

# REGENERON

SCIENCE TO MEDICINE®

JP MORGAN 2021

JANUARY 11TH

LEONARD S. SCHLEIFER MD, PhD

PRESIDENT & CEO

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PRESIDENT & CSO

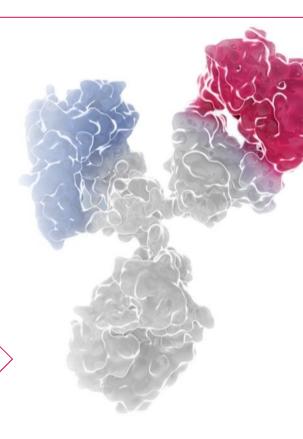
# NOTE REGARDING FORWARD-LOOKING STATEMENTS & NON-GAAP FINANCIAL MEASURES

This presentation includes forward-looking statements that involve risks and uncertainties relating to future events and the future performance of Regeneron Pharmaceuticals, Inc. ("Regeneron" or the "Company"), and actual events or results may differ materially from these forward-looking statements. Words such as "anticipate." "expect." "intend." "blan." "believe." "seek." "estimate." variations of such words, and similar expressions are intended to identify such forward-looking statements. Although not all forward-looking statements contain these identifying words. These statements concern, and these risks and uncertainties include, among others, the impact of SARS-CoV-2 (the virus that has caused the COVID-19 pandemic) on Regeneron's business and its employees, collaborators, and suppliers and other third parties on which Regeneron relies, Regeneron's and its collaborators' ability to continue to conduct research and clinical programs, Regeneron's ability to manage its supply chain, net product sales of products marketed or otherwise commercialized by Regeneron and/or its collaborators (collectively, "Regeneron's Products"), and the global economy; the nature, timing, and possible success and therapeutic applications of Regeneron's Products and Regeneron's product candidates and research and clinical programs now underway or planned, including without limitation EYLEA® (aflibercept) Injection, Dupixent® (dupilumab), Libtayo® (cemiplimab), Praluent® (alirocumab), Keyzara® (sarilumab), Inmazeb<sup>TM</sup> (atoltivimab, maftivimab, and odesivimab-ebgn), casirivimab and imdevimab, fasinumab, evinacumab, garetosmab, Regeneron's and its collaborators' other oncology programs (including odronextamab (REGN1979) and REGN5458), Regeneron's and its collaborators' other hematology programs (including pozelimab (REGN3918)). Regeneron's and its collaborators' earlier-stage programs, and the use of human genetics in Regeneron's research programs; safety issues resulting from the administration of Regeneron's Products and product candidates in patients, including serious complications or side effects in connection with the use of Regeneron's Products and product candidates in clinical trials; the likelihood, timing, and scope of possible regulatory approval and commercial launch of Regeneron's product candidates and new indications for Regeneron's Products including without limitation EYLEA, Dupixent, Libtayo, Praluent, Kevzara, casirivimab and imdevimab, fasinumab, evinacumab, garetosmab, odronextamab, REGN5458, and pozelimab; the likelihood and timing of achieving any of the anticipated milestones described in this presentation; the extent to which the results from the research and development programs conducted by Regeneron and/or its collaborators may be replicated in other studies and/or lead to advancement of product candidates to clinical trials, therapeutic applications, or regulatory approval; ongoing regulatory obligations and oversight impacting Regeneron's Products (such as EYLEA, Dupixent, Libtayo, Praluent, and Kevzara), research and clinical programs, and business, including those relating to patient privacy; determinations by regulatory and administrative governmental authorities which may delay or restrict Regeneron's ability to continue to develop or commercialize Regeneron's Products and product candidates; competing drugs and product candidates that may be superior to, or more cost effective than. Regeneron's Products and product candidates; uncertainty of market acceptance and commercial success of Regeneron's Products and product candidates and the impact of studies (whether conducted by Regeneron or others and whether mandated or voluntary) on the commercial success of Regeneron's Products and product candidates; the availability and extent of reimbursement of Regeneron's Products from third-party payors, including private payor healthcare and insurance programs, health maintenance organizations, pharmacy benefit management companies, and government programs such as Medicare and Medicaid (including the impact of the recently issued "most-favored-nation" interim final rule); coverage and reimbursement determinations by such payors and new policies and procedures adopted by such payors; the ability of Regeneron to manufacture and manage supply chains for multiple products and product candidates; the ability of Regeneron's collaborators, suppliers, or other third parties (as applicable) to perform manufacturing, filling, finishing, packaging, labeling, distribution, and other steps related to Regeneron's Products and product candidates; unanticipated expenses; the costs of developing, producing, and selling products; the ability of Regeneron to meet any of its sales or other financial projections or guidance, including, without limitation, capital expenditures, and changes to the assumptions underlying those projections or guidance; risks associated with intellectual property of other parties and pending or future litigation relating thereto (including without limitation the patent litigation and other related proceedings relating to EYLEA. Dupixent, and Praluent), other litigation and other proceedings and government investigations relating to the Company and/or its operations, the ultimate outcome of any such proceedings and investigations, and the impact any of the foregoing may have on Regeneron's business, prospects, operating results, and financial condition; and the potential for any license or collaboration agreement, including Regeneron's agreements with Sanofi, Bayer, and Teva Pharmaceutical Industries Ltd. (or their respective affiliated companies, as applicable), as well as Regeneron's agreement with Roche relating to casirivimab and imdevimab, to be cancelled or terminated. A more complete description of these and other material risks can be found in Regeneron's fillings with the U.S. Securities and Exchange Commission, including its Form 10-K for the fiscal year ended December 31, 2019 and Form 10-Q for the guarterly period ended September 30, 2020, in each case in the section thereof captioned "Item 1A. Risk Factors." Any forward-looking statements are made based on management's current beliefs and judgment, and the reader is cautioned not to rely on any forward-looking statements made by Regeneron. Regeneron does not undertake any obligation to update (publicly or otherwise) any forward-looking statement, including without limitation any financial projection or guidance, whether as a result of new information, future events, or otherwise.

