IRON PH

A randomized, double-blind, placebo-controlled, multicentre trial, assessing the impact of ferric carboxymaltose on exercise capacity and functional status in pulmonary hypertension

INCLUSION CRITERIA

≥18 years of age
WHO functional class II – IV
Iron deficiency defined as TSAT <21% (no more than ≥3 months old at randomization)
PH group 1, 2 or 4 defined by echocardiography and/or right heart catheterization

Group 1

- Idiopathic PAH, hereditary PAH, drug induced PAH or PAH and associated with CTD or CHD (historical RHC available) on stable and optimized doses of PAH targeted therapies for at least 4 weeks before randomization
- Echocardiographic evidence of a high or intermediate probability for PH (see below).

Group 2

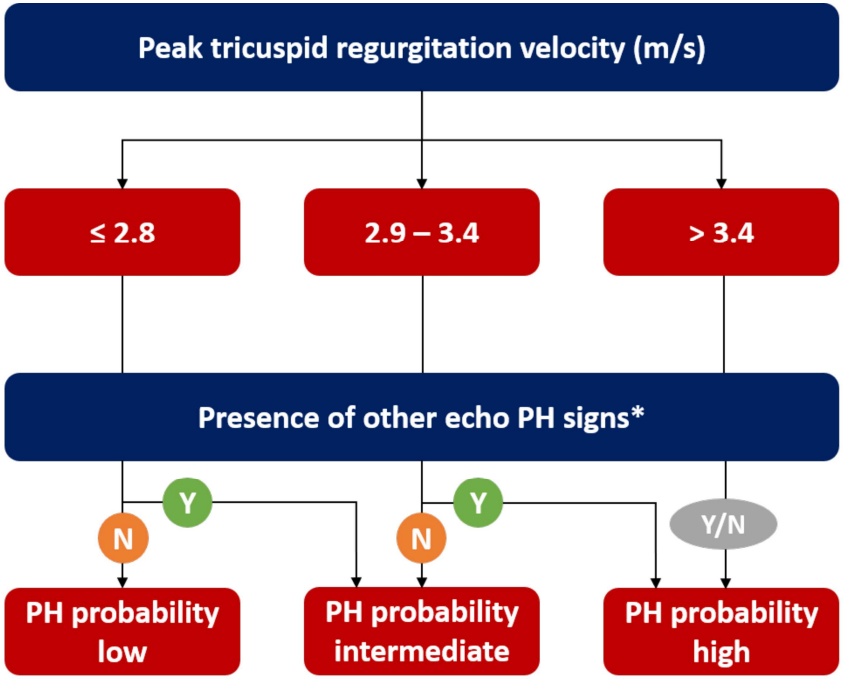
- Baseline LVEF > 50% on imaging modality within last 6 months before randomization and on stable doses of loop diuretics and HFpEF therapies for 4 weeks. Diagnosed by either RHC or echo as defined below.
- Diagnosis by RHC as following:
  - mPAP> 20mmHg AND
  - PCWP > 15 mmHg at rest or PCWP/CO-slope > 2mmHg/L/min or exercise PCWP>25mm Hg, or PCWP 13-15 mmHg with elevation ≥18mmHg after 500 cc Fluid
- Diagnosis by echo as following:
  - Presence of LVH or LA-enlargement AND
  - TRVmax >2.8 m/s (at rest) or mPAP/CO>3 mHg/L/min (exercise) or echocardiographic evidence of high or intermediate probability for PH (see below).

Group 4

- Inoperable CTEPH OR Persistent/recurrent CTEPH (> 1 year after endarterectomy or > 6 months after balloon pulmonary angioplasty) ineligible for balloon pulmonary angioplasty
- Echocardiographic evidence of a high or intermediate probability for PH (see below).

Exclusion criteria

- Screening haemoglobin < 8 g/dl or >15 g/dl
- Ferritin > 700 ng/mL
- Known hypersensitivity reaction to any component of FCM
- Group 1 PH associated with veno-occlusive diseases
- Primary diagnosis of group 3 or 5 PH
- Treatment with oral or other IV iron therapies at screening
- Current or planned mechanical circulatory support or lung/heart transplantation
- Any planned surgery or procedure leading to expected significant blood loss
- Haemodialysis or peritoneal dialysis (current or planned within the next 24 weeks)
- Inability to return for follow up visits within the necessary windows
- Concurrently in a study with another investigational product
- Uncorrected moderate to severe aortic stenosis (AVA <1.5cm^2 and mean gradient >20 mmHg) or severe valvular regurgitation (except tricuspid regurgitation)
- Impression by investigator that patient cannot perform a 6MWT
- Active infection as judged by the investigator
- Pregnancy or desire to become pregnant during the study duration



*Other echocardiographic signs of PH (signs from at least 2 categories (A/B/C) must be present)

A: ventricles	• RV/LV basal diameter/ area ratio >1.0 • Flattening of the interventricular septum • TAPSE/sPAP ratio < 0.55 mm/mmHg
B: pulmonary artery	• RVOT AT <105 ms and/or mid-systolic notching • Early diastolic pulmonary regurgitation velocity >2.2 m/s • PA diameter > Aortic Root or > 25mm
C: ICV and RA	• IVC diameter > 21 mm with decreased inspiratory collapse • RA area (end-systole) >18 cm2