

A TOLERIZING APC-TARGETED VACCIBODY VACCINE AMELIORATES DISEASE IN MOUSE MODELS OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS AND NON-OBESE DIABETES

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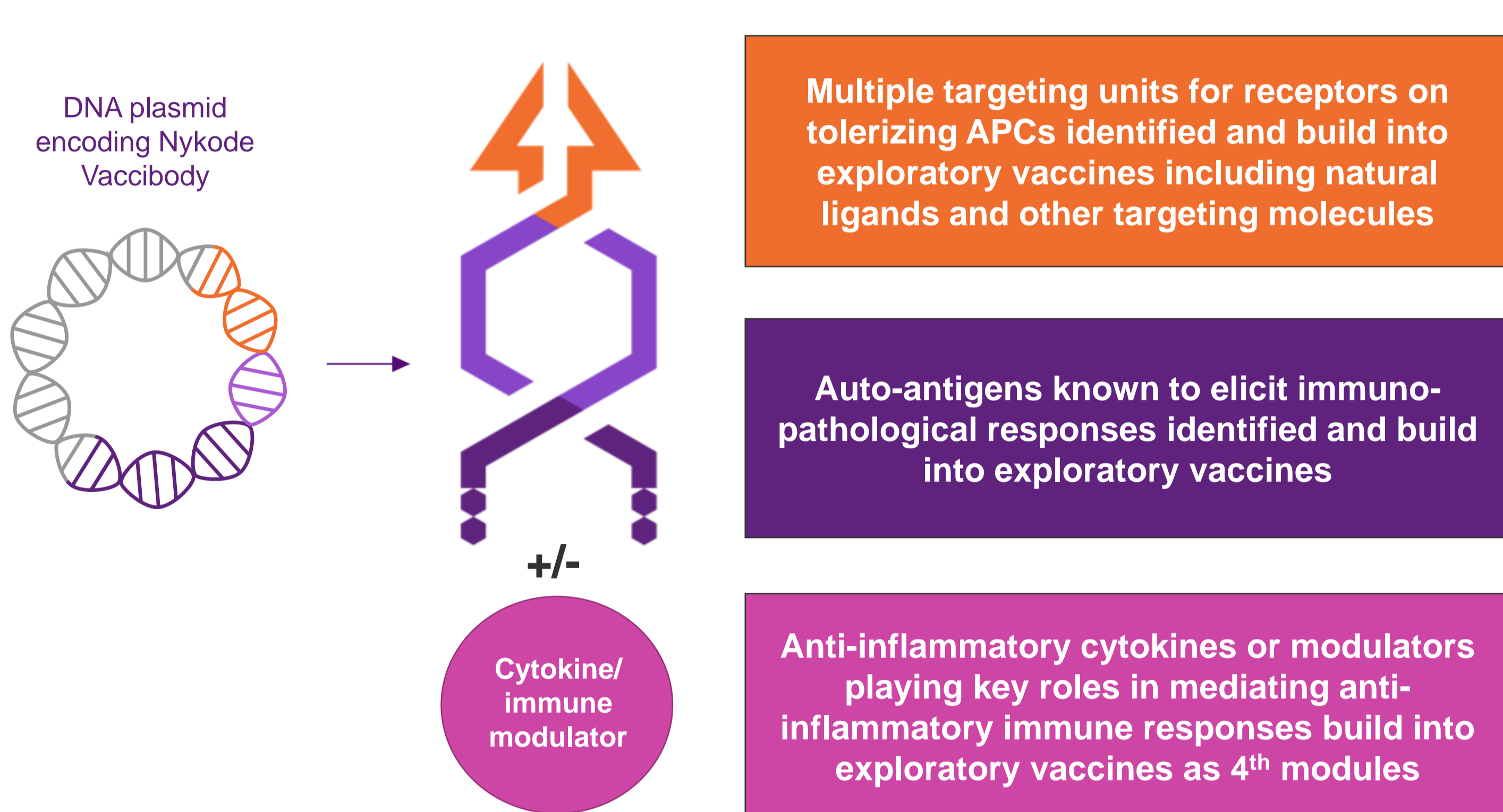
Introduction

Nykode Therapeutics has developed a platform that targets antigens directly to antigen presenting cells (APCs) using a modular dimeric protein format known as a Vaccibody™.

Here, Vaccibody™ vaccines were designed to deliver a tolerogenic response toward disease-associated antigens via specific APC targeting, administered as purified proteins or pDNA, either alone or co-expressed with immune-modulatory proteins (4th modules) in a multicistronic plasmid DNA.

