

**REGENERON**  
*SCIENCE TO MEDICINE®*

**ANNUAL SHAREHOLDERS  
MEETING**

JUNE 14, 2019

# NOTE REGARDING FORWARD-LOOKING STATEMENTS AND 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,” “plan,” “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 nature, timing, and possible success and therapeutic applications of Regeneron’s products, product candidates, and research and clinical programs now underway or planned, including without limitation EYLEA® (afibercept) Injection, Dupixent® (dupilumab) Injection, Praluent® (alirocumab) Injection, Kevzara® (sarilumab) Injection, Libtayo® (cemiplimab) Injection, fasinumab, evinacumab, Regeneron’s immuno-oncology programs (including its costimulatory bispecific development program), Regeneron’s earlier-stage product candidates, and the use of human genetics in Regeneron’s research programs; the extent to which the results from Regeneron’s research programs or preclinical testing may lead to advancement of product candidates to clinical trials or therapeutic applications; unforeseen safety issues resulting from the administration of products and product candidates in patients, including serious complications or side effects in connection with the use of Regeneron’s product candidates in clinical trials; the likelihood and timing of possible regulatory approval and commercial launch of Regeneron’s late-stage product candidates and new indications for marketed products, including without limitation EYLEA, Dupixent, Praluent, Kevzara, Libtayo, fasinumab, and evinacumab; 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 or its collaborators may be replicated in other studies and lead to therapeutic applications; ongoing regulatory obligations and oversight impacting Regeneron’s marketed products (such as EYLEA, Dupixent, Praluent, Kevzara, and Libtayo), 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 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 the Company’s products from third-party payers, including private payer healthcare and insurance programs, health maintenance organizations, pharmacy benefit management companies, and government programs such as Medicare and Medicaid; coverage and reimbursement determinations by such payers and new policies and procedures adopted by such payers; 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 and changes to the assumptions underlying those projections or guidance, including financial guidance relating to Sanofi collaboration revenue, non-GAAP unreimbursed R&D, non-GAAP SG&A, effective tax rate, and capital expenditures; 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, the ultimate outcome of any such proceedings, 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), to be cancelled or terminated without any further product success. A more complete description of these and other material risks can be found in Regeneron’s filings with the U.S. Securities and Exchange Commission, including its Form 10-K for the fiscal year ended December 31, 2018 and its Form 10-Q for the quarterly period ended March 31, 2019, including 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 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, non-GAAP net income per share - diluted, and free cash flow, which are financial measures that are not calculated in accordance with U.S. Generally Accepted Accounting Principles (“GAAP”). These 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 these and other 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, such non-GAAP measures provide investors with an enhanced understanding of the financial performance of the Company’s core business operations. However, there are limitations in the use of these and other 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 financial measures is provided on slide 26.

FOR OVER 30 YEARS,  
OUR GOAL HAS BEEN  
TO USE THE  
**POWER OF SCIENCE**  
TO BRING NEW  
MEDICINES TO  
PATIENTS ...  
OVER AND OVER  
AGAIN.



# WE'VE INVENTED 7 MEDICINES FOR PATIENTS WITH SERIOUS DISEASES



**Bob**

*Advanced cutaneous  
squamous cell carcinoma*



**Beth**

*Rheumatoid arthritis*



**Sirish**

*Atopic dermatitis*



**Shirley**

*Diabetic macular  
edema*



**Gina**

*Familial  
hypercholesterolemia*



**Evin**

*Cryopyrin-associated  
periodic syndromes*



# STRONG 2018 FINANCIAL PERFORMANCE AND TOP-LINE GROWTH

- **Strong double digit top-line growth of Regeneron-invented products**
  - \$8.2 billion net product sales recorded by the Company and its collaborators in 2018, an increase of 26% versus 2017
- **Balance Sheet provides significant financial flexibility to sustain and accelerate growth**
  - Cash & Marketable Securities \$4.6 billion
  - No Debt\*
- **\$2.2 billion invested in R&D**
- **Generated \$1.8 billion in Free Cash Flow <sup>(1)</sup>**

