



Dietary Solutions for Chronic Health Conditions

Confidential



BioActor; overview

Background;

- BioActor is based in Ghent, Belgium
- Founded in 2005 with technology from INRA, CSIC and Ghent University

Focus

- Natural food-grade bioactives for functional food addressing
 - Metabolic syndrome
 - Ageing related health problems

Pipeline

- Licensed-in or co-developed with top science institutes

Business Model

- Validate & fully develop the *Active Ingredient*
- Partner with leading branded food companies
- BtoB supplier of bioactive ingredients

R&D Pipeline

3 Product Candidates:



Peptides derived from Ovalbumen to control bloodpressure



Arabinoxylans from Wheat to improve glycaemic and metabolic homeostasis

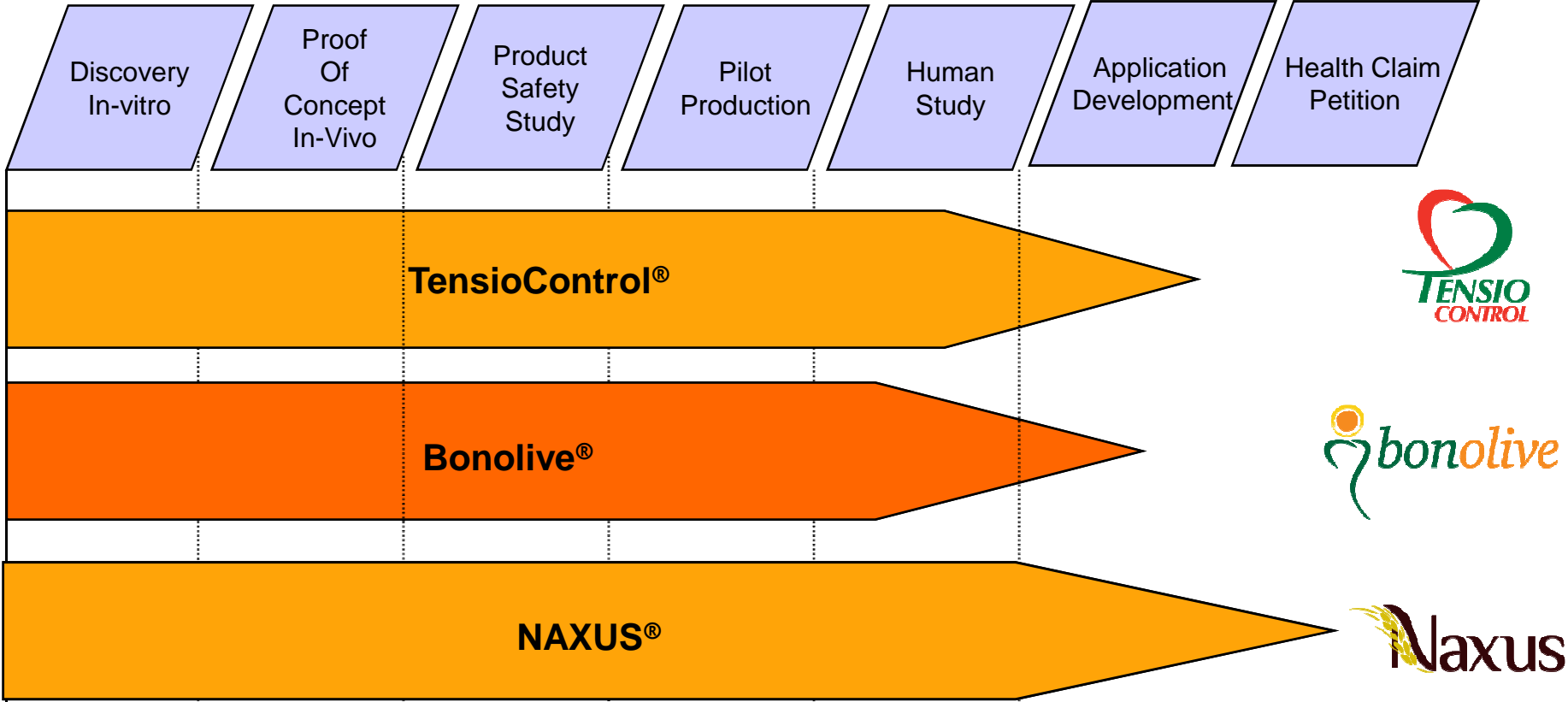


Polyphenols from Olive for Bone Health

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R&D Stages - Status Pipeline

