-novel. Accessed January 10, 2022.
- <sup>2</sup> Pfizer Inc. Pfizer Seeks Emergency Use Authorization for Novel COVID-19 Oral Antiviral Candidate. November 16, 2021.
- https://www.pfizer.com/news/press-release/press-release-detail/pfizer-seeks-emergency-use-authorization-novel-covid-19 . Accessed December 15, 2021.

  Pfizer Inc. Pfizer Announces Additional Phase 2/3 Study Results Confirming Robust Efficacy of Novel COVID-19 Oral Antiviral Treatment Candidate in Reducing Risk of Hospitalization or Death. December 14, 2021. <a href="https://www.pfizer.com/news/press-release/press-
- 4 Pfizer Inc. Pfizer's Novel COVID-19 Oral Antiviral Treatment Candidate Reduced Risk of Hospitalization or Death by 89% in Interim Analysis of Phase 2/3 EPIC-HR Study. November 5, 2021. https://www.pfizer.com/news/press-release-detail/pfizers-novel-covid-19-oral-antiviral-treatment-candidate. Accessed December 15, 2021
- <sup>5</sup> Pfizer Inc. Pfizer and The Medicines Patent Pool (MPP) Sign Licensing Agreement for COVID-19 Oral Antiviral Treatment Candidate to Expand Access in Low- and Middle-Income Countries. November 16, 2021. https://www.pfizer.com/news/press-release/press-release-detail/pfizer-and-medicines-patent-pool-mpp-sign-licensing. Accessed December 15, 2021.



# **Ensuring Broad and Affordable Access** to Paxlovid™

Making an oral COVID-19 treatment option available to more people worldwide through strategic manufacturing, distribution and pricing

Pfizer is committed to working toward equitable access to Paxlovid for all people, aiming to deliver this therapeutic as soon as possible, once authorized or approved, and at an affordable price. During the pandemic, Pfizer will offer its oral therapy through a tiered pricing approach, pending country authorization or approval, based on the income level of each country to promote equity of access across the globe. High and upper-middle income countries will pay more than lower income countries, which will pay a not-for-profit price.

Pfizer continues to invest to support the manufacturing and distribution of Paxlovid, including exploring potential contract manufacturing options. Pfizer has raised its production projections from 80 million to up to 120 million courses of treatment by the end of 2022, depending on the global need.

The company has entered into agreements with multiple countries and has initiated bilateral outreach to more than 100 countries around the world. Additionally, Pfizer has signed a voluntary license agreement with the Medicines Patent Pool (MPP) for its oral treatment to help expand access, pending country regulatory authorization or approval, in 95 low- and middle-income countries that account for approximately 53% of the world's population.



Paxlovid was granted Emergency Use Authorization by the FDA in December 2021.

Paxlovid<sup>™</sup> has not been approved, but has been authorized for emergency use by FDA under an EUA, for the treatment of mild-to-moderate COVID-19 in adults and pediatric patients (12 years of age and older weighing at least 40 kg (88 lbs)) with positive results of direct SARS CoV-2 viral testing, and who are at high-risk for progression to severe COVID-19, including hospitalization or death.

The emergency use of  $Paxlovid^{TM}$  is only authorized for the duration of the declaration that circumstances exist justifying the authorization of the emergency use of drugs and biological products during the COVID-19 pandemic under Section 564(b)(1) of the Act, 21 U.S.C. § 360bbb-3(b)(1), unless the declaration is terminated or authorization revoked sooner.



# 'Doing Our Part': A Colleague's COVID Vaccine Trial Experience

Highlighting the impact of participants in the COVID-19 clinical trial program

The decision to join a clinical trial is an important and personal one. Thousands of people around the world volunteer for many reasons.

Bruce Altevogt, External Medical Engagement Lead for Pfizer Hospital, volunteered with his family for the COVID-19 clinical trial because he is as passionate about protecting them as he is about advancing scientific innovation.

