

Seventure Partners Life Sciences Corporate Update Health for Life: March 2019 – June 2019

Paris, France – 1 July 2019 – Seventure Partners, one of Europe's leaders in financing innovation and a world-leader in life science microbiome investment, is pleased to provide an update on its Health for Life investments for the period March 2019 to June 2019 (June 27 is now marked The World Microbiome Day).

"2019 has continued to be a very active period, notably with launch of our Health for Life Capital II fund. We are active in investing in new opportunities in our fast-growing sector with our new fund as well as supporting growth in our portfolio from our first Health for Life Capital fund."

"Our strategy of targeting opportunities in the fast-evolving microbiome space continues to demonstrate the transformational potential for healthcare in this area as science unveils more insights" said Isabelle de Cremoux, CEO and Managing Partner, Seventure Partners.

Seventure Partners' News

In March, Seventure announced the first closing of its second dedicated fund focused on the microbiome, alongside health, nutrition and digital/connected health sectors, Health for Life Capital II[™] (HFL II), with a target for the final close of over €200 million.

The inaugural Health for Life Capital[™] fund (HFL) attracted strategic investments from prestigious organizations including Danone, Novartis, Lesaffre, Tornier, Unigrains and Bel. The new fund includes investors from this first fund, as well as new strategic industry partners including a US based global food ingredient provider, together with financial institutional Limited Partners and entrepreneurial investors.

In the News

Isabelle de Cremoux spoke on "<u>Investing in the Microbiome</u>" with Malcolm Kendall, Co-founder & CEO, Microbiome Insights: the video was published on *The Microbiome Times* website in June.

Microbiome Post has published a video in March in which Denise Kelly, Venture Partner, talks about how <u>"2019 will be a very important year for the global microbiome market"</u>.

Health for Life[™] Portfolio News

Axial Biotherapeutics Inc. (Axial), a clinical stage biopharmaceutical company harnessing the gutbrain axis to develop novel Central Nervous System (CNS) Therapeutics to improve the quality of life for people with CNS diseases and disorders, presented new preclinical data in early **May**. The data,

on AB-2004 (a potential treatment for gastrointestinal dysfunction and associated behavioural symptoms of Autism Spectrum Disorder, ASD), demonstrated the ability to repair leaky gut and improve repetitive behaviour, anxiety, and ASD-related sensorimotor gating deficits by removing key microbial metabolites in animal models with ASD. In addition, patient screening for Phase 1b/2a clinical trial of AB-2004 initiated in 1Q 2019.

- In late May, Axial's co-founder Sarkis Mazmanian and colleagues at California Institute of Technology reported their new findings in a *Cell* paper, which demonstrated that faecal microbiota from human autism donors transplanted into mice induced hallmark behaviours of Autism Spectrum Disorder (ASD) to their offspring compared to control. The authors suggested that metabolites produced by certain bacteria, including taurine and 5-aminovaleric acid (5AV), reduced autistic behaviours in a mouse model of autism.
- In late **June**, Axial disclosed a direct investment of \$10 million from Taiho Ventures LLC to fund the discovery and development of gut-targeted, small-molecule approaches in oncology. The investment is an extension of Axial's previously closed series B round from February and, in conjunction with its investment, Taiho will have a first right to negotiate for an exclusive license related to the new programs. Taiho's Sakae Asanuma also joined Axial's board.

BiomX, an Israeli microbiome company developing both natural and engineered phage therapies that target and destroy harmful bacteria in chronic diseases, has announced in **June**, the company has licensed a new set of bacterial targets from JSR Corporation, for the development and commercialization of phage therapies for Primary Sclerosing Cholangitis (PSC), an orphan liver disease. Dr. Takanori Kanai and his research team discovered in the microbiome of patients with PSC specific strains of Klebsiella pneumoniae (Kp) that disrupt the epithelial barrier. The presence of those strains triggers additional bacterial translocation and liver inflammatory responses. The results of this study were recently published in <u>Nature Microbiology</u>.

