



# Analyst and Investor Call to Review Presentations of Hemophilia A Gene Therapy at WFH and Oral GLP-1R Agonist at ADA

June 18, 2020



#### **Disclaimer**

This presentation includes forward-looking statements about, among other things, Pfizer's Rare Disease and Internal Medicine products and product candidates, including, among others, Giroctocogene fitelparvovec (SB-525), Marstacimab and our investigational oral GLP-1RA agonist (PF-06882961), planned clinical studies, gene therapy and their potential benefits, that are subject to substantial risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. These statements are subject to risks, uncertainties and other factors that may cause actual results to differ materially from past results, future plans and projected future results.

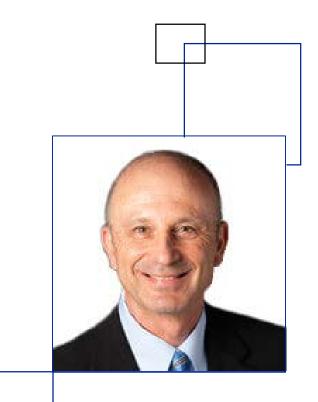
Additional information regarding these factors can be found in Pfizer's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and in our subsequent reports on Form 10-Q, including in the sections thereof captioned "Risk Factors" and "Forward-Looking Information and Factors that May Affect Future Results," as well as in our subsequent reports on Form 8-K, all of which are filed with the US Securities and Exchange Commission (SEC) and available at <a href="https://www.sec.gov">www.sec.gov</a> and <a href="https://www.sec.gov">www.pfizer.com</a>.

The forward-looking statements in this presentation speak only as of the original date of this presentation, and we undertake no obligation to update or revise any of these statements.



### **Introductory Remarks**

Mikael Dolsten, M.D., Ph.D.
Chief Scientific Officer and President, Worldwide
Research, Development, and Medical







# Hemophilia A Gene Therapy Presentation at WFH

Seng Cheng, Ph.D.
Chief Scientific Officer and Senior Vice
President, Rare Disease



#### Multiple Pathways to Treat the Spectrum of Hemophilia Patients

Transformative Periods in Hemophilia Treatment Targeting Multiple Pathways

1960's 1990's 2000's 2014 2020's

| Transformative |                    |   | Incremen   | tal                          | Transformative                   |                                     |  |
|----------------|--------------------|---|--|------------------------------|----------------------------------|-------------------------------------|--|
| Bleeding       | Plasma-<br>Derived | Recombin  | ant Factor (Short Half Life)                         | Extended Half Life<br>Factor | Non-Factor Agent                 | Gene Therapy                        |  |
|                |                    | Anthemophilic Factor (Recombinant)  BENEFIX*  Coagulation Factor IX (Recombinant)  Room Temperature Storage | Xyntha°solofuse° Antihemophilic Factor (Recombinant) |                              | Marstacimab for<br>Hem A & Hem B | Hem A & Hem B<br>Gene Therapy (GTx) |  |

**Patient Population** 

#### **Hemophilia A (FVIII Deficiency)**

- WW Prevalence: ~350,000 males
- US Prevalence: ~28,000
- 2019 Global market size ~\$7B

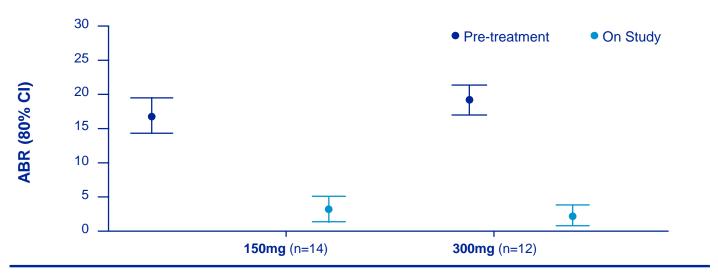
#### **Hemophilia B (FIX Deficiency)**

- WW Prevalence: ~70,000 males
- US Prevalence: ~6,000
- 2019 Global market size ~\$2B



# PF-06741086: Marstacimab Promising Ph2 and Long-Term Results With Weekly Subcutaneous Flat Dose in Both Hemophilia A and B Patients +/- Inhibitors

#### Ph2 and Long Term Extension Study



**Exposure days** Median (min,max) 324.5 (59\*, 468) \*2 subjects discontinued due to AE in B7841002.

Combined data from phase 2 and long term extension studies, with treatment assignment reflecting the dose the subjects received in long term extension.

