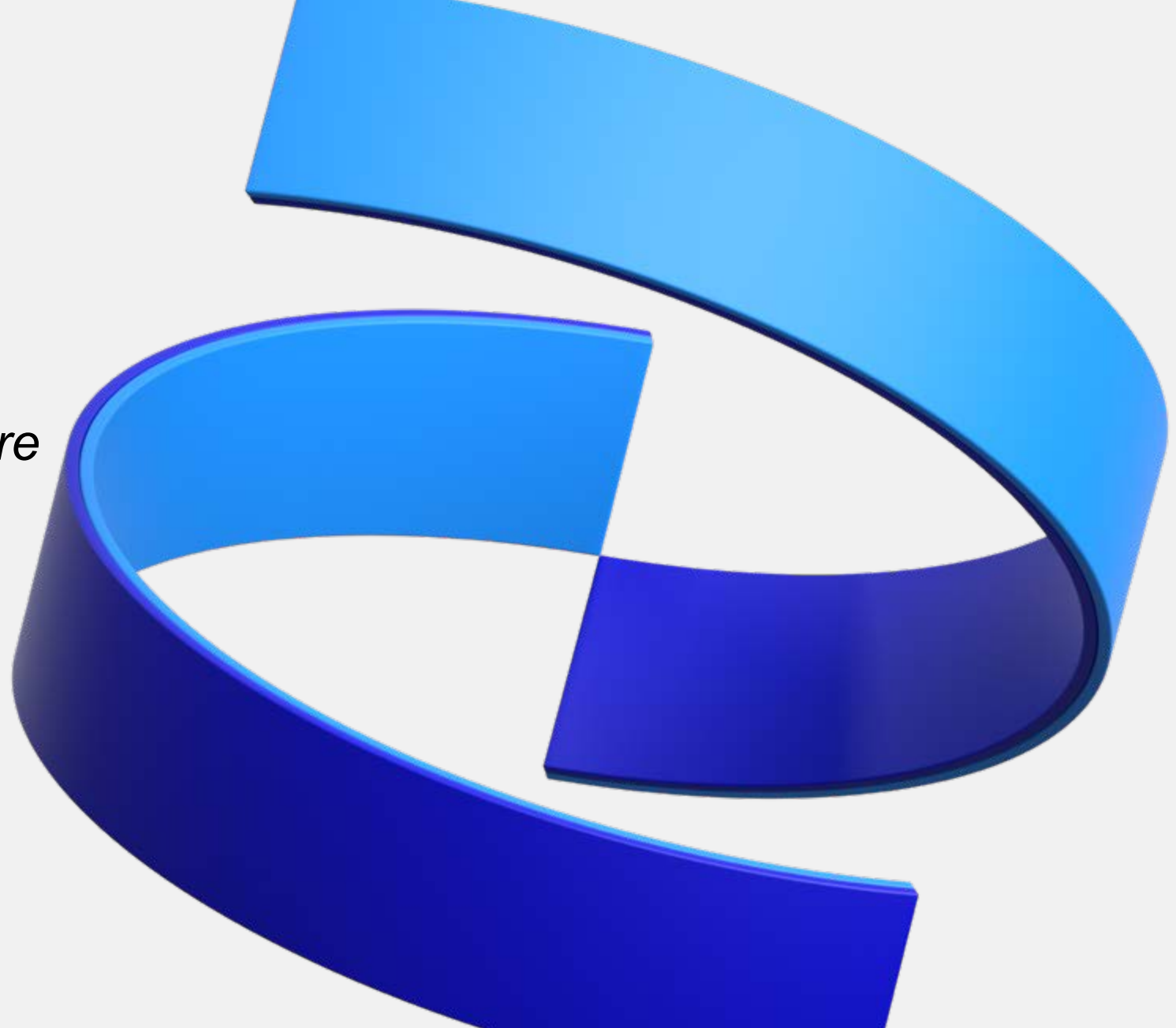




Advancing Our mRNA Strategic Development

*40th Annual JP Morgan HealthCare
Conference*

*Albert Bourla, DVM, PhD
CEO & Chairman
January 10, 2022*



Forward-Looking Statements and Other Notices


This presentation includes forward-looking statements about, among other topics, Pfizer's mRNA strategy and pipeline portfolio; Pfizer's collaboration agreement with BioNTech to co-develop a shingles mRNA vaccine; Pfizer's collaboration with Beam Therapeutics for base editing for certain rare diseases; Pfizer's option agreement with Acuitas to non-exclusively license LNP technology; Pfizer's research collaboration with Codex DNA for its synthetic DNA technology; our efforts to respond to COVID-19, including Comirnaty; our anticipated future operating and financial performance, business plans and prospects; our ability to successfully capitalize on growth opportunities and prospects; and other statements about our business, operations and financial results that are each subject to substantial risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. Among other things, statements regarding revenue and earnings per share growth; the development or commercial potential of our product pipeline, in-line products, product candidates and additional indications, including expected clinical trial protocols, the timing of the initiation and progress of clinical trials and data read-outs from trials; the timing for the submission of applications for and receipt of regulatory approvals; expected breakthrough, best or first-in-class or blockbuster status of our medicines or vaccines; and the anticipated benefits of our lightspeed approach to research and development of certain areas of our product pipeline, are forward looking and are estimates that are subject to change and clinical trial and regulatory success. These statements are subject to risks, uncertainties and other factors that may cause actual results to differ materially from past results, future plans and projected future results.