This presentation uses non-GAAP net income per share, or non-GAAP EPS, which is a financial measure that is not calculated in accordance with U.S. Generally Accepted Accounting Principles ("GAAP"). This and other non-GAAP financial measures are computed by excluding certain non-cash and other items from the related GAAP financial measure. Non-GAAP adjustments also include the income tax effect of reconciling items. The Company makes such adjustments for items the Company does not view as useful in evaluating its operating performance. For example, adjustments may be made for items that fluctuate from period to period based on factors that are not within the Company's control, such as the Company's stock price on the dates share-based grants are issued. Management uses non-GAAP measures for planning, budgeting, forecasting, assessing historical performance, and making financial and operational decisions, and also provides forecasts to investors on this basis. Additionally, non-GAAP measures provide investors with an enhanced understanding of the financial performance of the Company's core business operations or a perspective on how effectively the Company deploys capital. However, there are limitations in the use of non-GAAP financial measures as they exclude certain expenses that are recurring in nature. Furthermore, the Company's non-GAAP financial measures may not be comparable with non-GAAP information provided by other companies. Any non-GAAP financial measure presented by Regeneron should be considered supplemental to, and not a substitute for, measures of financial performance prepared in accordance with GAAP. A reconciliation of the Company's non-GAAP to GAAP net income and net income per share for the three months and nine months ended September 30, 2020 is provided on slide 38.

**REGENERON®** 

Leonard S. Schleifer MD, PhD
President & Chief Executive Officer



# **REGENERON** A DIVERSIFIED GROWTH STORY

# Strong and Growing Core Brands







# Entering a Period of New Launches



1L Non-Small Cell Lung Cancer and Basal Cell Carcinoma



Pediatric Asthma



Casirivimab / Imdevimab

COVID-19

#### **Evinacumab**

Homozygous Familial Hypercholesterolemia (HoFH)

#### A Broad and Diverse Pipeline

**Dupixent** in pivotal trials for eight Type 2 diseases

Advancing **immuno-oncology** pipeline and combinations

20+ Therapeutic candidates in clinical development

#### STRONG EXECUTION IN 2020

Total Revenues (9 months through Sept 2020)\*

**+29%** growth









Non-GAAP EPS (9 months through Sept 2020)\*

**+28%** growth

### R&D Pipeline Advancements



EoE, Pediatric Asthma/AD



Filed in 1L NSCLC and BCC (PDUFA's 1Q21)



Leading CD3 & CD28 Bispecifics platform



Casirivimab / **Imdevimab** 

COVID-19 antibody cocktail EUA



FDA-approved Treatment for Ebola

### Eight new INDs

# EYLEA, DUPIXENT, AND LIBTAYO ARE CORE TO DIVERSIFIED GROWTH STRATEGY; SPECIALIZED PROGRAMS OFFER ADDITIONAL GROWTH POTENTIAL

#### **EYLEA**

- Execute and grow in wet AMD and diabetic eye diseases
- Explore high-dose formulation for less frequent dosing
- Pursue gene therapy and other novel approaches

### **Dupixent\***

- Transform treatment of Type 2 inflammatory diseases
- Realize full potential in AD, asthma and CRSwNP
- Execute broad Ph3 & Ph4 development program

## Oncology

- Realize potential for best-in-class immunotherapy treatments
- <u>Compete</u>, <u>Enhance</u>, and <u>Extend</u> benefits of immunotherapy to broader patient populations

# Specialized growth opportunities:

Infectious Disease COVID-19<sup>^</sup> & Ebola Antibody Cocktails

Rare Disease HoFH, C5-mediated diseases

Allergic Disease
Cat, Birch

AMD – Age-Related Macular Degeneration; AD – Atopic Dermatitis; CRSwNP – Chronic Rhinosinusitis with Nasal Polyposis; HoFH – Homozygous familial hypercholesterolemia

<sup>\*</sup> In collaboration with Sanofi

## EYLEA®: EXTENDING MARKET LEADERSHIP POSITION

Setting a high bar on efficacy/safety/convenience for current and future potential competition



#1 prescribed anti-VEGF treatment 30+ million doses administered since launch

## **Capturing Market Growth**

- 4Q20 **\$1.34Bn (**+10% YoY), FY2020 **\$4.95Bn** (+7% YoY)\*
- Market share gains and favorable demographic trends



#### Maximize Growth Initiatives

- Realize potential in diabetic eye diseases
- Initiating DTC to drive disease awareness



### Focusing on the Science

- Explore high-dose formulation for less frequent dosing
- Pursue gene therapy and other novel approaches