DayTwo, an Israeli gut microbiome analysis start-up announced a \$31m round in late **June** with existing and new investors, bringing its total raised to \$48m.The company also launched a blood glucose control service with one of Israel's largest health maintenance organizations in **March**. As part of the deal, Clalit (health service) clients can get a DNA analysis of their gut microbiome and personalized nutritional insights based on DayTwo's technology, as well as two online counselling sessions with Clalit dieticians.

In **March**, **Enterome**, a clinical-stage biopharmaceutical company leveraging its unique knowledge of the key functional and molecular interactions between the gut microbiome and the human body to develop targeted therapeutics, entered into a R&D collaboration with Dana-Farber Cancer Institute (Boston, MA) to evaluate and develop gut microbiome-derived antigens as potential cancer immunotherapies.

- Enterome presented data on its innovative microbiome-based approach for the development of therapeutic peptide cancer vaccines for the first time in a poster at the American Association of Cancer Research (AACR) Annual Meeting 2019 in Atlanta, GA, USA (**March**).
- In **April**, Enterome announced the appointment of two new members to its management team: Jan Fagerberg M.D., Ph.D. as Chief Medical Officer and Catherine Mathis, Pharm.D. as Chief Development Officer.

LNC Therapeutics, a French biotech company specializing in gut-brain microbiome-based drug discovery, announced the grant of the first worldwide patent relating to the therapeutic applications of *Christensenella* bacteria in late March. In early June, LNC has announced the deployment of a

research platform focused exclusively on its gut microbiome activities and more precisely on analysis of the therapeutic properties of *christensenella*. LNC intends to develop new therapeutic application of its drug candidates for the treatment of obesity, metabolic diseases, and other serious indications with significant unmet medical needs.

Maat Pharma, a clinical stage company, announced in **April** that the independent Data and Safety Monitoring Board (DSMB) recommended the continuation, without amendment, of the ongoing Phase II HERACLES study (NCT03359980). The HERACLES trial investigates the use of lead biotherapeutic MaaT013 in steroid-resistant, gastrointestinal-predominant, acute Graft-versus-Host-Disease after allogeneic Hematopoietic Stem-Cell Transplantation.

- In May, the Institute National de la Propriété Industrielle (INPI) issued three new patents to the company covering its sample collection device and the overall processes associated with obtaining, processing, storing and administering human gut samples, ensuring that the highest quality of microbiota is present in MaaT Pharma's biologic drugs. In addition, the patents cover an innovative process to freeze-dry samples preserving the viability and taxonomic profile of the microbiome and enabling the development of an oral formulation.

In March, **NeurIMM Therapeutics** was listed in an article by Labiotech as one of "<u>the 15 biotech</u> <u>companies in Portugal you should know</u>". It recently renamed as **LiMM Therapeutics**.

Vedanta Biosciences, a clinical-stage company developing a new category of therapies for immunemediated diseases based on rationally defined consortia of human microbiome-derived bacteria, announced in **May** a \$18.5 million in extension funding, bringing the total for its round to \$45.5 million. The new investment comes from JSR Corporation, Shumway Capital, SymBiosis LLC, and Partners Investment Co., Ltd., who join previously disclosed investors the Bill & Melinda Gates Foundation, Bristol-Myers Squibb, Rock Springs Capital, Invesco Asset Management, Health for Life (Seventure Partners), and founder PureTech Health. Proceeds from the financing will be used to advance Vedanta's clinical portfolio including Phase 1 and 2 studies in food allergy, advanced or metastatic cancers, recurrent *Clostridium difficile* infection (rCDI) and inflammatory bowel disease (IBD). In later **June**, a Vedanta scientific team member, Silvia Caballero, Ph.D., has been named as one of *MIT Technology Review's* <u>Global Innovators Under 35</u>.

Events

During the period, Seventure attended a number of events, including the **BioSpring Europe**, **Vitafood Europe and Digestive Disease Week** where Seventure representatives spoke on panel.

