Innovation in Industry Hovione, a Portuguese example

Guy Villax CEO



Exclusively focused on pharmaceutical fine chemicals



Agenda

- A success story
- Portugal strengths
- Portugal weaknesses
- Next Steps



Ivan Villax, Founder circa 1951



Hovione *today*

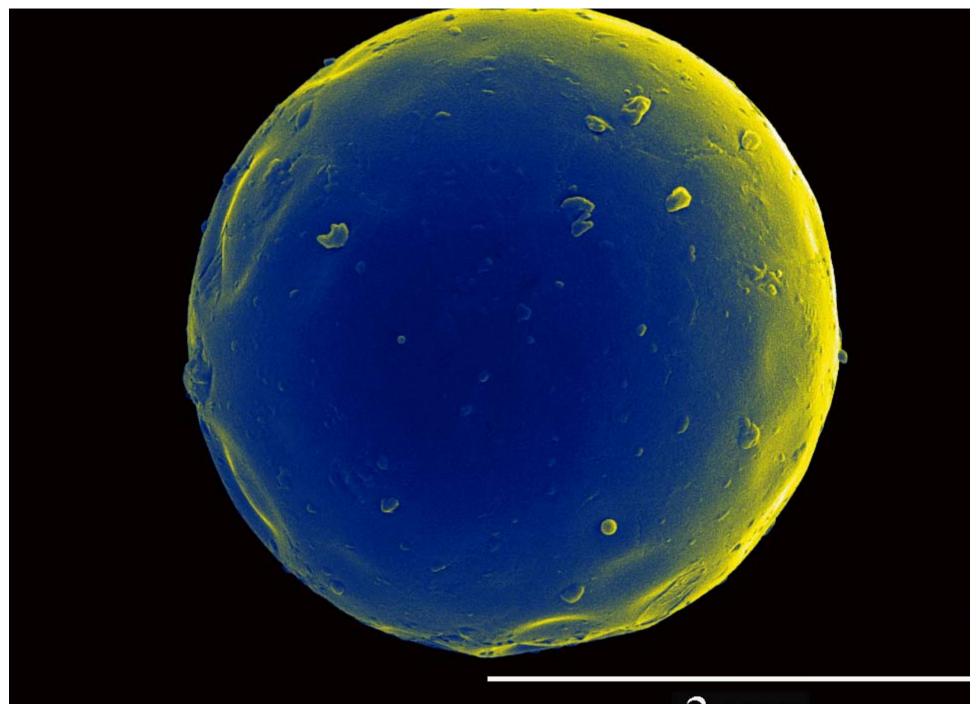
- 48 years making APIs
- Three sites, 600 staff
 - Portugal 430
 - China 130
 - New Jersey 40
 - All meet the strictest US Food and Drug Administration requirements
- R&D
 - \$12m in 2006
 - 130 staff
 - 400 patents
- \$93m in sales, Generics and Innovator drugs



