

rusfertide  
(PTG-300)

PN-943

PTG-200

PN-235

PN-232

PTG-100

## Rusfertide Update

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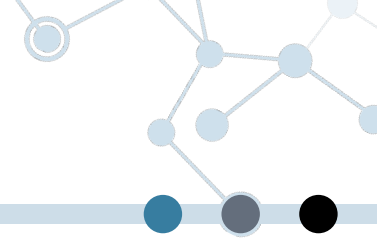
# Timelines and Catalysts

			2019	2020		2021		2022
				1H	2H	1H	2H	
Hepcidin Mimetics	Rusfertide (PTG-300) s.c.	Polycythemia Vera (PV)		Regulatory guidance for registrational clinical plan		★	★	★
		Hereditary Hemochromatosis (HH)		★		★	★	★
	Oral NCE	Pre-Clin Development					★	★
Oral $\alpha 4\beta 7$ -Integrin Antagonists	PN-943	Ulcerative Colitis (UC)	★		★			★
Oral IL-23R Antagonists	PTG-200	Crohn's Disease (CD)				Phase 2 study in progress		
	PN-235	Ph1 study			★	★		★
	PN-232	Pre-Clin Development				★	★	★

★ Milestones achieved  
 ★ Upcoming milestones

# Rusfertide (PTG-300) for Polycythemia Vera

## Highlights of 2020



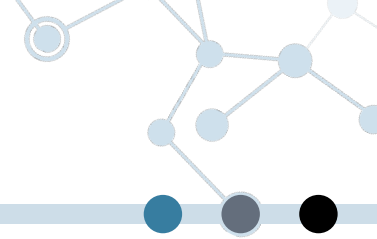
**May 2020:** Initial Phase 2 results with hepcidin mimetic PTG-300 in polycythemia vera

**September 2020:** Commercial opportunity update and unmet need webinar for PTG-300 in PV

**December 2020:** Updated Phase 2 data presentation at ASH annual meeting supporting long term efficacy of PTG-300 in treatment of PV

# Rusfertide Phase 3 Study in PV

## Summary of Regulatory Guidance and Next Steps



The company conducted an End-of-Phase-2 meeting with the FDA and received written comments from the EMA

Based on these interactions, plan to initiate a global Phase 3 study for rusfertide in PV

Continue to advance ongoing Phase 2 study and provide data update in the coming months

