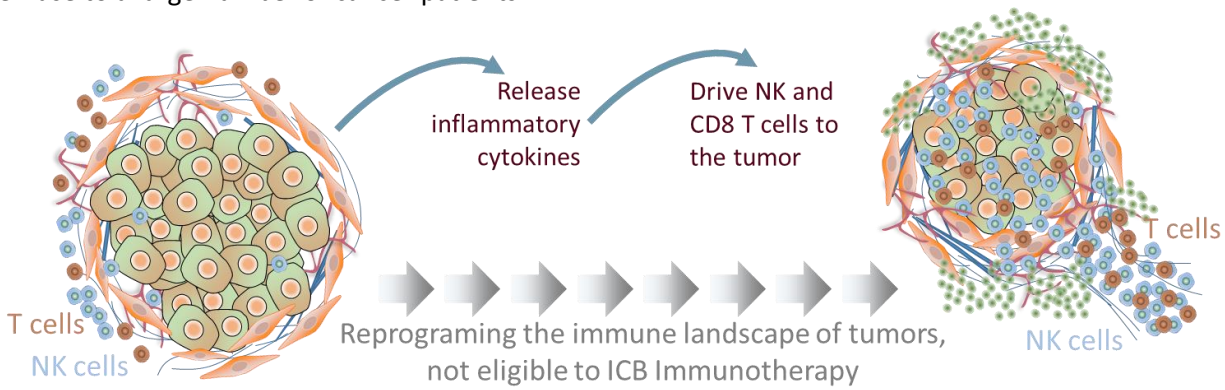
The **Tumor Immunotherapy and Microenvironment (TIME) group** led by Dr. Bassam Janji at **Luxembourg Institute of Health** has previously identified autophagy as a resistance mechanism protecting cancer cells from immune surveillance. **Sprint Bioscience**, a Swedish drug discovery company has developed a selective Vps34 inhibitor (SB02024) with an excellent pharmacological profile. Following discussion during the Annual TRANSAUTOPHAGY Conference, held in Warsaw Poland, October 2016, Bassam Janji and Sprint Bioscience started a collaboration bridging together their respective competencies in tumor immunology, autophagy and drug development to investigate the impact of Vps34 inhibition on the improvement of the therapeutic benefit of immunotherapy. Using several murine tumor models, Dr. Janji's group has shown that genetic ablation or pharmacological inhibition of Vps34 significantly reduces tumor growth. Such a decrease in tumor growth, associated with the establishment of an inflammatory signature in the tumor microenvironment, resulted in a dramatic change the immune landscape of tumors characterized by a massive infiltration of major cytotoxic immune cells to the tumor microenvironment. While only about 20% of cancer patients today benefit from immune-checkpoint blockade (ICB) therapies, the effects observed with SB02024 treatment will pave the way to set up an innovative therapeutic option to improve the clinical benefit of ICBs and extend their use to a large number of cancer patients.



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