"With COVID, we're all looking for ways we could do our part, and this seemed like the obvious way in which we could contribute to the ongoing science and the ongoing work that Pfizer is committed to," Altevogt said. "I trust our scientists, I know them personally, and I'm confident in what we're doing and why we're doing it."

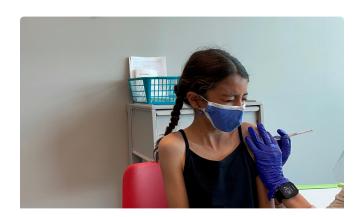
For his two children, Chaitan, 11, and Sahana, 9, participating in a clinical trial was an easy decision. They were excited to help others who had been affected by the COVID-19 pandemic and for the opportunity to leave the house for their clinical visits

"It feels good helping other people," said Sahana.

If you are considering joining a <u>clinical trial</u>, you'll be connected with the research study team of medical professionals, including the study doctor and nurses. You may also have additional scheduled visits and procedures, extra laboratory tests, and/or follow a modified treatment plan.



Sahana, Bruce, and Chaitan Altevogt at clinical trial appointment.



Sahana Altevogt gets her COVID-19 vaccine shot during her clinical trial appointment.



# Applying the Latest Digital Technology to Optimize COVID-19 Vaccine Efforts

Demonstrating how Science Will Win and how Digital is helping Pfizer do it faster

The development and distribution of the COVID-19 vaccine by Pfizer and its partner BioNTech on a global scale is one of the biggest public health achievements of the 21st century. Done largely at the height of the COVID-19 pandemic, this could not have been accomplished without the contributions of our Digital team, led by Lidia Fonseca, Chief Digital and Technology Officer. Here, Lidia discusses the role of Digital in accelerating our efforts.

### How did Digital help to transform Pfizer's COVID-19 efforts?

What we accomplished during COVID-19 highlights how Digital can change our traditional way of working. I am very proud of how we collaborated across the company to keep our colleagues safe and accelerate the development, production, and distribution of the COVID-19 vaccine. None of this happened by accident. In 2019, we began our transition to the New Pfizer and embarked on a digital transformation journey. Thus, in early 2020, we were well positioned to quickly shift gears when the pandemic hit. Practically overnight, we transitioned 80 percent of our workforce to remote work to keep them safe while continuing to deliver critical medicines to patients around the world.



Lidia Fonseca, Chief Digital and Technology Officer

#### What role did Digital play in development of the COVID-19 vaccine?

We harnessed Digital innovation to accelerate our COVID-19 vaccine efforts. Given the need to progress the vaccine clinical trial quickly, yet without compromising the safety and wellbeing of the researchers and clinical trial participants, we played a key role in accelerating the clinical development of the vaccine:

- In just four months, we scaled our clinical trial to 46,000 participants at 150 sites in six countries, and real-time predictive models of COVID-19 county-level attack rates helped the clinical development team target clinical trial site selection and optimization.
- · Using artificial intelligence and machine learning, our scientists were able to more quickly quality-check and analyze the vast amounts of data associated with the trial.
- Remote site monitoring enabled clinical trial sites to share source documentation with site monitors, something that was previously done in person. Between March and December 2020, 75 percent of site monitoring visits for the vaccine study were conducted remotely, compliantly with applicable requirements.

#### How did Digital support the manufacturing and shipping of the COVID-19 vaccine?

To support the rapid manufacturing scale-up of the vaccine - over 3 billion doses of the Pfizer-BioNTech COVID vaccine in 2021 - we deployed our first-in-industry patent-pending Digital Operations Center, providing an end-to-end view of manufacturing, allowing us to predict issues and adjust operations in real-time to meet patient supply commitments. We also deployed augmented reality to diagnose and repair equipment remotely in our labs and manufacturing sites, keeping colleagues safe and reducing travel by technicians. And, within days of the Emergency Use Authorization, we deployed end-to-end cold chain capabilities, including Internet of Things (IoT) sensors, or devices that detect and respond to changes in the environment and GPS tracking. These tools ensured cold chain integrity with real-time monitoring of shipments and temperatures anywhere in the world with close to 100 percent accuracy.