Efficacy: All dosing regimens demonstrated reduced ABR (82%-96% reduction) vs. control Safety: All dose regimens were well-tolerated with no reported thrombotic events and no treatment related SAEs



#### Giroctocogene fitelparvovec (SB-525) Gene Therapy for Hemophilia A

- Alta is a phase 1/2 dose-ranging, single-dose, multicenter study to assess the safety and tolerability of giroctocogene fitelparvovec (SB-525) in adult subjects (aged ≥18 years) with severe hemophilia A
- Giroctocogene fitelparvovec (SB-525) is a livertropic recombinant adeno-associated virus (rAAV6) vector carrying a B-domain-deleted F8 gene that is delivered through a single IV infusion

#### **Key exclusion criteria**

- Neutralizing activity to AAV6 capsid and/or inhibitor to FVIII
- History of hypersensitivity response to FVIII replacement therapy
- History of liver dysfunction
- Contraindication to steroids



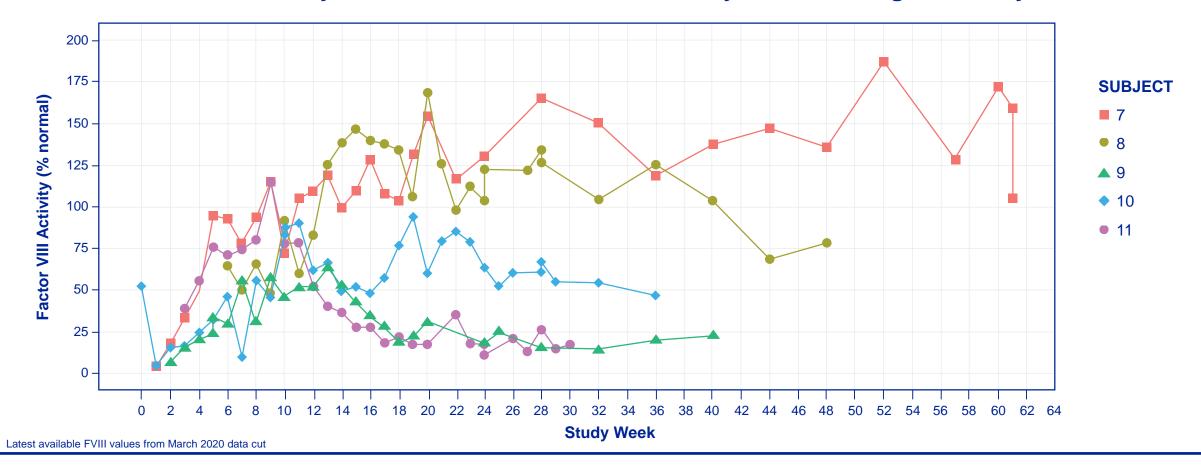


#### Safety Summary: Cohort 4 (3x1013 vg/kg)

- 1 subject had a treatment-related serious adverse event (SAE) of grade 3 hypotension and grade 2 fever, with symptoms of headache and tachycardia occurring ≈6 hours after completion of the vector infusion, with resolution ≈12 hours postinfusion
- No additional treatment-related SAEs
- 4/5 subjects in the high dose cohort required corticosteroid treatment for elevations in ALT, which all resolved with intervention
  - 3 of the 4 subjects had subsequent elevations in liver transaminases after resolution of the initial increase and received a repeat course of corticosteroids, which all resulted in resolution
- FVIII activity levels were sustained in all cases, with no patients experiencing bleeding events or requiring FVIII infusions

