

Mogrify and Sangamo announce collaboration and exclusive license agreement for Mogrify's iPSC- and ESC-derived regulatory T cells

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CAMBRIDGE, England & BRISBANE, Calif.--(BUSINESS WIRE)--Apr. 21, 2020-- Mogrify Ltd (Mogrify®), a UK company aiming to transform the development of cell therapies by the systematic discovery of novel cell conversions, and Sangamo Therapeutics (Sangamo) (Nasdaq: SGMO), a genomic medicine company, today announced that they have executed a collaboration and exclusive license agreement for Sangamo to develop allogeneic cell therapies from Mogrify's proprietary induced pluripotent stem cells (iPSCs) and embryonic stem cells (ESCs) and Sangamo's zinc finger protein (ZFP) gene-engineered chimeric antigen receptor regulatory T cell (CAR-Treg) technology.

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"Mogrify is delighted to announce its second commercial deal with a US biopharma and the first in the exciting field of T cell immunotherapy," said Dr. Darrin M. Disley OBE, CEO, Mogrify. "The combination of Mogrify's proprietary systematic cell conversion technology and Sangamo's regulatory T cell platform and proprietary ZFP platform is a natural fit. Sangamo is at the forefront of the development of a world-class engineered ZFP genome editing platform and we are very happy to be partnering with such an innovative company."

"This license agreement provides Sangamo with access to Mogrify's cell conversion technology, which will diversify our options as we develop off-the-shelf allogeneic CAR-Treg cell therapies," said Jason Fontenot, SVP, Head of Cell Therapy at Sangamo. "We expect this collaboration to accelerate our development of scalable and accessible CAR-Treg cell therapies, so that we can potentially deliver treatments to patients with inflammatory and autoimmune diseases more rapidly."

Mogrify's technology enables the transformation of any human cell type into any other human cell type. This transformation is achieved using transcription factors or small molecules identified using proprietary big data technologies. iPSCs and ESCs provide an evergreen starting material for the generation of Tregs, and facilitate more complex engineering and greater manufacturing scalability, potentially enabling the resulting therapies to be more cost-effective and thus more accessible to larger patient populations.

Under the terms of the agreement, Mogrify will be responsible for the discovery and optimization of the cell conversion technology from iPSCs or ESCs to regulatory T cells, and Sangamo will be granted exclusive rights to use Mogrify's technology to create Tregs from iPSCs or ESCs. Sangamo expects to then use its ZFP gene-engineering technology and therapeutic development capabilities to transform these Tregs into novel "off-the-shelf" allogeneic CAR-Treg cell therapy candidates and hopes to take them through clinical development through to registration for the treatment of inflammatory and autoimmune diseases.

Under the terms of the agreement, Sangamo will pay Mogrify an upfront payment. Mogrify is also eligible to receive potential additional payments related to development and regulatory milestones, and product sales.

About Mogrify Direct Cell Conversion Technology

The Mogrify platform (Rackham *et al.*, Nature Genetics, 2016)* takes a systematic big-data approach that leverages data from next-generation sequencing and the construction of gene-regulatory networks (DNA-protein & protein-protein), to identify, the transcription factors (*in vitro*) or small molecules (*in vivo*) needed to convert any source human cell type into any target human cell type. The Mogrify platform offers the potential to optimize cell conversions in order to deliver cells that exhibit improved safety, efficacy and scalable manufacturing profiles suitable for development as cell therapies.

*Rackham OJL et al, A predictive computational framework for direct reprogramming between human cell types. [Nature Genetics](#) 48(3), 331–335 (2016).

About Sangamo's Regulatory T cells (Tregs) and CAR-Tregs Technology

Tregs are a subset of T lymphocytes and act as the key regulators of the immune system. They ensure that the immune system does not mistakenly harm healthy organs while still protecting the body from pathogenic microorganisms.

CAR-Tregs are regulatory T cells (or Tregs) which are genetically engineered with a Chimeric Antigen Receptor (CAR) to precisely target sites of autoimmune and inflammatory pathology. Sangamo's CAR-Treg platform aims to use CAR and zinc finger protein (ZFP) technologies to genetically engineer Tregs *ex vivo* to treat autoimmune and inflammatory diseases.

About Mogrify www.mogrify.co.uk

Mogrify has developed a proprietary direct cell conversion technology, which makes it possible to convert any source human cell type into any target human cell type.

The platform takes a systematic big-data approach to identify, from next-generation sequencing and gene-regulatory networks, the optimal combination of transcription factors (*in vitro*) or small molecules (*in vivo*), needed to convert a cell.

Mogrify is deploying this platform to develop novel cell therapies addressing musculoskeletal, auto-immune, cancer immunotherapy, ocular and respiratory diseases as well as generating a broad IP position relating to cell conversions that exhibit safety, efficacy and scalable manufacturing profiles suitable for development as cell therapies.

Uniquely positioned to address a cell therapy market estimated to be \$35 billion USD by 2023, Mogrify is commercializing its technology via IP licensing, product development, and drug development. Based in Cambridge, UK, the Company has raised over \$20 million USD funding from Ahren Innovation Capital, Parkwalk, 24Haymarket, Dr. Darrin M. Disley, OBE and the University of Bristol Enterprise Fund III.

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For further information about Mogrify's collaboration opportunities for clinicians, academics and companies, please visit: mogrify.co.uk/partnering

About Sangamo Therapeutics

Sangamo Therapeutics is committed to translating ground-breaking science into genomic medicines with the potential to transform patients' lives using gene therapy, *ex vivo* gene-edited cell therapy, and *in vivo* genome editing and gene regulation. For more information about Sangamo, visit www.sangamo.com.

Sangamo Forward Looking Statements

This press release contains forward-looking statements regarding Sangamo's current expectations.

These forward-looking statements include, without limitation, statements relating to the potential for Sangamo to develop, obtain regulatory approvals for and commercialize cell therapies for inflammatory and auto-immune diseases, the timing, availability and costs of such therapies, the potential to use ZFP, CAR-Treg, iPSCs, ESCs and other technologies to develop such therapies, and other statements that are not historical fact. These statements are not guarantees of future performance and are subject to risks and uncertainties that are difficult to predict. Factors that could cause actual results to differ include, but are not limited to, risks and uncertainties related to: the research and development process; the regulatory approval process for product candidates; the manufacturing of approved products and the costs thereof; the commercialization of approved products; the potential for technologies to fail to produce the results expected by Sangamo; the potential for technological developments to obviate technologies owned or used by Sangamo; the potential for Mogrify to breach or terminate its license agreement with Sangamo; and the potential for Sangamo to fail to realize its expected benefits of the Mogrify license agreement.

Actual results may differ from those projected in forward-looking statements due to risks and uncertainties that exist in Sangamo's operations and business environments. These risks and uncertainties are described more fully in Sangamo's filings with the U.S. Securities and Exchange Commission, including its most recent Annual Report on Form 10-K. Forward-looking statements contained in this announcement are made as of this date, and Sangamo undertakes no duty to update such information except as required under applicable law.

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