

XVII Encuentro de Cooperación Farma-Biotech

AP-1, a remyelinating small molecule drug for the oral treatment of multiple sclerosis.



Madrid, 28 de noviembre de 2018

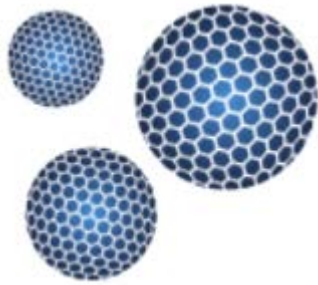
Content

1. The Institution

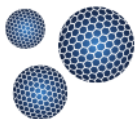
2. The Product

- a) Target Indications
- b) Innovative mechanisms of action
- c) Differential features facing the market
- d) Current status of development
- e) IPR protection
- f) Pitfalls & Risks to be considered

3. Partnering Opportunities



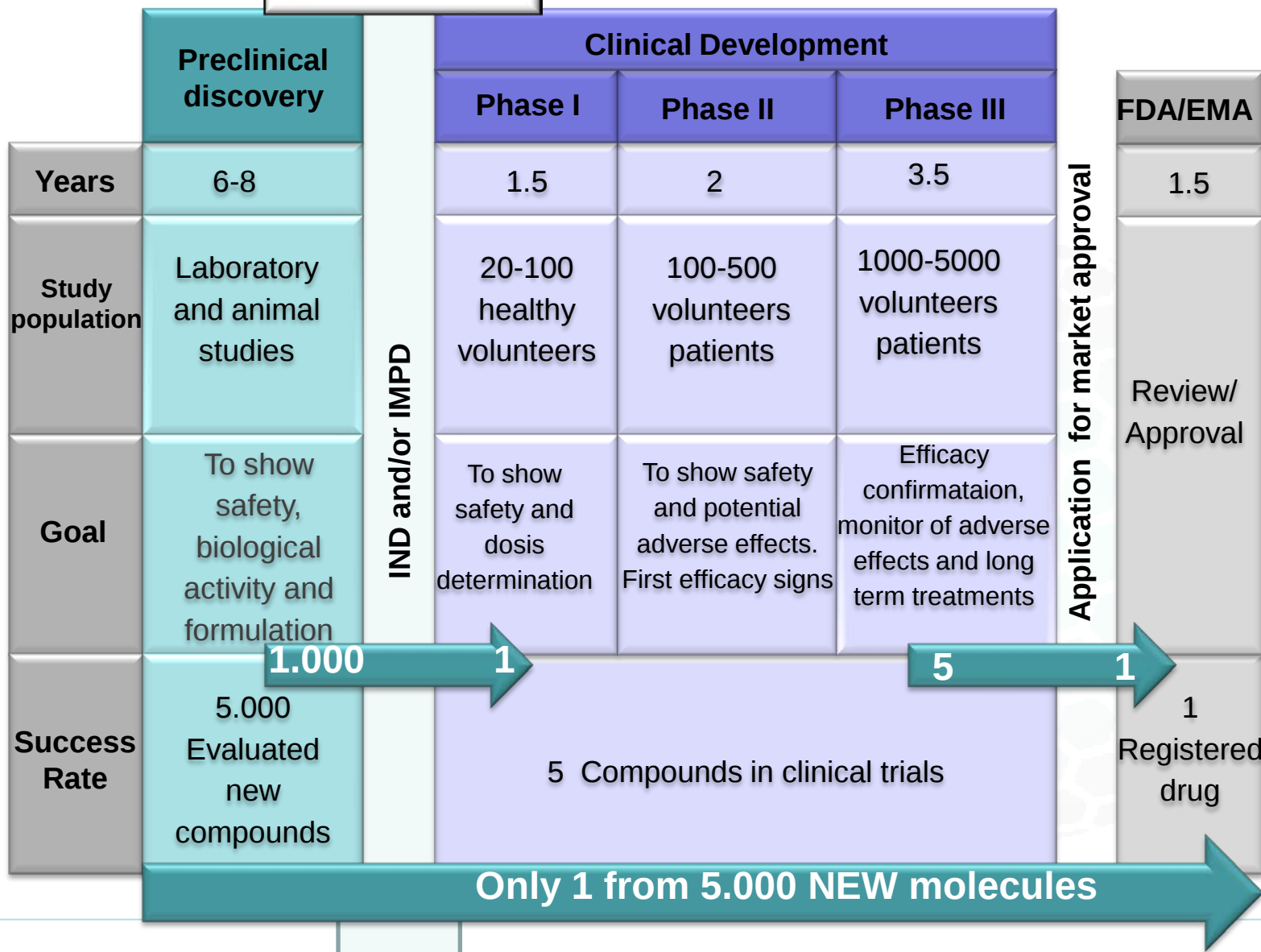
The Company



Gap to be cover



spin-off



Multidisciplinary team

Science



Scientific advisor, founder

Ana Martínez, PhD

Inventor AP-1

Research Professor CSIC



Scientific advisor, founder

Carmen Gil, PhD Co-

Inventor AP-1

Scientific Researcher CSIC



Management



Legal advisor, founder

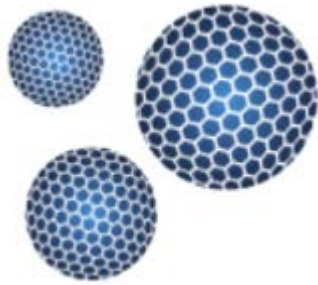
Michael Jose, PhD

*Extensive experience in start-ups
Alliances and Business Strategy*

