



Aquapharm Biodiscovery Ltd.

The Ocean Pharmacy: New antibiotic leads from Marine Micro-organisms'

CSA Marine Biotechnology
11th - 12th March 2013
Brussels



Aquapharm Biodiscovery

At a glance 



Based in Scotland

14 Employees including 6 PhDs

£12.5M VC raised to date

- Focused on developing NCE from marine NP - A novel chemical resource
- Oncology/Antibiotics - attractive market & clinical need
- Management team with >60 yrs biotech/pharma industry experience
- Business model - Develop to key V.I.P & license

Aquapharm Biodiscovery

Vision, Assets & Business Strategy

Marine microbial
Biodiversity

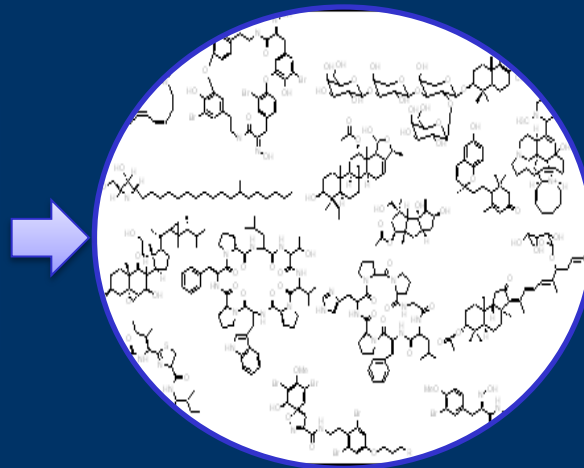
Novel Chemical
Diversity

Antibiotic Targets
RP- Protein Micro-array

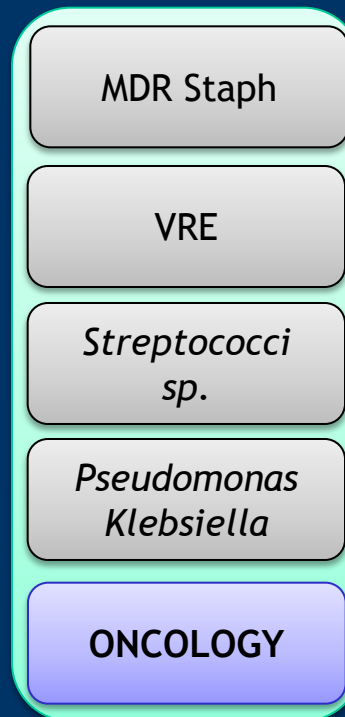
Diseases
Caused



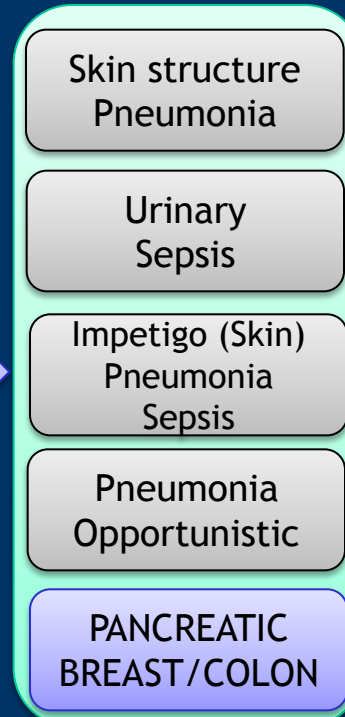
AQP - 10,000
Marine micro-
organisms



From 1100 strains:
>65 distinct classes
>150 chemical entities
>22 NCEs



IP covering
2 x New class Gram +ve
1 X Oncology
2 x NCE Nrf2/IL-17 dual active



Aquapharm's product pipeline

Current status (Sep 2012)

Screening
& Lead ID

Lead
Optimisation

in vitro
DMPK

in vivo
DMPK

in vivo
Efficacy

Antibiotics
Gram +Ve

AQP-182: Small molecule Gram positive IV (Hospital)

AQP-1086: Small molecule(with SAR) Gram positive oral (Community)

