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 those 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® ( aflibercept) Injection, Dupixent® (dupilumab) Injection, Praluent® (alirocumab) Injection, Kevzara® (sarilumab) Injection, Libtayo® (cemiplimab) Injection, fasimonab, evinacumab, Regeneron’s immuno-oncology programs (including its costimulatory bispecific portfolio), 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, fasimonab, evinacumab, REGN-EBS, and REGN1979; 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 Regeneron’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; unexpected expenses, the costs of developing, producing, and selling products; the ability of Regeneron to meet any of its sales or other financial projections, 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, non-GAAP 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 June 30, 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 unreimbursed R&D and non-GAAP SG&A, 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 full year 2019 non-GAAP to GAAP financial guidance is provided on slide 25.
EYLEA®: STRENGTHENING MARKET LEADERSHIP POSITION

* Outside the United States, EYLEA net product sales comprise sales by Bayer in countries other than Japan and sales by Santen Pharmaceutical Co., Ltd. in Japan under a co-promotion agreement with an affiliate of Bayer

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

- We believe there are no near-term potential agents that can provide substantially different dosing flexibility, duration or visual gains than are already achievable with EYLEA

Label expansions and line extensions

Innovating next generation therapeutics

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

<table>
<thead>
<tr>
<th>Year</th>
<th>U.S. Net Sales*, $Billion</th>
<th>Global Net Sales*, $Billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$0.8</td>
<td>$1.160.3MM</td>
</tr>
<tr>
<td>2013</td>
<td>$1.4</td>
<td>$1.875.6MM</td>
</tr>
<tr>
<td>2014</td>
<td>$1.7</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>$2.7</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>$3.3</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>$3.7</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>$4.1</td>
<td></td>
</tr>
</tbody>
</table>

Net Sales: 2Q19 YTD19
- U.S. $1,160.3MM $2,234.4MM
- Global $1,875.6MM $3,619.1MM
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 reduce the risk of blindness
- PANORAMA trial
  - 65-80% of EYLEA-treated patients experienced ≥ 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 – Entering clinic by YE19
- Other new molecular entities and gene therapies
Atopic Dermatitis: Practice-Changing Advances

In the U.S., ~18% of adult AD patients with the greatest need have used DUPIXENT

High persistence and compliance indicate patient and physician satisfaction

Ex-U.S. launch is progressing well

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

Now approved in adolescent patient population (12-17 years) in U.S. and the EU

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
- AD patients with comorbid asthma

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

Since Dupixent’s launch, the asthma biologic market has expanded 13% and nearly 80% of Dupixent patients are new to biologics
**DUPIXENT®: DELIVERING ON THE “PIPELINE IN A PRODUCT” PROMISE**

### APPROVED INDICATIONS

<table>
<thead>
<tr>
<th>Disease</th>
<th>Approval Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atopic Dermatitis</td>
<td>Approved in Adults and Adolescents</td>
</tr>
<tr>
<td>Moderate-to-Severe Asthma</td>
<td>Approved in Adults and Adolescents</td>
</tr>
<tr>
<td>Chronic Rhinosinusitis with Nasal Polyps (CRSwNP)</td>
<td>Approved in Adults</td>
</tr>
</tbody>
</table>

### NEAR-TERM OPPORTUNITIES

<table>
<thead>
<tr>
<th>Disease</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atopic Dermatitis in Pediatrics (6–11 years)</td>
<td>Positive Ph3 results; regulatory submission in 4Q19</td>
</tr>
<tr>
<td>Eosinophilic Esophagitis</td>
<td>Positive Ph2 results; pivotal Ph2/3 initiated 3Q18</td>
</tr>
<tr>
<td>Chronic Obstructive Pulmonary Disease (COPD)</td>
<td>Initiated Ph3 in 1Q19</td>
</tr>
</tbody>
</table>

### LONGER-TERM OPPORTUNITIES

<table>
<thead>
<tr>
<th>Disease</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatric Asthma (6-11 years)</td>
<td>Ph3 ongoing</td>
</tr>
<tr>
<td>Airborne Allergies</td>
<td>Ph2 in Grass Allergy topline results announced</td>
</tr>
<tr>
<td>Food Allergies</td>
<td>Ph2s in Peanut Allergy initiated</td>
</tr>
<tr>
<td>Combinations with REGN3500 (IL-33)</td>
<td>Asthma Ph2 topline Ph2 results announced; COPD and AD Ph2 results in next 12 months</td>
</tr>
</tbody>
</table>