#### Efficacy: Cohort 4 (3E13 vg/kg)

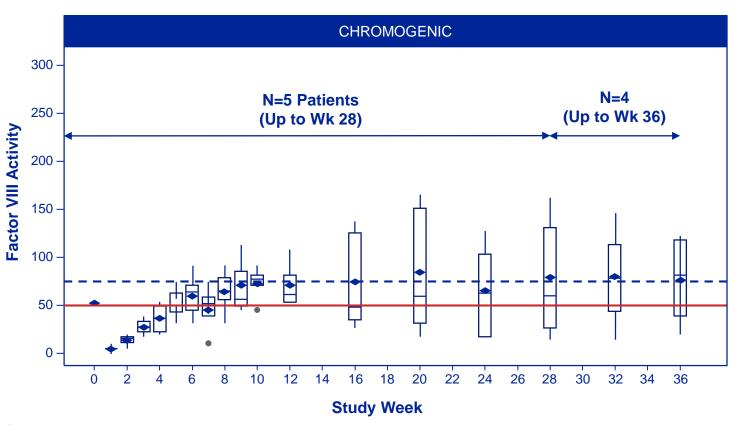
#### **FVIII Activity as measured at Central Laboratory with Chromogenic Assay**





#### Efficacy: Cohort 4 (3E13 vg/kg)

#### **Box-Whisker Plot of Factor VIII Activity for Cohort 4 (3E13 vg/kg)**



50% Factor VIII activity(Lower bound of Normal)

- Mean Factor VIII activity value from Week 9 to Week 36 (based on group mean)
  - Mean (Box-Whisker plot)

Data cut: March 2020



#### **Conclusions**

- Cohort 4 (3e10<sup>13</sup> vg/kg):
  - With follow-up ranging 30 to 61 weeks, data continues to show that giroctocogene fitelparvovec (SB-525) is generally well tolerated
  - Sustained FVIII activity levels
  - No use of exogenous FVIII beyond week 3 post infusion
  - No bleeding events
  - 1 treatment related SAE during vector infusion, no additional treatment related SAEs
- Follow-up for Cohorts 1-3 extends up to over 2 years with no safety signals
- The Ph1/2 study is ongoing and supports further development of giroctocogene fitelparvovec (SB-525)
- Phase 3 lead-in study is ongoing



Oral GLP-1R Agonist PF-06882961 Presentation at ADA

> Morris Birnbaum, M.D., Ph.D. Chief Scientific Officer, Internal Medicine



#### Our Internal Medicine R&D Strategy Seeks to Address the Increasing Global Impact of the Dysmetabolic State

We are driving innovation for cardiometabolic patients who often suffer from multiple diseases that share common origins in dysregulated metabolism

