AmyPore, the biotechnology company supported by KEDGE, just demonstrated why & how its innovative solution to cure Alzheimer’s and Parkinson's diseases is to go through quickly

AmyPore, relying upon European Commission funding (H2020 program) received last spring just announced that its solution, “AmyP53” molecule:

- 1/ tackles the right disease target, with the right approach,
- 2/ in validating 3 administration routes, with outstanding non-toxicity results.

The company which designs and develops therapeutic peptides thus confirms its path to the very 1st effective treatment against Alzheimer’s (AD) and Parkinson’s (PD) diseases, at the 3rd World Congress on Neurology and Therapeutics, in Madrid, Oct. 7-8th 2019.

1/ AmyPore reminded that both diseases are due to a brain cell membrane disruption (due to the formation of amyloid pores which generate the calcium ion overdose into the cell, killing it at the end), as demonstrated by many top scientific publications, from all over the world (1).

The company took also the opportunity to cite that major top scientific experts have finally acknowledged that the only solution path is “any small molecule capable to pass the brain-blood barrier targeting the cell membrane” (2).

The small AmyP53 molecule is fully in line with this logical conclusion. It is the very first molecule able to block the calcium overdose by preventing any amyloid pore formation in the brain cell membrane.

Again, in agreement with the international scientific literature, everyone can obviously conclude that the 5 following therapeutic approaches are hopeless, regardless of many “commercial” announcements:

- immunotherapy: many failures due to the demonstrated unbalanced risk/benefit (3),
- enzyme inhibition (anti-BACE): many failures due to their essential physiological functions (4),
- destruction of amyloid plaques (often referred to as “lesions”): irrelevant target (5),
- tau protein, oxidative stress, synapse deterioration, neurotransmitter dysfunctions, astrocytes/microglia disorders, neuroinflammation, glutaminyl cyclase, plasticity dysfunction,… : irrelevant target, being downstream events induced by the calcium overdose (6),
- Lewy bodies destruction, for Parkinson’s disease: irrelevant targets, just as amyloid plaques for Alzheimer’s disease (7).

2/ AmyPore had demonstrated also that AmyP53 has been absolutely non-toxic:

- by design, since it is constituted by natural amino acids,
- by dose, since it is efficient at very low concentrations,
- by 6 very complete demonstrations, with outstanding results, as follows (press pack available upon request):
  - Safe by intravenous administration into rats,
  - Safe by intranasal administration into rats,
  - No toxicity on brain neurons, astrocytes and endothelial cells in culture,
  - No inflammatory reaction (as assessed by dosing of 27 inflammatory factors),
  - No perturbation of the blood-brain barrier,
  - No toxicity in a cellular gene therapy validation test, demonstrating again our biotechnology advantage.

Thus, 2 major administration routes (intranasal and intravenous) were de-risked, and the pathway for an innovative gene therapy approach was opened.
The remaining minor validation steps will thus quickly be completed in order to surely launch the clinical trials with patients from 2020. By its unique mode of action and its non-toxicity, AmyP53 offers all the guarantees of a rapid development in humans, as the therapeutic emergency does request it.

AmyPore has benefited from the KEDGE Entrepreneurship program which aims to enhance entrepreneurship, innovation and creativity through support systems, training and an ecosystem that includes all types of stakeholders on its campuses and territories (Paris, Marseille, Bordeaux, Toulon, Dakar, Suzhou). These support systems can assist several hundred projects and cover all the stages of development: pre-incubation ("Pro Acts"), incubation ("Business Nursery") and acceleration ("Business Accelerator").

Entrepreneurship is one of KEDGE strategic axes. The School offers dedicated innovative spaces on its campuses (500m² in Marseille, 350m² in Bordeaux, 400m² in Paris, and soon in Dakar) as well as a network of KEDGE investors to financially support projects led by members of the KEDGE community.

Press pack available upon request.

