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Transgene and NEC Bio to advance vaccine development for head and neck cancer

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To prepare the next steps of the development of TG4050

Transgene, a French biotech company that designs and develops virus-based immunotherapies for the treatment of cancer, and NEC Bio B.V., a wholly owned subsidiary of Japan's NEC Corporation, a leader in IT, network and AI technologies, have announced the signing of a license agreement to advance the clinical development of TG4050, an individualised neoantigen therapeutic vaccine (INTV) in the adjuvant treatment of resected HPV-negative head and neck cancer.

TG4050 is an individualised immunotherapy based on an MVA viral vector incorporating neoantigens selected using NEC’s AI-enabled prediction platform.

It is currently being evaluated in patients with head and neck cancer with the aim of preventing relapse and extend disease-free survival following surgery and adjuvant therapy. TG4050 is designed to stimulate and educate the immune system against a patient’s cancer using tumor-specific genetic mutations (neoantigens) targeting each patient’s unique tumour. These neoantigens are identified and selected using NEC’s proprietary platform, which applies advanced machine learning to select immunogenic mutations that are most likely to induce a strong immune response.

Under the terms of the license agreement, Transgene secures access to NEC’s AI-based neoantigen prediction platform for further development of TG4050 in the adjuvant treatment of resected HPV-negative head and neck cancer while conferring rights to enable Transgene’s further clinical development and to support commercialisation and potential partnering of the program. NEC retains full ownership and operational control of its AI platform and will support Transgene to conduct further clinical activity.

NEC will receive a technology access fee of €2.5 million in Transgene shares following the signing, and an additional €2.5 million in cash to be paid out in a series of tranches through early 2028. Additionally, a further payment will be milestone-based and a portion of such payment will be made in Transgene' shares. NEC is also eligible to receive undisclosed additional consideration including development milestone payments, as well as a double-digit share of profits or licensing revenues.