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CCBIO seminar (BMED380)

Thursday, March 31, 12.30

SCAN ME

iPSC-based killer cell regeneration for cancer immunotherapy

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For T cell immunotherapy, the important points for good clinical benefit is to keep antigen-specificity, younger memory function and a high quantity of T cells. Although CD19 CAR- T-cell immunotherapy has had tremendous success, some patients do not respond well because of insufficient quality and quantity of the patient's T cell for CAR modification and CAR-T function in the body. iPS reprogramming technology can instill anti- cancer T cells a younger phenotype, clonality and quantity. Also, in cases using non-T cell derived non-antigen-specific iPS cells, antigen-specific receptor modification of the iPSC can give cancer-specificity to the differentiated T cells. To establish such a regenerative and rejuvenated T cell immunotherapy, we developed a system to efficiently produce T cells from iPS cells. In this presentation, we will introduce basic research and clinical development of iPSC-based immune cells modified by antigen-specific receptors.

Chairperson: James Lorens < jim.lorens@uib.no>, CCBIO