Additional information regarding these and other factors can be found in Pfizer's Annual Report on Form 10-K for the fiscal year ended December 31, 2020 and in our subsequent reports on Form 10-Q, including in the sections thereof captioned "Risk Factors" and "Forward-Looking Information and Factors That May Affect Future Results", as well as in our subsequent reports on Form 8-K, all of which are filed with the U.S. Securities and Exchange Commission and available at www.sec.gov and www.pfizer.com.

Potential risks and uncertainties also include the impact of COVID-19 on our sales and operations, including impacts on employees, manufacturing, supply chain, research and development, and clinical trials. The forward-looking statements in this presentation speak only as of the original date of the presentation and we undertake no obligation to update or revise any of these statements. This presentation is intended for the investor community only; it is not intended to promote the products referenced herein or otherwise influence healthcare prescribing decisions. All trademarks in this presentation are the property of their respective owners.



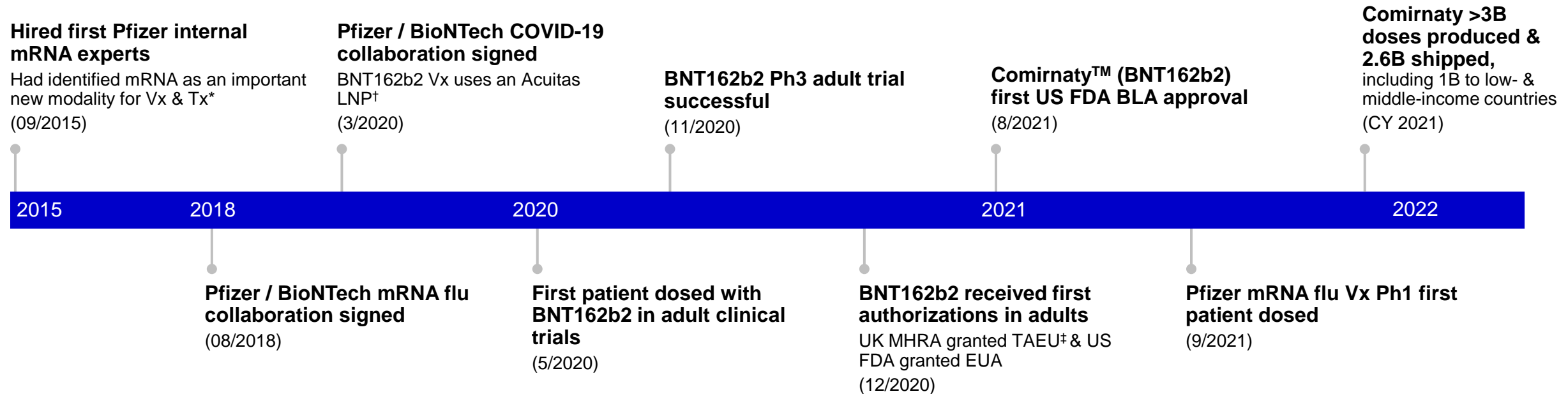
Pfizer's mRNA Strategy



mRNA is expected to be one of our sustainable business drivers going forward

- Adds another potential treatment modality to our armamentarium for vaccines and therapeutics, across our therapeutic areas
- Our Lightspeed methodology & internal cultural changes resulted in the acceleration of the platform's development in recent years
- Looking forward, we aim to continue to harness the power of mRNA to address the greatest patient challenges and contribute substantially to Pfizer's growth targets in the years ahead

mRNA - Where we've come from



*Vx = Vaccine, Tx = Treatment, †LNP= cationic Lipid NanoParticle, ‡TAEU = UK Temporary Authorization for Emergency Use. EUA = Emergency Use Authorization, BLA = Biologics License Application, CY = Calendar Year.