### Our Global Patients in Focus Week

### An activation of our enterprise-wide focus on patients

At Pfizer, we are committed to ensuring that the perspectives of patients are not only taken into consideration but embedded into every facet of our work to help people live longer, healthier lives. Our purpose is focused squarely on breakthroughs that change patients' lives. From research and development to product access, we work hand in hand with patients, caregivers and patient advocacy groups, to meet their needs.

This year, we hosted our first ever global Patients in Focus, a week-long activation of our focus on the patient perspective. Under the theme "Patients are Our Why," regional leaders from across the enterprise hosted more than 60 events designed to share patient and caregiver stories that build our understanding of the needs of all patients, bring colleagues together to discuss patient-centric design, and showcase impactful patient advocacy efforts across the company. Over 38,000 colleagues and 340 patient advocacy groups participated in Patients in Focus.



Patient Advocates join Pfizer Taiwan colleagues during a local Patients in Focus Week town hall. Featured in the photo from left to right: Kevin Liu, Taiwan PAPC & MA Lead, Pfizer; Shu-Min Ting, Secretary General for Atopic Dermatitis patient advocacy group, Taiwan; Li-Ping Tsai, Chairperson for PWSA patient advocacy group, Taiwan and Hung-Lai Wu, Chairperson for Peritoneal Dialysis patient advocacy group, Taiwan. Not pictured: Cellina Yeh, Taiwan Country Manager, Pfizer.

From patient award ceremonies to patient storytelling initiatives and patient-focused mini-magazines, the week served as an opportunity to honor and celebrate the patient partners we work with year-round. Internally, the week also allowed colleagues to highlight best practices for engaging patients. For example, the Global Patient Advocacy Team hosted several live global symposia featuring patient advocacy leaders from across the organization, sharing their tips for successful patient-focused initiatives. The symposia also highlighted our coordination guidelines for engaging with patients and patient advocacy groups, designed to help colleagues align on shared priorities, activities, and funding, and enhance both the relationship with and the value we bring to our partners.

60

25 3

38<sup>k</sup>

Global and local events hosted

2021 Stories

Countries represented

Pfizer colleagues attended

In a live fireside chat with more than 200 patient advocacy groups and CEO Albert Bourla, Chief Medical Officer, Aida Habtezion shared the importance of delivering breakthroughs to all patients, regardless of their circumstances. Albert reiterated the need to strive for respectful, equitable, impactful, bidirectional, and culturally appropriate interactions with patients and patient advocacy organizations. "This is possible only when everyone at Pfizer recognizes the importance of patient advocacy and actively works to include patient voices, insights, and experiences in every facet of our work," he said.



# Expanding Colleague Health and Wellness Support with New Resources

### Empowering colleagues to be their best selves

Healthy colleagues function at their best, and in turn, contribute to the scientific community and the health of our patients. We realize that for our colleagues to be their best, we must be committed to their health and wellness. That's why, each year, we make new investments to help colleagues manage their mental and physical well-being.

In 2021, Pfizer partnered with Thrive Global to encourage and enable colleagues to take ownership of their mental health and wellness. We integrated tools and resources into the fabric of our company's culture through leader-led forums, town halls, meetings, broadcasts, and the Pfizer Thrive app. Colleagues also received a "Wellness Day" — an extra paid day off from work to focus on health, well-being, and whatever brings them joy and relaxation.

At Pfizer, the importance of unleashing the power of our people means creating an environment where colleagues feel personally and professionally fulfilled, which will make us more successful than ever in delivering breakthrough medicines to patients. We are proud to partner with Thrive Global to create opportunities that empower colleagues to better care for themselves.



Thrive Global is an American company that provides behavior change technology. The company's mission is to end the stress and burnout epidemic by offering companies and individuals sustainable, science-based solutions to enhance both well-being and performance.



# Showcasing our Scientists and Sites

### Kicking off an enterprise-wide video recruitment campaign

We're moving at the speed of science – and to do so, we need to fill our talent pipeline with impressive scientists. Starting in the second half of 2021, we launched a comprehensive campaign with the goal of recruiting and filling positions across our Pfizer Research and Development sites, with a focus on Worldwide Research and Development (WRD) and Global Product Development (GPD) roles.