R & D Process is similar to drug development





The Bonolive ERA-SME Project

*Promoting Bone Health with Olive
Polyphenols*

BioActor

BONOLIVE; Background

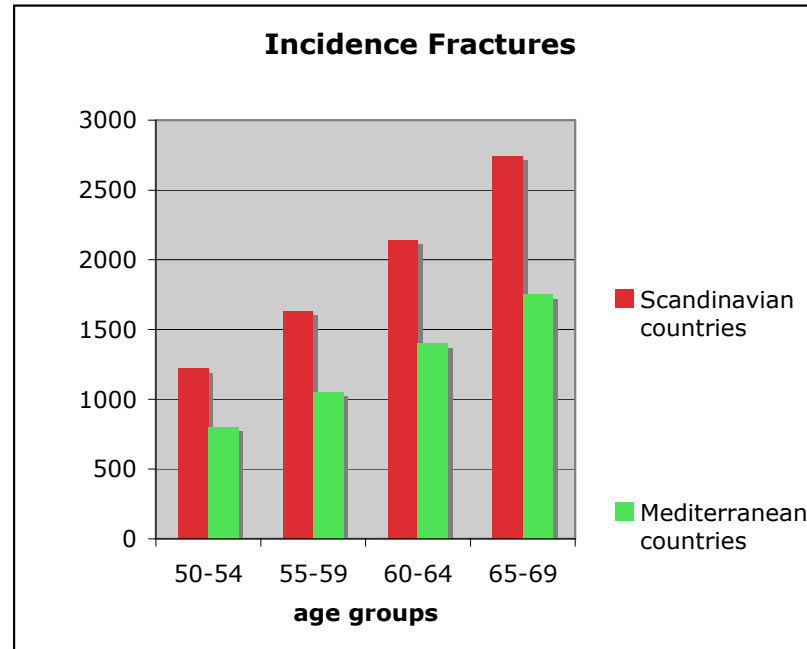
Epidemiological Data

- Study(Kanis cs) showed lower incidence of osteoporosis in mediterranean countries

Mediterranean Diet?? Olive Oil...