Our vision of mRNA leadership

Harness the power of mRNA to address the greatest unmet needs for patients with breakthrough medicines that contribute substantially to Pfizer's growth targets by 2025 and beyond



Pfizer's mRNA Strategy Roadmap

Harness the power of mRNA to address the greatest unmet needs for patients with breakthrough medicines

Invest to Strengthen Core Franchise

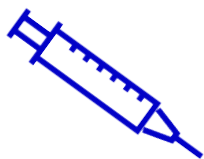


**COVID-19
Vaccine(s)****

Grow Prophylactic Vaccines*



Flu and Shingles**



Other Infectious Diseases
particularly viral

Pursue Additional TAs with Strongest Benefit/Risk



Rare Disease

Base editing in partnership
with Beam Therapeutics



Oncology

Internal effort leveraging
cancer vaccine experience

Explore opportunities in larger indications



I&I

(e.g., immuno-tolerance)



Internal Medicine

(e.g., next-gen
base editing)

*Programs are currently investigational

**Programs in collaboration with BioNTech

TA = Therapeutic Area; I&I = Inflammation and Immunology



Breakthroughs that change patients' lives

40th Annual JP Morgan Healthcare Conference – Jan 10, 2022

7

To advance our mRNA strategy, we are pursuing four agreements aligned with our strategic priorities

1 BIONTECH

Collaboration agreement to co-develop
mRNA Shingles (HZV) Vaccine

2 Beam THERAPEUTICS

Collaboration for **3 Rare Diseases**
(CNS, muscular, liver)

3 ACUITAS THERAPEUTICS

Collaboration & Option to non-exclusively license
LNP technology for up to 10 targets

4 CODEX DNA

Research collaboration / license for
synthetic DNA technology



CNS = central nervous system; HZV = Herpes Zoster Virus (aka Varicella Zoster Virus or VZV) which causes Chicken Pox as a primary infection and later (usually many years later) can cause Shingles after dormancy at the nerve endings; LNP = cationic Lipid NanoParticles

New collaborations established to advance mRNA programs in vaccines and rare diseases

Focus Area



**Grow Prophylactic
Vaccines**



**Explore Additional TAs with
Strongest Risk/Benefit**

Partnership

BIONTECH

*Agreement to co-develop
mRNA Shingles (VZV) Vaccine*



*Collaboration for 3 Rare
Diseases (CNS, muscular, liver)*

Strategic Benefits

- Candidates to use **Pfizer's HZV antigen sequences & certain of BNT's mRNA technology**
- Potential for well tolerated, highly efficacious vaccine that could be manufactured at scale
- Third **vaccines** collaboration between the companies since 2018

- **Jointly advance Rare Disease programs** using Beam's base editing technology to perform targeted editing of individual nucleotides
- Base Editing **does not involve double strand breaks** and is potentially more accurate and safer than CRISPR-Cas9* approaches



Formulation and manufacturing partnerships to accelerate efforts in core disease areas

Focus Area



Formulation

Access improved nanoparticle structure to optimize stability, targeting & efficacy



Manufacturing

Produce high-quality medicines at scale with efficient production processes

Partnership



Collaboration & Option to non-exclusively license LNP technology for up to 10 targets



Research collaboration / license for synthetic DNA technology

Strategic Benefits

- **Proven LNP* technology** used in the Comirnaty COVID-19 Vaccine could be applied to wider range of programs
- Shown to **efficiently deliver mRNA to target cells** while minimizing side effects

- Codex DNA's synthetic DNA technology allows **enzymatic synthesis of DNA**
- Moving from biological to synthetic DNA assembly may allow **significant time savings** at front-end of the mRNA production process