Through video storytelling, we featured six of our R&D sites across the United States: Pearl River, New York, St. Louis, Missouri, Andover, Massachusetts, Groton, Connecticut, Cambridge, Massachusetts, and La Jolla, California. We showcased both the cutting-edge facilities and our colleagues' personal stories, featuring three colleagues in each location.

These videos were shared externally on our corporate social media channels – Facebook, Twitter, LinkedIn, Instagram, and YouTube – through the colleague engagement platform, Conversation Leaders, and our internal site, PfizerWorld. Multiple versions of sizes and lengths of the videos were created to optimize viewership. This robust media campaign also featured local strategies like print publication ads and e-billboards, and global tactics like ads with music and television streaming platforms.

Check out some quotes from our featured scientists below.



### Vidia Roopchand

**Principal Scientist** 

"The cultural diversity on the Pfizer campus has allowed us to have different perspectives in our approach to vaccines research. We also have great diversity in our scientific backgrounds, and when those two come together, we have a very unique way of approaching problems. I think we all come to work with one purpose in mind, and that is to make vaccines that will make the world a better place."





### Eli Reiser

Senior Associate Scientist

"One of Pfizer's core values is excellence and there's a lot of support for it, but another one is courage and that willingness to speak up and say, 'Hey, I disagree'. I have felt comfortable doing that since I started, and the whole team is really open to that. We really are supporting each other and trying to improve our science in every way."





### Pooja Arora

Director, Global Chemistry, Manufacturing, & Controls

"When I was making a decision to go into academia versus industry, I thought about the pharmaceutical industry, because what better way to implement your knowledge and skills than to develop medicines that are expected to make a positive impact on the lives of patients."

Andover, MassachusettsLearn more about Andover <u>here</u>.





### Aran Hubbell

Senior Scientist

"What I think is most impressive about Pfizer Groton is the number of experts we have. I learned that learning never stops."



### Maria Galou-Lameyer

Head of Biotherapeutics Assay Development

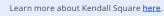
"Pfizer is a powerhouse of experts. What you find here in Kendall Square, it's kind of really unique in the world. Everywhere you look, everywhere you go everybody is talking science. When I saw that I was like 'I need to be here'."



Learn more about Groton here.



Kendall Square, Massachusetts





2021 Stories

# **Building Our Next Generation of Leaders**

### Breakthrough Fellowship Program is off to a successful start

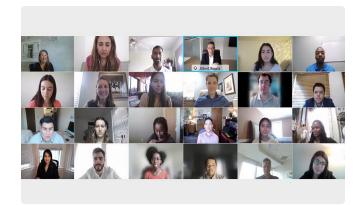
In early 2021, we launched the Breakthrough Fellowship Program - a nine-year commitment to increase minority representation and enhance our pipeline of diverse leaders. The Breakthrough Fellowship Program, a first-of-its-kind program, works to advance students and early career colleagues of Black/African American, Latinx/Hispanic and Native American descent, with a goal of developing 100 Fellows by 2025.

Our first cohort of 20 rising seniors completed the first phase of the program, a 10-week internship, in 2021. The cohort was 55 percent female and 45 percent male with a diversity breakdown of 40 percent Black/African American, 40 percent Latinx/Hispanic and 20 percent two or more races.1 The application process was extremely competitive, with more than 2,600 submissions received. Fellows were supported by a "triad" of Pfizer colleagues that included their manager, their peer buddy, and another first, an "Equity Mentor." This unique support system ensured Fellows had multiple connection points within their team and an expanded relationship within our Colleague Resource groups.

We developed a premier program for the Fellows that highlights our core values:

- · Courage, to meet with and ask smart questions during small-group group sessions with the Pfizer Executive Leadership Team
- Excellence, through opportunities to collaborate and connect between therapeutic areas
- Equity, through networking and development sessions with our Colleague Resource Groups, and
- · Joy, through the life-long peer connections and mentor relationships fostered during the Fellowship

We have invited 17 of the first cohort of 20 to join us as full-time colleagues upon graduation in 2022. The selection process is underway to identify the second cohort starting in 2022.