Over the coming months, Seventure will also be attending the following:

- KISACO Animal Microbiome Congress, London, UK (July 9-10)
- Microbiome 2019, New York (Cold Harbour Springs), USA (July 18-21)
- 1st Microbiome Movement-Oncology Response Summit 2019, Boston, USA (July 22-24)
- The Gastrointestinal Tract XVIII Conference: Integrated Biology of the GI Super Organ 2019, Colorado (Steamboat Springs), USA (July 28 – August 2)
- Microbiome Movement Drug Development & Nutrition Asia Summit 2019, Singapore (September 17-18)

- Microbiome Consumer Nutrition Congress (KISACO) 2019, San Francisco, USA (September 24-25)
- Keystone Meeting Microbiome: Therapeutic Implications 2019, Killarney, Ireland (October 6-10)

-ENDS-

Notes to Editors

About Seventure Partners

With €750m net commitments under management as of the end of 2018, Seventure Partners is a leading venture capital firm in Europe. Since 1997, Seventure Partners has been investing in innovative businesses with high growth potential in two fields: Life sciences across Europe, Israel, Asia and North America and Digital technologies in France and Germany.

In Life sciences, the main areas of focus include "*classic*" approaches such as biotechnology and pharmaceuticals, diagnostic and medtech, industrial biotechnology, as well as "*beyond the pill*" approaches such as MICROBIOME-linked innovations, nutrition, foodtech, digital/connected health and personalized medicine.

Investments can range between €500k and €10m per round, or up to €20m per company, from early to late stage.

In March 2018, Seventure Partners launched AVF, a new fund dedicated to innovative solutions for animal nutrition, feed and health with Adisseo as strategic partner.

Seventure Partners successfully launched Health for Life Capital[™] which invests in Life sciences (health, nutrition, digital/connected health...) with a core focus on the microbiome revolution and its applications in human health, nutrition and food.

The €160m first fund launched in 2014 has invested in 20 companies at the forefront of their fields, such as Enterome, Vedanta Biosciences, MaaT Pharma, Eligo Bioscience, LNC Therapeutics, TargEDys, A-Mansia Biotech, BiomX, Microbiotica, Anaeropharma, NeurIMM (renamed LiMM Therapeutics), Siolta Therapeutics, DayTwo, Zipongo, Mdoloris Medical Systems, MycoTechnology, etc. In January 2019 it launched second fund *Health for Life Capital II*[™] with a target fund size of over €200m.

Health for Life Capital[™] funds have attracted strategic investments from prestigious organizations including Danone, Novartis, Lesaffre, Bel, Tereos, Tornier, Unigrains and more recently a US based global food ingredient provider (to be disclosed), as well as entrepreneurs and financial institutions. For more details: <u>www.seventure.fr/en</u> Twitter: @seventurep

About Health for Life Capital[™]

Seventure Partners launched Health for Life Capital[™], the first venture capital fund focused mainly on investments "beyond the pill" in the microbiome and nutrition space. Europe is the primary focus of the fund, but it also invests in North America, Asia and Israel. The €160m first fund and the €200m second fund attracted strategic investments from prestigious organisations including Danone, Novartis, a US based global food ingredient provider (to be disclosed), Lesaffre, Tornier, Tereos, Unigrains and Bel, as well as financial institutions and entrepreneurs. Health for Life Capital[™] is managed by Seventure Partners' Life sciences team.

Media contacts:		
At the Company	In France	International
Isabelle de Cremoux	Agence Yucatan	Instinctif Partners
CEO and Managing Partner of Seventure	Caroline Prince-	Sue Charles / Deborah Bell
Partners	Albagnac	Tel: +44 20 7866 7863
Tel: + + 33 1 58 19 22 77	Tel: +33 1 53 63 27 35	Email:
Email:	Email:	seventure@instinctif.com
mailto:isabelle.decremoux@seventure.fr	cprince@yucatan.fr	