Pfizer is uniquely positioned to be a leader in mRNA

Strong development expertise in mRNA technology from Comirnaty

- Building our internal mRNA platform to improve stability, quality, and efficacy



Deep understanding of disease within our five core therapeutic areas

- Vaccine expertise & infrastructure built through development of Prevnar 13 and 20, RSV* and Comirnaty
- Depth in gene therapy & rare disease with three AAV**-based gene therapies in Phase 3

Demonstrated ability to progress & manufacture promising therapies at "lightspeed"

- Industry-leading manufacturing expertise with >3B doses of Comirnaty manufactured in 2021
- Implemented lightspeed cultural changes to accelerate promising new therapies

*RSV = Respiratory Syncytial Virus, **AAV = Adeno-Associated Virus

Our approach to collaborating with the ecosystem to co-create innovation



Pfizer Ventures

Monitors early-stage companies for investment opportunities aligned with our mRNA strategy



RNA Incubator

Establishes academic collaborations and initiates exploratory projects through Pfizer's Center for Therapeutic Innovation



Business Development

Dedicated team tasked with identifying M&A and partnership opportunities with mature companies that fit our enterprise-wide priorities



mRNA Centers of Excellence

Internal COE comprising research nodes focused on our mRNA priorities (Vaccines, Rare Disease, Oncology, Medicinal Sciences)

A large, abstract graphic composed of several overlapping, curved, and faceted planes in various shades of blue and purple. The planes are arranged in a way that suggests a three-dimensional, crystalline or molecular structure, possibly representing a DNA helix or a protein fold. The lighting creates soft gradients and highlights on the surfaces, giving it a sense of depth and movement.

BioNTech Shingles mRNA Vaccine Collaboration

What is Shingles / Herpes Zoster?

Painful disease with potentially severe & long-lasting effects in older & immunocompromised adults

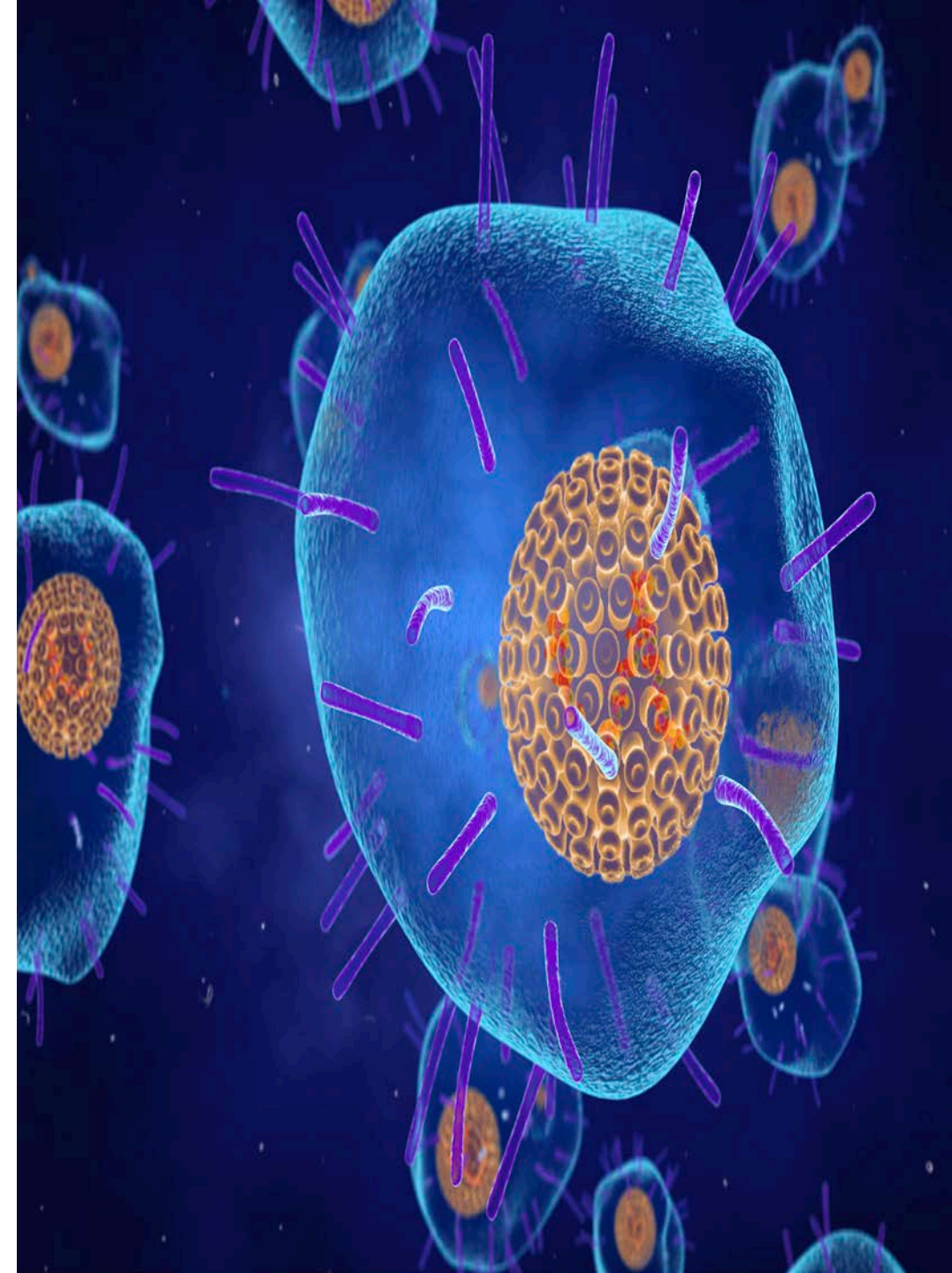
- Reactivation of virus that causes Chicken Pox which has been dormant in nerve endings since childhood infection
- 1 in 3 US adults will experience Shingles at least once in their lifetime with most attacks lasting 3-5 weeks
 - Most cases occur in adults >60 and those who are immunocompromised
- Presents usually as unilateral rash; post herpetic neuralgia (PHN) is a major complication defined as pain persisting to 90 days or more
- PHN is the third most common cause of chronic neuropathic pain in the US with an estimated 500K yearly cases
- ACIP* recommends Shingles vaccination for adults >50