Investment advisor, board of directors

Diego Fernandez, PhD





The Product

AP-1, a disruptive solution for MS

.....a market that grows the 7% annually.....



> 2.500.000 M patients¹
0,1 % worldwide incidence

Young adults Onset age: 20-40 years



Relapsing-remitting 85%
Primary progressive 10%
Secondary progressive 5%

Current market²
> 15.000.000 M €

NO effective treatment
ONLY palliative treatments

¹ National Multiple Sclerosis Society

² Credit Suisse. Multiple Sclerosis-Evolution or Revolution Report. 18 March 2013

Unsolved problem

Competitors (immunomodulators)



3 oral brands



5 injectable interferon beta brands



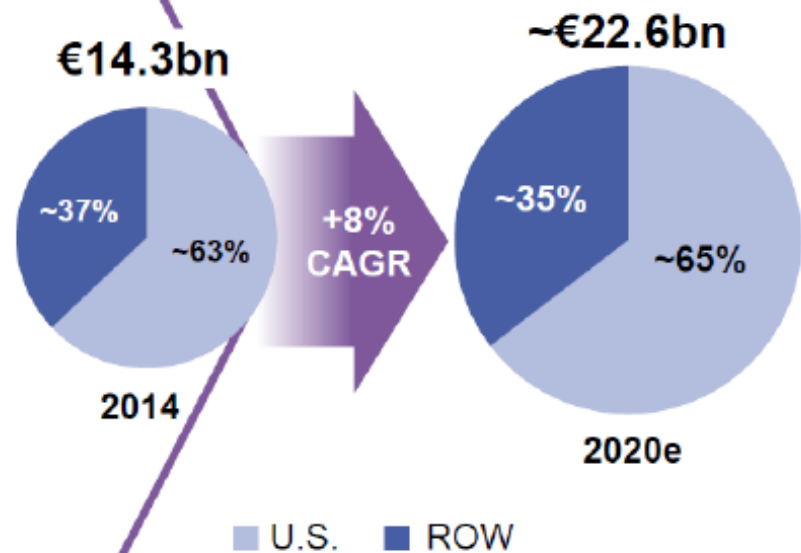
2 injectable glatiramer acetate brands including a generic



2 intravenous biologic drugs



Multiple Sclerosis Market Global Sales⁽¹⁾



Market opportunity

- ✓ Small molecule
- ✓ Oral administration
- ✓ Immunomodulator
(inflammation decrease)
- ✓ Neuroprotective agent
(neuronal death decrease)

