

Enterome to present world first clinical data with EO2401, its first-in-class off-the-shelf OncoMimics™ therapeutic cancer vaccine, at ASCO 2022

Data highlights strong immune responses and early signs of clinical benefit, establishing proof-of-concept

OncoMimics™ immunotherapy pipeline generated using Enterome's unique microbiome Mimicry platform – a potential source of multiple breakthrough candidates in a broad range of therapeutic areas

Three abstracts on Enterome's OncoMimics™ pipeline accepted for presentation at ASCO 2022

Paris, France – May 19, 2022

Enterome, a clinical stage biopharmaceutical company developing first-in-class immunomodulatory drugs based on its bacterial Mimicry drug discovery platform, today announces that it will present for the first time proof-of-concept data from clinical trials with EO2401, its first-in-class off-the-shelf OncoMimics™ cancer immunotherapy at the American Society of Clinical Oncology (ASCO) Annual Meeting, taking place June 3-7, 2022 in Chicago and virtually.

OncoMimics™ peptides – generating strong CD8⁺ T-cell responses derived from pre-existing memory cells

OncoMimics™ peptides are gut microbiome-derived peptides that closely mimic antigens expressed by tumor cells. In contrast to tumor antigens, however, OncoMimics™ peptides are recognized by the immune system as “non-self” and can generate a strong human cytotoxic CD8⁺ response stemming from memory T cells, offering enormous potential to create a new class of cancer vaccines targeting solid and liquid tumors.

Enterome's pioneering work on its OncoMimics™ pipeline leverages the fundamental understanding that the gut is the largest lymphoid organ in the body and is home to most of its memory T-cells. As a result, there is constant interaction and presentation of peptides and proteins secreted by gut bacteria to the body's immune system, resulting in the formation of a pool of effector memory T cells protecting the human body against bacterial invasion. In the event that the bacterial antigens are mimics of tumor antigens, this process leads to the generation of circulating effector memory T cells with a preserved ability to recognize tumor antigens.

To-date, Enterome has generated a repertoire of OncoMimics™ peptides correlating to tumor antigens across a wide range of solid and liquid tumor types. From this, the Company is creating a pipeline of off-the-shelf cancer immunotherapies designed to act via the same novel mode of action. The first candidates include EO2401 (in clinical trials for glioblastoma and adrenal malignancies), EO2463 (in clinical development for liquid tumors) and EO4010 (in development for colorectal cancer, and targeted to enter clinical trials in 2023).

Enterome's lead candidate EO2401 combines three OncoMimics™ peptides that closely mimic IL13Ra2, BIRC5 and FOXM1, all of which are known driver antigens present on aggressive solid tumors and generate strong human CD8+ responses. In addition, EO2401 contains a CD4 helper peptide UCP2.

At ASCO, in the first two abstracts, Enterome will present, for the first time, clinical proof-of-concept data from Phase 1/2 clinical trials of EO2401 in combination with an immune checkpoint inhibitor (nivolumab, Opdivo®), for the treatment of patients with first progression/recurrence of glioblastoma (the ROSALIE trial, EOGBM1-18) and for the treatment of patients with locally advanced or metastatic adrenocortical carcinoma, or malignant pheochromocytoma/paraganglioma (the SPENCER trial, EOADR1-19).

In a third abstract, the Company will present the use of its second therapeutic vaccine program, EO2463 as monotherapy and in combination with lenalidomide and rituximab, for treatment of patients with indolent non-Hodgkin lymphoma (the SIDNEY trial, EONHL1-20). EO2463 combines four OncoMimics™ peptides that exhibit molecular mimicry with the B cell markers CD20, CD22, CD37, and CD268 (BAFF-receptor), respectively.

Jan Fagerberg, Chief Medical Officer of Enterome said, *“As a proof-of-concept for the entire Mimicry platform, we have put in action a clinical development strategy for EO2401 that is designed to identify a clinical efficacy signal in various tumor types that have in common the same tumor antigens (IL13Ra2, BIRC5 and FOXM1). In both the ROSALIE and SPENCER trials, EO2401 in combination with checkpoint blockade generated strong systemic immune responses directed against human tumor antigens. We look forward to sharing these very promising clinical data at ASCO while continuing to progress these trials, with the aim of providing a more mature set of data at ESMO, Europe's leading medical oncology conference, later in the year.”*

Enterome's Mimicry Platform

Enterome's Mimicry drug discovery platform is based on its unique ability to decode the interaction between the gut microbiome and the immune system. The Mimicry platform uses best-in-class biocomputational tools and bioassays to identify novel therapeutics from its proprietary database of 21 million full-length gut microbiome peptides and proteins.

The Mimicry platform is highly productive and has already generated first-in-class small protein and peptide drug candidates targeting multiple therapeutic areas that modulate the immune system by closely mimicking the structure, effect or actions of specific human antigens, hormones or cytokines.

“We are thrilled to be able to present the first clinical data demonstrating the potential of our unique OncoMimics™ pipeline at ASCO this year. We are using our Mimicry platform to generate multiple pipelines of transformative drug candidates, targeting a broad range of therapeutic areas. Presently we are advancing two pipelines of distinct drug candidates – OncoMimics™ and EndoMimics™ - which have the potential to address cancer, inflammatory and autoimmune diseases,” said Pierre Belichard, CEO of Enterome. “We believe that our unique platform has the potential to create effective new medicines that make a real difference to patients. Our corporate strategy is designed to advance the development of these new therapies as quickly and robustly as possible while generating significant value for our shareholders. Enterome's future has never looked so exciting.”

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About Enterome

Enterome is a clinical-stage biopharmaceutical company focused on developing breakthrough immunomodulatory drugs for the treatment of cancer and immune diseases. Enterome's pioneering approach to drug discovery is based on its unique and powerful bacterial Mimicry drug discovery platform allowing to uncover new biological insights from millions of gut bacteria proteins in constant cross-talk with the human body.

Enterome's potentially first-in-class small protein and peptide drug candidates modulate the immune system by closely mimicking the structure, effect or actions of specific antigens, hormones, or cytokines.

Enterome is presently advancing two pipelines of drug candidates, OncoMimics™ and EndoMimics™, which have the potential to address cancer, inflammatory and autoimmune diseases, respectively:

- OncoMimics™ peptides, a pipeline of therapeutic cancer vaccines. The lead candidate EO2401 is in Phase 1/2 clinical trials in patients with glioblastoma and adrenal tumors and has demonstrated clinical proof of concept. A second OncoMimics™ candidate, EO2463 is in a Phase 1/2 clinical trial for indolent non-Hodgkin lymphomas. Clinical proof-of-concept data are expected in H1 2023. EO4010 is in development for colorectal cancer and targeted to enter clinical trials in 2023.
- EndoMimics™ peptides, a pipeline of next generation bioactives acting like human hormones or cytokines for the treatment of immune diseases. EB1010, the lead candidate, is a potent local inducer of IL-10 designed to provide improved therapeutic outcomes for patients with IBD. EB1010 is expected to enter the clinic in 2023.

Enterome employs 65 people and is headquartered in Paris, France. Since its inception, the company has raised a total of €96 million from Europe- and US-based life science investors and more than €120 million from pharmaceutical partnerships.

For more information, please visit the company's website at: www.enterome.com