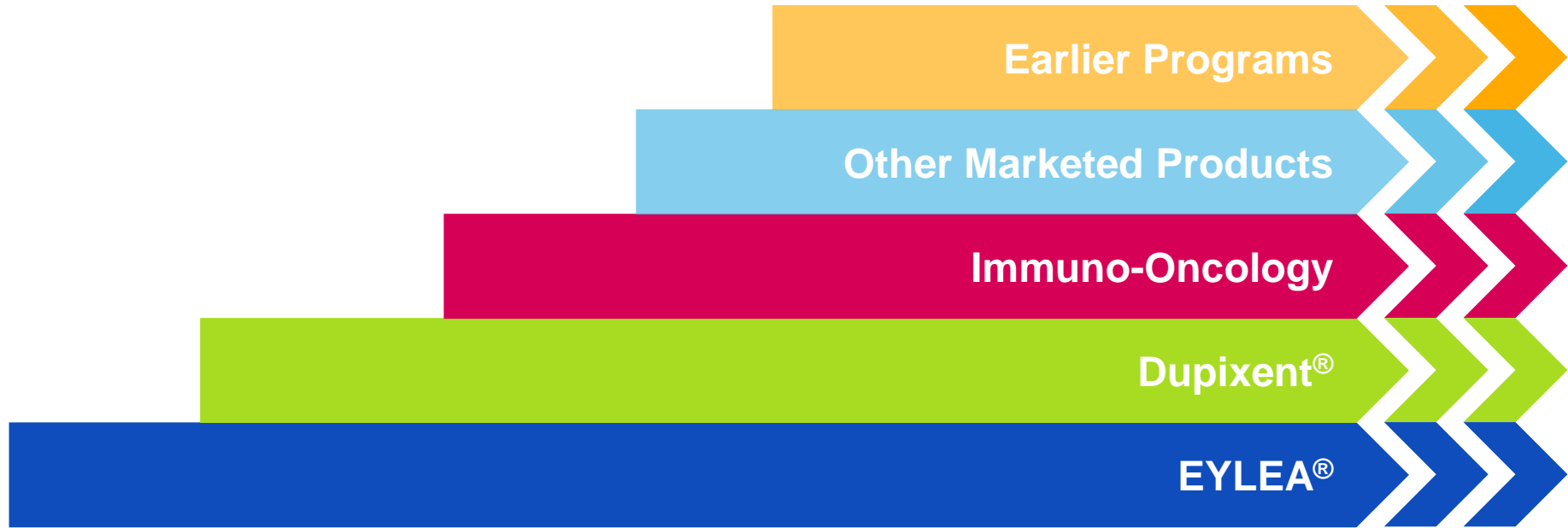
(1) Non-GAAP measure; cash flow from operations less CAPEX

\* Excludes \$709MM of Capital and facility lease obligations

	Year Ended December 31,		
	2018	2017	% Change
<b>Total Revenues</b>	\$6,711	\$5,872	14%
<b>GAAP Net Income</b>	\$2,444	\$1,199	104%
<b>GAAP Net Income Per Share - Diluted</b>	\$21.29	\$10.34	106%
<b>Non-GAAP Net Income</b>	\$2,622	\$1,901	38%
<b>Non-GAAP Net Income Per Share - Diluted</b>	\$22.84	\$16.32	40%

(\$ in millions, except per share data)

# IMPORTANT SHORT- AND LONG-TERM GROWTH DRIVERS WILL HELP PATIENTS IN NEED

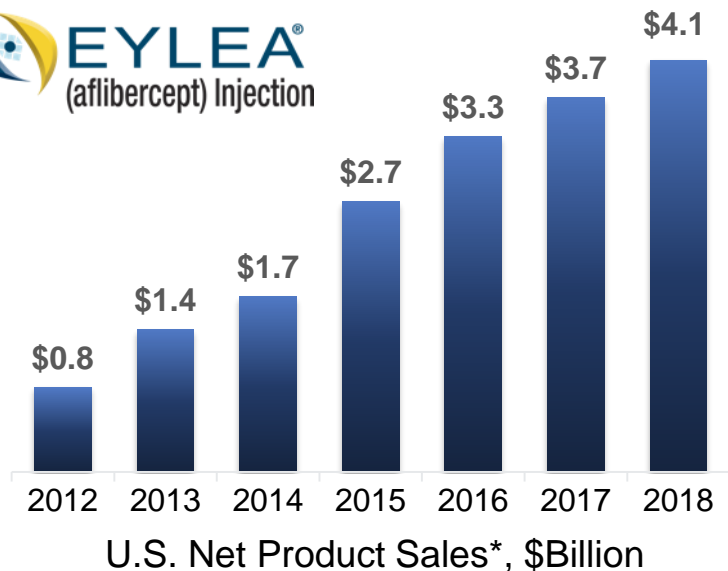


Investing to bring needed new medicines to patients  
and ensure diverse, sustainable revenue streams

A portrait of an elderly woman with short, wavy, light-colored hair. She is smiling and looking directly at the camera. She is wearing a pink, ribbed, V-neck top and a long, dark beaded necklace. She has small hoop earrings.

FOR PATIENTS LIKE  
**JULIE**

# EYLEA®: STRENGTHENING MARKET LEADERSHIP POSITION



Net Product Sales:	1Q19	FY18
U.S.	\$1.07 B	\$4.08 B
Global	\$1.74 B	\$6.7 B

Building on leadership position in wAMD and diabetic eye disease, both of which are increasing in prevalence

- While competition is anticipated, we believe there are no near-term agents that will have a significantly differentiated label from EYLEA

Label expansions and line extensions

Innovating next-generation therapeutics

**Our strategy is to maximize EYLEA growth opportunities and develop next-generation therapeutics**



# EYLEA®: LEADING OPHTHALMOLOGY INNOVATION

## ► Opportunities in Diabetic Eye Diseases

- **Diabetic Macular Edema (DME)**
  - Targeted commercial strategy to increase anti-VEGF penetration
- **Diabetic Retinopathy (DR)**
  - EYLEA is now approved to treat all stages of diabetic retinopathy, and thereby help reduce the risk of blindness
  - PANORAMA trial
    - 65-80% of EYLEA-treated patients experienced  $\geq$  two-step improvement from baseline on the Diabetic Retinopathy Severity Scale (DRSS) vs. 15% sham
    - By one year 20% of untreated patients developed proliferative diabetic eye disease, and EYLEA reduced this risk by 85% to 88%
  - Of the 3.5M people in the U.S. with DR without DME, ~1M individuals have moderately severe to severe disease and are at greatest risk