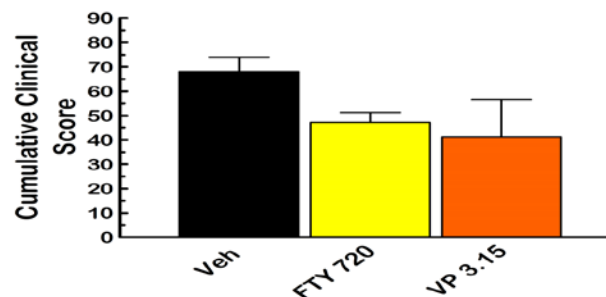
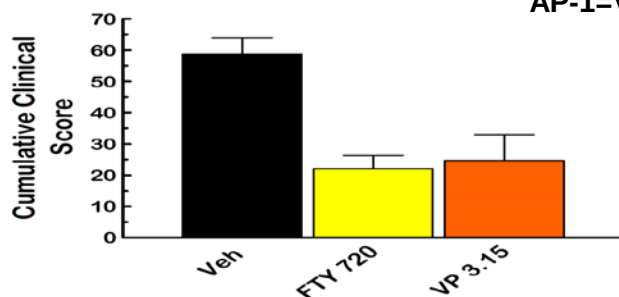
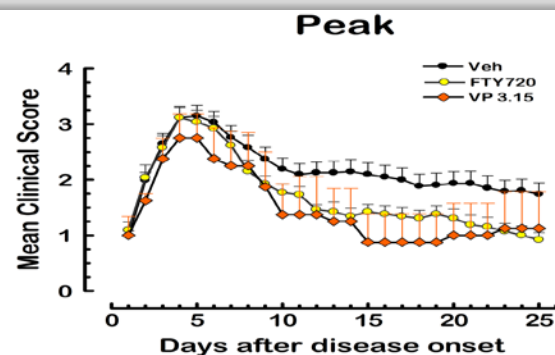
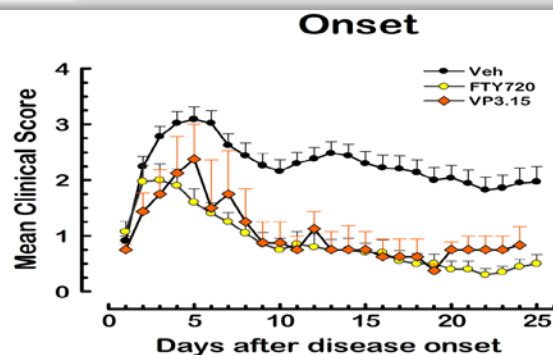
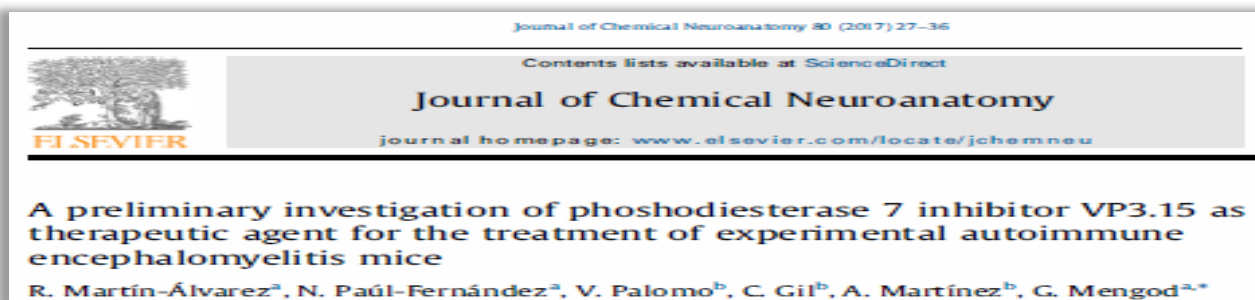


Remyelination
(OPC increase)

