

**KEYNOTE
SEMINAR SERIES**

Invité par Frédéric Checler :

Pr. Roger Nitsch

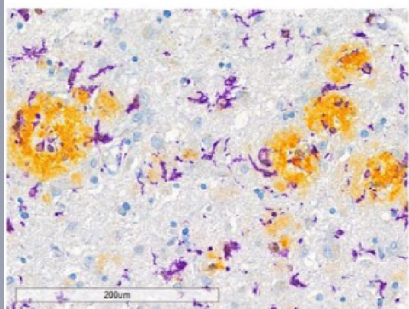
University of Zurich

Human monoclonal antibodies for the depletion of amyloid in the heart and the brain

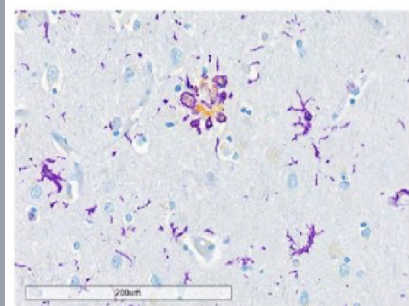
Amyloid depletion is becoming a clinical reality for disease modification in the therapy of proteinopathies including ATTR cardiomyopathy and beta-amyloidosis in Alzheimer's disease, with antibodies evolving as a therapeutic modality of choice. Designed to selectively bind amyloid and labeling it for degradation through macrophages, monocytes, and microglia, selective antibodies can substantially deplete amyloid from affected tissues. Guided by high-throughput analyses of human memory B-cell libraries in healthy elderly, we designed antibodies that selectively recognize multiple forms of amyloid in various tissues. The human-derived antibody ALXN2220, designed to deplete cardiac amyloid, is currently developed in a large multi-center phase 3 clinical trial for the treatment of ATTR cardiomyopathy. For the depletion of beta-amyloid Alzheimer's disease, we are developing NI101SQ, a next-generation, auto-admin version of aducanumab for subcutaneous self-injection. We are currently preparing NI101SQ for a phase 3 clinical trial to confirm initial signs of clinical benefit. Together, these developments are designed to establish safety, tolerability and clinical efficacy of depleting amyloid from affected tissues

Roger is the President and CEO of Neurimmune, a biopharmaceutical company developing human antibody-based therapeutics targeting misfolded proteins in human diseases. These include aducanumab for beta-amyloid depletion in Alzheimer's disease and ALXN2220 for ATTR-amyloid depletion in ATTR cardiomyopathy. A Professor emeritus at the University of Zurich, Roger holds an M.D. degree from University of Heidelberg, Germany. He habilitated in Neurobiochemistry at University of Heidelberg, and earned his post-doctoral qualifications at the Massachusetts Institute of Technology and the Mass General Hospital at Harvard Medical School. Roger is an elected member of the German Academy of Sciences Leopoldina, the recipient of numerous awards including the Potamkin Award for Research in Pick's, Alzheimer's and Related Diseases, and the Chairman's Award of Excellence from the American Federation for Aging Research. Roger serves as Executive Organizer of the International Conferences on Alzheimer's and Parkinson's Diseases, the AD/PD Meetings, and is a member of the Boards of Directors of Lonza, Integra Biosciences, NovaGo Therapeutics and the Neurimmune group

untreated AD



aducanumab-treated AD



**Vendredi 7 juin 2024 à 11h
en salle de conférences de l'IPMC**

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