## ► Next Generation Strategy

Our strategy is to make even better treatments than our market-leading anti-VEGF therapy, EYLEA

- **High-dose formulation of EYLEA**
- **Other new molecular entities and gene therapies**



# EYLEA®: LEADING OPHTHALMOLOGY INNOVATION

## ► Opportunities in Diabetic Eye Disease

- **Diabetic Macular Edema**
  - Targeted commercial launch
- **Diabetic Retinopathy (DR)**
  - EYLEA is now approved for DR, thereby help reduce the burden of DR
  - PANORAMA trial
    - 65-80% of EYLEA-treated patients achieved resolution of DR from baseline on the first visit
    - By one year 20% of patients had no DR, and 50% had no DR or DR
  - Of the 3.5M people with DR, 1.5M have moderately severe DR

## ► Next Generation Strategy

Our strategy is to make even better therapy, EYLEA


- **High-dose formulation** of EYLEA
- **Other new molecular entities**

### Diabetes Management Checklist

- ☒ Glucose Control
- ☒ Blood Pressure
- ☒ Lipid Management
- ☒ Renal Function
- ☒ Foot Care
- ☒ Eye Health

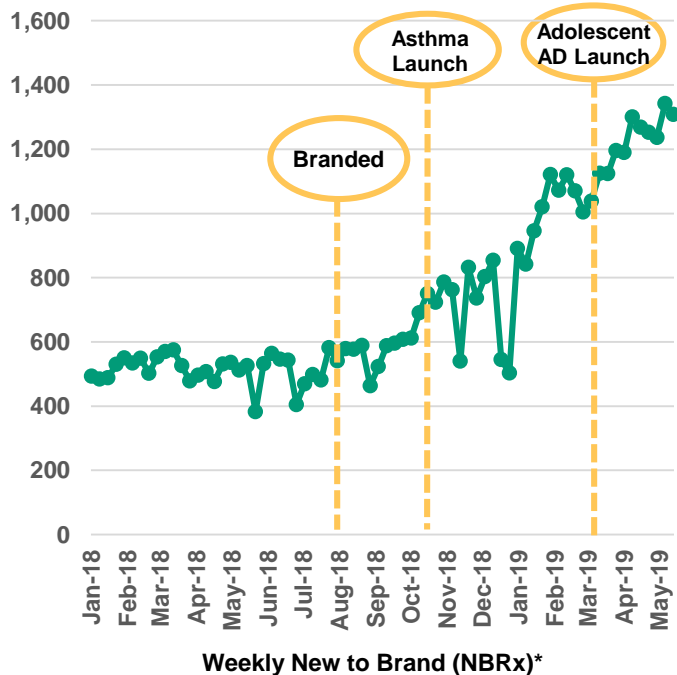


FOR PATIENTS LIKE  
**SUSAN** 

**DUPIXENT<sup>®</sup>**   
(dupilumab) Injection  
200mg • 300mg

# DUPIXENT®: BUILDING LEADERSHIP IN ATOPIC DERMATITIS (AD) AND ASTHMA

**DUPIXENT®**  
(dupilumab) Injection



\* Source: IQVIA  
Please see full Prescribing Information for all approved products



## Moderate-to-severe AD: A Practice-Changing Advance

In the U.S., ~15% of adult AD patients with the greatest need have used DUPIXENT

High persistence and compliance indicate patient and physician satisfaction

Ex-U.S. launch in early stage and progressing well

Encouraging prescription trends following commencement of DTC TV campaign in 3Q18

Now also approved in adolescent patient population (12-17 years)



## Moderate-to-severe Asthma: High Unmet Need

Only asthma biologic approved for:

- Moderate-to-severe asthma with an eosinophilic phenotype
- Oral corticosteroid-dependent asthma regardless of phenotype
- Treatment of AD and asthma in same patient.

Clinically meaningful improvements in lung function, asthma attacks and oral steroid sparing

Up to 900K patients (≥12 years) in the U.S. with moderate-to-severe asthma may be suitable for biologic therapy

Encouraging initial prescription trends, particularly among allergists treating asthma

# DUPIXENT®: DELIVERING ON THE “PIPELINE IN A PRODUCT” PROMISE

## APPROVED INDICATIONS

Moderate-to-Severe Atopic Dermatitis

Approved in Adults and Adolescents

Moderate-to-Severe Asthma

Approved in Adults and Adolescents

## NEAR-TERM OPPORTUNITIES

Chronic Rhinosinusitis with Nasal Polyps (CRSwNP)

sBLA filing accepted – PDUFA date Jun 26, 2019

Pediatric Atopic Dermatitis

Ph3 results for 6-11 years expected in 2019; Ph2/3 for 6 months-5 years ongoing

Eosinophilic Esophagitis

Positive Ph2 results; pivotal Ph2/3 initiated 3Q18

Chronic Obstructive Pulmonary Disease (COPD)

Initiated Ph3 in 1Q19

## LONGER-TERM OPPORTUNITIES

Pediatric Asthma (6-11 years)

Ph3 ongoing

Food Allergies

Ph2s in Peanut Allergy initiated

Airborne Allergies

Ph2 in Grass Allergy enrollment complete

Combinations with REGN3500 (IL-33)

