

## Focus & Indications

Development of new therapeutics for the treatment of neuropathic pain, overactive bladder and other sensory neurons-mediated diseases.

## Products

PHE377 is a small molecule TRPV1 receptor antagonist highly effective in several pain models, including pain of neuropathic origin. PHE377 is now undergoing Phase I clinical trials.

## Financing

€3.2 M series A in January 2007  
€6 M series B in September 2008

## Shareholders

- Z-Cube (Zambon Group)
- Quantica SGR
- Emilia Ventures  
(MPS Venture SGR, Montepaschi Group)
- MPHealthcare Venture Man., Inc.  
(Mitsubishi Tanabe Group)
- Zernike Meta Venture
- Fondamenta SGR
- Founders
- University of Ferrara

## Management and Team

Claudio Semeraro  
*President & CEO*  
Paolo Indennitate  
*Chief Financial & Business Officer*  
Mauro Napoletano  
*Research Manager*  
Gabriele Morazzoni  
*Development Manager*  
Marcello Trevisani  
*Head of Pharmacology*  
Francesca Fruttarolo  
*Medicinal Chemist - Senior Researcher*  
Raffaele Gatti  
*Pharmacologist - Senior Researcher*  
Maria Giovanna Pavani  
*Medicinal Chemist - Senior Researcher*  
Guiscardo Lorito  
*Pharmacologist - Researcher*  
Serena Bencivenni  
*Pharmacologist - Researcher*  
Matilde Mallardi  
*Medicinal Chemist - Researcher*  
Lara Fullin  
*Assistant*

## Founders

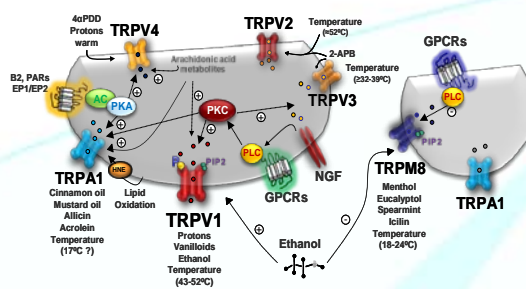
Prof. Pier Giovanni Baraldi  
Prof. Pier Andrea Borea  
Prof. Pierangelo Geppetti

## Scientific Advisory Board

Prof. Troels Staehelin Jensen  
Dr. Ennio Ongini  
Prof. Clive P Page  
Prof. Arpad Szallasi

## Overview

PharmEste is a biopharmaceutical Company that brings together world-class expertise in Transient Receptor Potential (TRP) ion channels and small-molecule-therapeutics research & development through the assets of its industrial competences of the management and the founding team.



## Technology

PharmEste is developing proprietary novel TRP channel modulators for the treatment of neuropathic pain and other TRPs-related diseases. The TRPV1 receptor is the best known member of the TRP ion channel family (see figure above). TRPV1 is present on primary sensory neurons and is activated by low pH, by noxious heat and by endogenous chemical mediators such as lipids, whose action is also mimicked by exogenous substances including capsaicin. TRPV1 is up-regulated following inflammation and nerve damage and is a key factor in the pain response. Neuropathic pain has no satisfactory treatment because standard therapy either work poorly or produce unacceptable side-effects. TRPV1 antagonists may represent a new safe and effective treatment for neuropathic pain and other TRPV1-related diseases.

## Products

The TRPV1 antagonist, PHE377, is the candidate drug under Phase I clinical trial, characterised by high activity and selectivity on target, high efficacy and long lasting effect in experimental models of pain, no relevant toxicity in vitro and in vivo and favorably compares with other TRPV1 antagonists under development.

Second generation of TRPV1 antagonists are at final lead optimization stage and a discovery program on TRPs antagonists is ongoing in order to identify new drug candidates for the treatment of other TRP-mediated diseases.

## Finance

On September 2008, PharmEste has concluded a second financing stage (Round B) for a total of €6 Million which will be mainly used for the clinical development of the PHE377 molecule. The investment, besides the pre-existing financial partners, is now joined by two new financial partners: Emilia Venture, managed by MPS Venture SGR (Montepaschi Group) and MP Healthcare Venture Management, a Boston Venture fund controlled by the Mitsubishi Tanabe Japanese Group.

On January 2007 PharmEste closed a €3.2 million Series A financing - Z-Cube srl as lead investor; Quantica SGR, Zernike Meta Ventures, State Street Global Investments SGR (now Fondamenta SGR) as co-investors.

## PharmEste

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