NASH emerging as #1 indication for liver transplants with no approved therapies

Six potential first-in-class metabolic MOAs\* in

our discovery & development portfolio

Cardiovascular disease remains a leading cause of death

Advancing vupanorsen to treat residual risk factors such as non-HDL-C

NASH

Type 2 Cardiovascular Diabetes & Disease **Obesity** 

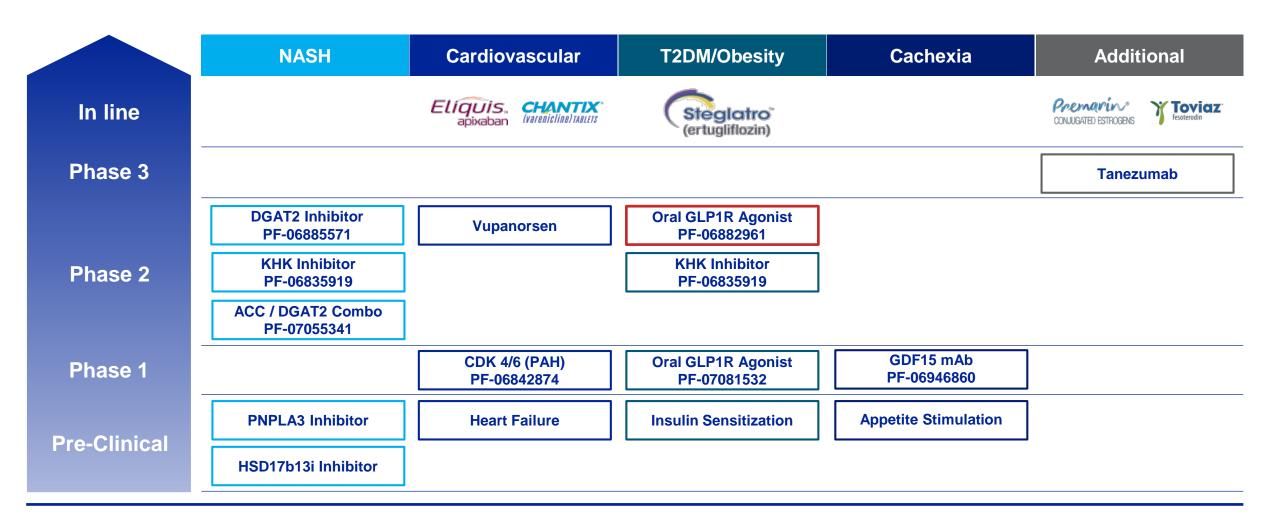
**Epidemic of type 2 diabetes and** obesity continues to grow worldwide

Potential first small molecule oral GLP-1RA for T2DM and Obesity

\*Mechanism of action



#### **Emerging Pipeline with Multiple Novel MOAs Addressing Cardiometabolic Conditions**





# Diabetes and Obesity are Highly Prevalent and Drive Global Healthcare Burden: Significant Potential Opportunity to Bring Benefits of GLP-1RA Class to More Patients in Need

**Global Epidemics** that Continue to Rise

Carry Significant Health Consequences

#### **Diabetes**

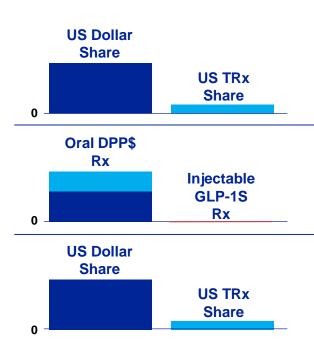
**463M** today By 2030: **578M**<sup>1</sup> In the US only ~50% have HbA1c below treatment goal 4

#### **Obesity**

**650M** today<sup>2</sup> By 2030: **1.12B**<sup>3</sup>

Increased comorbidity risk & development of >200 chronic diseases<sup>5</sup>

#### **GLP-1RA Class is Currently Underutilized**



In Diabetes, while GLP-1RAs have 42% share of \$ sales in US, they only have 8.6% share of total prescriptions

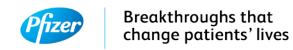
80K (of 250K) primary care practitioners in US have written a diabetes Rx for oral DPP4 but not for injectable GLP-1RAs

In Obesity, injectable GLP-1RAs have 69% share of \$ sales in US but only 4% share of total prescriptions, despite limited efficacy and safety of current oral treatment options