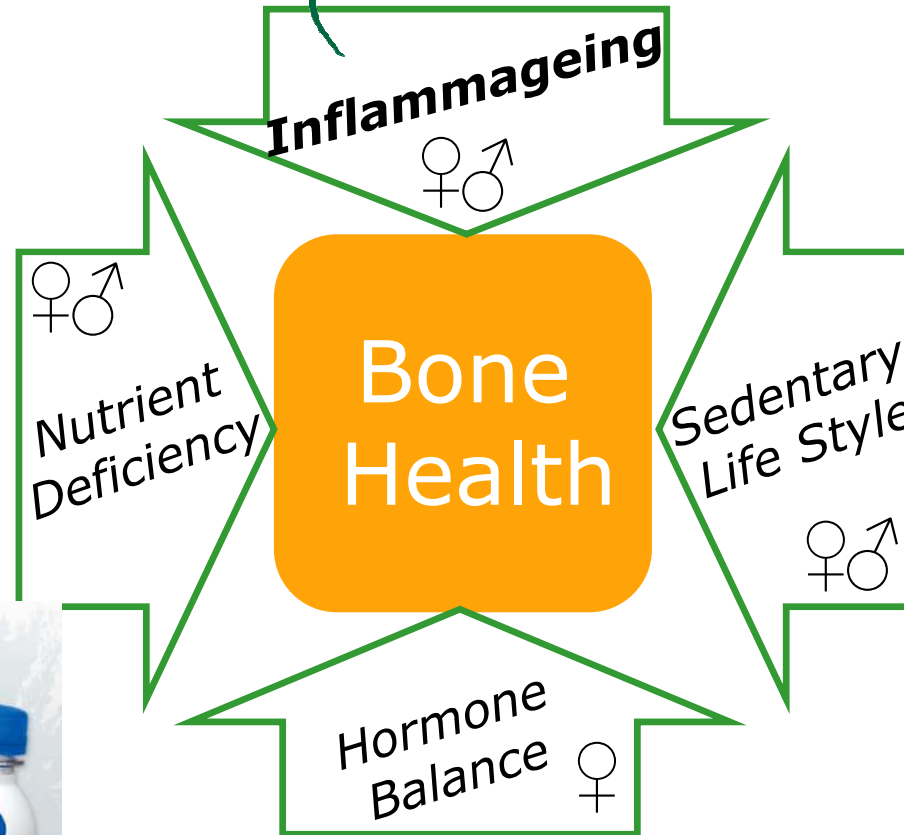
INRA Discovery

- Scientists at INRA - Laboratoire de Theix discovered that Olive Polyphenols protect against bone loss in OVX-rats



Olive Polyphenols: new bioactive for Bone Health

Olive Polyphenols have strong anti-inflammatory activity



- Calcium
- Vitamin D
- Magnesium
- Phosphor
- Vitamin K

- Physical exercise



- Isoflavones (Genistein)
- Lignans
- Hop extracts

BONOLIVE; Background (2)

Patent

- INRA was the first to discover the bone protecting effect of olive polyphenols => Patent filing

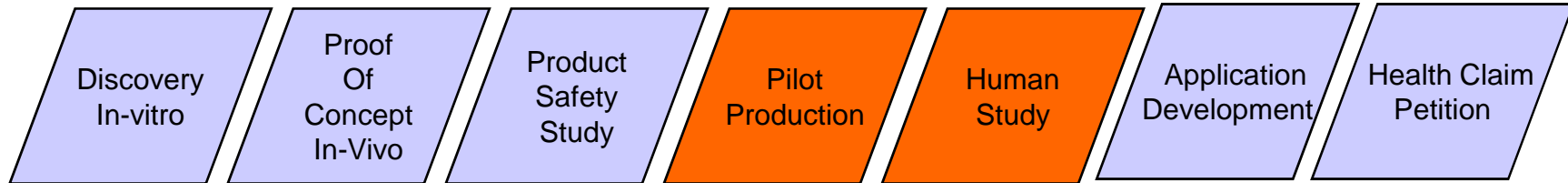
License & Research Collaboration

- BIOACTOR obtained ww excl license from INRA and collaborated with INRA Scientists in dose/response study

Human Study

- BIOACTOR wanted to test olive polyphenols in human study; Study must be placebo controlled double-blind for health claim approval AND 'street credibility'
- Human study should be done with a product that is
 - at least a very good 'beta-version'
 - made in sufficient quantities