Date Source: Shingles, National Institute on Aging, accessed at <https://www.nia.nih.gov/health/shingles> Illustration source: Getty Images

*ACIP = US CDC's Advisory Committee on Immunization Practices



Breakthroughs that change patients' lives



Opportunity for an Improved Shingles Vaccine Using mRNA Technology

Builds upon prior Pfizer-BioNTech collaboration for COVID-19

Potential mRNA VZV* Vaccine Could Allow: Maintaining High Efficacy + Reduced Side Effects + Robust, Scalable Manufacturing

- Leverages Pfizer's depth in Vaccines (\$6.6B in 2020 revenues, +2% op)
- Uses same expertise & infrastructure as Comirnaty with opportunity for:
 - High Efficacy (\approx Current Vaccine)
 - Potential for reduced number of doses (1 vs. 2)
 - Reduced Vaccine Side Effects
 - Currently licensed adjuvanted recombinant vaccine has high efficacy but also rates of side effects that we think can be improved
 - Robust, Scalable Manufacturing
 - Produced >3B doses of Comirnaty in CY[†] 2021 and have production capacity of 4B doses in CY[†] 2022

*VZV = Varicella Zoster Virus, [†]CY = Calendar Years ending 12/31



Breakthroughs that change patients' lives

Currently Licensed Adjuvanted Recombinant Vaccine

Currently Licensed Vaccine – Effective but we believe tolerability & capacity-constrained supply can be improved

- Vaccine is highly effective (up to >90% in preventing attacks*) according to data from their label, but
- Large portions of prevalent and incident populations of all adults >50 years and immunocompromised adults >18 years remain unvaccinated
 - The populations total nearly 400M in major markets†, with only a small portion having been vaccinated to date
- Most patients experience side effects for 2-3 days post-vaccination (2 doses)
- Multi-step reconstitution process with adjuvant

*Source: Shingrix US PI, accessed at https://gskpro.com/content/dam/global/hcpportal/en_US/Prescribing_Information/Shingrix/pdf/SHINGRIX.PDF †Pfizer calculation. Major Markets include US, EU, UK, CAN, AUST, NZ, JPN, SK. ‡Gastro-intestinal includes nausea / vomiting / diarrhea / pain.

