



FGCL-3019-079 OVERVIEW

Open-Label, Single-Arm Phase 2 Study in Non-Ambulatory Subjects with Duchenne Muscular Dystrophy

Elias Kouchakji, M.D., Senior VP of Clinical Development and Safety
Tro Sekayan, M.D., Associate Medical Director, Clinical Development

PROJECT PARENT MUSCULAR DYSTROPHY 2018
ANNUAL CONFERENCE



Pamrevlumab Background

Pamrevlumab (FG-3019): a novel investigational agent for treating fibrotic and fibro-proliferative diseases

- Pamrevlumab is a recombinant human monoclonal antibody that inhibits the activity of connective tissue growth factor (CTGF), a critical mediator in the progression of fibrosis and related serious diseases. Pamrevlumab has been studied in several indications including pancreatic ductal adenocarcinoma (PDAC) and idiopathic pulmonary fibrosis (IPF)
- 11 Phase 1 and Phase 2 clinical trials completed or ongoing
- Approximately 530 patients have received pamrevlumab
- About half of the patients have received treatment for >6 months

Pancreatic cancer

- Completed Phase 1/ 2 trial in 75 patients showing dose-related improvement in survival (*J Cancer Clin Trials* 2017, 2:1)
- Ongoing Phase 1/ 2 trial in 37 patients with locally advanced unresectable pancreatic cancer
- All patients completed treatment and are currently in long-term follow-up

Pamrevlumab Background

Idiopathic Pulmonary Fibrosis (IPF)

- Completed a one-year, open-label Phase 2 trial in 89 patients showing reversal of lung fibrosis and improved lung function in some patients (*Eur Respir J* 2016; 47: 1481–1491)
- Completed randomized, placebo-controlled Phase 2b trial with 103 patients (PRAISE study)
- Pamrevlumab did better than placebo at preserving lung function according to FVC measurements
- Study results presented at the ERS International Congress 2017 and the ATS International Conference in 2018

Safety

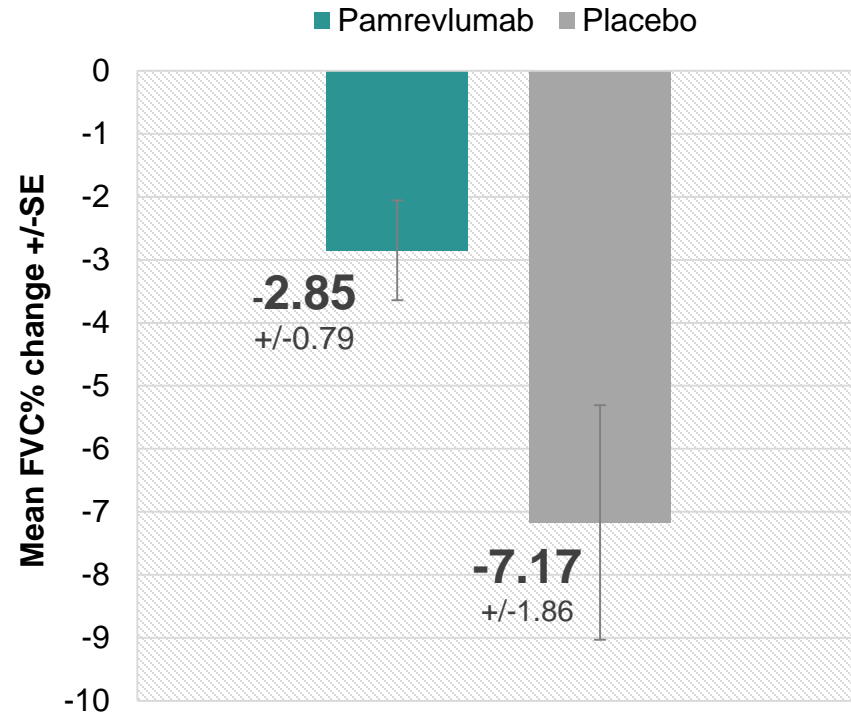
- No safety signals to date that might prevent further development of the drug
- Well tolerated and no dose-limiting toxicities observed to date