BONOLIVE - Partnering Needs



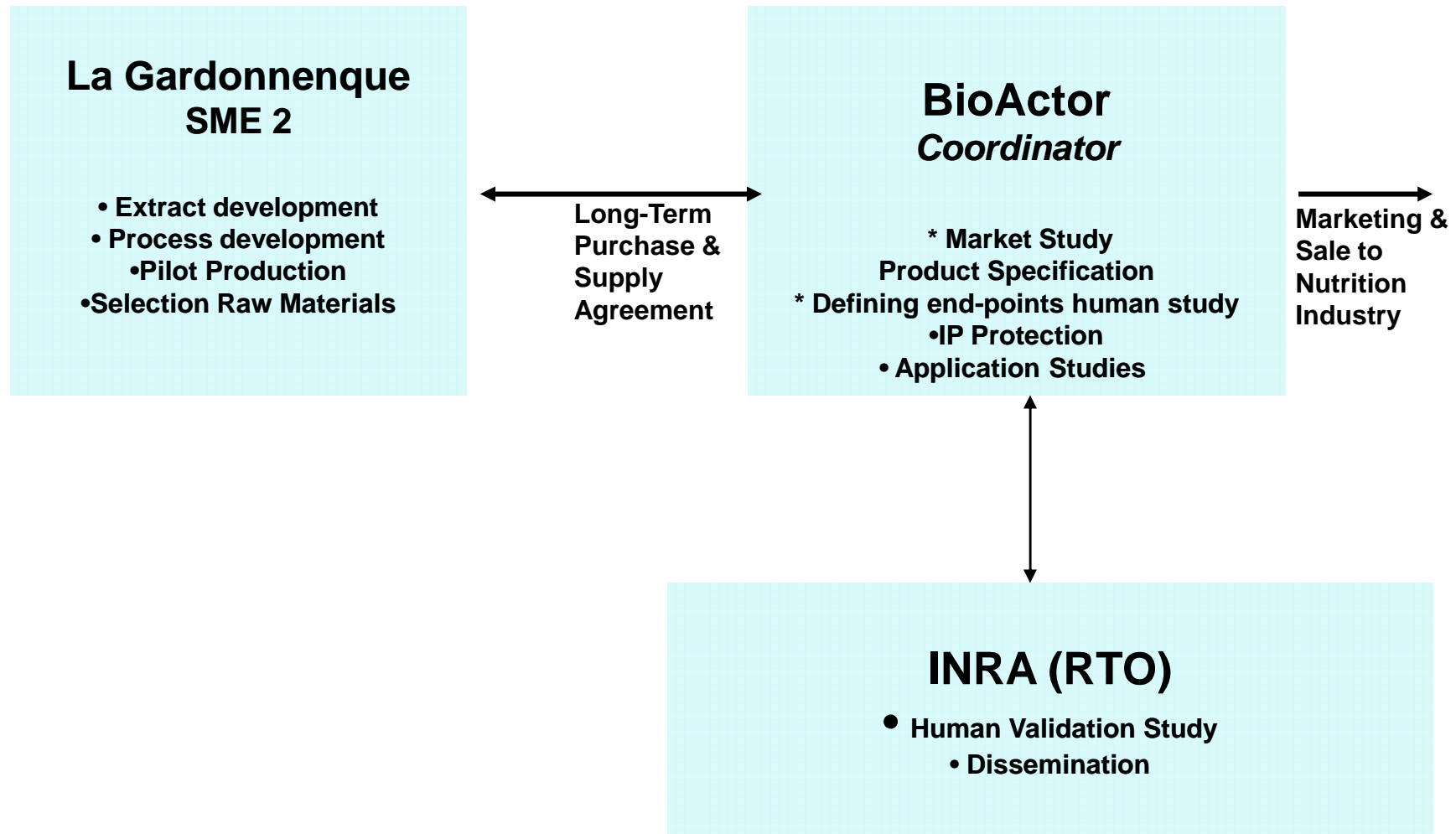
BioActor needed partners for;

Clinical Study; access to `patients & medical supervision

Production; all our products are different => we need specific production infrastructure & expertise

ERA-SME was the platform to access these partnerships

BONOLIVE PROJECT; Complementary Roles of Partners



BONOLIVE-Project; Status

Product

- A unique olive polyphenol extract with reproducible specs was developed
- Product has superior solubility and is stable in beverages

Production

- Industrial pilot scale production is running

Patent

- Patent was filed on formulation of olive polyphenols with improved bio-availability

Human Study

- A 12-months clinical study with 60 post-meno-pausal women is ongoing
- Results expected Q1-2010

Importance of ERA-SME

Catalyst

- The ERA-SME programme was the catalyst to jump-start in parallel production development and clinical development
- We were actively encouraged by our regional ERA-net representative (IWT + Flanders Food) to participate!

Partnering Context

- The ERA-SME programme provides a context to approach SMEs and RTOs for partnerships
- We got help from OSEO-ANVAR by the identification/contacting of SMEs in France

Financial

- Without the ERA-SME programme, we would not have engaged in a clinical study of the current size

Suggestions for improvement

Avoid Double Work

- We learned a few days before the deadline that - in parallel to our ERA-SME submission - we had to make a complete filing in the regional aid format, requesting additional data and different budget presentations. Both applications had to be submitted before the same deadline, 1 electronically and 1 hand-delivered..

Ensure hassle-free electronic submission

- the digital submission did not work! Neither at BioActor nor at INRA. Finally, OSEO-ANVAR managed with a reformatted document at 16.00h (oufff!)

Provide Direct European ERA-SME Funding

- Upon selection at the ERA-SME level, the grant is again evaluated and decided at the regional level, applying regional criteria and considerations. Outsourcing work to an ERA-SME partner is not per se positive from a regional perspective.