This slide includes pipeline drug candidates currently undergoing clinical testing in a variety of diseases. The safety and efficacy of these drug candidates have not been evaluated by any regulatory authorities for the disease categories described here.
**ADOLESCENT AND PEDIATRIC ATOPIC DERMATITIS** – HIGH DISEASE BURDEN WITH LIMITED TREATMENT OPTIONS

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

- Overall rate of treatment-emergent adverse events was comparable between the dupilumab group (72%) and placebo (69%). The rate of overall infections and infestations was numerically lower in the dupilumab group (11%) vs. placebo (20%)
- No SAEs or events leading to discontinuation in the treatment group

**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

Now FDA and EMA approved

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

<table>
<thead>
<tr>
<th></th>
<th>Dupilumab q2w n=82</th>
<th>Placebo n=85</th>
</tr>
</thead>
<tbody>
<tr>
<td>IGA: 0-1*</td>
<td>24%</td>
<td>2%</td>
</tr>
<tr>
<td>EASI-75*</td>
<td>41.5%</td>
<td>8%</td>
</tr>
</tbody>
</table>

*p< 0.0001

\*co-primary endpoints; p< 0.0001

This slide includes pipeline drug candidates currently undergoing clinical testing in a variety of diseases. The safety and efficacy of these drug candidates have not been evaluated by any regulatory authorities for the disease categories described here.

For illustrative purposes only. Results are not representative of all patients; and individual results vary.
LIBTAYO®: NEW 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 and EMA approved treatment option for advanced CSCC, a life-threatening condition.

EMA conditional approval granted in July.

Regeneron reported 2Q19 net product sales of $40.8 Million.

At the 2019 American Society of Clinical Oncology (ASCO) Annual Meeting we presented updated results from pivotal Libtayo Phase 2 study*

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

- 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.

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

* Source: ASCO 2019 posters
† Source: Migden et al., N Engl J Med 2018; 379:341-351
Please see full Prescribing Information for all approved products.
LIBTAYO®: THE FOUNDATION OF OUR IO STRATEGY

CSCC: THE FIRST OF MANY POTENTIAL APPROVALS

LIBTAYO is the first and only FDA and EMA-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

<table>
<thead>
<tr>
<th>DEVELOPMENT STRATEGY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximize Skin Cancer Opportunity</strong></td>
</tr>
<tr>
<td>2L Basal Cell Carcinoma (BCC) – Ph2 (potentially pivotal) ongoing; locally advanced BCC cohort data readout expected in 1H19</td>
</tr>
<tr>
<td>CSCC – Ph3 adjuvant trial ongoing; neo-adjuvant study to start in 4Q19</td>
</tr>
<tr>
<td><strong>Non Small Cell Lung Cancer (NSCLC)</strong></td>
</tr>
<tr>
<td>1L NSCLC Monotherapy (≥50% PD-L1) (n=700) – Ph3 more than 2/3 enrolled</td>
</tr>
<tr>
<td>1L NSCLC Combination therapy (non-squamous and squamous, stratified by PD-L1 status) – Ph3 Part 2 enrolling</td>
</tr>
<tr>
<td>• LIBTAYO + Chemo vs. Chemo</td>
</tr>
<tr>
<td><strong>HPV Positive Cancers</strong></td>
</tr>
<tr>
<td>2L Cervical Cancer – Ph3 ongoing</td>
</tr>
<tr>
<td><strong>Additional Solid &amp; Liquid Tumor Indications</strong></td>
</tr>
<tr>
<td>Pediatric Glioblastoma (GBM) – Ph1/2 ongoing</td>
</tr>
<tr>
<td>1L Classical Hodgkin Lymphoma – Ph1 anticipated in 2019</td>
</tr>
<tr>
<td><strong>Combinations</strong></td>
</tr>
<tr>
<td>Immune modulators, vaccines, cell therapies, kinase inhibitors, chemotherapy and bispecifics</td>
</tr>
</tbody>
</table>

This slide includes pipeline drug candidates currently undergoing clinical testing in a variety of diseases. The safety and efficacy of these drug candidates have not been evaluated by any regulatory authorities for the disease categories described here.
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