Report asthma Ph2 results in mid 2019; Ph2 in AD and COPD ongoing

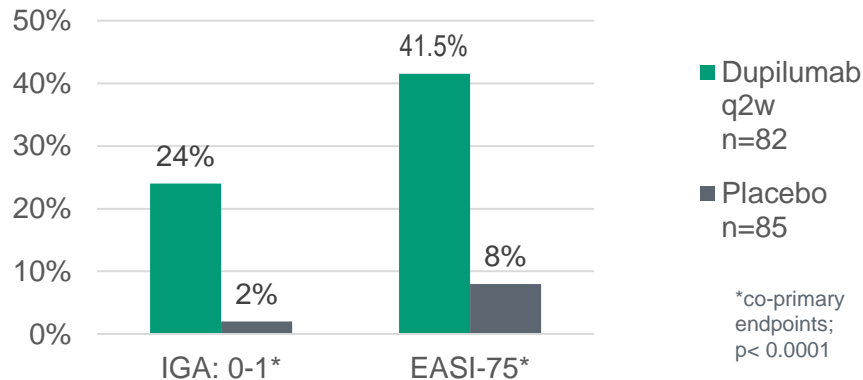


# DUPIXENT®: DELIVERING ON THE “PIPELINE IN A PRODUCT” PROMISE

## ADOLESCENT AND PEDIATRIC ATOPIC DERMATITIS – HIGH DISEASE BURDEN WITH LIMITED TREATMENT OPTIONS

### Adolescent Atopic Dermatitis (Ages 12–17 years)

Now FDA approved



Overall rate of treatment-emergent adverse events was comparable between dupilumab and placebo. The rate of overall infections and infestations was numerically lower in the dupilumab group vs. placebo. There was a higher rate of injection site reactions and conjunctivitis with dupilumab.

IGA: Investigator's Global Assessment, EASI: Eczema Area and Severity Index

### Before DUPIXENT

Prior treatments included cycles of prednisone, oral anti-Staph antibiotics, triamcinolone and chronic daily sedating antihistamines



### After DUPIXENT

Patient had significantly improved overall disease severity, skin clearing and reduced itching



A close-up portrait of a middle-aged man with fair skin and short, light-colored hair. He has visible signs of skin cancer, including a large, raised, and irregular lesion on the side of his face near his ear, and several smaller, dark spots on his forehead and cheek. He is wearing a dark suit jacket, a white shirt, and a red tie with a small white pattern. The background is blurred, showing warm, bokeh-style lights.

FOR PATIENTS LIKE  
**BOB**



# LIBTAYO®: HOPE FOR PATIENTS WITH ADVANCED CSCC

Cutaneous squamous cell carcinoma (CSCC) is the second most common form of skin cancer (after basal cell carcinoma) and is responsible for an estimated 7,000 deaths per year in the U.S.

LIBTAYO is the only FDA approved treatment option for advanced CSCC, a life-threatening condition

EMA approval is expected in mid-2019

Regeneron reported 1Q19 net product sales of \$27 Million

**At ASCO 2019 we presented updated results from pivotal Libtayo Phase 2 study\***



	Locally Advanced CSCC (n=78) <i>Primary Analysis</i>	Metastatic CSCC (n=59) <i>Longer-term data</i>
<b>Overall Response Rate (ORR)</b>	34/78 (44%)	29/59 (49%)
<b>Complete Responses (CR)</b>	10/78 (13%)	10/59 (17%)
<b>Median Progression Free Survival (PFS)</b>	not reached	18 months

- Median duration of response (DOR) and overall survival (OS) have not been reached for either group
- LIBTAYO was associated with adverse events similar to other PD-1 inhibitors; 8% of patients with local advanced CSCC discontinued due to adverse events and 10% of those with metastatic CSCC

Patient in Phase 2 Study



Baseline



Week 8

An 83-year-old patient who had undergone multiple surgeries for CSCC, at baseline and after 8 weeks of treatment with LIBTAYO†

# LIBTAYO®: THE FOUNDATION OF OUR IO STRATEGY



## CSCC: THE FIRST OF MANY POTENTIAL APPROVALS

LIBTAYO is the first and only FDA-approved therapy for patients with advanced CSCC; potentially pivotal study in BCC ongoing

We plan to be a major player in indications where PD-1 inhibition has shown activity