# Update on Rusfertide in PV

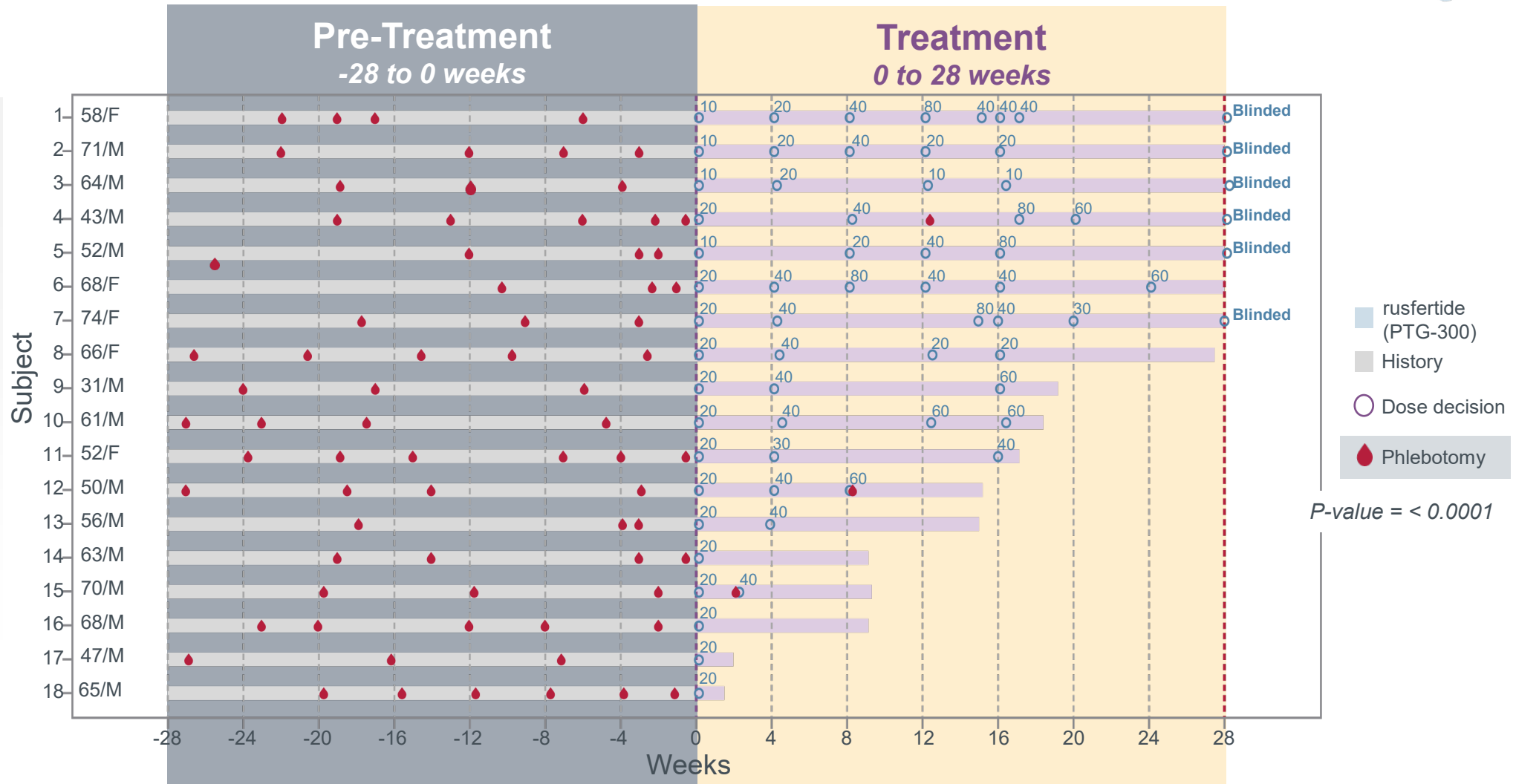
## Plan to Initiate a Global Phase 3 Study

- Randomized placebo-controlled study of about 200-250 adult PV patients
- Study will include
  - PV patients requiring frequent phlebotomy treatments with or without cytoreductive or other concomitant therapies for PV
  - Both high-risk and low-risk PV patients
- Primary endpoint will be the proportion of patients achieving a response
  - Absence of phlebotomy eligibility based on hematocrit control between weeks 20 through 32
- Secondary endpoints include frequency of phlebotomies as well as symptom improvement as measured by MPN-TSS criteria
- Durability follow-up during weeks 32 through 52
- Open-label treatment will be offered to evaluate long-term effects and safety

# Rusfertide (PTG-300) Essentially Eliminated Phlebotomy Requirements

## Interim Data (n=18)

- Diversity of patients
  - 12 M vs 6 F
- Risk category
  - 10 high risk vs 8 low risk
- Concurrent treatments
  - 8 on phlebotomy alone
  - 7 on phlebotomy + hydroxyurea
  - 3 on phlebotomy + interferon



# Polycythemia Vera

## Current Treatment Options

### Phlebotomy

- Treatment goal is to maintain HcT  $\leq$  45%
- HcT control may be erratic with up and down excursions from 45%
- Can lead to iron deficiency

### HU +/-Phlebotomy

- Recommended when HcT cannot be controlled, or in high-risk patients
- Potential long-term side effects
- Some patients reluctant to use chemotherapeutic agents

### Jakafi

- Approved for HU resistant/intolerant patients
- ~5300 patients/yr treated
- ~25% develop intolerance or resistance
- Potential side effects include cytopenia