#### **DUPIXENT®: STRONG GROWTH TRAJECTORY**



+69% worldwide sales growth in 3Q20 vs. 3Q19



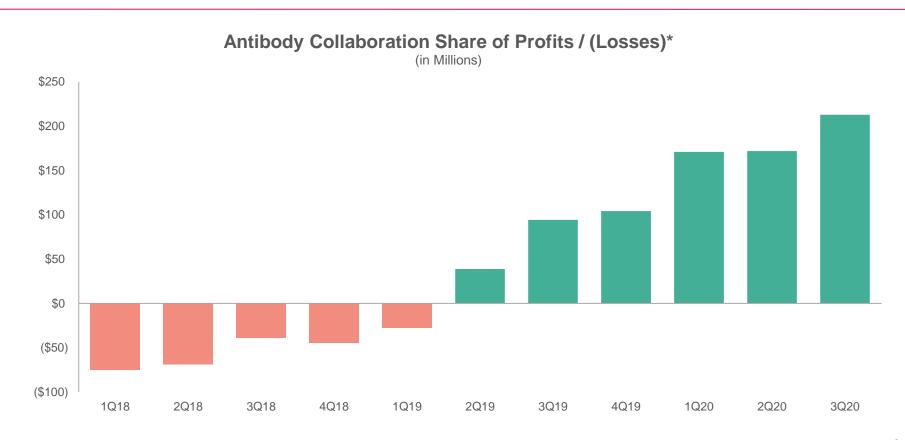
Net Product Sales\*, \$Million

Broad-based growth across all approved indications

Significant market opportunities support future growth

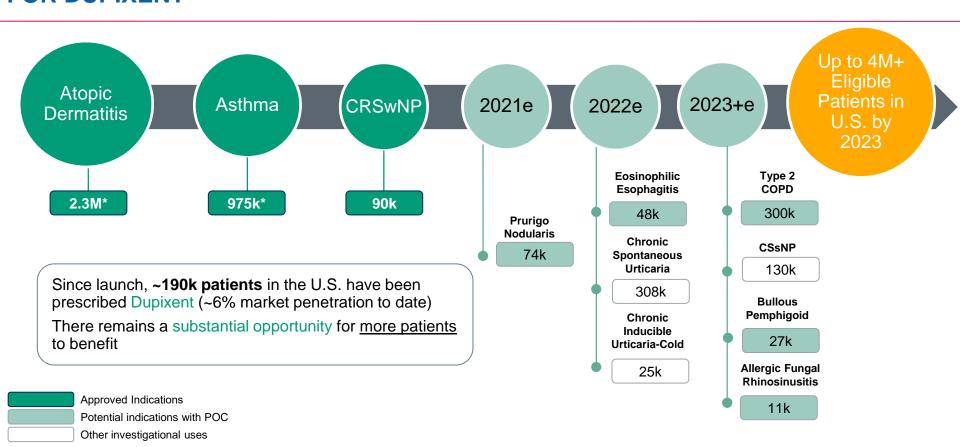
Advancing clinical development program across **EIGHT** Type 2 diseases

### DUPIXENT®: DRIVING LEVERAGE IN COLLABORATION PROFITABILITY



<sup>\*</sup> Share of profits/(losses) are derived from global net product sales of Praluent (up until and including 1Q20), Kevzara, and Dupixent, which are recorded by Sanofi

# SUBSTANTIAL PATIENT OPPORTUNITY IN TYPE 2 INFLAMMATORY DISEASES FOR DUPIXENT®



#### ROADMAP TO LEADERSHIP IN ONCOLOGY

<u>COMPETE</u>, ENHANCE, and EXTEND treatment benefits in <u>monotherapy</u> and in combination settings

#### COMPETE



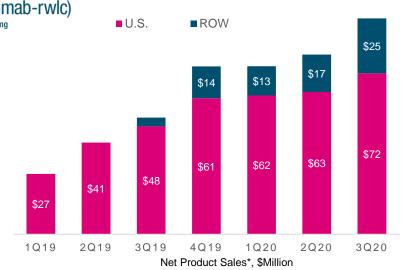
### **LEAD in dermato-oncology**

First approved anti-PD-1 in advanced CSCC

Accepted for **priority review** as first-in-class PD-1 in 2L+ BCC (PDUFA 3/3/21)

#### **COMPETE in 1L Non-Small Cell Lung Cancer**

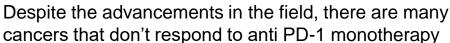
Accepted for **priority review** in **PD-L1+ NSCLC** (PDUFA 2/28/21)



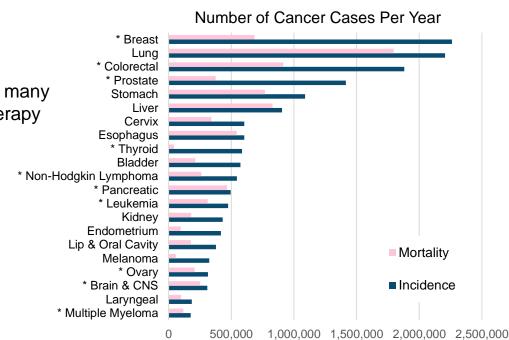
<sup>\*</sup> Sanofi records net product sales of LIBTAYO outside the U.S.



## SIGNIFICANT OPPORTUNITY TO ENHANCE & EXTEND TREATMENT BENEFITS



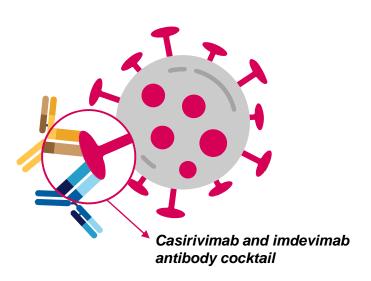
Even for those cancers that are responsive, many patients unfortunately do not benefit



Regeneron's clinical development pipeline of 12+ candidates has potential to address unmet need in the vast majority of the most prevalent cancer types

# COVID-19 ANTIBODY COCKTAIL – FIRST COMBINATION THERAPY TO RECEIVE EUA; MANUFACTURING SCALE-UP ONGOING

In 4Q20, the U.S. FDA granted Emergency Use Authorization to the COVID-19 antibody cocktail casirivimab and imdevimab



#### **Net Product Sales**

4Q20 Net Product Sales\* of \$144M (\$184M in FY2020)

### **Patients**

 For recently diagnosed, mild-to-moderate COVID-19 in highrisk patients

### **Supply/Manufacturing**

- U.S. government purchased initial 300K doses
- Increasing global capacity including through Roche collaboration

### **Clinical Development**

 Trials in both treatment and prophylactic settings ongoing, exploring lower doses

#### **EVINACUMAB – RARE DISEASE OPPORTUNITY**

# **Evinacumab**

PDUFA date 2/11/2021

Address Unmet Need in Patients with HoFH

**Build Rare Disease Strategy** 

Apply Cardiometabolic Expertise



Found that patients with loss-of-function mutations in their ANGPTL3 gene have significantly lower levels of key blood lipids, including LDL-C

Evinacumab was designed to replicate this loss-of-function mutation effect to lower LDL-C in patients with HoFH

### **MULTIPLE POTENTIAL REGULATORY SUBMISSIONS: 2021-2023+**

2021 2022 2023+ **DUPIXENT\*** Casirivimab and Imdevimab Odronextemab<sup>^^</sup> (CD20xCD3) Itepekimab (IL-33)\* Eosinophilic Esophagitis COVID-19<sup>‡</sup> Chronic Obstructive Pulmonary Disease B Cell NHI REGN5458 (BCMAxCD3)\* Fasinumab† **DUPIXENT\* REGN1908-1909 (Feld1)** Relapsed/Refractory Multiple Myeloma Osteoarthritis Pain<sup>^</sup> Cat Allergy Pediatric Atopic Dermatitis (6 mo-5 yr) Garetosmab **High-Dose EYLEA DUPIXENT\*** REGN5713-5714-5715 (Betv1) FOP<sup>^</sup> Wet AMD and DME Chronic Inducible Urticaria - Cold Birch Allergy Pozelimab ± cemdisiran+ **DUPIXENT\*** LIBTAYO\* **DUPIXENT\*** 2L Cervical Cancer Prurigo Nodularis Chronic Spontaneous Urticaria C5-mediated diseases **DUPIXENT\* DUPIXENT\*** Pediatric Asthma (6-11 yr) **Bullous Pemphigoid** Chronic Obstructive Pulmonary Disease Chronic Sinusitis w/o Nasal Polyposis LIBTAYO\* + chemo 1L Non-Small Cell Lung Cancer Allergic Fungal Rhinosinusitis **PRALUENT New Molecule New Indication** Pediatric HeFH