We have a comprehensive and differentiated IO strategy with LIBTAYO at the core

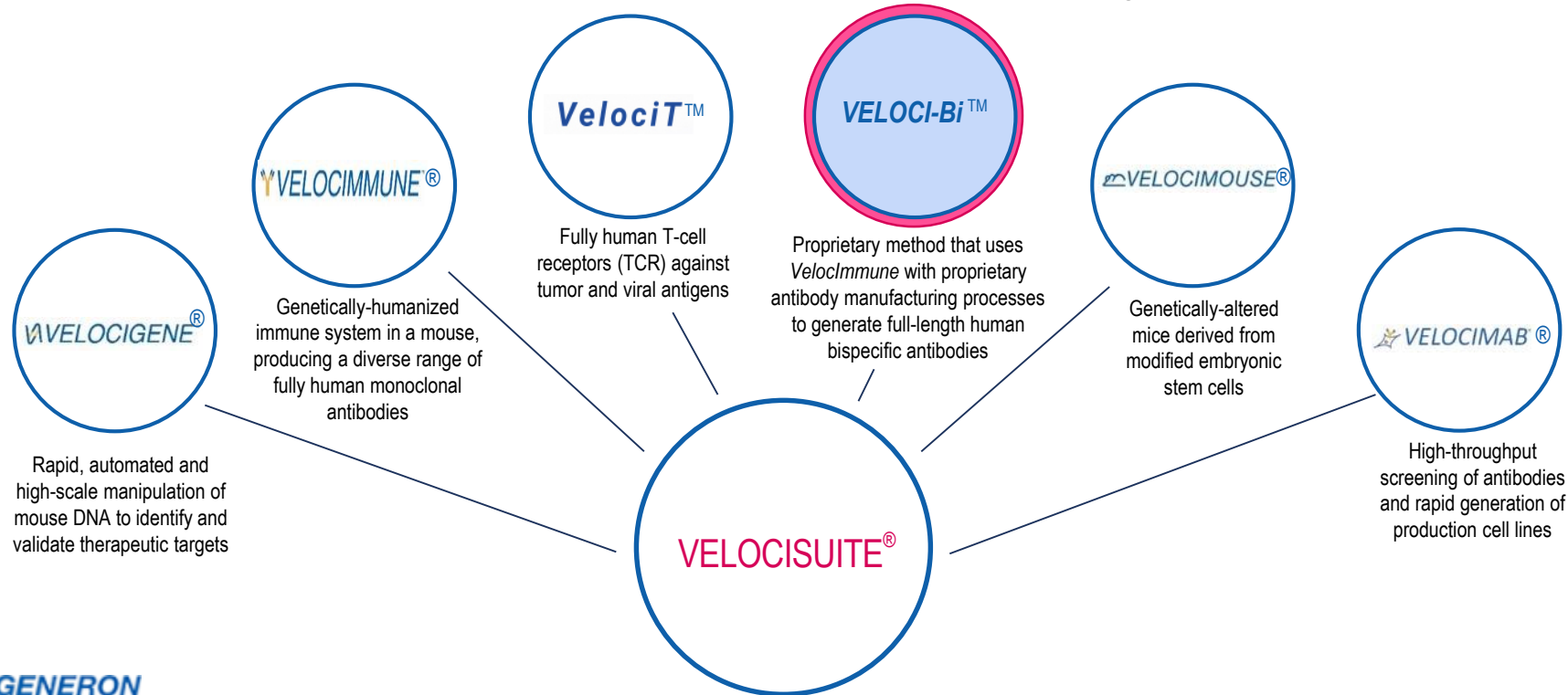
## DEVELOPMENT STRATEGY

Maximize Skin Cancer Opportunity	2L Basal Cell Carcinoma (BCC) – Ph2 (potentially pivotal) ongoing; locally advanced BCC cohort fully enrolled in 1Q19 CSCC – Ph3 adjuvant trial to start in 2Q19; neo-adjuvant study to start in 3Q19
Non Small Cell Lung Cancer (NSCLC)	1L NSCLC Monotherapy (≥50% PD-L1) (n=700) – Ph3 about 2/3 enrolled 1L NSCLC Combination therapy (non-squamous and squamous, stratified by PD-L1 status) – Ph3 amended • LIBTAYO + Chemo vs. Chemo
HPV Positive Cancers	2L Cervical Cancer – Ph3 ongoing
Additional Solid & Liquid Tumor Indications	Pediatric Glioblastoma (GBM) – Ph1/2 ongoing
Combinations	Immune modulators, vaccines, cell therapies, kinase inhibitors, chemotherapy and bispecifics

# REGENERON'S IO STRATEGY IS BUILT ON A DEEP FOUNDATION OF SCIENCE AND TECHNOLOGY

**619** manuscripts published, **9,351** patent applications filed and **4,945** patents issued over the last 10 years

**500,000** exomes sequenced by Regeneron Genetics Center (RGC)





# NEW REGN1979 DATA REPORTED TODAY SHOW HIGH RESPONSE RATES IN RELAPSED/REFRACTORY NON-HODGKIN LYMPHOMA



EUROPEAN  
HEMATOLOGY  
ASSOCIATION

**93% response rate (13 of 14) in follicular lymphoma patients (grades 1 to 3a) who received REGN1979 5mg to 320mg, and 71% complete response rate (10 of 14)**

**57% response rate (4 of 7) in diffuse large B-cell lymphoma patients who received REGN1979 80mg to 160mg, all of which were complete responses – including 2 of 4 DLBCL patients whose disease had progressed after CAR-T treatment and 2 of 3 who had not been treated with CAR-T**