CHRONIC TREATMENT OVER 20 YEARS



# Understanding PV Patient Journey

## Evaluating the Unmet Need of PV Patients in US

- Evaluation of 28,306 PV patients treated in 2018-2019
- Hematocrit levels: lab tests of 4,264 patients

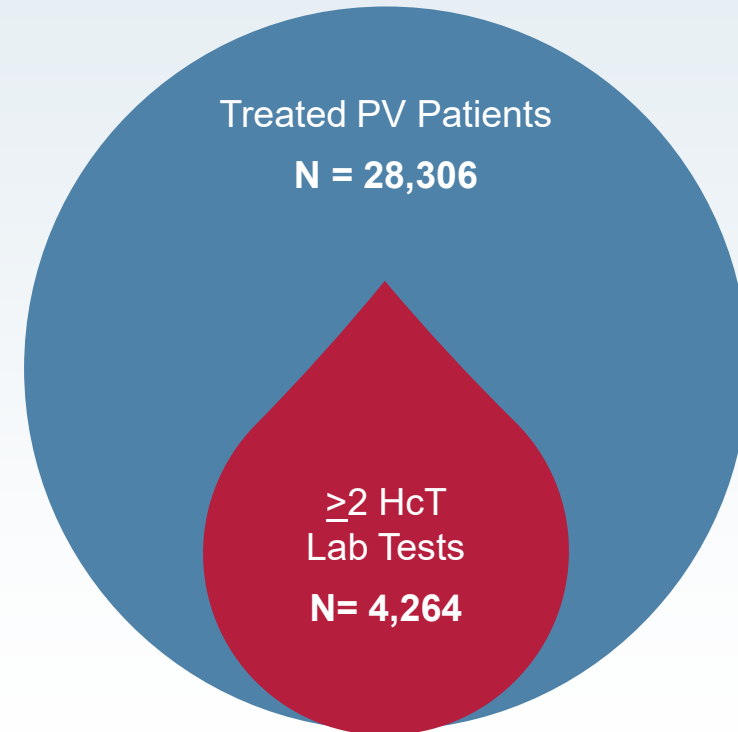
### Key Findings in three categories

Treatment patterns

Hematocrit management to NCCN guidelines

Thrombotic risks and events

### Real world PV patient treatment data (2018-2019)<sup>1</sup>



Representative of treated PV population

# Real World PV Patient Treatment Data

## Hematocrit Not Managed to NCCN Guidelines of <45% in Majority of Patients

### Treatment patterns

- Predominant treatment is phlebotomy regardless of risk
- Hydroxyurea is the most commonly used cytoreductive agent
- Combination of hydroxyurea and phlebotomy commonly used to control HcT

### Hematocrit management to NCCN guidelines

- Only 22% patients had all HcT tests below 45%
- In high-risk patients only 25% patients had all HcT test below 45%
- 60% of these high-risk patients initiated treatment on phlebotomy vs 31% on HU and the majority of patients never switched therapies

### Thrombotic risks and events

- For patients with a prior thrombotic event, ~40% had at least another TE while on treatment
- For patients without prior thrombosis, ~10% had at least one TE while on treatment

# Key Achievements

## Strong Track Record and Momentum

### Accelerated Key Programs

- **Rusfertide:** Released positive Ph 2 data for PV
- Received Fast Track and orphan designations
- Launched additional PV trial in sub-populations
- Regulatory guidance received on Ph3 pivotal study design
- Open-label Ph2 POC study in HH underway
- Oral hepcidin mimetic program

### Expanded Pipeline

- IDEAL trial of **PN-943** in UC progressing well
  - Study completion in 2022
- Added two new clinical development assets
  - **PN-235**
  - **PN-232**

*Shifting treatment paradigms and addressing unmet needs*

### Strengthened Cash Position

- Cash runway through mid-2024
- Strong cash position to support execution across portfolio

**Team of seasoned scientists and prolific drug developers,**  
dedicated to **improving the lives of patients** across rare and prevalent diseases