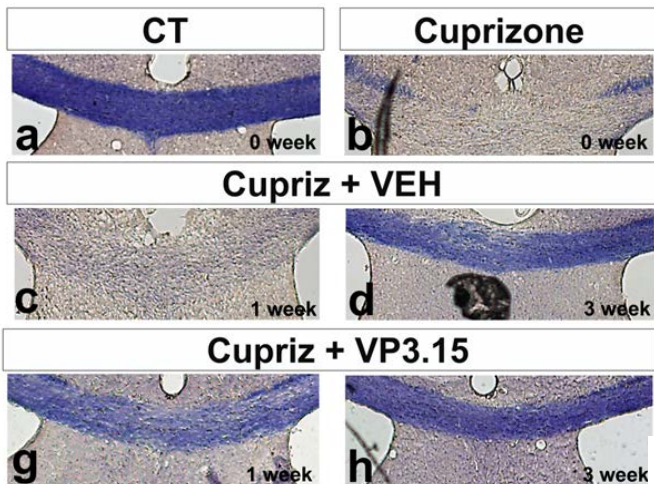


In preclinical models, BETTER than Fingolimod.

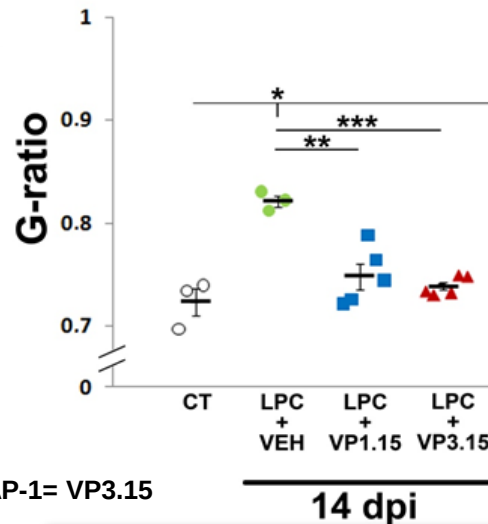
AP-1: a reality in ANKAR PHARMA



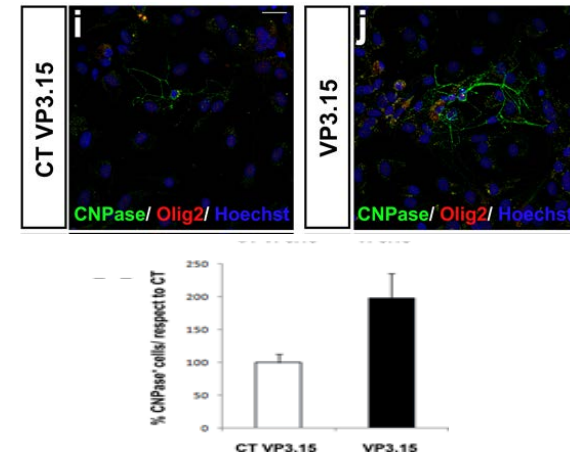
AP-1: a reality in ANKAR PHARMA



AP-1 favors *in vivo* remyelination (cuprizone model)



AP-1 increases myelin thickness in the repair phase in the LPC demyelination model *in vivo*



AP-1 is able to promote human OPC differentiation without affecting proliferation

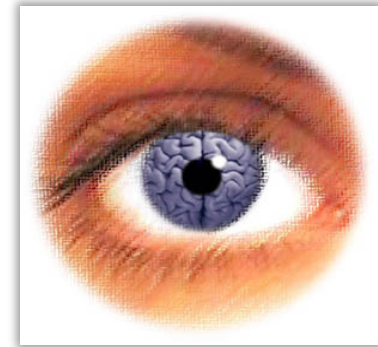
AP-1: working for the future



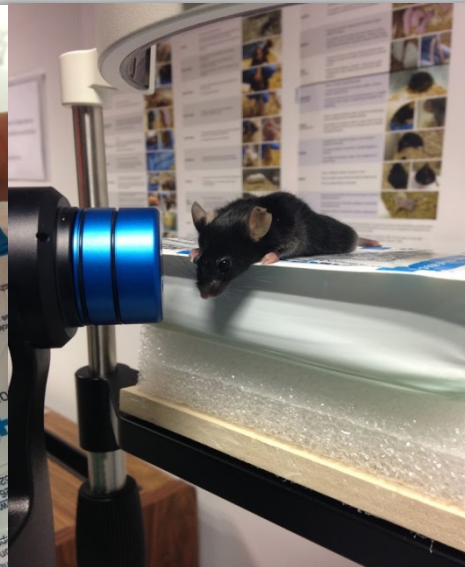
Remyelination: End-points for clinical phase II