Source: IQVIA MIDAS,Xponent

#### References:

1. International Diabetes Federation. IDF Diabetes Atlas, 9th edn. Brussels, Belgium: 2019, Available at: <a href="https://www.diabetesatlas.org">https://www.diabetesatlas.org</a>; 2. WHO. Obesity and overweight. (February 2018) https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight; 3. Obesity Policy Engagement Network (OPEN). What about the 650 million? Challenging the way we view and manage obesity. (February 2019) <a href="https://obesity.open.org/storage/app/media/650m-report.pdf">https://obesity.open.org/storage/app/media/650m-report.pdf</a> 4. Carls, G., Huynh, J., Tuttle, E. et al. Achievement of Glycated Hemoglobin Goals in the US Remains Unchanged Through 2014. Diabetes Ther 8, 863–873 (2017). <a href="https://obesity.open.org/storage/app/media/650m-report.pdf">https://obesity.open.org/storage/app/media/650m-report.pdf</a> 4. Carls, G., Huynh, J., Tuttle, E. et al. Achievement of Glycated Hemoglobin Goals in the US Remains Unchanged Through 2014. Diabetes Ther 8, 863–873 (2017). <a href="https://obesity.open.org/storage/app/media/650m-report.pdf">https://obesity.open.org/storage/app/media/650m-report.pdf</a> 4. Carls, G., Huynh, J., Tuttle, E. et al. Achievement of Glycated Hemoglobin Goals in the US Remains Unchanged Through 2014. Diabetes Ther 8, 863–873 (2017). <a href="https://obesity.open.org/storage/app/media/650m-report.pdf">https://obesity.open.org/storage/app/media/650m-report.pdf</a> 4. Carls, G., Huynh, J., Tuttle, E. et al. Achievement of Glycated Hemoglobin Goals in the US Remains Unchanged Through 2014. Diabetes Ther 8, 863–873 (2017). <a href="https://obesity.open.org/storage/app/media/650m-report.pdf">https://obesity.open.org/storage/app/media/650m-report.pdf</a> 4. Carls, G., Huynh, J., Tuttle, E. et al. Achievement of Glycated Hemoglobin Goals in the US Remains Unchanged Through 2014. Diabetes Through 2014. D



# Oral Small Molecule GLP-1RA (PF-06882961) Evaluated in Phase 1 Study of Adults with Type 2 Diabetes Mellitus for 4 Weeks

### Study Objectives & Endpoints

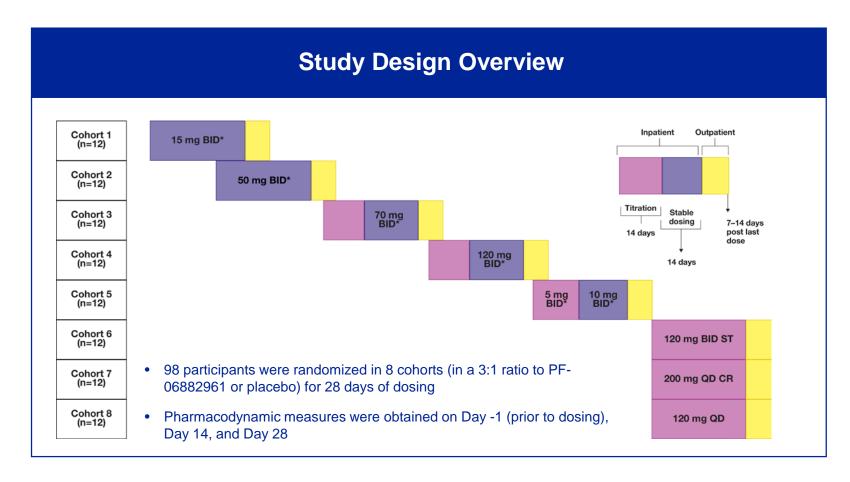
Randomized, double-blind, placebocontrolled, multiple ascending dose Phase 1 study (NCT03538743)

#### **Primary Endpoint:**

Safety and tolerability of PF-06882961

#### **Secondary and exploratory endpoints:**

- CFB in 24-hour mean daily glucose, fasting glucose & HbA1c
- CFB in body weight
- PF-06882961 PK parameters



\*Represents the target dose of PF-06882961 (or matching placebo); Doses of 15 and 50 mg BID were not titrated.
For the 50 mg BID dose only, down-titration to 15 mg BID was permitted in the setting of difficulty with tolerability. BID, twice daily; CFB, change from baseline; CR, controlled release formulation, HbA1c, glycated hemoglobin; PK, pharmacokinetic;, QD, once daily; ST, slow titration.