Pfizer CEO Albert Bourla meets with Breakthrough Fellows during one of the 1:20 sessions with the Pfizer Executive Leadership Team.



<sup>&</sup>lt;sup>1</sup> Applicant data – Jackie Goldschmidt

# **Embedding DEI into Our Purpose**

### Enhancing diversity and belonging throughout the company

Building on our reputation as a leader in diversity, equity, and inclusion (DEI), we updated our DEI strategy in 2021 to embed these principles into our workplace and further advance one of our five Bold Moves, unleash the power of our people.

Our updated strategy embraces the vision to be a best-in-class organization that embeds DEI in our workplace and into our purpose of delivering breakthroughs that change patients' lives, and includes a new governance model. By having a clear overarching DEI vision, we're able to outline distinct DEI roles and accountabilities, align our therapeutic areas and divisions with our vision, and assess our progress against measurable outcomes. As our Chief Diversity, Equity and Inclusion Officer Ramcess Jean-Louis said, "We approach DEI with the same Pfizer discipline applied to everything else we do - what gets measured, gets improved. Pfizer's DEI strategy is built around tangible efforts that can be measured against three key stakeholder pillars."



Mona Babury, Global Diversity, Equity and Inclusion, at the first Refugee Hiring Event at Fort Dix.

These three pillars support our core value of Equity, ensuring every person is seen, heard, and cared for. The pillars include building a more inclusive colleague experience, advancing equitable health outcomes, and transforming society with external DEI partnerships - creating a strong foundation from which to develop an inclusive workplace for all.

From supplier diversity to equitable accessibility planning for product launches, we considered all aspects of our business and identified ways to embed DEI, remove barriers, and build our inclusive culture.

"We approach DEI with the same Pfizer discipline applied to everything else we do — what gets measured, gets improved."

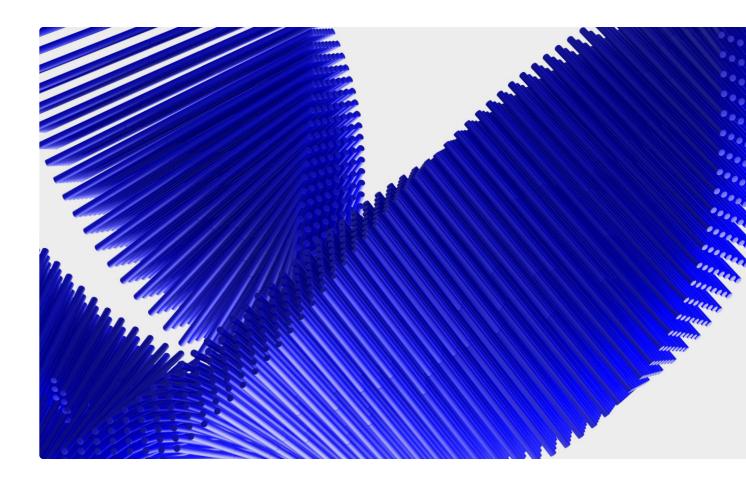
Ramcess Jean-Louis, Chief Diversity, Equity and Inclusion Officer

Our new strategy came to life in 2021 through our first global safe space listening session and launch of our Breakthrough Fellowship Program. The global safe space listening session was in response to the Afghanistan withdrawal and offered colleagues, especially those who identify as refugees or veterans, an opportunity to share their feelings around the news. Safe space listening conversations will continue to be planned based on world events.

Understanding that minority communities are underrepresented in leadership across corporate America, the Breakthrough Fellowship Program is a nine-year commitment to increase minority representation at Pfizer. It's a first-of-itskind fellowship program focused on advancing undergraduate students and fellows of Black/African American, Latino Community/Hispanic and Native American descent with the goal of engaging 100 Fellows by 2025.

