PBF-999: Potential New Therapeutic Option to Control Hyperphagia in PWS

Dr. Santiago Figueroa
COO Palobiofarma S.L.
sperz@palobiofarma.com
Tel.: +49 178 4722716
PBF-999: Potential New Therapeutic Option to Control Hyperphagia in PWS

PBF-999 is a potent and selective inhibitor of the enzyme Phosphodiesterase 10, which is thought to be involved in central appetite regulation.

Currently in clinical Phase 2
Orphan Drug Designation granted by FDA and EMA

Phase 3 to start in 2025
Rationale of PDE10 inhibitors in PWS

- **PDE** is a class of enzymes, located within a cell, that degrades cyclic nucleotides (cAMP and cGMP).
- Inhibitors of PDEs increase the concentration of cyclic nucleotides inside the cell.
- Cyclic nucleotides are second messengers that convey the signal from a neurotransmitter in the cell surface to the cell's interior, to elicit a cellular response.
- PDE10 is localized in the brain, mainly in striatum inhibitory neurons.

**PBF-999 increases cAMP and cGMP in striatum neurons**

- **Modulate** DOPAMINE Signaling
  - Food reward processing
  - Appetite hormonal regulation
Phase 2 trial to investigate safety and efficacy of PBF-999 in patients with PWS
Phase 2 trial to investigate safety and efficacy of PBF-999 in patients with PWS

### Objectives:

1. Investigate safety and tolerability of PBF-999 in patients with PWS
   - Adverse Events

2. Explore the effect of PBF-999 in hyperphagia, behaviour, body weight and metabolic parameters
   - HQ-CT Score
   - CGIC (hyperphagia)
   - Caregiver reported change in PWS specific behaviours
   - Weight, Waist Circumference, etc.
   - Clinical chemistry, etc.
Phase 2 trial to investigate safety and efficacy of PBF-999 in patients with PWS

Site: Parc Taulí University Hospital in Barcelona, Spain.

Principal Investigator: Dr. Assumpta Caixàs, Coordinator of PWS working group of Spanish Society of Obesity.

Sponsor: Palobiofarma S.L

Founding: Palobiofarma and FPWR
Phase 2 trial to investigate safety and efficacy of PBF-999 in patients with PWS

2 sequential cohorts (10 patients each):

- Adult cohort PBF-999 low dose
- Adult cohort PBF-999 high dose
Future Plans PBF-999

2024
Finish second adult cohort (Phase 2)

2025
Start multinational Phase 3 Study

2026
Thank you

sperez@palobiofarma.com