**Rapid, automated and high-scale manipulation of mouse DNA to identify and validate therapeutic targets**

**VELOCIGENE®**

Genetically-humanized immune system in a mouse, producing a diverse range of fully human monoclonal antibodies

**VELOCAMAB®**

High-throughput screening of antibodies and rapid generation of production cell lines

**VELOCIMOUSE®**

Genetically altered mice derived from modified embryonic stem cells

**VELOCISUITE®**

Proprietary method that uses VelociImmune with proprietary antibody manufacturing processes to generate full-length human bispecific antibodies

**VelociT™**

Fully human T-cell receptors (TCR) against tumor and viral antigens

**VELOCI-Bi™**

Genetically humanized immune system in a mouse, producing a diverse range of fully human monoclonal antibodies

700,000 exomes sequenced by Regeneron Genetics Center (RGC)
REGENERON’S IO STRATEGY CONNECTS MULTIPLE INDIVIDUAL PIECES…
...LOGICALLY AND RATIONALLY INTO A COHESIVE WHOLE

...like pieces in a puzzle, bringing order to chaos

Regeneron’s IO puzzle is evolving and not yet complete; based on science and experimental data, the shape, components and configuration may change.
REGN1979, OUR EXCLUSIVELY-OWNED CD20xCD3 BISPECIFIC ANTIBODY, DEMONSTRATES HIGH ORR/CR

In our dose escalation study, treatment with ≥5 mg of REGN1979 demonstrated 83%-100% ORR and 67%-80% CR in 12 pts with R/R FL.

At higher doses in R/R DLBCL we are seeing response rates comparable to CAR-Ts; 2/4 CRs at 80–160 mg doses are in patients who failed prior CAR-Ts*. At doses tested, REGN1979 was well-tolerated in B-NHL; infections were reported in 49.4% of patients [14.8% Grade 3-4, with two deaths (2.5%)], 5% discontinued due to AE, no discontinuations due to CRS or immune-related events, or neurotoxicity, 3 deaths due to related AEs†.

Tolerability has been demonstrated at doses up to 320 mg weekly, with no observed DLTs.

Initiated potentially pivotal Ph2 studies in NHL

This slide includes pipeline drug candidates currently undergoing clinical testing in a variety of diseases. The safety and efficacy of these drug candidates have not been evaluated by any regulatory authorities for the disease categories described here.
### Anti-PD-1 Responsive Tumors
TCR binds tumor MHC/peptide

- Anti-PD-1 mAb monotherapy or combination

### Anti-PD-1 Unresponsive Tumors
TCR does not recognize tumor MHC/peptide

- CD3 bispecific alone, or in combination with PD-1 and/or costimulatory bispecifics

### Additional Strategic Opportunities

- Block T cell inhibition with LIBTAYO (anti-PD-1) monotherapy
- Enhance with combinations: chemotherapy, other immune modulators (e.g., CTLA-4, LAG-3, GITR), kinase inhibitors, vaccines, costimulatory bispecifics, etc.
- Initiate immune response with a CD3 bispecific targeting tumor specific antigens (e.g., neoantigens bound to MHC) or tumor associated antigens on cells that are safe to ablate (e.g., CD20)
- Enhance response with anti-PD-1 and/or costimulatory bispecific directed against a tumor target
- Major collaboration with bluebird bio to empower and extend CAR-T therapies with novel tumor targeting moieties such as TCRs or reagents that bind peptide/MHC complexes
- Can complement with soluble reagents such as anti-PD-1 and CD3 or costimulatory bispecifics
REGENERON’S CD3 & COSTIMULATORY BISPECIFICS ARE OFF-THE-SHELF DRUGS WITH POTENTIAL TO TURN PATIENTS’ T CELLS INTO CAR-T-LIKE CANCER KILLERS

The combination of CD3 and costimulatory bispecifics has the potential to activate T cells into highly effective, targeted cancer killers.
CAR-T Mechanism

LIBTAYO blocks the stop signal

CD3 bispecific

Costimulatory bispecific

Bispecific/Costimulatory Mechanism

LIBTAYO blocks the stop signal

Using LIBTAYO to block PD-1 signaling can further enhance the efficacy of CD3 and costimulatory bispecifics
**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

**anti-PD-1 + PSMAxCD28**
*in vivo* syngeneic humanized PSMA mouse model

- Unlike superagonist CD28 mAbs, our CD28 bispecifics have no toxicity, 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, PSMAxCD28 entered clinical development, and we are planning to advance another CD28 bispecific antibody into the clinic.

