ReNeuron to use Cellmate Automated Cell Culture for Stem Cell-based Stroke

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To Accelerate Production at New Advanced Therapy Medicinal Products Manufacturing Facility in Wales

TAP Biosystems (now part of the Sartorius Stedim Biotech Group), a leading supplier of innovative cell culture and fermentation systems for life science, is delighted to announce its Cellmate automated cell culture system has been chosen by leading stem cell therapy firm, ReNeuron to produce clinical and commercial stem cell therapies at the new Advanced Therapy Medicinal Products (ATMP) Manufacturing Facility in Wales. Cellmate, which has been designed for the safe, high throughput production of adherent cell-based therapies in a GMP environment, will be installed at the ATMP Facility in Pencoed, Wales. The system will be used initially by ReNeuron to automate T-flask processing of its CTX neural stem cell therapy to treat patients disabled by the effects of stroke and critical limb ischemia. Using Cellmate at the ATMP Facility will allow ReNeuron staff to aseptically seed, culture, and harvest cells while minimising manual interaction with the cultures. This will safely and rapidly provide a stem cell therapy, which is of consistent quality and is reproducible from batch to batch. Dr Jasmin Kee, Head of Engineering at ReNeuron explained: “For our Phase I and II clinical trials, the production of CTX stem cell therapies is a manual process. As we move into Phase III, we are looking to increase our batch sizes 10 fold while maintaining the quality and reproducibility of our product. We needed a reliable platform that would remove many of the risks of inconsistency when scaling-up. After assessing many available technologies, we concluded that for our cells, expansion of our T-flask approach would be the optimum strategy. In collaboration with Cell Therapy Catapult and Loughborough University, we are using TAP Biosystems’ CompacT SelecT automated cell culture system to design a scaled-up process, which can be transferred to the Cellmate.” Dr Kee added: “For manufacturing our stem cell therapies at scale, Cellmate was the system of choice because it is a proven, validated, automation platform for adherent cell culture used in GMP facilities globally to produce licensed products. TAP Biosystems also has a long established support team that can help us ensure the system performs optimally over its lifetime.” Dr Dave Thomas, Cellmate Product Manager stated: “We’re delighted that ReNeuron is going to be using Cellmate for manufacturing its innovative cell therapy at the new ATMP facility in Wales. The extensive process development work carried out between Loughborough University and ReNeuron is an excellent demonstration to biotech and pharma companies of how utilising our Cellmate and CompacT SelecT automated cell culture technologies can contribute to advancing a low-risk, consistent scale-up strategy for commercially viable stem cell therapy production