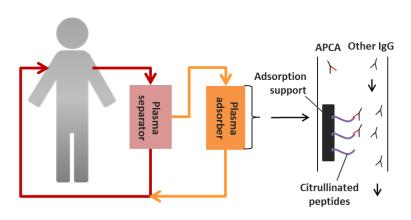
Specific peptides to filter out autoantibodies to citrullinated proteins (ACPA)

How to specifically remove from patient's body the autoantibodies implicated in rheumatoid arthitis (RA) with minimal side effects?

₹ DESCRIPTION*

- Strong rationale for involvement of fibrin/ACPA immune complexes in self-maintaining of joint inflammation
- Peptide constructs derived from human fibrin bearing the immunodominant epitopes targetted by ACPA
- Use of the constructs for therapeutic purposes including removal of ACPA
- Efficiency of the constructs for ACPA elimination validated by affinity chromatography with large series of sera showing various profiles of ACPA specificities



Example of therapeutic application: Apheresis using the citrullinated peptide constructs to filter out ACPA from the plasma of RA patients



□ COMPETITIVE ADVANTAGES

- Suitable for patients resistant to anti-TNF, anti-CD20 and other biotherapies
- High specificity towards APCA, avoiding removal of other immunoglobulins
- No side effects and contraindications

APPLICATIONS

 Therapeutic strategies for rheumatoid arthritis

O INTELLECTUAL PROPERTY

Patent in force

O DEVELOPMENT STAGE

Experimental proof of concept



- Proof of macrophage activation and TNF-alpha secretion induced by ACPA/citrullinated fibrin/rheumatoid factor immune complexes
- Immunodominant epitopes identified and peptide constructions available
- APCA elimination by affinity chromatography validated

Q LABORATORY

 Team « Autoantibodies to citrullinated proteins »



CONTACT

T. +33 (0)5 62 25 50 60 sante@toulouse-tech-transfer.com www.toulouse-tech-transfer.com