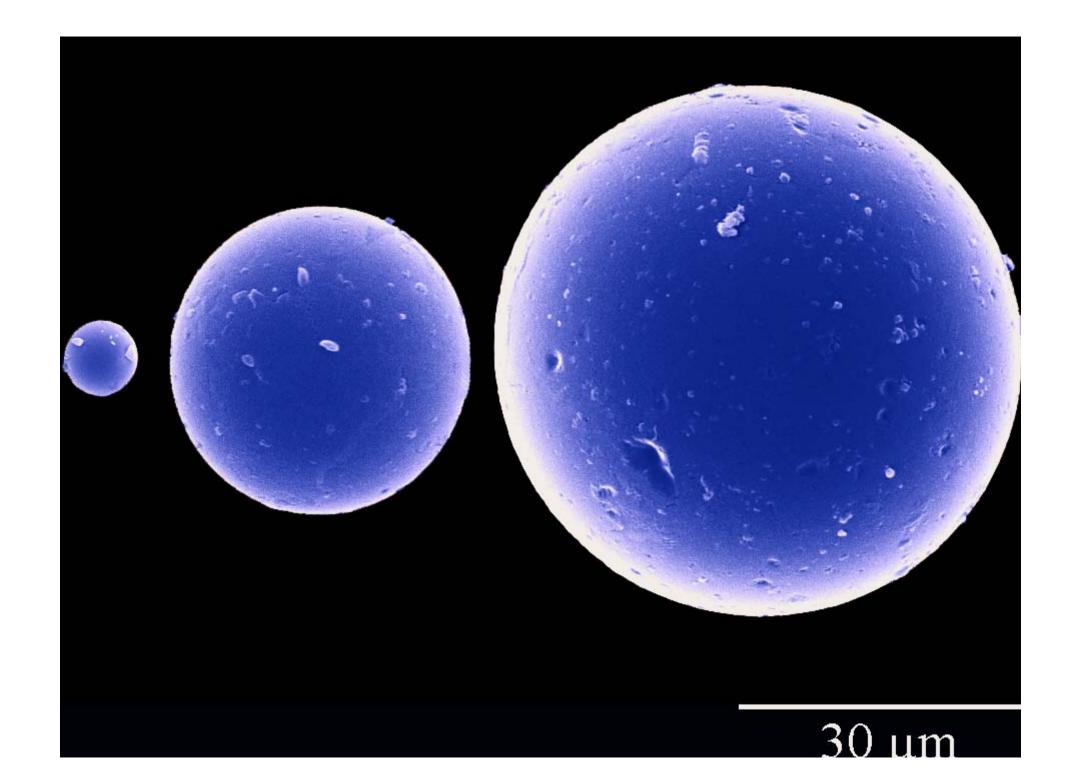
Who we are

- Experts in Pharmaceutical Chemistry
- Process development and compliant manufacture
- Offering customers solutions for difficult problems

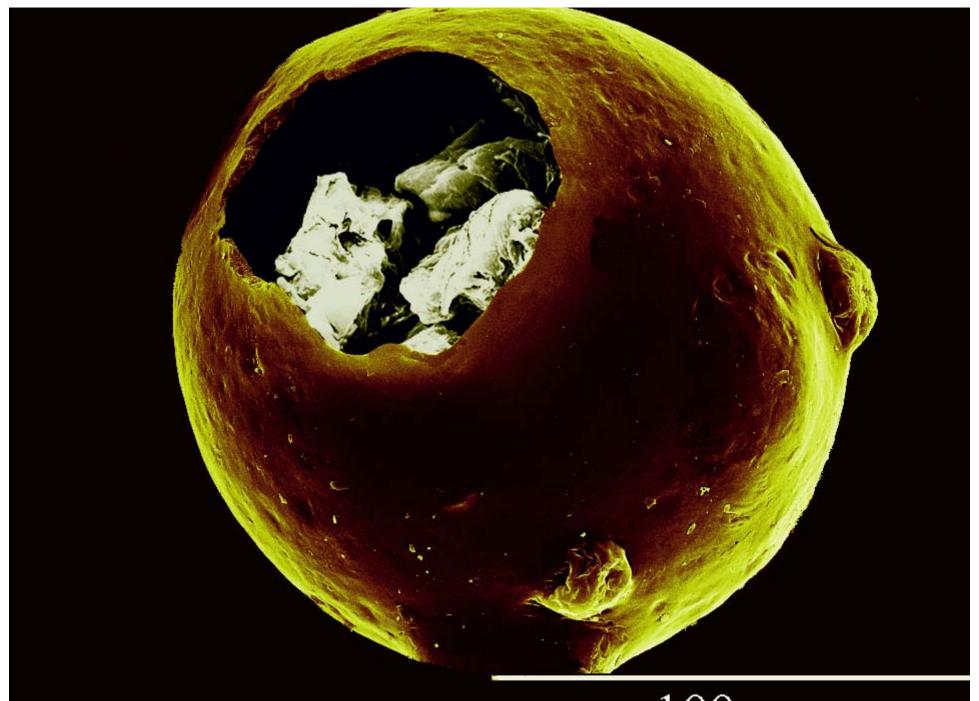




3 um







100 um



A Success Story?