Learn more about our diversity and belonging efforts, inclusive research, and partnerships in the Social section of this year's **ESG Report**.





# Living Our Values

Our Environmental, Social & Governance commitments help us to deliver on our vision every day.

Learn more about our progress on our goals in our <u>ESG report</u>.



### A Closer Look at ESG

Pfizer's values and commitment to long-term sustainability through ESG goals are at the heart of the way we strive to responsibility live our purpose – breakthroughs that change patients' lives.

### **Environment**

As planetary health impacts public health, we are committed to limiting our impact on the environment and the climate. Our company purpose – breakthroughs that change patients' lives – guides our environmental priorities, with a focus on impact reduction, conservation of resources and the reduction of waste arising from our operations. As a global biopharmaceutical company, we are committed to applying science to fight the challenges posed by the climate crisis and innovating to bring products to the market that tackle health conditions linked to our warming planet.



# SCIENCE WILL WIN" Replicer Werturn Jah 201

### Social

The COVID-19 pandemic continues to introduce uncertainty and fluid challenges, heightening our business imperative to harness scientific innovation to help create a healthier, more equitable world for all. While we are continually redoubling our efforts to address COVID-19 as it evolves, we remain focused on helping to address the burden on individuals, their families, and communities of other equally debilitating infectious and chronic diseases. Through our partnerships and programs, we aim to expand affordable access to our breakthrough medicines and vaccines, particularly among underserved communities. Our societal priorities extend to people across the globe and within our own workforce and supply chain, as we invest in our human capital and work to advance diversity, equity, and inclusion.

### Governance

We behave ethically and thoughtfully in everything that we do, owning our responsibility to change lives for the better. As part of this responsibility, Pfizer prioritizes safety, quality, and transparency in our operations. Our governance structure supports proactive business-led quality and compliance built around elements of effective risk management. To facilitate accountability, our Board of Directors is more involved than ever in the governance and implementation of our ESG strategy. This board is made up of diverse representatives with respect to gender, age, race, ethnicity, background, and professional experience and a majority of independent directors.



- Read about Pfizer's ESG Report online here.



# 2021 Progress and Highlights



7%

Reduction in scope 1 and 2 greenhouse gas (GHG) emissions from 2019 baseline



4th

Consecutive year on CDP's Supplier Engagement Leaderboard



15%

Reduction in water withdrawal and 13% reduction in hazardous and non-hazardous waste disposed compared to 2020



1.4b

Estimated patients<sup>1</sup> treated or vaccinated by a Pfizer product

424m

Estimated patients<sup>1</sup> treated excluding COVID-19 vaccines or treatments



41.5%

Representation for women at VP+ levels globally

25%

Representation for U.S. minorities at VP+ level



21%

Clinical success rate (first-inhuman to approval) for Pfizer new molecular entities by end of 2021



3/12

3 out of 12 board directors identify as ethnically diverse



4/12

4 out of 12 board directors are female



Named one of the World's Most Ethical Companies by Ethisphere

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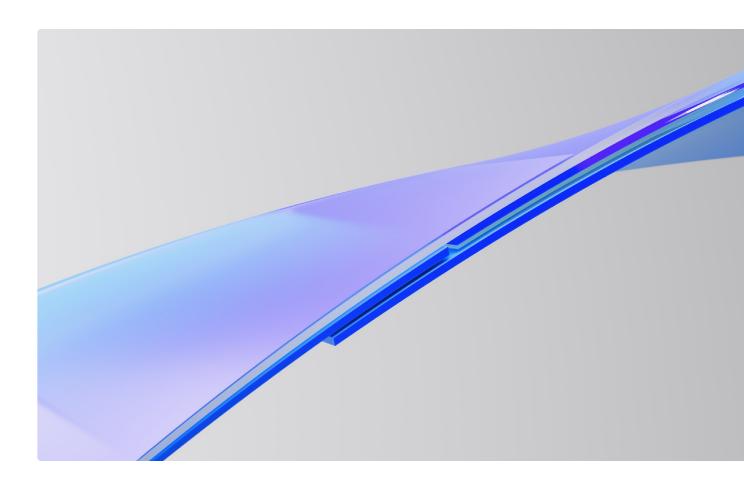
<sup>&</sup>lt;sup>1</sup> Patient counts are estimates based on multiple data sources.