An abstract graphic consisting of several overlapping, curved, and faceted planes in various shades of blue and purple. The planes are arranged in a way that creates a sense of depth and movement, resembling a stylized, modern architectural structure or a molecular model. The lighting is soft, highlighting the edges and surfaces of the planes.

Beam Therapeutics Rare Disease Base Editing Collaboration

Beam's Base Editing Platform for Rare Diseases Advances Pfizer's Path to Leadership in mRNA

- **Leverages Pfizer's depth in gene therapy & rare diseases**

- Pfizer has 3 AAV-based* gene therapies for Rare Diseases in Phase 3 trials and 12 in pre-clinical development with 1-2 INDs expected annually
- Pfizer Rare Disease Therapeutic Area has \$2.9B 2020 revenues (+29% op) with marketed product strength in hematology, endocrinology, and cardiology

- **Demonstrates Pfizer's commitment to mRNA / LNP Technology Across Therapeutic Areas**

- Delivery of mRNA encoding base editing machinery by LNP[†] is the method of choice for gene editing
 - mRNA delivery facilitates transient expression of editing activity
 - Ability to redose to achieve desired effect level if necessary
- Progress made in targeting LNP[†] to tissues beyond the liver

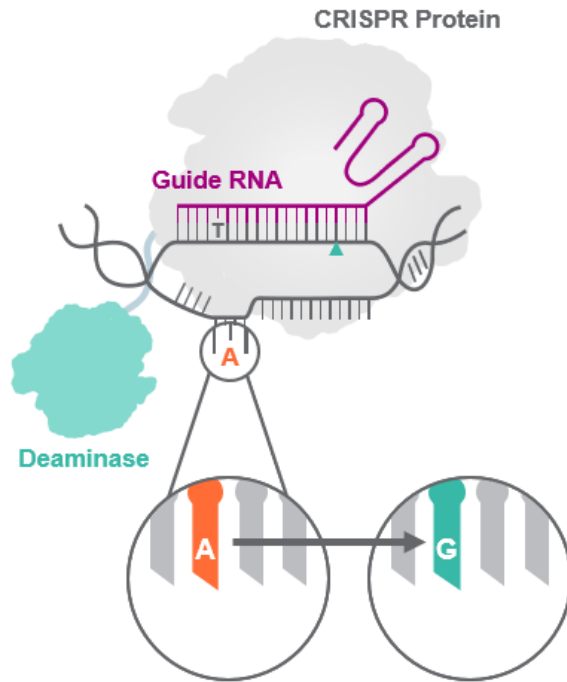
- **Newer generations of gene editing may be more suitable for *in vivo* therapeutic development**

- CRISPR-Cas9[‡] editing now clinically validated for effecting gene knockdowns
- Beam's Base Editing does not use double strand breaks and non-homologous end-joining, and may be more accurate and efficient
- Leverages a non-viral delivery platform



*AAV = Adeno-Associated Virus, [†]LNP = cationic Lipid NanoParticles, [‡]CRISPR-Cas9:CRISPR - clustered regularly interspaced short palindromic repeats, Cas9 - CRISPR associated protein 9

Base editing is a highly differentiated, potentially best-in-class gene editing technology

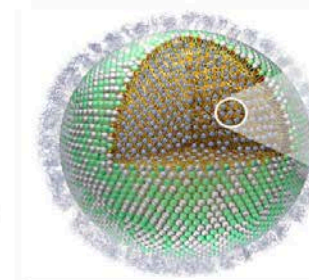


B Biology	▶ Direct, durable editing of single DNA base pairs
A Application	▶ Gene correction, activation, silencing, modification ▶ Simultaneous “multiplex” editing at many sites
S Specificity	▶ Highly specific and predictable editing profile ▶ Avoid genotoxicity and chromosomal aberrations associated with double-stranded DNA breaks
E Efficiency	▶ High levels of editing in any cell type, including non-dividing cells

Therapeutic consists of BE mRNA, guide RNA and LNP

1. mRNA for ABE
2. guide RNA 1
3. Amino lipid
4. Cholesterol
5. DSPC
6. PEG-lipid

Lipid components



60 nm

ABE = Adenine Base Editor, DSPC = DiStearoylPhosphatidylCholine, PEG= PolyEthylene Glycol

A large, abstract graphic composed of several overlapping, curved, and faceted planes in various shades of blue and purple. The planes are arranged in a way that creates a sense of depth and movement, resembling a stylized, modern architectural structure or a complex, flowing ribbon. The colors transition from a deep blue on the left to a lighter, more vibrant purple on the right.