- Sales \$93m up CAGR 10% per year in last 10 years
 ⇒ 21% are sales of R&D services
- EBITDA 20-25% of sales up CAGR 11% per year in last 10 years
- Sales/employee: \$155.000 up CAGR 7% in last 5 years
- Recruited & trained (6 months-3 years) >100 graduates, last 10 years
- R&D is 13% of sales
- Major Portuguese:
 - industrial R&D investor \$12m/year
 - Patent applicant 3 patents per year
 - Employer of PhDs
- Clients:
 - 5 of 10 top Pharma Multinationals
 - 30 Nasdaq listed Biotechs
 - Top Generic houses



Portugal – Strengths

- A beautiful country
- We are a friendly people
- Respect (if not awe) for Science
- 800 years of History and unchanged borders
 - **⇒** Collaborative,
 - ⇒ Open doors, Open minded
 - ⇒ Keen on new ideas
- Strong, solid, traditional univerisities
 - ⇒ and we get the pick of the crop

Portugal – Weaknesses

- 800 years of History and unchanged borders
 - ⇒ No ambition
 - ⇒ Lost Scientific tradition
 - ⇒ No more spirit of adventure
- Strong, solid, traditional universities
 - ⇒ Too theoretical
 - ⇒ Remote from reality
- Political parties:
 - ⇒ Inability to agree on policies where the impact is long term (education, R&D)
- Government:
 - ⇒ Constant change
 - ⇒ Challenged when it comes to implementation



Examples

- 1992
 - Hovione's \$3m waste stream recycling investment project found not eligible as an environmental protection project
 - ⇒ Recycling is part of the production process
 - ⇒ anti-pollution = end of pipe

The EU Commission & UNEP awarded Hovione with a waste management prize!

- **2005**
 - Hovione's \$19m investment in a research centre in Princeton New Jersey found not elligible for a tax credit scheme designed to encourage the internationalization of Portuguese Industry
 - **⇒** A Research Centre was deemed "not productive"

This is post-Lisbon Agenda...

S. ON R. MINISTÉRIO DAS FINANÇAS



ASSUNTO: Candidatura aos benefícios fiscais previstos no nº 4 do artº 39º do EBF e regulamentados pelo Decreto-Lei nº 401/99. de 14/10

Projecto de investimento nos EUA

Na sequência do exercício do direito de audição efectuado em 15.04.2004, comunica-se a V. Exª. que, por despacho nº 629/2004-XVI, proferido em 29.12.2004, por Sua Excelência o Secretário de Estado dos Assuntos Fiscais, foi mantido o despacho de indeferimento nº 384/04/MEF, proferido por SEMEF, em 19.03.2004, com base nos fundamentos nele referidos - incumprimento do requisito exigido no nº 3 do artigo 1º do Decreto-Lei nº 401/99, dado que o investimento não contribui positivamente para os resultados de exploração da empresa promotora, durante o prazo estabelecido no nº 1 do artigo 9º do referido diploma. Assim, irá proceder-se ao arquivamento do respectivo processo.

Com os melhores cumprimentos,

A Directora de Serviços

(Maria Helena Martins)

Rejected ...
because the investment [in a research centre] does not contribute positively to the profitability of the parent company.

Ours was the largest Portuguese Investment in the USA - ever



Portugal – Weaknesses that matter

- We can put up with everything except
 - ⇒ Lack of trained people
- Why is innovation a success in the USA?
- Why so many great Biotechs in Basle?

Trained people, seasoned managers

Multinationals have great commercial research organizations

- In Portugal: Few... maybe one large research organization Siemens
- What do we do:
 - We have a strong culture, we train our own scientists and managers
 - We hire from University
 - We limit our growth to 10%/year
- ... But what can start-ups do?

Next Steps

- De-localise industrial production to China
 - Inflexible labour laws
 - Strong €
 - REACH etc...
 - Frustrating red-tape

China already has 50% of Asia-Pacific's Biotechs! Singapore...

- Focus our Portuguese activities on
 - R&D
 - Intense value-added industrial steps
- Could we grow our R&D services as a stand alone business? Could we grow quictly to 1000 scientists? Could Hovione provide the seasoned manager scientists to manage start-ups in due course?

maybe.

Thank you / Obrigado
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