



Mogrify solidifies IP position surrounding core technology and expands platform algorithm to enhance cell conversion

- *Assignment of rights in foundational patent underpinning the Company's direct cell conversion technology*
- *Exclusive license from MRC Laboratory of Molecular Biology of rights to enhanced version of MOGRIFY technology incorporating next-generation RNA sequencing data to enable more accurate transcription factor predictions and improve cell conversion efficacy*

Cambridge, UK, 17 December 2020 Mogrify Limited (Mogrify®), a UK company aiming to transform the development of *ex vivo* cell therapies and pioneer the field of *in vivo* reprogramming therapies, today announced it had secured the assignment of the foundational intellectual property (IP) underpinning its core direct cell conversion technology (MOGRIFY® V1) and extended the method to allow for the inclusion of new sources of data and more accurate transcription factor predictions (MOGRIFY V2). The expansion of rights has allowed the Company to bring the latest version of the technology in-house.

The MOGRIFY platform utilizes a systematic big-data approach (Rackham *et al.*, Nature Genetics, 2016) developed over a 10-year period via a multi-national research collaboration. By deploying next-generation sequencing and gene regulatory data, the platform enables the prediction of the transcription factors (or small molecules) and culture medium conditions required to produce (*ex vivo* or *in vivo*) any target cell type from any source cell type.

The Company's patent portfolio includes data for over 150 cell types, of which more than 30 cell conversions are covered in the foundational patent filing with two additional conversion specific patents filed covering the production of chondrocytes and fetal cardiomyocytes. Further conversion specific patents are expected in a number of areas relating to the Company's internal product pipeline.

Specific progress in Mogrify's intellectual property position includes the assignment and negotiation of commercially enabling terms for the use of the foundational MOGRIFY patent from RIKEN, University of Bristol, and Monash University, which covers the method of direct cell differentiation and exemplified predictions of numerous human cell conversions.

The latest version of the technology, in-licensed from the Medical Research Council (MRC) Laboratory of Molecular Biology with support from LifeArc, incorporates next-generation bulk and single-cell RNA sequencing data into the algorithm to enhance the quality and accuracy of transcription factor predictions and cell conversion efficacy. Bringing this in-house will enable Mogrify to identify the key regulators required to convert any cell type in the human body, supporting its bid to develop scalable off-the-shelf therapies across multiple therapeutic areas.

Joe Foster, Chief Operating Officer, Mogrify, said: *“The progress we have made in securing our IP position will enable further commercialization via internal development programs and co-development partnerships. MOGRIFY V2 enables the inclusion of new sources of data and delivers enhanced prediction quality, prediction accuracy, and cell conversion efficacy, helping the Company to engineer an evergreen and scalable source of cell types that exhibit efficacy and safety profiles necessary to address diseases with a high unmet clinical need.”*

Alastair Hick, PhD, Senior Director, Monash Innovation, said: *“We are excited to continue strengthening our relationship with Mogrify and to support their commercialization efforts. It is great to see the significant progress the Company has made on multiple fronts to develop this exciting technology platform.”*

For further information about Mogrify’s technology, please visit: <https://mogrify.co.uk/science/>

ENDS

Notes to Editors



*Joe Foster,
Chief Operating Officer,
Mogrify*



*Alastair Hick, PhD,
Senior Director, Monash
Innovation*

For high-resolution images please contact Zyme Communications.

For further information please contact:

Mogrify
Darrin M Disley, PhD, OBE
Tel: + 44 (0)1223 734154
Email: darrin@mogrify.co.uk

Zyme Communications (media inquiries)
Michelle Ricketts, PhD
Tel: +44 (0)7789 053 885
E-mail: michelle.ricketts@zymecommunications.com

Westwicke, an ICR Company (investor inquiries)
Stephanie Carrington
Tel: +1 (646) 277-1282
Email: stephanie.carrington@icrinc.com

To opt-out from receiving press releases from Zyme Communications please e-mail info@zymecommunications.com. To view our privacy policy, please [click here](#).

About Mogrify www.mogrify.co.uk

Mogrify® has developed a proprietary suite of platform technologies that utilize a systematic big-data approach to direct cellular conversion (Rackham *et al.*, Nature Genetics, 2016) and the maintenance of cell identity (Kamaraj *et al.*, Cell Systems, 2020). The platforms, MOGRIFY® and EpiMOGRIFY, developed over a 12-year period via a multi-national research collaboration, deploy next-generation sequencing, gene regulatory and epigenetic network data to enable the prediction of the transcription factors (or small molecules) and optimal culture conditions required to produce any target human cell type from any source human cell type.

The platform can be used to enhance existing stem-cell forward reprogramming methods or can bypass development pathways altogether, affecting a direct transdifferentiation between a mature cell type to another mature cell type.

Mogrify is applying its proprietary and award-winning platforms to engineer a renewable and scalable source of cell types that exhibit efficacy and safety profiles necessary to transform the development of *ex vivo* cell therapies and pioneer a new class of *in vivo* reprogramming therapies for indications of high unmet clinical need in hematological, immunological, ophthalmological and other disease areas.

Uniquely positioned to address a regenerative medicine market estimated to be worth \$39 billion USD by 2023, Mogrify is commercializing its technology via a combination of internal cell and gene therapy development, co-development partnerships, and out-licensing of novel cell conversions. 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.

Follow Mogrify on Twitter [@Mogrify_UK](#) and LinkedIn [@Mogrify](#)