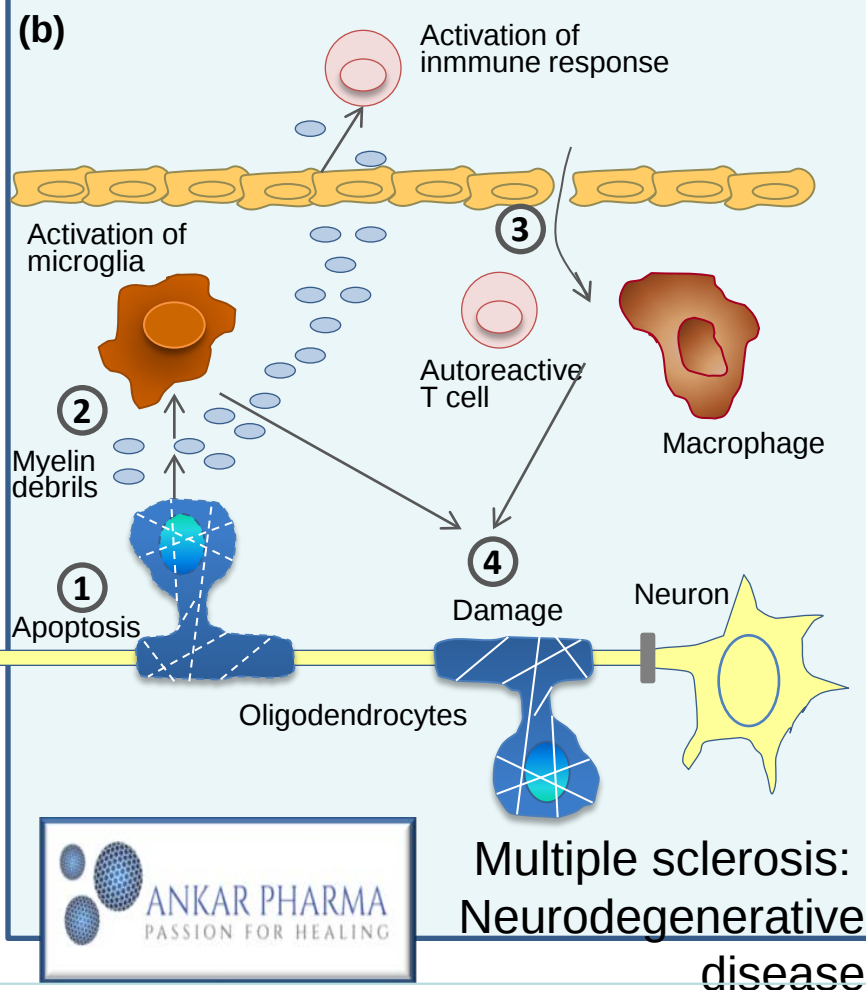
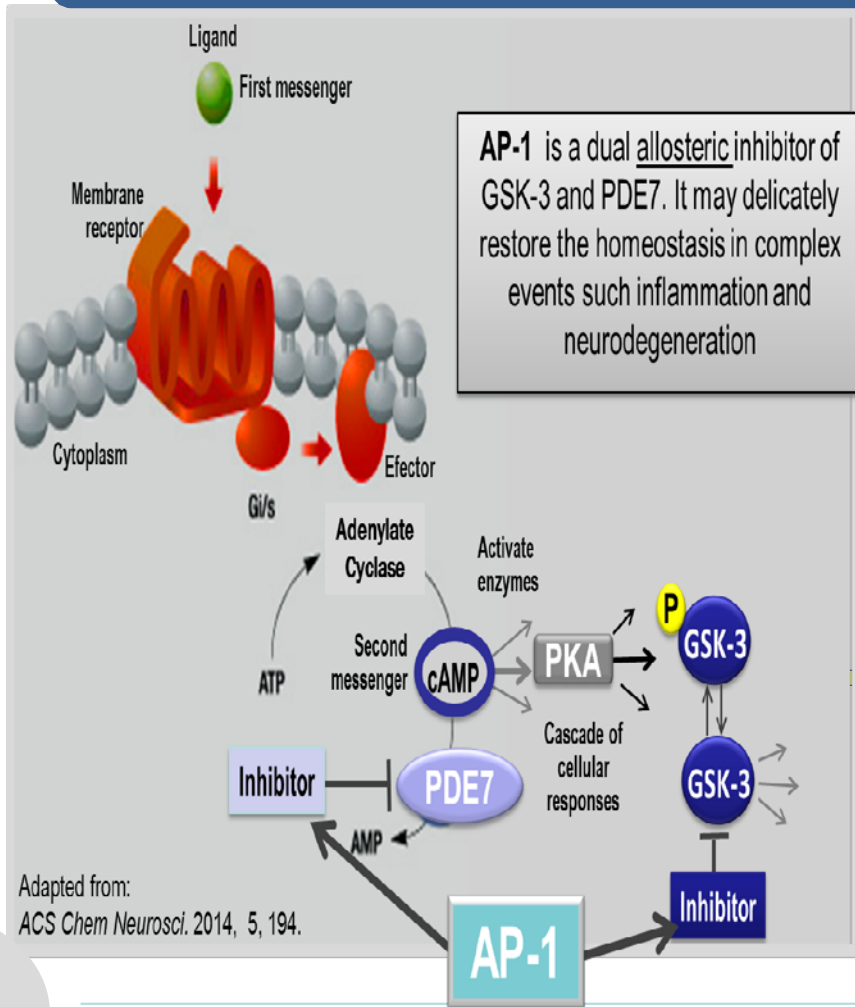
Eye as a window to the brain