<sup>\*</sup> In collaboration with Sanofi

<sup>^</sup> Partial clinical hold pending review of additional data

M Partial clinical hold pending changes to clinical protocol

<sup>+</sup> In collaboration with Alnylam

<sup>†</sup> In collaboration with Teva and Mitsubishi Tanabe

<sup>‡</sup> Received EUA from FDA for mild to moderate COVID-19 in high-risk non-hospitalized patients

#### **BUSINESS SUMMARY**

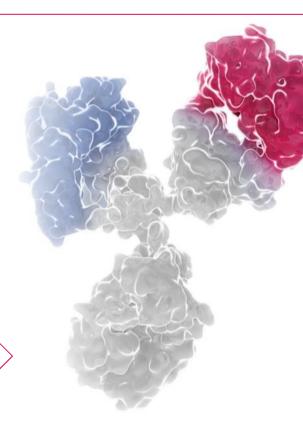
2020 was a transformational year driven by growth, commercial execution across
the portfolio, advancements/innovations in R&D, strong financial performance and
significant corporate initiatives creating long-term value for shareholders

We will maintain commitment to continue the fight against COVID-19

We are entering a period of anticipated accelerated growth with several launches

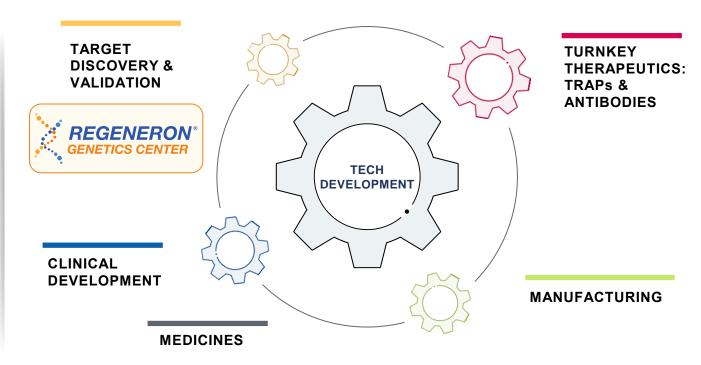
 We continue to advance our industry-leading R&D pipeline and capabilities across many therapeutic areas including oncology and immunology

George D. Yancopoulos, MD, PhD President & Chief Scientific Officer



# REGENERON'S PROPRIETARY TECHNOLOGIES REPEATEDLY DELIVER IMPORTANT NEW THERAPEUTICS



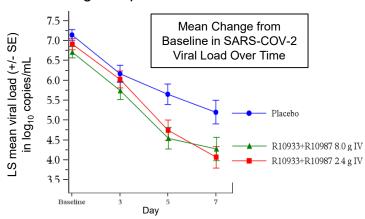


REGENERON technologies *deliver repeated breakthroughs* by addressing limitations and bottlenecks in every step of the drug discovery

# THESE TECHNOLOGIES ENABLED RAPID DEVELOPMENT AND ADVANCEMENT OF OUR COVID-19 ANTIBODY COCKTAIL

#### Virology results

Non-hospitalized study: Statistically significant anti-viral activity against SARS-COV-2 in seronegative patients



#### Clinical results

Non-hospitalized study: reduction in COVID-19 related medical visits ("MVs", e.g. ER/urgent care visits, hospitalizations)

- 57% reduction in MVs in overall population (n=799)
- 84% reduction in MVs in targeted population (one or more risk factors, seronegative and high viral load)

**Basis for the granted EUA** 

Hospitalized study: passed initial futility analysis

• 22% reduction in risk of death or mechanical ventilation in seronegative patients on low-flow oxygen (n=217; HR: 0.78; 80% CI: 0.51-1.2)

# Using *VelociSuite*® technologies, discovery and preclinical validation were compressed to MONTHS vs. years

#### COVID-19 ANTIBODY COCKTAIL: BROAD CLINICAL DEVELOPMENT PROGRAM



STUDY 2067 Non-Hospitalized (IV) Seamless Ph1/2/3

#### **Program Status Update**

- EUA granted for mild to moderate COVID-19 in high-risk patients
- Additional data (including lower 1.2g dose) in late 1Q21



STUDY 2066 <u>Hospitalized</u> (IV) Seamless Ph1/2/3

No O<sub>2</sub> requirement | Low Flow O<sub>2</sub>

- Passed futility analysis in Low Flow O2 patients
- UK RECOVERY Trial ongoing (including patients requiring high-flow oxygen or mechanical ventilation)



STUDY 2069 <u>Household Contacts</u> <u>Prophylaxis</u> (SQ) Ph3

Data expected in 1H21



STUDY 20145 <u>Dose Ranging</u>
<u>Virology Study</u>

**STUDY 2093 HV Multidose** 

Exploring lower doses and repeated dosing

### Approaching 15,000 patients enrolled to date

## REGENERON-DISCOVERED, APPROVED AND INVESTIGATIONAL MEDICINES ACROSS A WIDE AND DIVERSE SET OF DISEASES







**REGN7257** (IL-2Rg)









Dupilumab\* (IL-4R)

Sarilumab\* (IL-6R)

Itepekimab\* (IL-33)

**REGN1908-1909** (Feld1)

Aflibercept (VEGF Trap)





Casirivimab / **Imdevimab** 

#### PHASE 1

- Casirivimab and Imdevimab<sup>^</sup> **REGN5381** (NPR1) (SARS-CoV-2)
- REGN5713-5714-5715 Cemiplimab\* (PD-1) (Betv1)
- Odronextamab (CD20xCD3)
- REGN5459\* (BCMAxCD3)
- **REGN4018**\* (MUC16xCD3)
- REGN5678 (PSMAxCD28)
- REGN5093 (METXMET)
- **REGN6569** (GITR)
- **REGN3767** (LAG-3)