Acuitas LNP Option Agreement

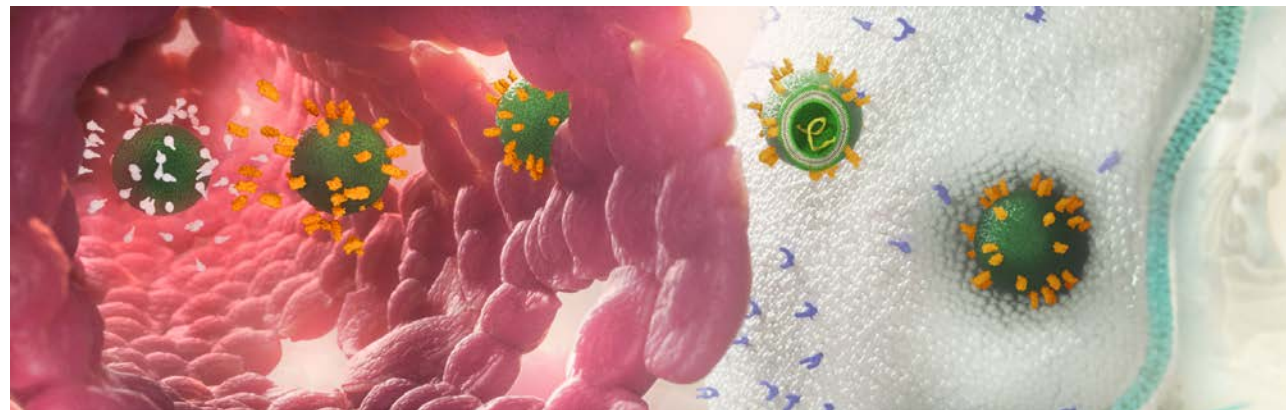
Acuitas LNP Collaboration

Acuitas Collaboration Terms

- Acuitas is one of the global leaders in development of LNPs
- Allows Pfizer to explore LNPs for a variety of vaccines or therapeutics and exercise option for up to 10 different Vx and Tx
- Acuitas' proven LNP technology is used in the Comirnaty COVID-19 Vx, and shown to efficiently deliver mRNA to target cells while minimizing side effects

Why are LNPs important for mRNA delivery?

- Engineered LNPs allow efficient intracellular delivery of mRNA vaccines/medicines to the cytoplasm
 - “Naked” mRNA can be significantly degraded or attacked by the immune system before reaching desired cells
 - mRNA has a hard time passing through the cell wall unaided
 - Each specific LNP's properties help determine tissue tropism, reactogenicity, and immunogenicity