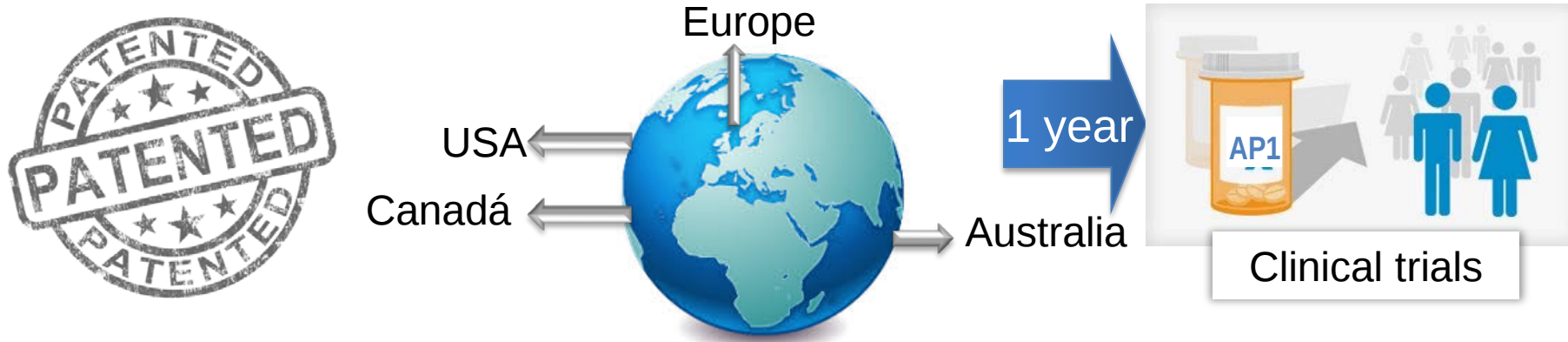
OCT (optic coherence tomography) to measure remyelination



