



## AbolerIS Pharma announces a Journal of Clinical Investigation Publication, supporting development of anti-CD45RC antibody for autoimmune diseases

**Nantes, France, March 1, 2022** – AbolerIS Pharma announces today a publication in the 'Journal of Clinical Investigation' (JCI), one of the most prestigious medical journals. The study outlines key preclinical and translational data in support of using an anti-CD45RC antibody in the Autoimmune PolyEndocrinopathy Candidiasis Ectodermal Dystrophy syndrome (APECED or APS-1).

The work of Dr. Carole Guillonnet's team, together with AbolerIS Pharma and international collaborators, provides for the first time a detailed description of the clinical benefits and mechanisms of action when targeting CD45RC on T and B cells in an animal model of APECED syndrome. The findings are supportive of developing a monoclonal antibody (mAb) directed against CD45RC in the field of autoimmunity, including APECED syndrome. Targeting CD45RC restores the immune balance, and could be a game-changer in the management of T/B-cell mediated autoimmune diseases.

ABIS-45RC, a humanized anti-CD45RC IgG1 mAb, is currently under development by AbolerIS Pharma. The company aims to advance the asset to first-in-human trials early 2024.

The article entitled "Anti-CD45RC antibody immunotherapy prevents and treats experimental Autoimmune PolyEndocrinopathy Candidiasis Ectodermal Dystrophy syndrome" (<https://www.jci.org/articles/view/156507>) reports that in a rat model of APECED syndrome, an anti-CD45RC antibody is effective both as prevention and treatment of autoimmune manifestations such as alopecia and vitiligo, protects organs from autoimmune destruction and inhibits autoantibody development. The team discovered major mechanisms of action of the anti-CD45RC mAb intervention: depleting CD45RC<sup>high</sup> T cells, restoring the Treg/Teff balance and the altered Treg transcriptomic profile and inhibiting CD45RC<sup>high</sup> B cells. The effect of the anti-CD45RC mAb on B cells is a newly discovered mechanism of action of the antibody, not previously evidenced in the transplantation settings. This mechanism could be of critical relevance and will be investigated in human autoimmune diseases involving autoantibodies and B-cell responses. In human samples, the team demonstrated that CD45RC expression was dysregulated being significantly increased in APECED patients' peripheral blood T cells, that the Treg/Teff ratio was imbalanced and that lesioned organs from APECED patients were infiltrated by CD45RC<sup>high</sup> cells.

### **About AbolerIS Pharma** ([www.aboleris-pharma.com](http://www.aboleris-pharma.com))

Founded in November 2019 by Dr. Carole Guillonnet (Director of Research CNRS) and Dr. Ignacio Anegón (Director of Research INSERM), researchers in Unit 1064-CRTI INSERM University of Nantes, located at the Nantes University Hospital, together with Dr. François-Xavier Hubert, MD PhD. AbolerIS Pharma is developing two innovative strategies to regulate the immune system: an anti-CD45RC monoclonal antibody and the cytokine IL-34. In October 2020, AbolerIS Pharma raised €2.5 million from an investment consortium comprised of Turenne Santé/Sham Innovation Santé and Newton Biocapital and obtained an exclusive worldwide license by Ouest Valorisation, a French TTO.

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