# PF-06882961 Safety and Tolerability Profile in Study NCT03538743 (Primary Endpoint)

- Overall safety profile was consistent with the GLP-1RA class
- The most frequently reported all-causality adverse events were nausea (49.0%), dyspepsia (32.7%), vomiting (26.5%), diarrhea (24.5%), headache (23.5%) and constipation (20.4%)
- Increases in heart rate were observed with mean time-matched double differences ranging up to 11.8 beats per minute (bpm) over a 24-hour period, compared with placebo
- No apparent differences in diastolic blood pressure were observed by Day 28, compared with placebo; however, mild decreases in systolic blood pressure were noted with higher doses of PF-06882961 by Day 28

# Why We Are Encouraged: Study NCT03538743 Demonstrated Substantial Reductions in Glucose, HbA1c and Body Weight in T2DM Patients Receiving PF-06882961 for 28 Days

|                            | Baseline     | Observed change from baseline at Day 28 |                      |              |              |                  |                  |  |
|----------------------------|--------------|---|----------------------|--------------|--------------|------------------|------------------|--|
| Parameter                  |              | Placebo                                 | PF-06882961 dose BID |              |              |                  |                  |  |
|                            |              |   | 10 mg                | 15 mg        | 50 mg        | 70 mg            | 120 mg           |  |
| FPG, mg/dL, mean (SD)      | 178.7 (34.4) | -24.8 (33.4)                            | -34.3 (37.7)         | -66.6 (27.2) | -34.5 (47.0) | -80.6 (37.2)     | -89.7 (30.0)     |  |
| MDG, mg/dL, mean (SD)      | 197.9 (39.4) | -20.5 (27.2)                            | -53.3 (21.8)         | -85.9 (31.6) | -48.7 (36.3) | -101.6<br>(44.3) | -105.9<br>(33.6) |  |
| HbA1c, %, mean (SD)        | 8.3 (0.8)    | -0.4 (0.4)                              | -0.8 (0.5)           | -0.9 (0.3)   | -1.2 (0.6)   | -1.2 (0.3)       | -1.2 (0.6)       |  |
| Body weight, kg, mean (SD) | 92.5 (17.6)  | -1.9 (2.3)                              | -2.8 (1.8)           | -2.4 (2.0)   | -2.4 (2.3)   | -4.0 (2.0)       | -7.9 (3.5)       |  |

<sup>\*</sup>Model adapted from Kjellsson, M.C.; et. al. J. Clin. Pharmacol. 2013, 53, 589-600.

Modeling of MDG data predicts steady state HbA1c reduction of ~1.7% for 120 mg BID dose\*



<sup>\*</sup>Assumes baseline MDG = 187 mg/dL and baseline HbA1c = 8%

BID, twice daily; FPG, fasting plasma glucose; HbA1c, hemoglobin A1C; MDG, mean daily glucose; SD, standard deviation; T2DM, type 2 diabetes mellitus

## Our Oral Small Molecule GLP-1RA Has the Potential to Improve Treatment of T2DM and Obesity

### **Promising Early Clinical Profile**

- Robust glycemic efficacy and encouraging reductions in HbA1c at only 4 weeks
- Early signals of weight loss
- Favorable safety profile consistent with the GLP-1RA class

#### **Key Next Steps**

- Concurrent Phase 2 studies in T2DM & Obesity expected to initiate in 2H20
- Subject to successful Phase 2 studies,
   Phase 3 starts for both indications planned for 2022

#### **Future Opportunity**

- Oral GLP-1RA may offer more convenient delivery and simpler titration to optimize patient experience and benefit relative to injectables
- PF-06882961 is the First Oral Small Molecule GLP-1RA being developed for both T2DM and Obesity
- Potential for innovative fixed-dose combinations with other small molecules
- Potential expansion to additional indications such as NASH



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