#### PHASE 2

- Casirivimab and Imdevimab<sup>^</sup> (SARS-CoV-2)
- REGN4461 (LEPR)
- Pozelimab (C5)
- Garetosmab (Activin-A)
- **Evinacumab** (ANGPTL3)

**IMMUNOLOGY &** 

INFLAMMATORY DISEASES

- Cemiplimab\* (PD-1)
- Odronextamab (CD20xCD3)
- REGN5458\* (BCMAxCD3)

#### PHASE 3

- Casirivimab and Imdevimab<sup>^</sup> (SARS-CoV-2)
- **Aflibercept** (VEGF Trap)
  - **Dupilumab\*** (IL-4R)
  - Alirocumab (PCSK9)
  - Cemiplimab\* (PD-1)
  - Fasinumab<sup>†</sup> (NGF)

RARE DISEASES

ONCOLOGY

PAIN

**INFECTIOUS** 

DISFASES

21

OPHTHALMOLOGY

CARDIOVASCULAR/ METABOLIC DISEASES

<sup>\*</sup> In collaboration with Sanofi

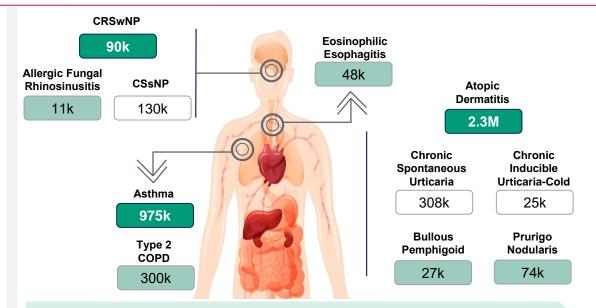
<sup>†</sup> In collaboration with Teva and Mitsubishi Tanabe ^ In collaboration with Roche

As of 3Q20 10-Q filing

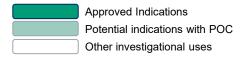
# PROGRESSING AND EXPANDING DUPIXENT'S CLINICAL DEVELOPMENT PROGRAM FOR MANY TYPE 2 DISEASES

Approved indications address **3+ million** eligible patients in the U.S. with Type 2 diseases

**Dupixent** is currently in pivotal trials for **EIGHT** Type 2 diseases; potential to address disease in ~1 million additional patients



Dupixent clinical trials prove that IL-4 and IL-13 are key drivers of multiple Type 2 inflammatory conditions



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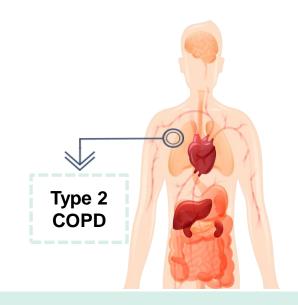
# DUPIXENT & ITEPEKIMAB (ANTI IL-33) – TWO-PRONGED APPROACH AGAINST CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

# **Dupixent** addresses **Type 2 COPD**

Achieved prespecified efficacy milestone in interim analysis of first Ph3 study

# Itepekimab addresses also non-Type 2 COPD

Ph2 proof-of-concept data indicates potential benefit in former smokers



Dupixent clinical trials prove that IL-4 and IL-13 are key drivers of multiple Type 2 inflammatory conditions

Interkeukin-33 (IL-33) is a key driver of lung inflammation

### ADDRESSING UNMET NEED IN COPD; PHASE 3 PROGRAMS UNDERWAY

### **Dupixent** addresses **Type 2 COPD**

Eosinophils ≥300/µl

Both former and current smokers

2 Ph3 trials ongoing

Pivotal data expected **2023** 

Former Smokers (70% of COPD patients^)

Itepekimab addresses also non-Type 2 COPD

No eosinophil restriction

Focus on former smokers

2 Ph3 trials initiated

Pivotal data expected 2024

Current Smokers (30% of COPD patients^)

Non-Type 2

Itepekimab only ~350K patients

Type 2

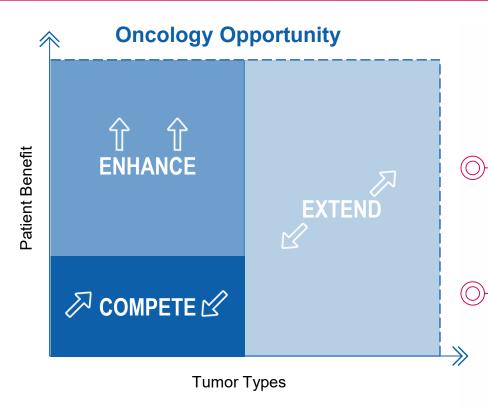
Dupixent or Itepekimab >200K patients

**Dupixent only** ~100K patients

<sup>\*</sup> Dupixent and Itepekimab are developed in collaboration with Sanofi

<sup>^</sup> US epidemiology estimates, patient populations exclude never smokers

### ONCOLOGY STRATEGY: ASPIRE TO COMPETE, ENHANCE, & EXTEND



**COMPETE: LIBTAYO** delivers potentially 'best-in-class' data in tumors responsive to PD-1 monotherapy (e.g., skin cancers & NSCLC\*)

- **Compete** in large PD-(L)1 opportunity:
  - >\$25Bn, +25% YoY growth<sup>^</sup>

**ENHANCE:** Even for PD-1 responsive tumors, more than half of patients do not respond

 Enhance responsiveness for these tumors by adding novel therapeutics (e.g., xCD3 & xCD28 Bispecifics)

**EXTEND:** Most tumor settings have limited responses to checkpoint inhibition

 Extend responsiveness for these tumors via addition of novel therapeutics (e.g., xCD3 & xCD28 Bispecifics)

\*If approved; under priority review with PDUFA date of 02/28/2021



# REGENERON ONCOLOGY TOOLKIT LEVERAGES MULTIPLE PLATFORMS TO CREATE COMBINATORIAL FLEXIBILITY

# VelocImmune®

**Antibodies** 

(e.g., checkpoint inhibitors)