"Pfizer's vision is to be a best-in-class organization built on a strong foundation of ESG principles."

Albert Bourla

Chairman & Chief Executive Officer





# Performance

2021 was a year in which we set all-time highs in several financial categories — including Revenue and Adjusted Diluted EPS.

Learn more about our performance on our <u>Investor site</u>.



## Financial Performance

Three-year summary for the years ended December 31

Millions (Except Per Common Share Data)				% Change	
	2021	2020	2019	21/20	20/19
Revenues	\$ 81,288	\$ 41,651	\$ 40,905	95	2
Reported net income <sup>(a)</sup>	\$ 21,979	\$ 9,159	\$ 16,026	*	(43)
Reported diluted EPS <sup>(a)</sup>	\$ 3.85	\$ 1.63	\$ 2.82	*	(42)
Adjusted income <sup>(b)</sup>	\$ 25,236	\$ 12,727	\$ 11,056	98	15
Adjusted diluted EPS <sup>(b)</sup>	\$ 4.42	\$ 2.26	\$ 1.95	96	16
Net cash provided by operating activities	\$ 32,580	\$ 14,403	\$ 12,588	*	14
Cash dividends paid	\$ 8,729	\$ 8,440	\$ 8,043	3	5

Detailed information on our financial and operational performance can be found in our 2021 Annual Report on Form 10-K.



<sup>\*</sup> Indicates calculation not meaningful or result is equal to or greater than 100%.

<sup>(</sup>a) Reported net income is defined as Net income attributable to Pfizer Inc. common shareholders in accordance with U.S. GAAP. Reported diluted earnings per share (EPS) is defined as EPS attributable to Pfizer Inc. common shareholders—diluted in accordance with U.S. GAAP.

Adjusted income and Adjusted diluted EPS are defined as U.S. GAAP Net income attributable to Pfizer Inc. common shareholders and reported EPS attributable to Pfizer Inc. common shareholders—diluted before the impact of purchase accounting for acquisitions, acquisition-related items, discontinued operations and certain significant items. The Adjusted income and Adjusted diluted EPS measures are not, and should not be viewed as, substitutes for U.S. GAAP net income and diluted EPS, have no standardized meaning prescribed by U.S. GAAP and may not be comparable to the calculation of similar measures of other companies. See the Non-GAAP Financial Measure: Adjusted Income section of Management's Discussion and Analysis of Financial Condition and Results of Operations in Pfizer's 2021 Annual Report on Form 10-K for an explanation of how management uses these non-GAAP measures, reconciliations to the most directly comparable GAAP measures and additional information.

# Top 10 Medicines and Vaccines

Take a look at our breakdown of the top medicines and vaccines by revenue from 2021.

\$36,781 million

Comirnaty®

\$5,970 million

Eliquis® (apixaban)

\$5,437 million

Ibrance® (palbociclib)

\$5,272 million

Prevnar Family®

\$2,455 million

Xeljanz® (tofacitinib)

\$2,015 million

Vyndaqel®/Vyndamax™ (tafamidis)

\$1,185 million

Enbrel® (etanercept)

\$1,185 million

Xtandi® (enzalutamide)

\$1,002 million

Inlyta® (axitinib)

\$683 million

Sulperazon® (sulbactam sodium/cefoperazone sodium)

☑ View the interactive graph on the <u>Annual Review site</u>.



Performance

### **About This Review**

This review covers Pfizer's worldwide business and provides information on our activities for the year ending on December 31, 2021. It describes key dimensions of our purpose, strategy, and performance as well as analysis of trends and strategies for addressing Environmental, Social, and Governance (ESG) key performance indicators. The ESG Report, in which this information is supplied, is available for download via link in the footer of this report.

