To passionately turn any challenge into a solution by collaborating with our partners to create great medicines.

UTEN – University Technology Enterprise Network
Portugal - September 2011
Multinational Company - Headquarters in Portugal

New Jersey, USA
Technology transfer center. Process chemistry R&D Labs, Kilo plant and pilot plant. Sales and marketing for North America

Cork, Ireland
427 m² manufacturing facilities

Loures, Portugal
430 m³ manufacturing facilities. Process chemistry R&D Labs, Kilo and pilot plants

Macau, China
100 m³ manufacturing facilities

Taizhou, China
350 m³ manufacturing facilities

Shanghai, China
Process chemistry R&D Center

Loures, Portugal

Lucerne, Switzerland

Mumbai, India

Macau, China

Shanghai, China

Hong Kong, China
4 Business Units

**Exclusives**
- Process Development
- PAR Studies
- Process Engineering
- Clinical API supply
- cGMP Manufacturing
- Clinical Supplies
- Commercial Supply

**Inhalation**
- Formulation Development
- Device Development
- Cascade Impactor Studies
- Powder characterization
- Particle Morphology Analysis

**Particle Design**
- Spray Drying
- Potent
- Aseptic
- Freeze Drying
- Spray Congealing
- Micronization
- Jet / Wet Milling
- Controlled crystallization
- Encapsulation / Particle Coating

**Generics**
- Value Generics
- Exclusive Generic APIs
- Patent extensions
- Products
  - Tetracyclins, macrolides & mectins
  - Corticosteroids
  - Contrast Agents
R&D and Innovation as source of value and differentiation

- Quality and Compliance is a must, no longer a differentiator
- Investment in RDI at Hovione is key to add value and differentiate
  - Know-how: more than 100 chemical processes for APIs
  - IP: more than 350 patents worldwide
  - 150 staff dedicated to R&D, 10% of sales invested in R&D activities
  - Innovation capturing systems – Innovation as everybody’s job

**Increased complexity and multi disciplinary collaborations**

- Develop know-how internally
- Supplier’s know-how
- Existing Know-how
- Customer’s know-how
- External collaborations to develop new know-how
University – Enterprise Collaborations

- Identify the collaboration objective
- Define clear user requirements
- Make or Collaborate
- Get internal support to externalize
- Appoint the Owner of the Project
- Get budget approved

- Evaluate the cultural match of collaborating University
- Experience in other collaborations – It’s a learning process
- Aligned objectives
- Transparency – no hidden agenda
University – Enterprise Collaborations

- Add non-core expertise
- Bring new technologies and equipment
- Scientific support – Commercial vision
- Capture know-how, promote spill-overs
- Establish good personal relationships
- Interactions at different levels

- Effective Project Management – Define responsibilities
- Ensure adequate resources and timing of actions
- Mutual agreement on planning & avoid over-promising
- Regular follow-up and reporting
University – Enterprise Collaborations

- Divide the project in smaller milestones
- Multidiscipline coordination
- Build the team spirit
- Promote good communication
- Equal contribution, mutual benefit
- Equal power

- Clear IP protection and ownership right from the start
- Enterprise flexibility towards academic calendar
- University to understand business requirements
- Same priorities
University – Enterprise Collaborations

- Be aware of scale limitations
- Prepare for letting your baby grow
- Tech transfer support
- Inversion of know-how flow
- There is always room for improvement
- Technical & scientific consultancy

- Be open and prepared to capture unexpected results
- Major breakthroughs and out of the box solutions
- Uncertainty of R&D activities – be prepared for failure
- Good luck!
Hovione Ambassadors at Portuguese Universities

José Ascensão
Paulo Granadeiro
Henrique Dolores
Marco Gil

Rafael Antunes
Hélio Lourenço
Rui Loureiro
Margarida Vareiro

Luis Rato
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Cristina Barradas
Nuno Carlota
Thank you for your attention!

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