### **Bispecifics**

## **CD3 Bispecifics**

(to link Killer T Cell to tumor: Signal 1)

# Costimulatory Bispecifics

(to provide synergistic Signal 2)

# New Classes of Bispecifics

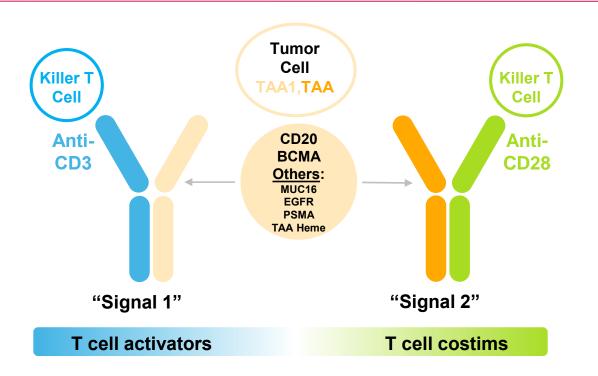
PiGs, VelociNator™, others

#### **Collaborations**

(CAR-Ts; Vaccines)

# PD-1 (LIBTAYO)

# REGENERON'S VELOCI-BI® APPROACH CAN CREATE, MANUFACTURE, AND DEVELOP HIGH-QUALITY BISPECIFICS OF ANY DESIRED SPECIFICITY



#### **VELOCI-BI®**

## VelociGene® and VelocImmune® technologies are fundamental

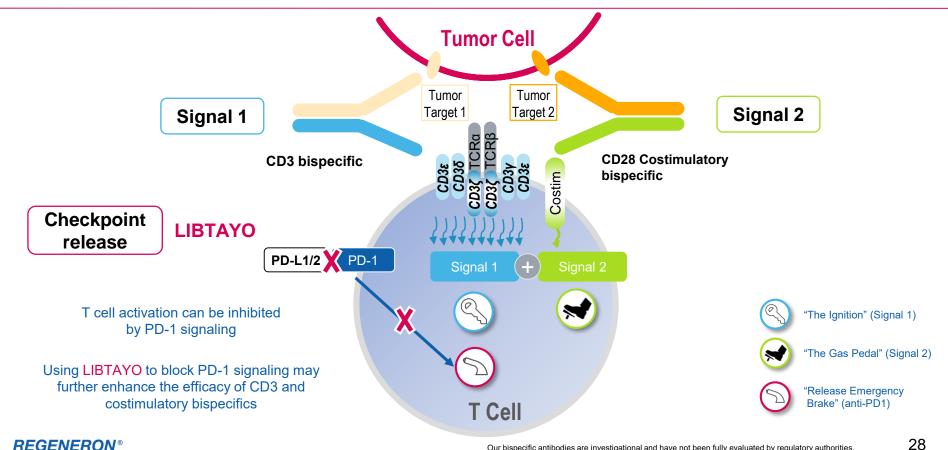
 Foundation for Dupixent, Praluent, Libtayo, REGN-EB3 (Inmazeb), COVID-19 Ab cocktail and other Regeneron-discovered medicines

Next-generation VelocImmune® used to create several distinct classes of bispecifics, with varying specificity and affinity

#### Regeneron bispecific approach is unique

- No linkers or artificial sequences
- Ease of manufacturing using same process as regular antibodies
- · Similar PK to regular antibodies

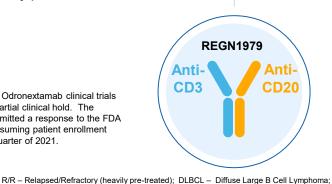
### REGENERON'S CD3 & CD28 COSTIMULATORY BISPECIFICS ARE OFF-THE-SHELF DRUGS WITH POTENTIAL TO TURN PATIENTS' T CELLS INTO TUMOR CELL KILLERS



### ODRONEXTAMAB (CD20XCD3): DEEP AND DURABLE RESPONSES

- A single bispecific, effective in both indolent and aggressive lymphomas, including patients who failed CAR-Ts
- **Off-the-shelf** administered in outpatient setting\*
- Pivotal Phase 2 enrolling rapidly robust development plan ahead
- Over 350 patients dosed to date across program
- **Durable responses** (~3.5 years in FL)
- Acceptable safety profile

The Ph1 and Ph2 Odronextamab clinical trials are currently on partial clinical hold. The company has submitted a response to the FDA with the goal of resuming patient enrollment early in the first quarter of 2021.



ORR - Objective Response Rate; CR - Complete Response; CRS - Cytokine Release

Syndrome; TEAE - Treatment-Emergent Adverse Event

#### American Society of Hematology (ASH) Dec 2020 update:

#### R/R Follicular Lymphoma

R/R DLBCL (CAR-T naïve)

R/R DLBCL (post-CAR-T)

• ORR=90%, CR=70%

• CRs ongoing for up to

~3.5 years

- N=30, doses 5-320 mg
- ORR=55%, CR=55%
  - N=11, doses 80-320 mg
  - · CRs ongoing for up to 21 months
- ORR=33%, CR=21%
- N=24, doses 80-320 mg
- · All CRs ongoing for up to 20 months

Durable CRs: mDoCR not reached for any indication

- Most frequent Gr ≥3 TEAEs (>10% of patients) included anemia (24.3%; Gr 1–3 at baseline in 22%), lymphopenia (20.6%; transient), neutropenia (18.4%; febrile in 2.2%), and hypophosphatemia (18.4%; transient)
- Nine patients (6.6%) had to discontinue odronextamab due to a TEAE, including Gr 1 cytomegalovirus infection (n=1), Gr 1 fatigue (n=1); Gr 2 pneumonia (n=1); Gr 3 hemolysis, fatigue, pneumonia, toxoplasmosis, and TLS (all n=1), plus abscess (n=1; unrelated to study treatment)
- No patients discontinued odronextamab due to CRS or neurotoxicity
- Odronextamab was administered up to 320 mg weekly without DLTs or reaching MTD; no dose-dependent increase in toxicity was observed

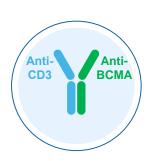


# REGN5458 (BCMAxCD3): COMPETITIVE ANTI-TUMOR ACTIVITY; POTENTIALLY REGISTRATIONAL PH2 UNDERWAY IN MULTIPLE MYELOMA

#### **REGN5458**

Our first BCMAxCD3 bispecific to enter clinic; now in potentially registrational Ph2 dose expansion