**TSA = Tumor Specific Antigen**

---

This slide includes pipeline drug candidates currently undergoing clinical testing in a variety of diseases. The safety and efficacy of these drug candidates have not been evaluated by any regulatory authorities for the disease categories described here.
**BROADENING OUR IMMUNO-ONCOLOGY PIPELINE**

<table>
<thead>
<tr>
<th>Pre-IND</th>
<th>Clinical Development (Active IND)</th>
<th>LIBTAYO Potential Indications</th>
<th>Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSAxCD28 B cell malignancy</td>
<td>REGN1979 (CD20xCD3) B-Cell NHL</td>
<td>LIBTAYO NSCLC, Cervical, BCC, Pediatric, Adjuvant CSCC</td>
<td>LIBTAYO CSCC</td>
</tr>
<tr>
<td>GITR Solid tumors</td>
<td>REGN5458 (BCMAxCD3) Multiple Myeloma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>And More To Come HLA/peptide (tumor and viral), etc.</td>
<td>REGN4018 (MUC16xCD3) Ovarian Cancer</td>
<td>LIBTAYO + REGN1979 (CD20xCD3) B-Cell NHL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>REGN5678 (PSMAxCD28) Prostate Cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>REGN4659 (CTLA-4) NSCLC</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>REGN3767 (LAG-3) Solid/hematologic malignancies</td>
<td></td>
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</tr>
</tbody>
</table>

This slide includes pipeline drug candidates currently undergoing clinical testing in a variety of diseases. The safety and efficacy of these drug candidates have not been evaluated by any regulatory authorities for the disease categories described here.

TSA = Tumor Specific Antigen
MANY COMPANIES CAN DO ONE THING...

CD3 bispecifics

PD-1/L1

Costimulatory bispecifics

CTLA-4, LAG-3, GITR…
...FEW CAN DO MANY THINGS

REGENERON is one of the few

PD-1/L1

Costimulatory bispecifics

CD3 bispecifics

CTLA-4, LAG-3, GITR...
OSTEOARTHRITIS IS A COMMON CONDITION ASSOCIATED WITH WEAR AND TEAR ON THE JOINTS, AND IS THE MOST COMMON INDICATION FOR KNEE AND HIP REPLACEMENT

Pain is a protective mechanism

NGF blockade treats pain, but not osteoarthritis itself

In clinical trials we observed a dose-dependent increase in rapidly progressive osteoarthritis (RPOA) and total joint replacement (TJR); we therefore limited development to lower dose regimens

Fasinumab* is a human monoclonal antibody that treats osteoarthritis pain by blocking nerve growth factor (NGF)

Based on our analysis of the data, we believe we have identified a minimally effective dose

As of 4/30/19, the data monitoring committee overseeing patient safety recommended continuing the program at the ongoing lower doses where we previously reported positive efficacy results

Phase 3 efficacy and long-term safety studies in osteoarthritis pain have completed enrollment

* Partnered with Teva and Mitsubishi Tanabe Pharma (MTPC) outside of the U.S.
PORTFOLIO & PIPELINE

**PHASE 1**
- REGN4461 (LEPR)
- Cemiplimab* (PD-1)
- REGN1979 (CD20xCD3)
- REGN5458* (BCMAxCD3)
- REGN4018* (MUC16xCD3)
- REGN5678 (PSMAxCD28)
- REGN4659 (CTLA-4)
- REGN3767 (LAG-3)

**PHASE 2**
- REGN5713-5714-5715 (Betv1)
- REGN3048-3051 (MERS virus)
- REGN4659 (CTLA-4)
- REGN3767 (LAG-3)
- REGN1979 (CD20xCD3)
- REGN3500* (IL-33)
- REGN3048-3051 (MERS virus)
- REGN3767 (LAG-3)

**PHASE 3**
- Pozelimab (C5)
- Garetosmab (Activin-A)
- Evinacumab (ANGPTL3)
- Cemiplimab* (PD-1)
- REGN1979 (CD20xCD3)
- REGN3500* (IL-33)
- Dupilumab* (IL-4R)
- Sarilumab* (IL-6R)
- REGN1908-1909 (Feld1)
- REGN5069 (GFRα3)

This slide includes pipeline drug candidates currently undergoing clinical testing in a variety of diseases. The safety and efficacy of these drug candidates have not been evaluated by any regulatory authorities for the disease categories described here.
SELECT NEXT 12 MONTHS GOALS AND MILESTONES