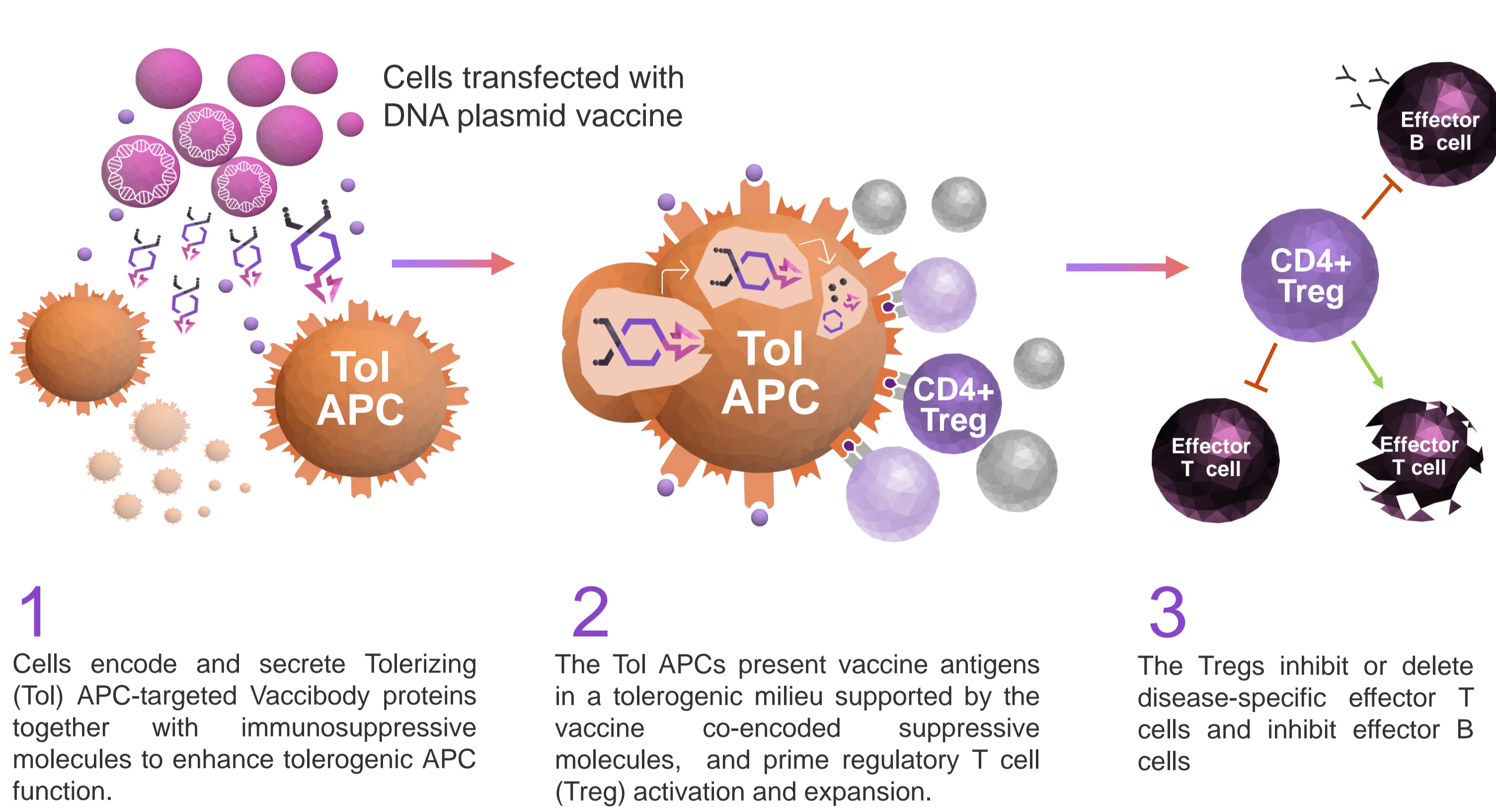
The ability of Vaccibody™ vaccines to suppress disease development and modulate immune responses in an APC-targeted and antigen-dependent manner was tested in the Experimental Autoimmune Encephalomyelitis (EAE) and Non-Obese Diabetic (NOD) mouse models.

