

Dendritic cells from induced pluripotent stem cells with an adult phenotype for immunotherapy

► Asset Overview

Product Type	Peptide
Indication	Oncology
Current Stage	Proof-of-Concept
Target (MoA)	Mutations in the IGF2R that increase affinity with IGF2. These mutated receptors act as traps for IGF2 (IGF2-TRAP), thus sequestering this overexpressed ligand.
Brief Description	Researchers at the University of Oxford have identified key mutations that increase the affinity of Insulin-like Growth Factor 2 Receptor (IGF2R) for its ligand, reducing hypoglycaemia and tumour volume.
Organization	Oxford University

► Differentiation

□ Midkine is unregulated in kidney Injury Limitations of Current Technologies : Clinical Trials of Dendritic Cell-Based Vaccines

- More than 200 trials have been conducted in cancer immunotherapy for the treatment of melanoma, prostate cancer, glioblastoma and renal cell carcinoma Objective response rates (ORR) in the 8-15% range have typically been reported along with clear evidence of CTL responses in >50% of patients
- Many studies have shown a median prolongation of Overall Survival of ~20%, and Clinical trials over the past two decades have therefore established

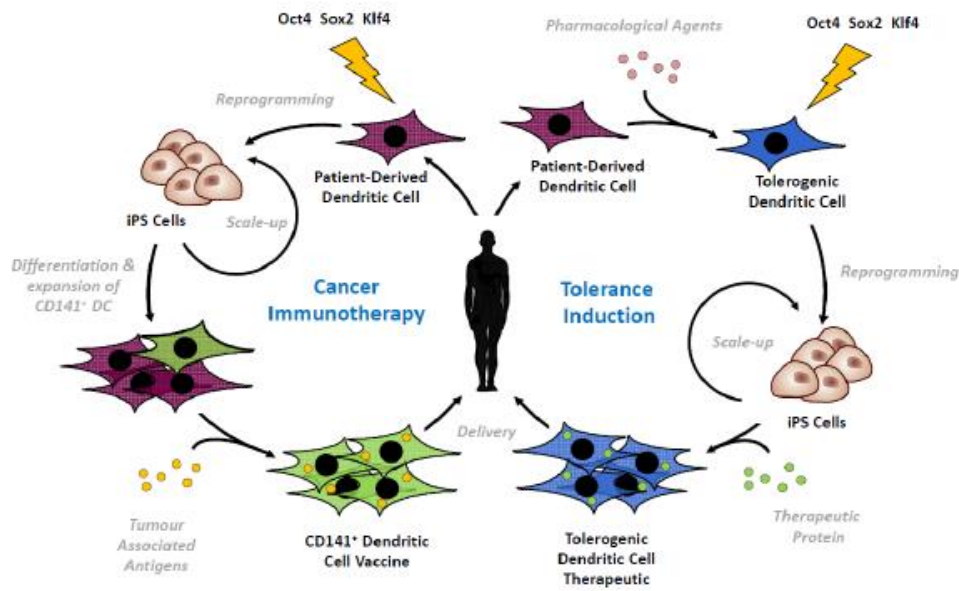
□ Strategic Advantages of the OII Dendritic Cell Platform

- The OII platform exploits the cross-presentation capacity of the CD141+ DCs, avoiding the need for transfection or the identification and synthesis of peptide epitopes relevant for each MHC haplotype
- Responsiveness of CD141+ DCs to XCL1 secreted by CD8+ T cells, uniquely directs them towards the very cells capable of responding to TAAs
- Survival of administered DC need only be transient: the legacy of vaccination remains imprinted within the memory T cell repertoire
- Irradiation of the cellular inoculum enhances the safety profile by mitigating against tumorigenesis
- Only modest scale-up in manufacturing is required to produce sufficient numbers
- The platform provides opportunities for future generations of cell therapy products with refined functionality

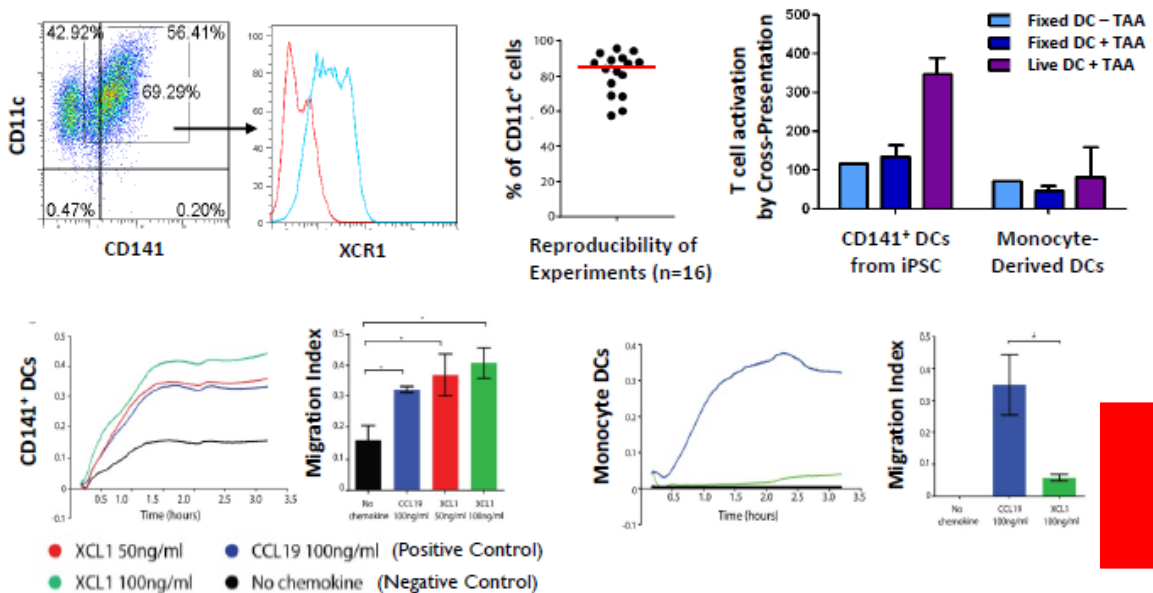
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► Key Data

The Oll Dendritic Cell Platform



Characterisation of CD141⁺ DC Differentiated from Human iPSC



다른
평어도

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► Intellectual Property

Patent No.	PCT-GB2017-050201
Application Date	2017.01.26
Status	Application Pending
Country	US, EP, CN

► Contact Information

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