### Forward Looking Information

This Annual Review contains forward-looking statements about, among other topics, our anticipated operating and financial performance, business plans, strategy, and prospects, expectations for our product pipeline, in-line products and product candidates, including anticipated regulatory submissions, data readouts, study starts, approvals, clinical trial results and other developing data, revenue contribution, growth, performance, timing of exclusivity, potential benefits and breakthrough, best-in-class, firstin-class or blockbuster status, strategic reviews, capital allocation objectives, dividends and share repurchases, reorganizations, plans for and prospects of our acquisitions, dispositions and other business-development activities and our ability to successfully capitalize on these opportunities, manufacturing and product supply, our efforts to respond to COVID-19, including the Pfizer-BioNTech mRNA vaccine for COVID-19 and our oral COVID-19 treatment (Paxlovid™), our expectations regarding the impact of COVID-19 on our business, operations and financial results and our ESG strategy that

are subject to substantial risks and uncertainties. We cannot guarantee that any forward-looking statement will be realized. Should known or unknown risks or uncertainties materialize or should underlying assumptions prove inaccurate, actual results could vary materially from past results, future plans and projected future results. A further list and description of risks, uncertainties and other matters can be found in Pfizer's Annual Report on Form 10-K for the year ended December 31, 2021, and in Pfizer's subsequent reports on Form 10-Q, in each case including in the sections thereof captioned "Risk Factors" and "Forward-Looking Information and Factors That May Affect Future Results," as well as in Pfizer's subsequent reports on Form 8-K. These reports are available on our website at www. pfizer.com and on the U.S. Securities and Exchange Commission's (SEC) website at www.sec.gov. The forward-looking statements in this Annual Review speak only as of the original date of this Annual Review, and we undertake no obligation to update or revise any of these statements as the result of new information or future developments or otherwise.

Data in this review and associated ESG Report covers the calendar year from January 1 to December 31, 2021, unless otherwise stated.

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# Corporate Shareholder Information

### Stock Transfer Agent and Registrar

The principal market for our Common Stock is the New York Stock Exchange. Our stock is also traded on various U.S. regional stock exchanges.

Stock Transfer Agent and Registrar

**Computershare Investor Services** 

P.O. Box 505000

Louisville, KY 40233-5000 Telephone: (800) 733-9393

Outside the U.S., Canada and Puerto Rico:

(781) 575-4591

Internet: www.computershare.com/investor

### **Shareholder Services and Programs**

Please contact our Stock Transfer Agent and Registrar, Computershare, with inquiries concerning shareholder accounts of record and stock transfer matters, and for information:

- Computershare Investment Program
- · Direct purchase of Pfizer stock
- · Dividend reinvesment
- Automatic monthly or biomonthly investments
- Book-entry share ownership
- · Direct deposit of dividends

### Pfizer Public Policy Engagement for Global Public Health

Learn more about public policy at Pfizer:

www.pfizer.com/purpose/contributions-partnerships/political-partnerships

### Useful Links:

- https://investors.pfizer.com/Investors/Overview/
- https://www.pfizer.com/contact
- https://www.pfizer.com/Privacy
- https://www.pfizer.com/about/careers
- https://www.pfizer.com/general/terms

### **Additional Information**

Find more information about Pfizer online:

- www.pfizer.com
- www.twitter.com/Pfizer
- www.facebook.com/Pfizer
- www.linkedin.com/company/pfizer

We may use our website as a means of disclosing material information and for complying with our disclosure obligations under Regulation Fair Disclosure promulgated by the SEC. These disclosures are included on our website in the "About — Investors" or "News" sections. Accordingly, investors should monitor these portions of our website, in addition to following Pfizer's press releases, SEC filings, public conference calls and webcasts, as well as Pfizer's social media channels (Pfizer's Facebook, YouTube and LinkedIn pages and Twitter accounts (@Pfizer and @Pfizer\_News)).

The information contained on our website, our Facebook, YouTube and LinkedIn pages or our Twitter accounts is not incorporated by reference into this 2021 Annual Review.

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