NYKODE VACCIBODY MODULAR DESIGN



- Numerous exploratory vaccines build on above modules and evaluated experimentally
- Nykode's immunotherapy candidates may be delivered through DNA, mRNA, viral vectors or as rec. proteins
- Vaccibody™ vaccine is clinically validated: VB10.16 Therapeutic vaccine candidate for HPV16+ cancers with strong clinical data and broad potential

NYKODE: TOLERANCE INDUCTION MOA



CONCLUSION

These data demonstrate the flexibility of the Vaccibody™ vaccine platform and its ability to deliver potent tolerizing responses in two different models of autoimmune disease.

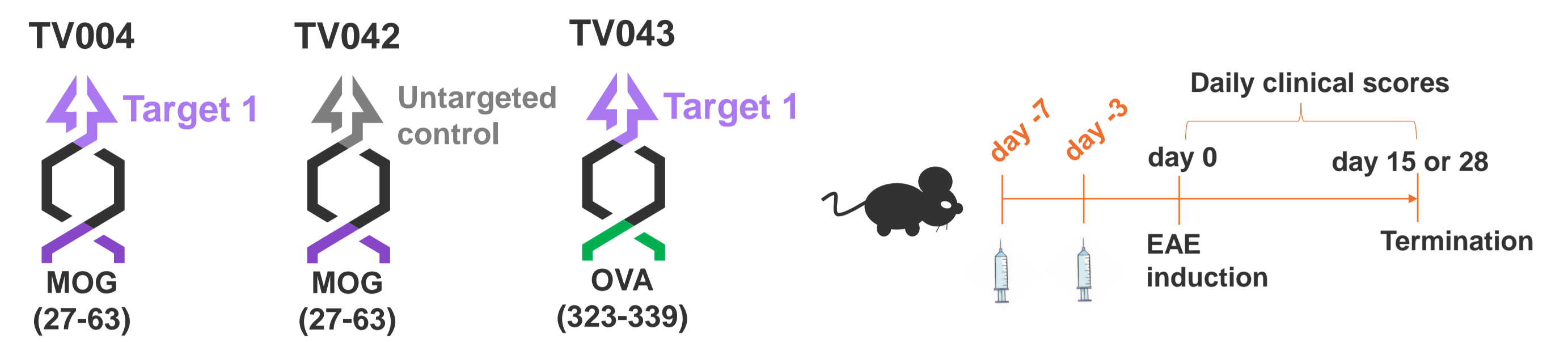
NEXT AND ONGOING

In-depth analysis aimed at further dissecting the immunological and molecular mechanisms behind the disease control mediated by Vaccibody™ vaccine, including:

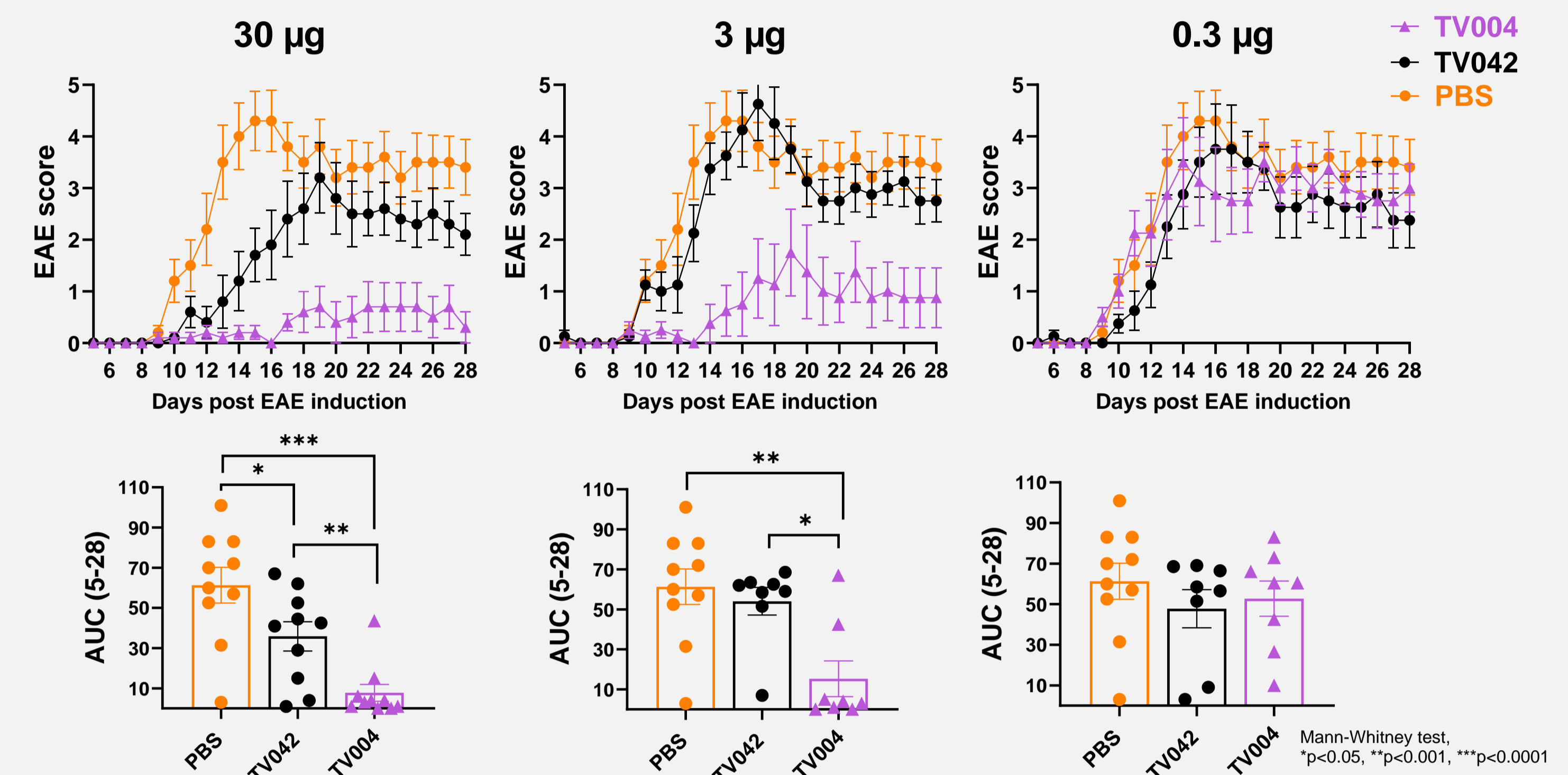
- Further evaluate potency and efficacy of later therapeutic delivery of Vaccibody™ in the EAE and NOD model
- Immunological mode of action with focus on Tregs
- Assess Vaccibody™ potential for inducing bystander suppression

EFFECT OF NYKODE VACCINE IN EAE MOUSE MODEL

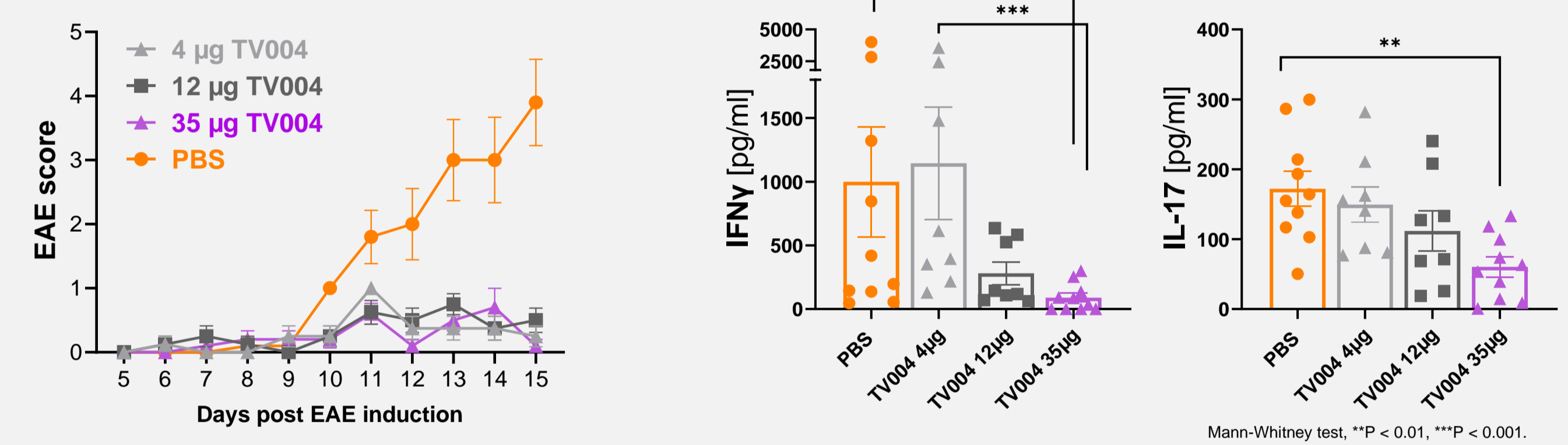
Recombinant Vaccibody™ in MOG(35-55)/CFA + PTX-induced EAE disease in C57BL/6 mice