AP-1 has an innovative mechanism of action



AP-1 has a granted compound patent



International advisory board

Professor of Regenerative Neurology
Consultant Neurologist



Head of Neurology
Consultant Neurologist

biodonostia
osakun berrieta institutua
instituto de investigación sanitaria

Research Professor



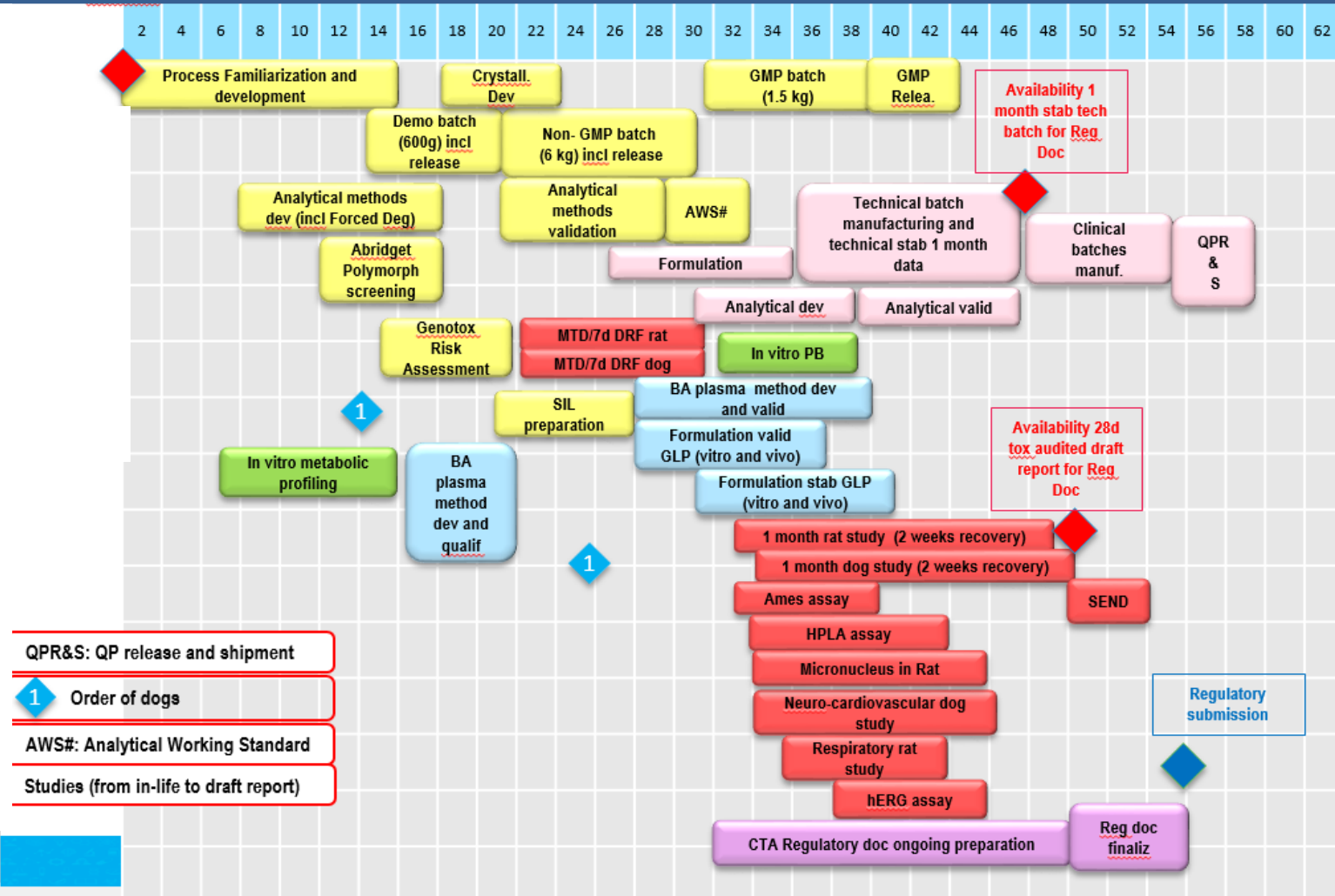
Senior Preclinical advisor
(vast experience in CROs)