- Competitive efficacy profile in a heavily pretreated, vulnerable patient population:
  - 100% refractory to anti-CD38 and at least triple refractory
  - o 67% with prior autologous transplant
  - o 31% 70 years or older
- Data shown for all patients at all dose levels explored (intention to treat analysis)
  - Deep responses across all dose levels
- Acceptable safety profile
  - No Grade 3+ neurotoxicity or CRS



#### Phase 1 ASH Dec 2020 update:

#### R/R Multiple Myeloma

N=49\*, doses 3-96 mg

#### Efficacy:

3-12mg (n=24): **ORR=29%**, **VGPR** or better= **25%** 

24-48mg (n=17): **ORR=41%, VGPR or better= 41%** 

96mg (n=8): **ORR=63%, VGPR or better= 63%** 

- High and deep response rates: 95% of responders achieved VGPR or better
- Among responding patients with ≥6 months of followup, 83% have ongoing responses for up to 13 months
- · Responses occur early and improve over time
- Acceptable tolerability up to 96mg (dose level 6)



# COSTIMS COMBINED WITH CD3 BISPECIFICS SHOW ENHANCEMENT IN PRECLINICAL HEMATOLOGICAL TUMOR MODELS

Our CD28 costimulatory bispecifics activate T cells only when they are bridged to cancer cells and after having received the first "recognition" signal from the CD3 engagement

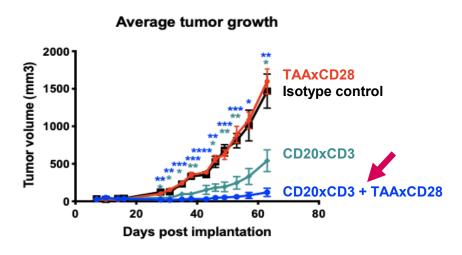


2021: (B cell TAA)xCD28 + odronextamab to enter clinic for B-NHL

2021: (Plasma cell TAA)xCD28 + REGN5458 to enter clinic for Multiple Myeloma

#### odronextamab + TAAxCD28 costim

odronextamab-resistant DLBCL mouse model



Complementary costimulatory bispecifics could further enhance anti-tumor effects of odronextamab and REGN5458

# COSTIM COMBINATIONS: ENHANCE AND EXTEND BENEFITS OF CHECKPOINT INHIBITORS

#### CD28 COSTIMS IN THE CLINIC (SOLID TUMORS)

#### REGN5678 (PSMAxCD28)



Evaluating combination with LIBTAYO



Prostate Cancer (metastatic castration-resistant)

#### REGN5668 (MUC16xCD28)



**Ovarian Cancer (recurrent)** 



#### REGN7075 (EGFRxCD28)



Evaluating combination with LIBTAYO



Solid tumors, including:



Non-Small Cell Lung Cancer Cutaneous Squamous Cell Carcinoma Colorectal Cancer (microsatellite stable) Triple Negative Breast Cancer

Combinations of our CD3 and CD28 bispecific antibodies and checkpoint inhibitors offer advantage of simultaneously providing multiple signals for activating T cells to kill tumors

Additional CD3 and CD28 bispecifics for all these tumors are being developed

Robust combinatorial potential and flexibility to enhance and extend treatment across many different types of cancers

# POWERFUL AND DIVERSE ONCOLOGY PORTFOLIO FOR RATIONAL COMBINATIONS

		Bispe				
			Costims	New Classes Coll	aborations	
	VelocImmune® Antibodies	CD3 Bispecifics	Bispecifics	Other		
EARLY DEVELOPMENT	REGN3767 (LAG-3) Solid/hematologic cancers	REGN5458* (BCMAxCD3) Multiple myeloma	REGN5678 (PSMAxCD28) Prostate cancer	REGN5093 (METxMET MET-altered NSCLC		
	REGN6569 (GITR) Solid tumors	REGN5459* (BCMAxCD3) Multiple myeloma	REGN5668 (MUC16xCD28) Ovarian cancer	PiG (Peptide in HLA ( Solid tumors	3roove)†	
		REGN4018* (MUC16xCD3) Ovarian cancer	REGN7075 (EGFRxCD28) Solid tumors	ISA101b + LIBTAYO (ISA) HNSCC		
				Voyager-V1 + LIBTAY( Solid tumors	O (Vyria	
POTENTIALLY PIVOTAL		Odronextamab^ (CD20xCD3) B cell NHL		RP1 + LIBTAYO (Rep CSCC	limune)	
	<b>LIBTAYO*</b> NSCLC	LIBTAYO* BCC	<b>LIBTAYO*</b> Cervical	<b>LIBTAYO*</b> Adjuvant CSC0	;	
APPROVED	<b>LIBTAYO*</b> Advanced CSCC					

Additional bispecifics and combinations expected to enter the clinic in coming months



<sup>\*</sup> In collaboration with Sanofi

<sup>^</sup> Currently on partial clinical hold † Preclinical

## **BROAD COMBINATIONS PIPELINE CONTINUES TO ADVANCE AND GROW**

	COMBINATIONS			INDICATIONS	STATUS			
ONGOING	Odronextamab <sup>^</sup> (CD20xCD3)	+	LIBTAYO*	Lymphoma	Resubmit modified study design to FDA <sup>^</sup>			
	REGN4018* (MUC16xCD3)	+	LIBTAYO*	Ovarian cancer	Dose escalation ongoing			
	REGN5678 (PSMAxCD28)	+	LIBTAYO*	Prostate cancer	Dose escalation ongoing			
	REGN3767 (LAG-3)	+	LIBTAYO*	Advanced cancers	Expansion cohort enrolling			
	REGN5668 (MUC16xCD28)	+	REGN4018* / LIBTAYO*	Ovarian cancer	IND open			
	REGN6569 (GITR)	+	LIBTAYO*	Solid tumors	Enrolling			
	REGN7075 (EGFRxCD28)	+	LIBTAYO*	Solid tumors	IND open			
UPCOMING	odronextamab (CD20xCD3)	+	B cell/CD28 costim	B-NHL	IND filed			
	REGN5458/9* (BCMAxCD3)	+	Plasma cell/CD28 costim	Multiple myeloma	IND filing in 2021			
	TAAxCD3	+	LIBTAYO*	Prostate cancer	IND filing in 2021			
	odronextamab (CD20xCD3)	+	Standard of Care	B-NHL	Initiating in 2021			
	REGN5458/9* (BCMAxCD3)	+	Standard of Care	Multiple myeloma	Initiating in 2021			