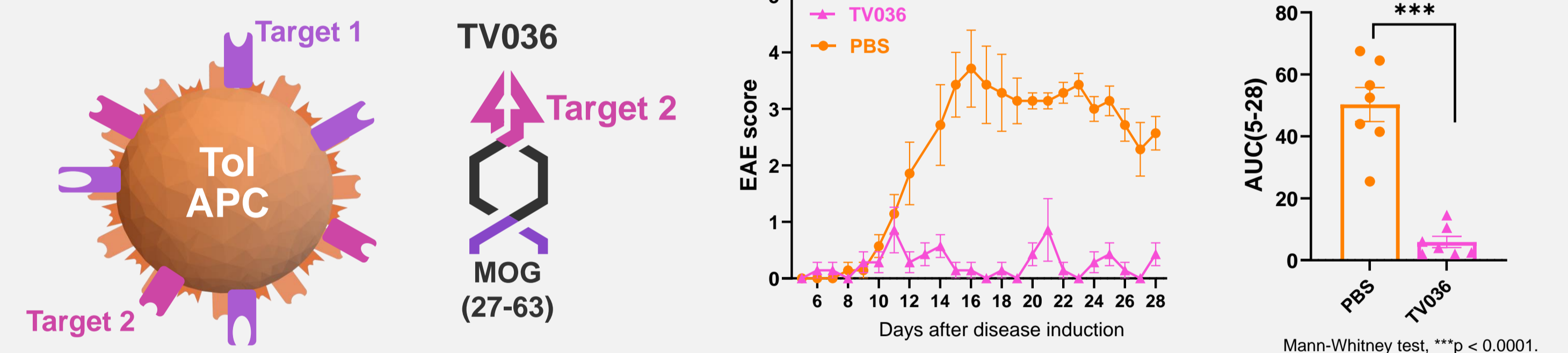
APC targeting by Vaccibody™ is required for effective disease protection in the EAE model



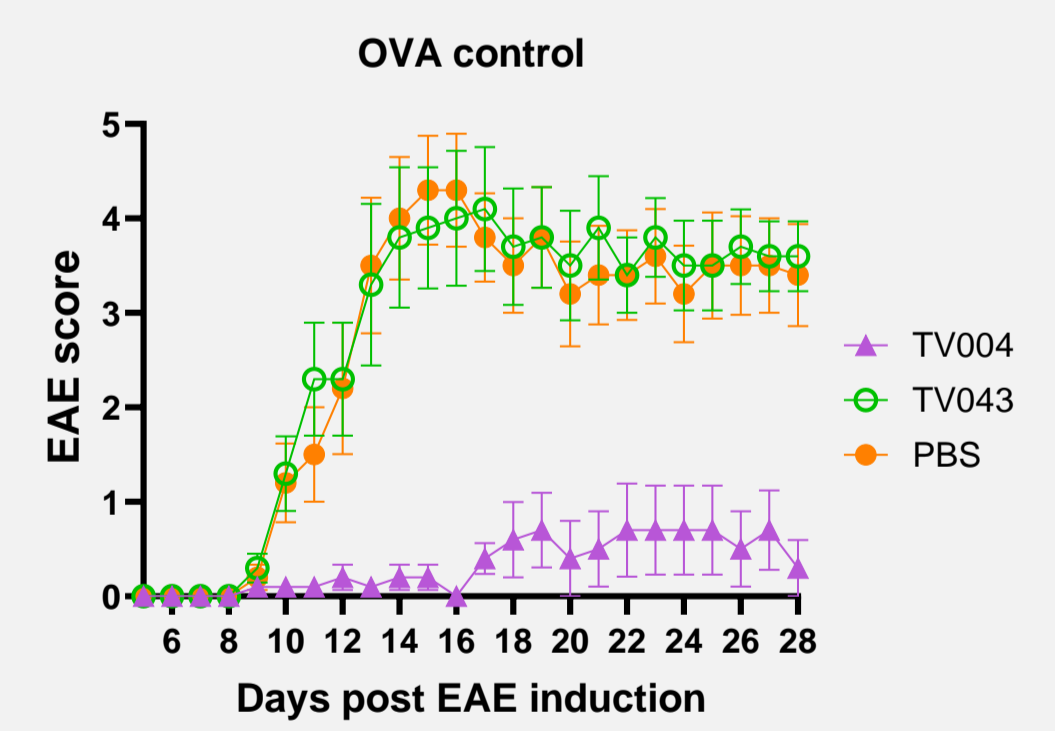
A low dose of Vaccibody™ prevents EAE with a dose-dependent decrease in disease-associated cytokines at peak of disease