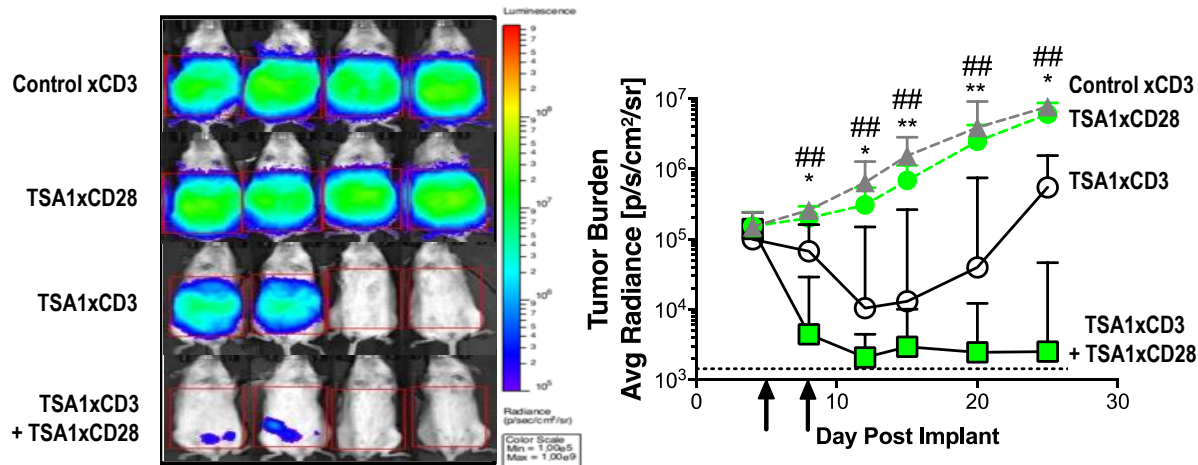
Potentially registrational Phase 2 program is initiating this month and will proactively evaluate active doses in indolent and aggressive non-Hodgkin lymphoma

The incidence and severity of CRS declined through optimized pre-medication, even with REGN1979 dose escalation. Grade 3 or higher AEs that occurred in at least 10% of patients were anemia (21%), lymphopenia (20%), neutropenia (17%), infections and infestations (15%), thrombocytopenia (14%) and hypophosphatemia (11%).

# ADDING COSTIMULATORY BISPECIFICS TO CD3 BISPECIFICS OR TO ANTI-PD-1 SHOWS SYNERGY IN PRECLINICAL TUMOR MODELS

## TSA1xCD3 + TSA1xCD28

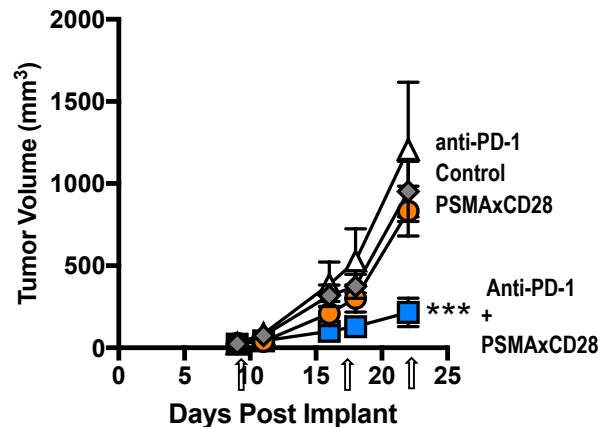
*in vivo* xenogeneic humanized TSA1 mouse model