**REGENERON®** 

VelocImmune® Antibodies

\* In collaboration with Sanofi

^ Currently on partial clinical hold

CD3 BiSpecifics

# EMPOWERING OUR COLLABORATIONS TO ADVANCE THE NEXT GENERATION OF GENETICS-BASED MEDICINES





#### World leading human sequencing

- >1M human exomes sequenced
- linked to EHRs
- BIG DATA











#### VIRAL-BASED GENE THERAPY

- RGC helps discover gene targets for hearing loss
- Developing novel ways to engineer viral-based gene therapy to the ear

#### RNAi THERAPEUTICS

- RGC helps discover new gene targets
- First-in-class antibody/ RNAi combinations (e.g. C5)

#### CRISPR/Cas9

- First-ever CRISPR-based systemic gene therapy (TTR)
- RGC helps discover new gene targets
- Inventing new technologies for "CRISPR-based gene knock-in"

#### CAR-T & OTHER CELL BASED THERAPIES

- Technologies to discover new CAR-T targets
- Creating new CARs
- Novel tumor targeting moieties (e.g.PiG Abs)

## **KEY UPCOMING MILESTONES (12-18 MONTHS)**

**EYLEA:** Ph2 data readout for High Dose formulation

#### **Dupixent**

- Regulatory submissions in pediatric asthma (6-11 years)
- Ph3 data readouts for EoE and Prurigo Nodularis

#### Libtayo

- Regulatory action in 1L NSCLC (PDUFA 2/28/21) and 2L+ BCC (PDUFA 3/3/21)
- Data anticipated in 1L NSCLC chemo combo and 2L Cervical

#### Odronextamab (CD20xCD3)

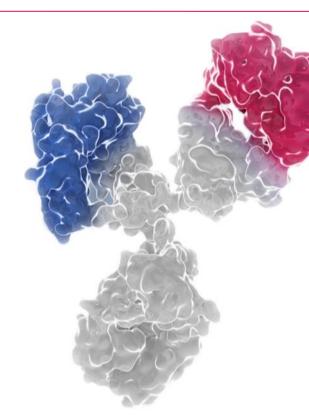
- Complete enrollment in potentially pivotal Phase 2 in NHL
- Initiate OLYMPIA Phase 3 program and evaluate combinations

#### REGN5458 (BCMAxCD3)

- Complete enrollment in potentially pivotal Phase 2 in Multiple Myeloma
- Evaluate combinations with standard of care and novel agents

New Bispecifics: Potential first data for MUC16xCD3 and PSMAxCD28

**Evinacumab (ANGPTL3):** Regulatory action for HoFH (PDUFA date 2/11/21)



NSCLC - Non-Small Cell Lung Cancer

BCC – Basal Cell Carcinoma

NHL – Non-Hodgkin's Lymphoma

HoFH – Homozygous Familial hypercholesterolemia

EoE – Eosinophilic Esophagitis

### Q&A

Leonard S. Schleifer MD, PhD
President & Chief Executive Officer

Marion McCourt EVP, Head of Commercial **George D. Yancopoulos, MD, PhD** President & Chief Scientific Officer

**Robert Landry** EVP, Chief Financial Officer



### RECONCILIATION OF GAAP NET INCOME TO NON-GAAP NET INCOME

## REGENERON PHARMACEUTICALS, INC. RECONCILIATION OF GAAP NET INCOME TO NON-GAAP NET INCOME (Unaudited)

	Three Months Ended September 30,			]	Nine Months Ended September 30,			
		2020		2019		2020		2019
GAAP R&D	\$	684.6	\$	526.0	\$	1,990.5	\$	1,897.6
R&D: Non-cash share-based compensation expense		55.9		60.0		169.5		178.0
R&D: Up-front payments related to license and collaboration agreements		_		_		85.0		400.0
Non-GAAP R&D	\$	628.7	\$	466.0	\$	1,736.0	\$	1,319.6
	$\overline{}$		_		_		_	
GAAP SG&A	\$	326.9	\$	304.4	\$	1,042.5	\$	890.1
SG&A: Non-cash share-based compensation expense		35.9		40.8		114.4		122.3
SG&A: Litigation contingencies and restructuring-related expenses		_		_		28.9		10.0
Non-GAAP SG&A	\$	291.0	\$	263.6	\$	899.2	\$	757.8
GAAP COGS	\$	131.0	S	115.9	\$	312.3	\$	253.8
COGS: Non-cash share-based compensation expense		9.4		16.3		26.6		30.5
COGS: Other	_		_			0.9	_	
Non-GAAP COGS	\$	121.6	\$	99.6	\$	284.8	\$	223.3
GAAP other income (expense), net	\$	(54.8)	\$	30.0	\$	176.2	\$	5.2
Other income/expense: Losses (gains) on investments		37.2		(3.4)		(162.1)		70.7
Interest expense: Other		11.2		_		12.7		_
Non-GAAP other income (expense), net	\$	(6.4)	\$	26.6	\$	26.8	\$	75.9
GAAP net income	\$	842.1	\$	669.6	\$	2,364.0	\$	1,323.8
Total of GAAP to non-GAAP reconciling items above		149.6		113.7		275.9		811.5
Income tax effect of GAAP to non-GAAP reconciling items		(30.5)		(21.5)		(53.7)		(165.8)
Non-GAAP net income	\$	961.2	\$	761.8	\$	2,586.2	\$	1,969.5
Non-GAAP net income per share - basic	\$	9.11	S	6.96	s	23.88	\$	18.04
Non-GAAP net income per share - diluted	s	8.36	S	6.67	\$	22.01	\$	17.16
Shares used in calculating:								
Non-GAAP net income per share - basic		105.5		109.4		108.3		109.2
Non-GAAP net income per share - diluted		115.0		114.2		117.5		114.8
•								