PRESS RELEASE

OMass Therapeutics Presents Positive Preclinical Data For its Best-in-class MC2 Program at ENDO 2025

- OMS1620 is advancing through IND-enabling studies for diseases associated with ACTH excess, including congenital adrenal hyperplasia
- Designed to resist competition from endogenous ACTH by maximizing receptor residency time
- OMS1620 demonstrates best-in-class efficacy in acute and chronic preclinical models of ACTH excess

Oxford, United Kingdom – 14th July 2025 – OMass Therapeutics ('OMass' or 'the Company'), a biotechnology company identifying medicines against highly validated target ecosystems such as membrane proteins or intracellular complexes, today announces positive preclinical data for OMS1620, its lead program targeting the melanocortin-2 (MC2) receptor, at ENDO 2025, the Annual Endocrine Society Meeting, taking place in San Francisco from 12-15 July.

This poster is the first public data disclosure related to OMS1620, a potential best-in-class MC2R antagonist currently in IND-enabling studies. MC2R is a GPCR for the adrenocorticotropic hormone (ACTH), a hormone released by the pituitary that triggers cortisol and androgen production. OMS1620 is being developed for diseases associated with ACTH excess, including congenital adrenal hyperplasia (CAH).

In classical CAH, patients are unable to produce cortisol and require exogenous glucocorticoid supplementation. In people without CAH, endogenous cortisol prevents ACTH upregulation but to achieve this in CAH patients, supraphysiological doses of glucocorticoids are usually required. This results in CAH patients having symptoms associated with ACTH over production (leading to androgen excess), side effects associated with glucocorticoid overdosing, or both.

ACTH surges in CAH can be many times above the upper limit of normal, last for multiple hours, and increase as patients try to downtitrate their glucocorticoid dose. OMS1620 has been exquisitely designed to maximize receptor residency time, making it highly resistant to competition from rising endogenous ACTH. This was demonstrated preclinically utilizing an acute ACTH challenge model in rats, an experiment meant to mimic the high levels of ACTH observed in CAH patients. Compounds with longer residence time were shown to have greater MC2 receptor inhibition. OMS1620 also led to improvement in body and adrenal weight in a chronic ACTH excess model, where Sprague Dawley rats were treated with ACTH via an osmotic mini-pump.

These results demonstrate OMS1620 is a potential best-in-class MC2 antagonist with the ideal compound properties to combat high ACTH surges that CAH patients can experience throughout the day. This can further support patients in achieving the ultimate treatment goal in CAH of androgen normalization whilst on physiological dose replacement of glucocorticoids.

Ros Deegan, Chief Executive Officer at OMass Therapeutics, commented: "*This compelling preclinical data validates our approach of optimizing our MC2 antagonists' residence time to deliver a best-in-class molecule in OMS1620. Our preclinical modelling suggests OMS1620's profile can further support patients as they try to achieve the ultimate treatment goal in CAH of normalizing androgen levels while on physiological doses of glucocorticoids. This underscores the potential of our MC2 program to transform outcomes for patients with CAH, a population with significant unmet need and we're excited to take the next step towards the clinic.*"

The poster can be downloaded here.

-ENDS-

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About OMass Therapeutics

OMass Therapeutics is a biotechnology company discovering medicines against highly-validated target ecosystems, such as membrane proteins or intracellular complexes.

OdyssION™, OMass' unique drug discovery platform, comprises next-generation native mass spectrometry with novel biochemistry techniques and custom chemistry to interrogate not just a drug target, but also the interaction of the target with its native ecosystem, separate from the confounding complexity of the cell. This unique approach results in cell-system fidelity with cell-free precision.

OMass is advancing a pipeline of small molecule therapeutics in rare diseases and immunological conditions. Its lead program is a best-in-class MC2 (melanocortin-2) receptor antagonist for the treatment of Congenital Adrenal Hyperplasia (CAH) and ACTH-dependent Cushing syndrome. The focus of the program has been to increase receptor residency time to make OMass' antagonists resistant to competition by the endogenous ligand, thereby avoiding loss of efficacy in the face of rising adrenocorticotropic hormone (ACTH) levels due to reductions in glucocorticoid supplementation for CAH or progression of Cushing's Syndrome.

Headquartered in Oxford, UK, OMass has raised over $160M (£129M) from a top-tier international investor syndicate including Syncona, Oxford Science Enterprises, GV, Northpond Ventures, Sanofi Ventures and British Patient Capital.

To learn more, please visit www.omass.com. Follow us on LinkedIn.