TSA = Tumor Specific Antigen

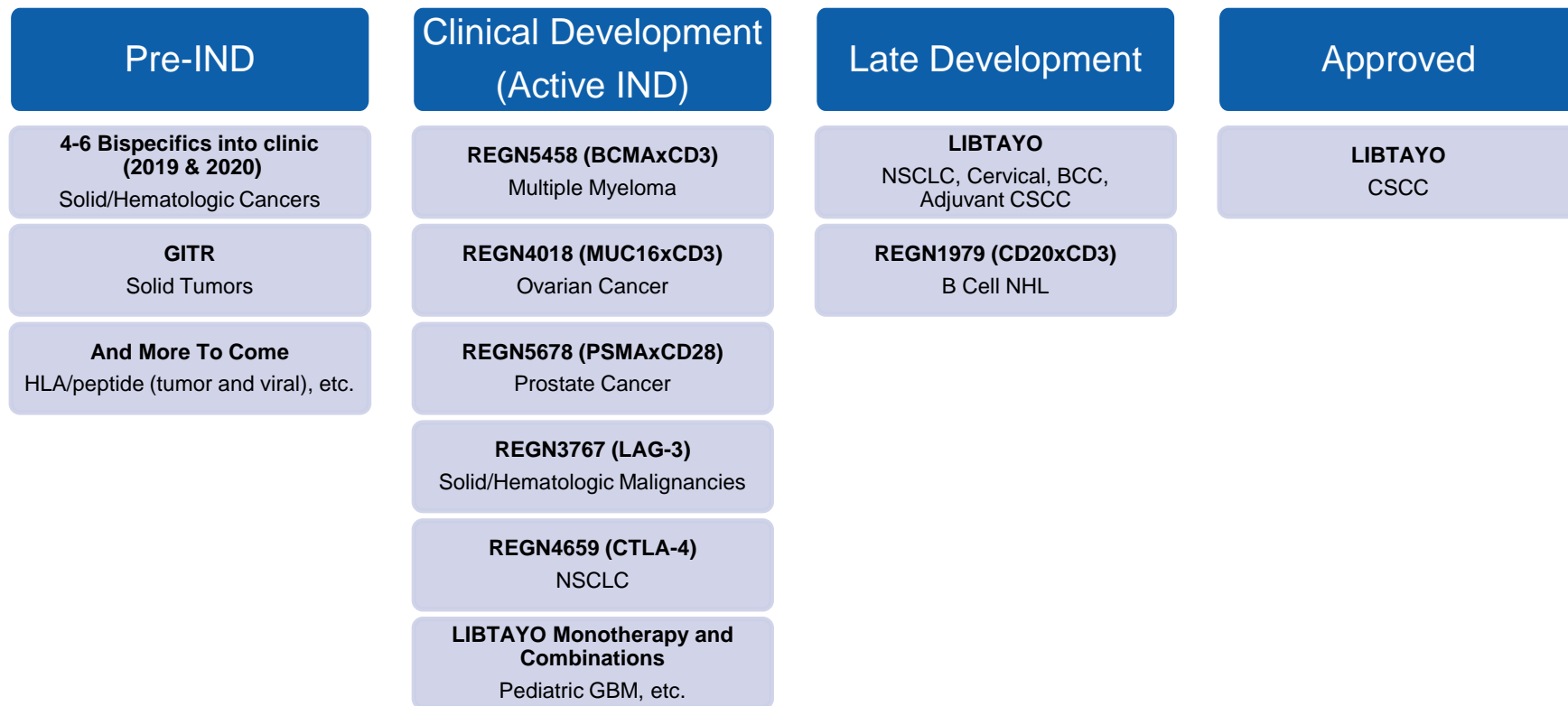
## anti-PD-1 + PSMAxCD28

*in vivo* syngeneic humanized PSMA mouse model



- Unlike superagonist CD28 mAbs, our CD28 bispecifics have minimal propensity for CRS, and little or no activity on their own, but when clustered on cells expressing their target, activate signal 2 and synergize with signal 1 (via CD3 bispecific) and/or anti-PD-1
- In 2019, Regeneron plans to advance PSMAxCD28 as well as another CD28 bispecific antibody into clinical development











# BROADENING OUR IMMUNO-ONCOLOGY PIPELINE












# PORTFOLIO & PIPELINE











## PHASE 1

-  REGN4461 (LEPR)
-  Pozelimab (C5)
-  Cemiplimab\* (PD-1)
-  REGN1979 (CD20xCD3 bispecific)
-  REGN5458\* (BCMAxCD3 bispecific)
-  REGN4018\* (MUC16xCD3 bispecific)
-  REGN4659 (CTLA-4)
-  REGN3767 (LAG-3)
-  REGN5069 (GFRα3)
-  REGN3048-3051 (MERS virus)

## PHASE 2

-   Garetosmab (Activin-A)
-   Evinacumab (ANGPTL3)
-  Cemiplimab\* (PD-1)
-  REGN3500\* (IL-33)
-  Dupilumab\* (IL-4R)
-  Sarilumab\* (IL-6R)
-  REGN1908-1909 (Feld1)

## PHASE 3

-   Evinacumab (ANGPTL3)
-  Alirocumab\* (PCSK9)
-  Cemiplimab\* (PD-1)
-  Dupilumab\* (IL-4R)
-  Sarilumab\* (IL-6R)
-  Fasimumab† (NGF)
-  REGN-EB3 (Ebola virus)

 IMMUNOLOGY & INFLAMMATORY DISEASES

 CARDIOVASCULAR/ METABOLIC DISEASES

 ONCOLOGY

 INFECTIOUS DISEASES

 OPHTHALMOLOGY

 PAIN

 RARE DISEASES

# RGC AND EXTERNAL PARTNERSHIPS ENRICH OUR RESEARCH ENGINE



70+ collaborations established

500K exomes sequenced by January 2019

Genetic data sequenced by the RGC from 50,000 UK Biobank participants made available to global health research community



Broad collaboration on RNAi therapies for eye, central nervous system, and select liver-mediated diseases

RNAi may be able to address targets not suitable for antibody approaches

Upfront cash + equity investment in Alnylam



# RESPONSIBILITY: MAKING AN IMPACT BEYOND OUR MEDICINES

## CULTURE



# #1

Ranked the #1 Employer in industry by SCIENCE magazine for 6 of last 7 years



## ENVIRONMENT



# 98%

Waste diverted from landfill, surpassing our 5-year goal



## COMMUNITY



# TOP 50

Recognized in Civic50, as one of the 50 most community-minded companies in the U.S.



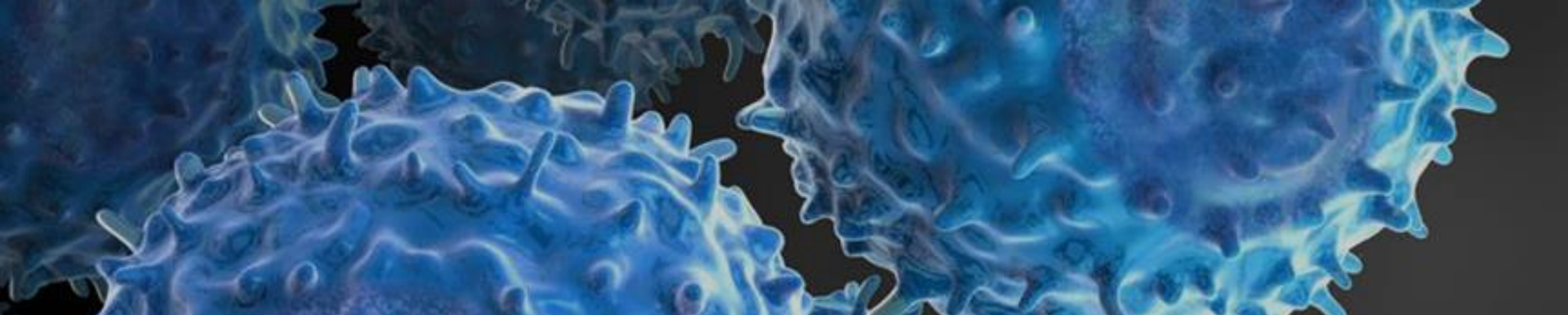
## FUTURE INNOVATORS



# \$100M

Commitment to Regeneron Science Talent Search, the most prestigious HS science competition