Oncology

AQP-182: Small molecule NCE - Oncology

Inflammation
Nrf2 / IL-17

AQP-1180

AQP-1386

Small molecule dual active

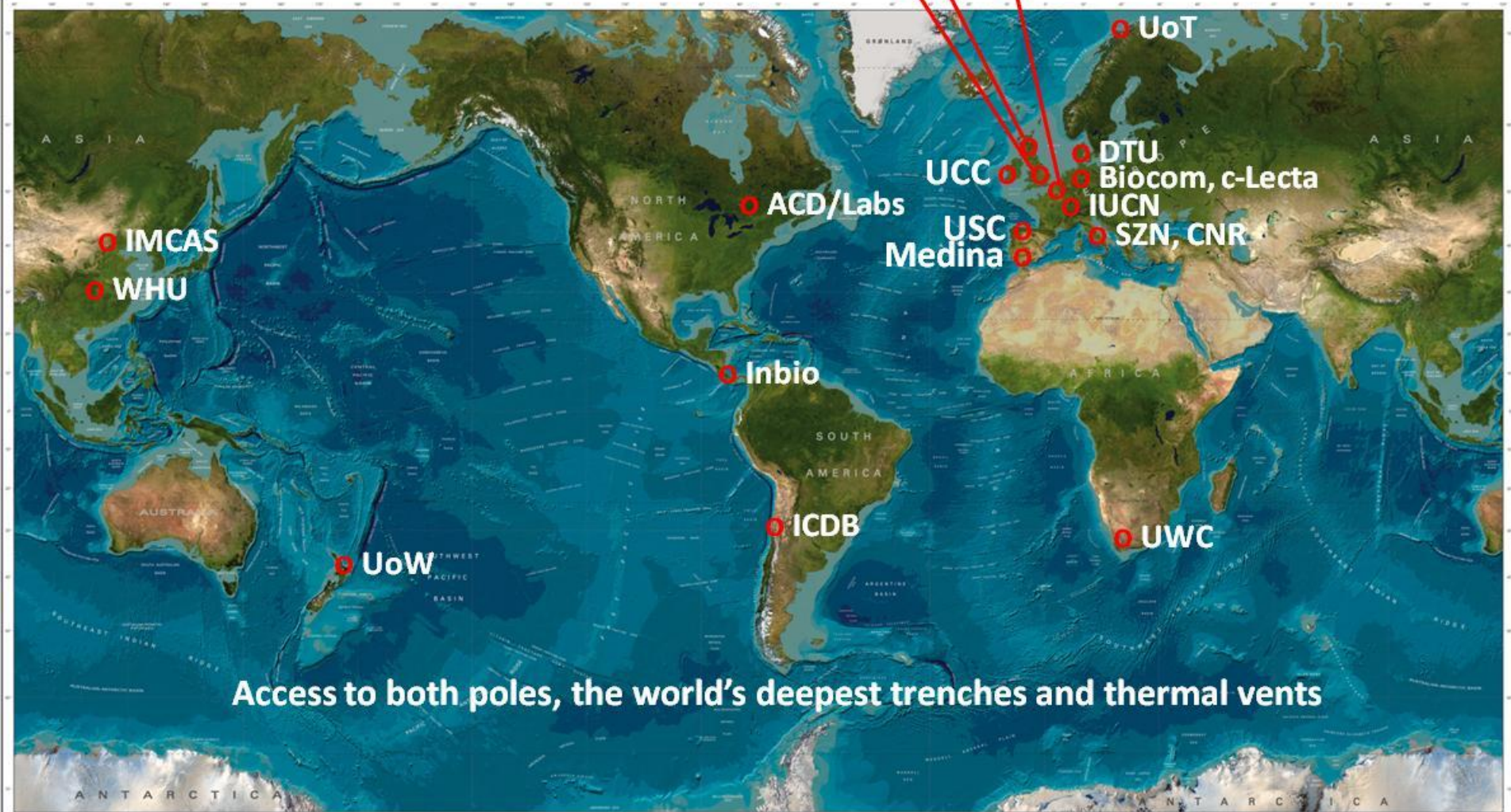
Small molecule NCE Nrf2 modulator

Screening
Pharmasea

Antibiotics, Anti-inflammatory, NRF2

UniAbdn, DeepTek, Aquapharm
RSC, BioBridge

KULeuven, eCoast



Access to both poles, the world's deepest trenches and thermal vents

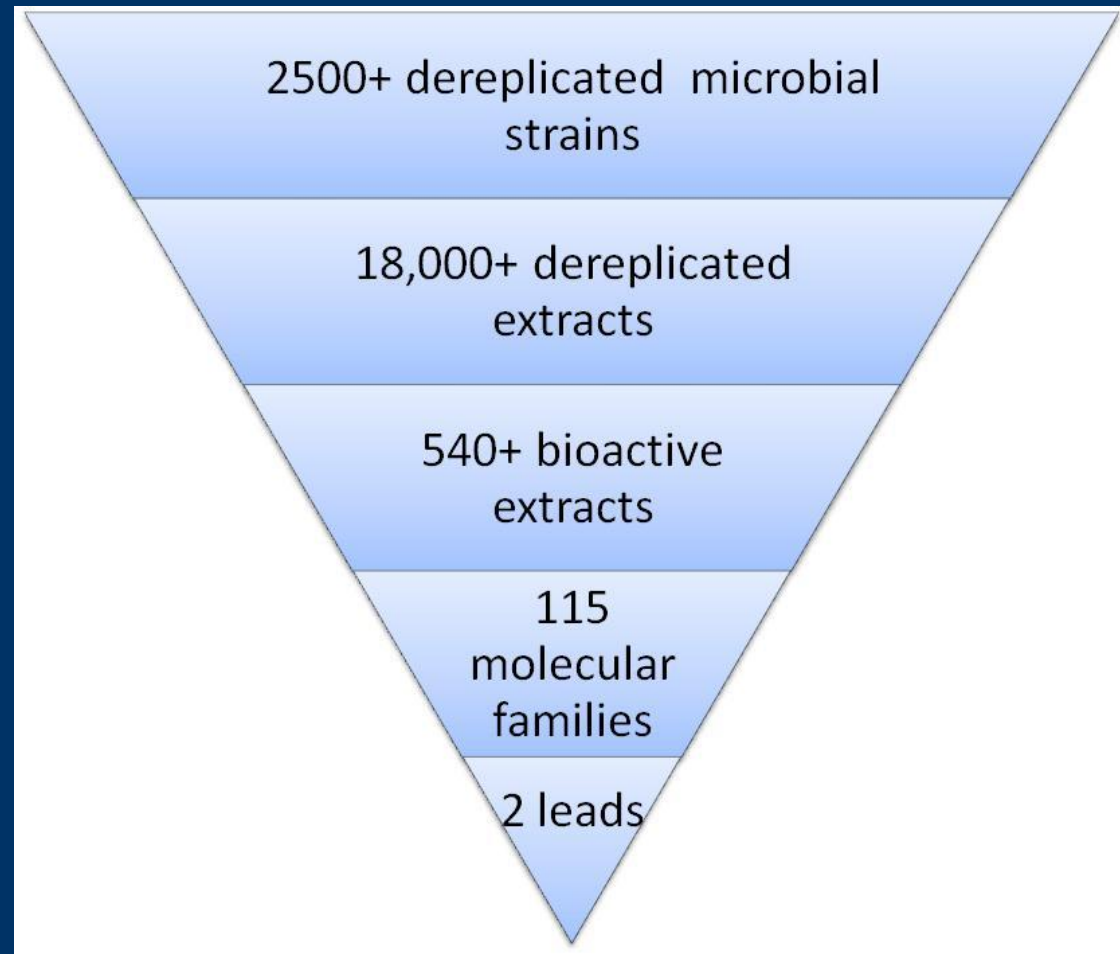
PharmaSea

Removing bottlenecks from marine discovery

- **Increasing Value and Flow in the Marine Biodiscovery Pipeline**
- EU Framework Programme 7 Consortium funded at EUR 9.5 million
- 24 Partners, 14 countries
- *To improve the quality, volume and value of active agents discovered in the marine environment and increase the speed at which they can be delivered to the marketplace, by addressing bottlenecks and restrictions and adding technical booster-pumps*
- Targets - New antibiotic discovery (particularly G-Ves)

PharmaSea

The Discovery Funnel



Guiding Philosophy

Media/Stress
Chemometrics/Assays

Extreme
Environment

Novel
Biology

Novel
Chemistry

Access:
Legal
Physical

Selective isolation
Taxonomy
Genome Scanning

Novelty screens
Datamining
CASE

Novel
Activity

Product

MOA/*In vivo*
Counterscreens

ADMET prediction
Scale-up/Knowledge transfer