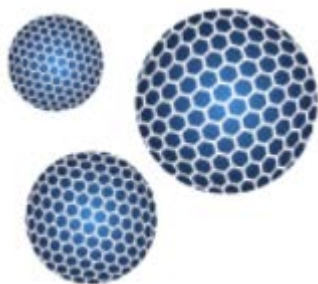
harlan
Helping you
do research better



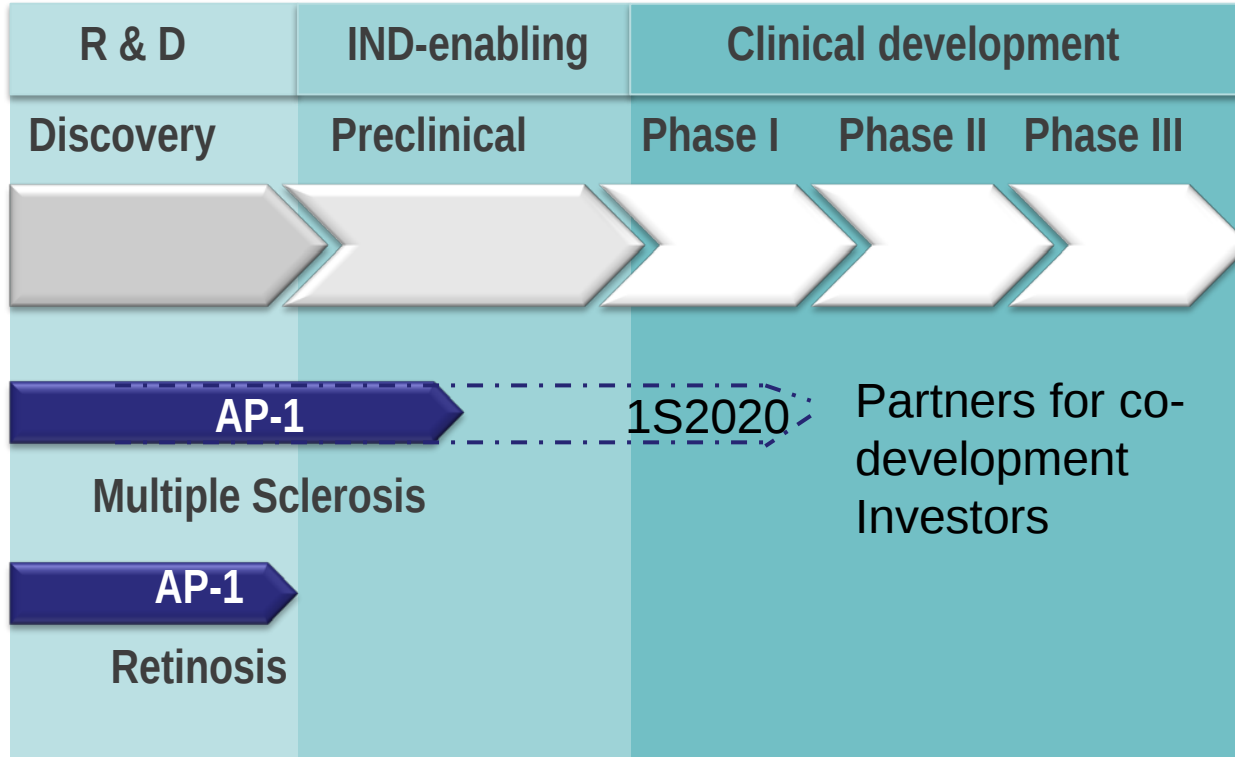
**Huntingdon
Life Sciences**
Working for a better future

AP-1 development plan





Partnering Opportunities



Contact: Ana Martinez, PhD
ana.martinez@csic.es