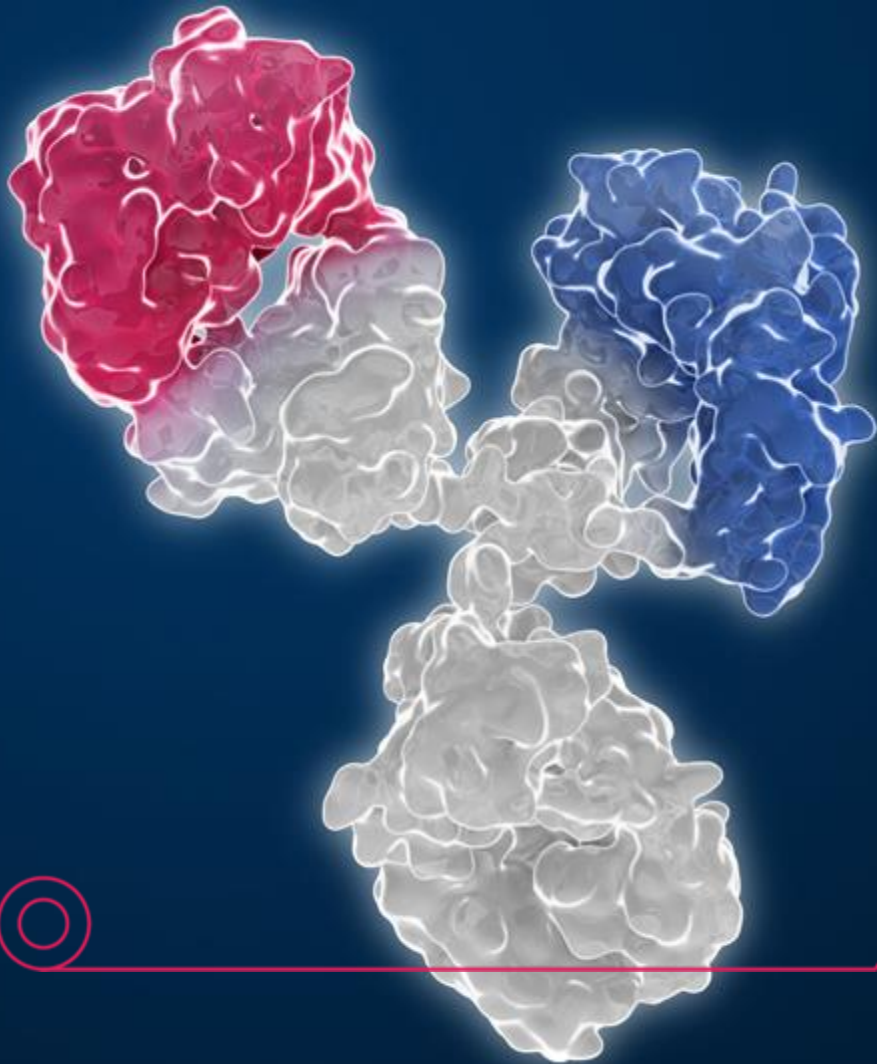
We feel confident that the best way to **build value** for patients and shareholders is to focus on **long-term innovation**, deliver **important new products** for serious diseases, and continue to manage the business **responsibly and ethically**.



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

REGENERON PHARMACEUTICALS, INC.  
RECONCILIATION OF GAAP NET INCOME TO NON-GAAP NET INCOME (Unaudited)  
(In millions, except per share data)

	Year Ended December 31,	
	2018	2017
GAAP net income	\$ 2,444.4	\$ 1,198.5
<i>Adjustments:</i>		
R&D: Non-cash share-based compensation expense	229.0	271.9
R&D: Up-front payments related to license and collaboration agreements	—	25.0
SG&A: Non-cash share-based compensation expense	169.2	208.4
SG&A: Litigation contingencies	30.0	—
COGS and COCM: Non-cash share-based compensation expense	29.2	27.0
Other income/expense: Loss on extinguishment of debt	—	30.1
Other income/expense: Gains and losses on investments in equity securities <sup>(a)</sup>	41.9	—
Income tax effect of reconciling items above	(92.1)	(186.0)
Income tax (benefit) expense: Impact of sale of assets between foreign subsidiaries	(162.1)	—
Income tax (benefit) expense: (Adjustment) charge related to enactment of U.S. Tax Reform Act	(68.0)	326.2
Non-GAAP net income	\$ 2,621.5	\$ 1,901.1
Non-GAAP net income per share - diluted	\$ 22.84	\$ 16.32
Shares used in calculating Non-GAAP net income per share - diluted	114.8	116.5



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