

**Docket #:** S22-086

# **Neutralizing nanobody against cross reactive T cells**

Stanford researchers have designed a nanobody platform to selectively block a key region on T cells found within arterial plaque, with the aim of preventing thrombotic complications and myocarditis. Across acute respiratory infections such as influenza and SARS-COVID-19, patients have been susceptible to serious complications, including acute thrombotic events and myocarditis. Notably, similar complications have been observed in certain individuals following vaccination against these viral infections. Prior research has shown that the presence of cross-reactive T cells that exhibit specificity towards arterial plaque could be a central contributing factor to these clinical phenomena. In an effort to address the limited preventative treatments, the researchers developed a method to selectively block regions on T cells responsible for binding self-epitopes. In doing so, plaque progression and the inflammatory process are reduced.

## **Applications**

- Prevention of thrombotic complications (e.g., heart attack)

## **Advantages**

- Greater precision by targeting T cells directly
- Slower plaque progression
- Lower inflammatory-related damage

## **Patents**

- Published Application: [WO2023173024](#)

## **Innovators**

- Patricia Nguyen
- Mark Davis
- Charles Chan

## **Licensing Contact**

### **Cheryl Cathey**

Senior Licensing and Strategic Alliance Manager

[Email](#)