**KEY REGULATORY APPROVALS & SUBMISSIONS**

- **EYLEA** FDA decision on Prior-Approval Supplement (PAS) for pre-filled syringe
- **DUPIXENT** Regulatory submission for pediatric AD, ages 6-11; EU decision on CRSwNP

**CLINICAL PROGRESS**

- **EYLEA** Initiate studies of higher dose formulations of aflibercept; initiate Ph3 in retinopathy of prematurity (ROP)
- **DUPIXENT** Continue enrollment in pivotal eosinophilic esophagitis (EoE) study
- **LIBTAYO** Initiate neoadjuvant CSCC; continue enrollment in NSCLC and other studies; report pivotal BCC data
- **REGN1979 (CD20xCD3)** Initiate potentially pivotal Ph2 programs in Diffuse Large B-Cell Lymphoma (DLBCL) and other NHL, in addition to ongoing Follicular Lymphoma (FL) program
- **Fasinumab (NGF)** Completed patient enrollment in Ph3 studies in Osteoarthritis
- **Pozelimab (C5)** Continue enrollment in Ph2 study in Paroxysmal Nocturnal Hemoglobinuria (PNH)
- **REGN4461 (LEPR agonist)** Initiate Ph2 in generalized lipodystrophy

**KEY DATA READOUTS**

- **DUPIXENT** Present results from Ph2a in grass allergy
- **REGN3500 (IL-33)** Report results from Ph2 in COPD
- **Pozelimab (C5)** Present PNH Ph2 results
- **Evinacumab (ANGPTL3)** Report results from Ph3 in HoFH
- **Garetosmab (Activin A)** Report results from Ph2 in FOP
- **REGN5458 (BCMAxCD3)** Report interim results from Ph1 in multiple myeloma

**NEW INDs**

- **REGN5678 (PSMAxCD28)** IND open Expect to advance 4-6 new molecules into clinical development (including additional CD3 & CD28 bispecifics)

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This slide includes pipeline drug candidates currently undergoing clinical testing in a variety of diseases. The safety and efficacy of these drug candidates have not been evaluated by any regulatory authorities for the disease categories described here.
### 2019 Financial Guidance

- **GAAP Sanofi Collaboration Revenue:** $500 – $530MM
- **GAAP Unreimbursed R&D:** $2.300 – $2.380B
- **Non-GAAP Unreimbursed R&D**
- **GAAP SG&A:** $1.705 – $1.785B
- **Non-GAAP SG&A**
- **GAAP Effective Tax Rate:** 11 – 13%
- **GAAP Capital Expenditures:** $380 – $420MM

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*As of August 6, 2019. The guidance does not assume the completion of any significant business development transaction that had not been completed as of the date of the guidance. The guidance is not being updated or reaffirmed at this time. Regeneron does not undertake any obligation to update publicly any financial projection or guidance, whether as a result of new information, future events, or otherwise.

† Please refer to slide 2 for important information regarding non-GAAP financial measures and to slide 25 for a reconciliation of these measures to GAAP financial measures.
## RECONCILIATION OF FULL YEAR 2019 NON-GAAP TO GAAP FINANCIAL GUIDANCE

<table>
<thead>
<tr>
<th>(in millions)</th>
<th>Projected Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>GAAP unreimbursed R&amp;D*</td>
<td>$2,300</td>
</tr>
<tr>
<td>R&amp;D: Non-cash share-based compensation expense</td>
<td>(250)</td>
</tr>
<tr>
<td>R&amp;D: Up-front payment related to license and collaboration agreements</td>
<td>(400)</td>
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<tr>
<td>Non-GAAP unreimbursed R&amp;D</td>
<td>$1,650</td>
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<tr>
<td>GAAP SG&amp;A</td>
<td>$1,705</td>
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<tr>
<td>SG&amp;A: Non-cash share-based compensation expense</td>
<td>(165)</td>
</tr>
<tr>
<td>SG&amp;A: Litigation contingencies</td>
<td>(10)</td>
</tr>
<tr>
<td>Non-GAAP SG&amp;A</td>
<td>$1,530</td>
</tr>
</tbody>
</table>

* Unreimbursed R&D represents R&D expenses reduced by R&D expense reimbursements from the Company's collaborators and/or customers.