(1) ref. Kayed et al., 2003 + Demuro et al., 2005 + Forloni et al., 2016 + Salahuddin et al., 2016 + Bengoa-Vergnory et al., 2017 + Fusco et al., 2017 + Cline et al., 2018 + Fabiani & Antollini, 2019, etc...
(2) ref. Jang et al. 2013 + Hong et al., 2014 + Di Scala et al., 2016 + Gillman et al., 2016, + Lee et al., 2017 + Cascella et al., 2017 + Magistretti et al. 2019, etc ...
(3) ref. Münch & Robinson, 2002 + Doody et al., 2014 + Sigurdsson, 2018 + Van Dick, 2018, etc...
(4) ref. Egan et al., 2018 + Panza et al., 2019, etc...
(5) ref. Egan et al., 2018 + Panza et al., 2019, etc...
(6) ref. De Felice et al. 2008 + Žempeľ et al., 2010 + Rudenko et al., 2019, etc...
(7) ref. Winner et al., 2011 + Gaddad et al.; 2011 + Schmidt et al., 2012 + Angelova et al., 2016, etc...

About AmyPore:
AmyPore S.A.S, a biotechnology company, designs and develops innovative therapeutic peptides to improve the treatment of amyloid-related diseases and the clinical outcome of patients. The goal of the company is to become a pharmaceutical biotech in the field of therapeutic peptides centered on indications of proteinopathies for which there is a strong therapeutic need (Alzheimer, Parkinson, ALS, type 2 diabetes). Amypore is a pioneer in the development of inhibitors targeting amyloid pores.

The company's expertise in peptide design will enable it to form alliances with leading biopharmaceutical companies interested in this innovative approach.

After more than 15 years of disruptive research, our inventors, Prof. N. YAHI (92 scientific articles; H-index: 42, from PubMed) and Pr. J. FANTINI (190 scientific articles; H-index: 54) found and patented the most promising solution, for Alzheimer's and Parkinson's diseases. Their research has been supported and validated by two Nobel and one Lasker laureates.

AmyPore has an exclusive 15y license to value this solution, now called “AmyP53”. It is chimeric peptide (Alzheimer / Parkinson) issued from an innovative strategy of artificial intelligence applied to the molecular neurosciences.

www.amypore.com

AmyPore press contacts:
Dris FANTINI: Tel. +33 (0) 673 196 800 / amyp53-project-partner-rfp@amypore.com
Philippe CRESPO: Tel. +33 (0) 631 111 296 / amyp53-project-partner-rfp@amypore.com

About KEDGE Business School:
KEDGE is a leading French business school with four campuses in France (Paris, Bordeaux, Marseilles and Toulon), three abroad (Shanghai, Suzhou and Dakar) and three partner campuses (Avignon, Bastia and Bayonne). The KEDGE community is made up of 12,600 students (including 25% coming from abroad), 183 professors (including 44% coming from abroad), 275 international academic partners and 65,000 alumni around the world. KEDGE offers 36 programmes in management, designed for students and industry professionals. It also provides tailor-made educational programmes for businesses at national and international levels. KEDGE Business School is AACSB, EQUIS and AMBA-accredited, and is a member of the Conférence des Grandes Ecoles. It is also recognised by the French government, with labelled programmes, and has obtained the EESPIG label. KEDGE was ranked 35th by the Financial Times in the European Business School ranking and 36th globally in its Executive MBA ranking.

kedge.edu -@kedgebs -Facebook/kedgebs

KEDGE press contacts:
Julien RAVIER Tel. +33 (0) 671 535 161 / julien.ravier@kedgebs.com
Titiane LUGAND Tel. +33 (0) 556 846 343 / titiane.lugand@kedgebs.com
Aurélie PROUILLAC Tel. +33 (0) 556 845 509 / aurelie.prouillac@kedgebs.com
Kimberley BORG Tel. +33 (0) 603 343 316 / kimberley.borg@kedgebs.com