PRAISE in IPF

Randomized, Double-Blind, Placebo-Controlled Phase 2 Study to Evaluate the Safety and Efficacy of Pamrevlumab (FG-3019) in Patients with Idiopathic Pulmonary Fibrosis

Efficacy Analysis from PRAISE, Primary Endpoint*: Mean Change from Baseline at Week 48 in FVC Random Coefficients Model (Linear Slope Method)

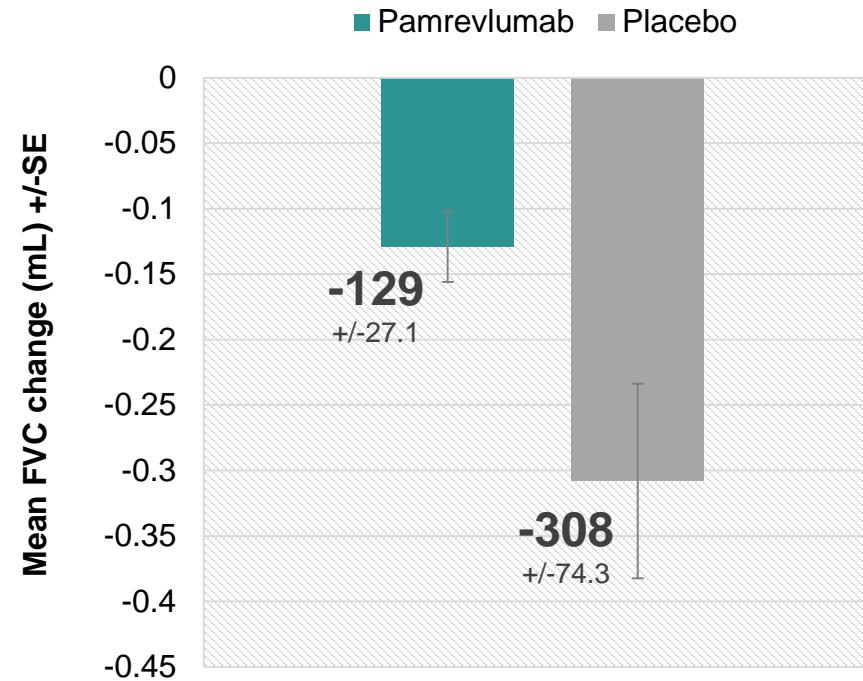
*FVC%-Predicted



p-value = 0.0331

FVC%-Predicted Difference: 4.33%
Relative Difference: 60%

FVC (mL)



p-value = 0.0249

Absolute FVC Difference: 178mL
Relative Difference: 58%

Safety Summary

- The majority of the treatment emergent adverse events were mild to moderate in severity and were \leq Grade 3
- Treatment emergent serious adverse events were infrequent during the study and mostly respiratory-related
- Pamrevlumab infusions were generally well tolerated, mild to moderate in severity (no serious AEs observed) and did not lead to study discontinuations
- In general, pamrevlumab was well tolerated in IPF and warrants further clinical investigation

