**Licensing Opportunity**

**Treatment of Breast Cancer with adoptive immunotherapy**

Adoptive Cell Therapy (ACT) with T cells is one of the most important recent advances in oncology. Adoptive T cell therapy consists in expanding at large scale Tumor Infiltrating Lymphocytes (TILs) from tumor fragments ex-vivo followed by TIL infusion into patient. ACT takes advantage of the enriched numbers of tumor-specific T cells which can be found at the tumor site. Ex-vivo expanded TIL attack and kill tumor cells in the patient body. ACT has shown efficacy mainly in metastatic melanoma while limited expansion of functional tumor-specific TILs has been observed in other types of cancer including breast cancer.

**ADVANTAGES**

This approach allows for the first time the expansion ex vivo of TILs from human breast cancer. TILs can be expanded in large numbers and are functionally active against the tumor. Importantly, a high response rate including long-lasting complete responses could be induced in metastatic melanoma patients following ACT with TILs.

**INTELLECTUAL PROPERTY**

- Priority date: December 14, 2014
- Patent application WO2016096903 A1, filed in the name of the University of Lausanne and naming as inventors M.A. Doucey, N. Guex, I. Crespo, I. Xenarios.

**COLLABORATION OFFER**

PACTT offers to grant exclusive or non exclusive license to industrial partners able to develop and commercialize the technology.

**PUBLICATION**

Guex N. et al, PLOS computational Biology, 2015

**REFERENCE**

IDF 30/14