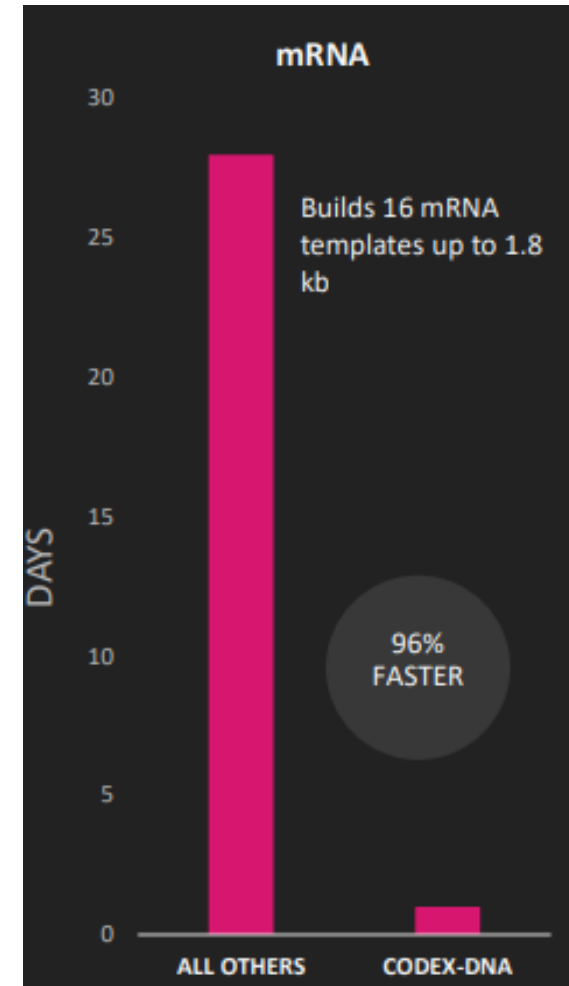
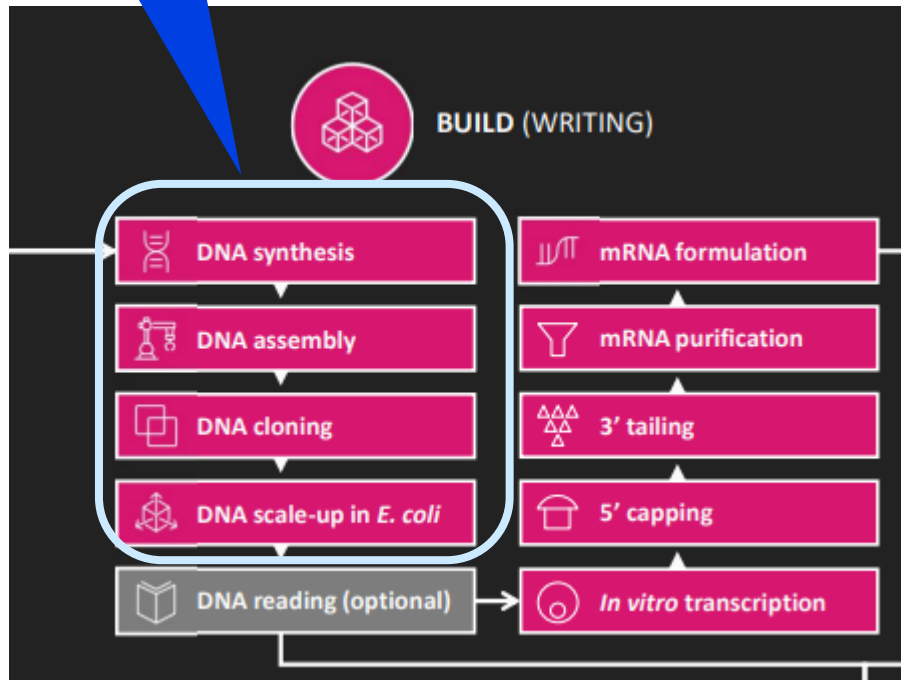
Source for illustration: Acuitas Therapeutics
Vx = Vaccine, Tx = Therapeutic

A large, abstract graphic composed of several overlapping, curved, and faceted planes in various shades of blue and purple. The planes are arranged to create a sense of depth and movement, resembling a stylized DNA helix or a modern architectural structure. The lighting is soft, creating subtle gradients and shadows on the surfaces.

Codex DNA Synthetic DNA Collaboration

Codex DNA's technology may allow significant time savings at front-end of the mRNA production process by moving from biologic to synthetic DNA assembly, potentially reducing time from several weeks to days

Codex DNA replaces these steps



mRNA Collaborations - Key Takeaways

New BioNTech, Beam, Acuitas and Codex DNA collaborations allow Pfizer to continue to advance its mRNA strategy

- These strategic collaborations provide many of the key enabling technologies needed to deepen and expand Pfizer's mRNA development
 - Beam expands the use of mRNA into Rare Disease with the opportunity for precise gene editing
 - BioNTech shingles collaboration adds a potential third mRNA viral vaccine candidate
 - Acuitas LNP collaboration / option / license provides potential LNPs for additional future vaccine & therapeutics candidates
- **Platform Capabilities:**
 - Codex DNA's synthetic DNA assembly could allow for reduced production cycle times.

Bottom Line: These collaborations provide many of the key enabling technologies needed to deepen and expand Pfizer's mRNA strategic development

A large, abstract graphic composed of several overlapping, curved, and faceted planes in various shades of blue and purple. The planes are arranged in a way that creates a sense of depth and movement, resembling a stylized, modern architectural structure or a complex, flowing ribbon. The colors transition from a deep blue on the left to a lighter, more vibrant purple on the right.

40th Annual JP Morgan Healthcare Conference