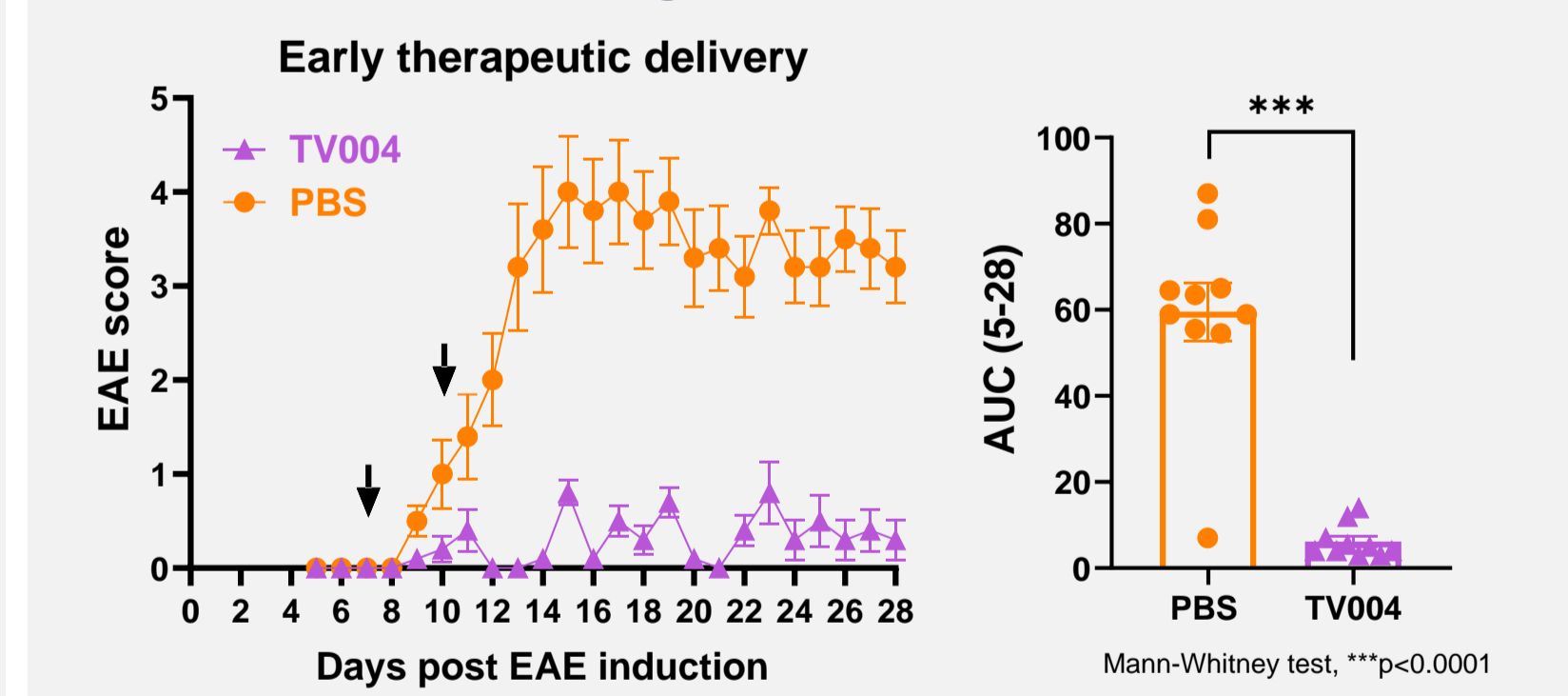
Disease prevention in the EAE model can also be achieved by targeting an alternative target on tolerizing APCs



Vaccibody™ delivers antigen-specific suppression of EAE



Vaccibody™ prevents EAE disease in an early therapeutic setting



EFFECT OF NYKODE VACCINE IN NOD MOUSE MODEL

DNA vaccination with Vaccibody™ targeting tolerizing APCs show durable prevention of diabetes in NOD mice