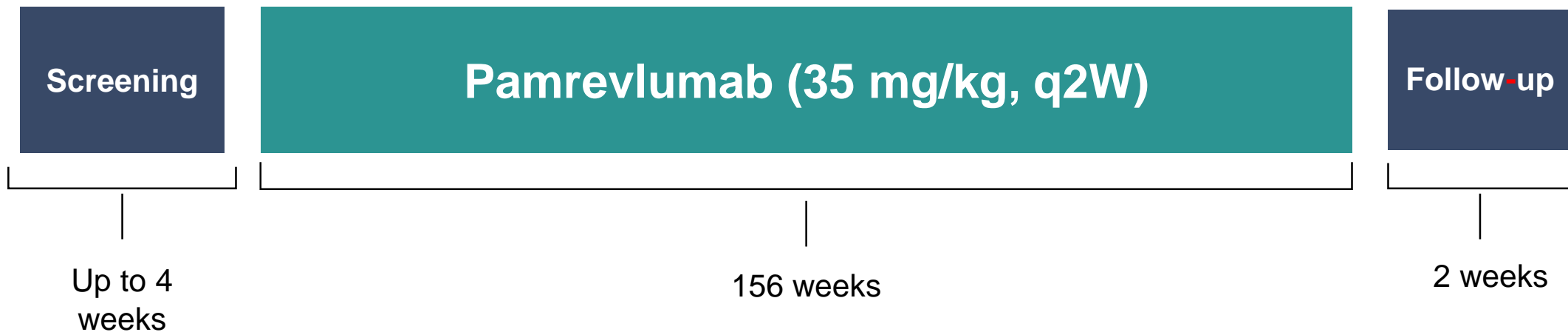
STUDY FGCL-3019-079

Open-Label, Single-Arm Phase 2 Study in Non-Ambulatory Subjects with Duchenne Muscular Dystrophy

Study FGCL-3019-079 Design

- An open-label, single-arm Phase 2 study in non-ambulatory DMD patients
- Each subject will receive IV infusions of pamrevlumab (35 mg/kg every 2 weeks, not to exceed 150 cc/hour) for up to 156 weeks
- All subjects are closely monitored for safety

DMD 079- Study (N=21)



Key Inclusion Criteria

- At least 12 years of age
- Non-ambulatory
- Brooke Score for Arms and Shoulders ≤ 5
- Diagnosis of DMD by medical history and confirmed Duchenne mutation in available genetic testing using a validated genetic test
- Able to perform spirometry
- Able to undergo cardiac and extremity (upper arm) MRI
- Percent predicted FVC between 40 and 90, inclusive
- At least one historical FVC% predicted value within 18 months of baseline
- Left ventricular ejection fraction $\geq 45\%$ as determined by cardiac MRI at screening or within 3 months prior to Day 0
- Patients currently receiving heart failure cardiac medications must achieve a stable regimen for at least 3 months prior to screening
- On a stable dose of corticosteroids for a minimum of 6 months, with no substantial change in dosage for a minimum of 3 months

Key Exclusion Criteria

- Requires ≥ 16 hours continuous ventilation
- Anticipated spine surgery within 156 weeks
- Severe uncontrolled heart disease including any of the following:
 - Need for IV diuretics or inotropic support within 3 months prior to screening
 - Hospitalization for a heart failure exacerbation or arrhythmia in last 3 months
 - Arrhythmia requiring anti-arrhythmic therapy
- Hospitalization due to respiratory failure in the last 6 weeks
- Poorly controlled asthma or underlying lung disease
- BMI ≥ 40 kg/m² or weight > 117 kg
- Exposure to another investigational drug or approved product for DMD within 28 days prior to start of study treatment (or 5 half-lives, whichever is longer) with the exception of deflazacort

Status of Study 079

- Enrollment is complete, with 21 subjects currently on study
- 10 U.S. sites
- An interim analysis will be conducted after at least 10 to 12 subjects have completed 52 weeks of treatment
- Summary of patient exposure to pamrevlumab in days:

Statistics	Study 079 (N=21)
Mean (SD) (days)	326.4 (243.0)
Range (days)	29, 872
PEY* (years)	18.77
*PEY = All patients' duration on treatment/365.25	

- Currently, 16 subjects have been on the study for more than 6 months and 3 subjects >2 years

Site ID	All Subjects (N=21) n (%)
7901	1 (4.8)
7903	4 (19.0)
7904	4 (19.0)
7905	1 (4.8)
7908	4 (19.0)
7910	2 (9.5)
7912	2 (9.5)
7913	1 (4.8)
7920	1 (4.8)
7921	1 (4.8)
All Sites	21 (100.0)

Summary of Safety

- All subjects are currently on the study
- No death on the study
- 90% of subjects had TEAEs, none of the adverse events led to treatment discontinuation
- All TEAEs were mild to moderate in severity and were graded 1-3 per CTCAE. There were no grade >4 adverse events reported to date
- All vitals and labs were within accepted ranges for patients on the study

QUESTIONS?



Thank you

