



European
Crohn's and Colitis
Organisation



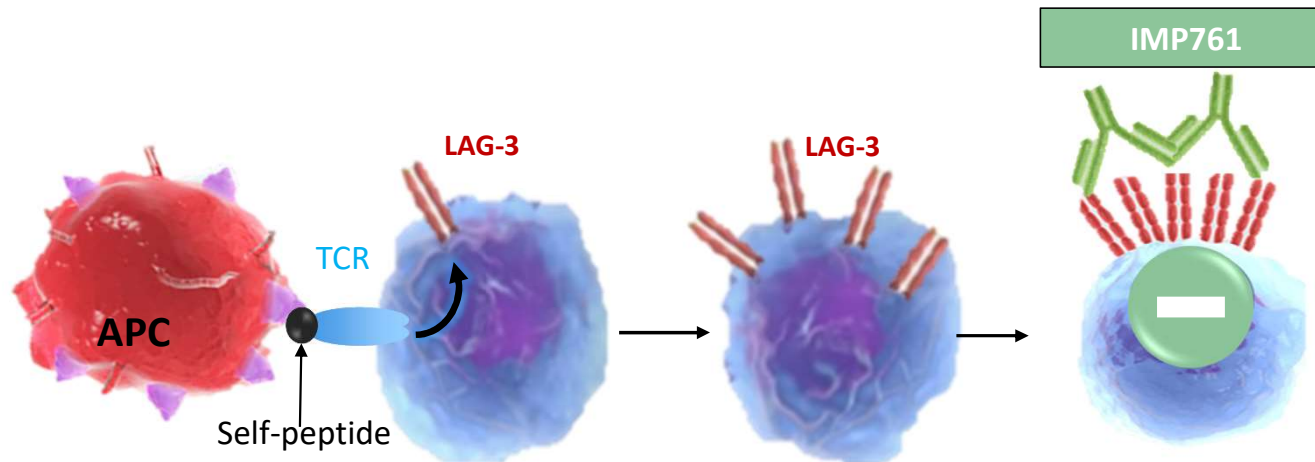
IMP761, a novel anti-LAG-3 agonist antibody for the treatment of auto-immune diseases

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IMP761 vs Auto-immune diseases: Mode of action

- **Current therapies:** fighting the symptoms by treating inflammation (e.g. anti-TNF)
- **Future direction:** fighting the root cause of auto-immune diseases (activation of anti-self T cells)

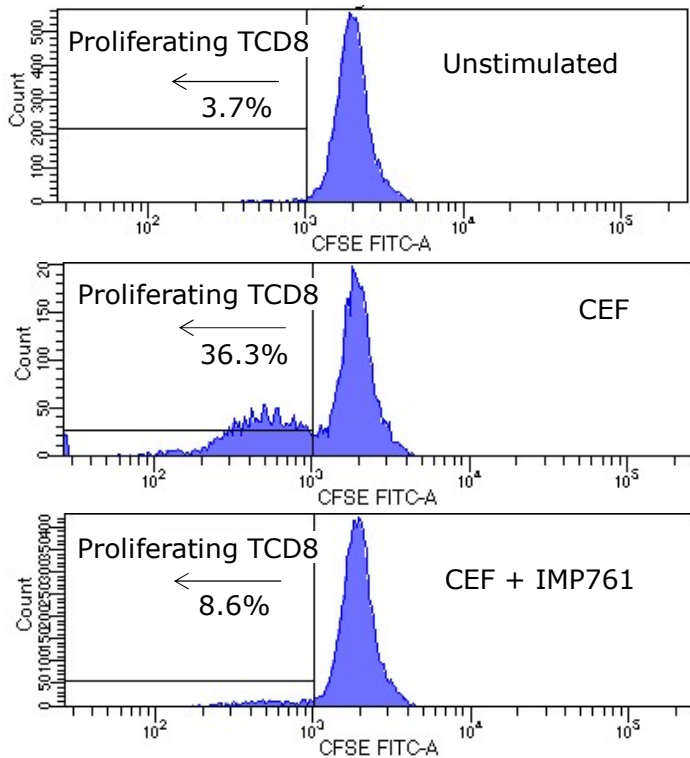


IMP761 (anti-LAG-3 agonist) :

- Down-regulates TCR signaling
- Blocks the activation of self-reactive memory T cells

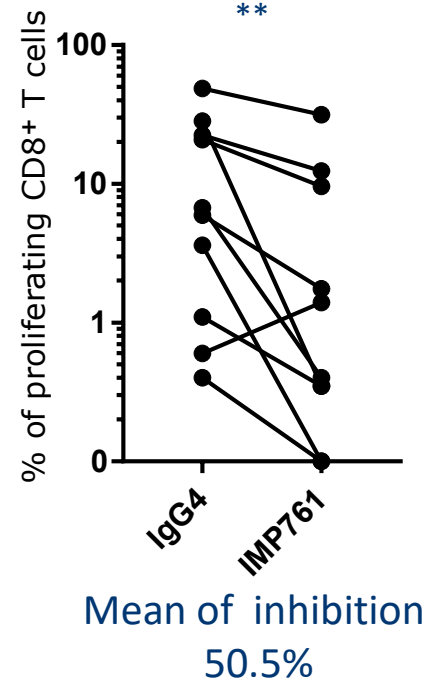


IMP761 Inhibits human T cell proliferation and activation *in vitro*

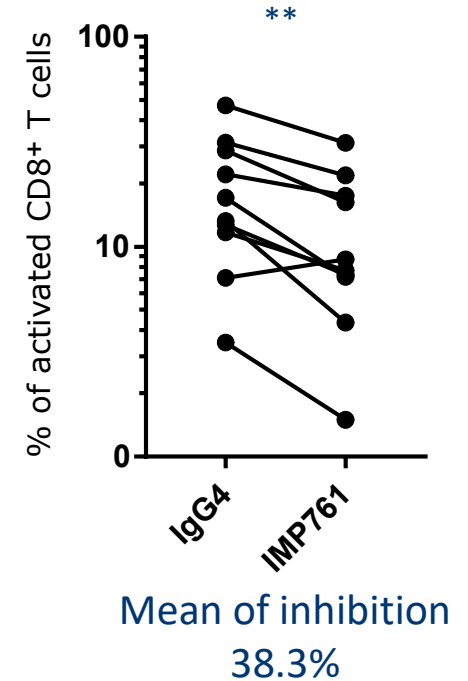


Proliferation to CEF (CMV + influenza + EBV peptides)

Proliferation of (CFSE^{low}) CD8⁺ T cells



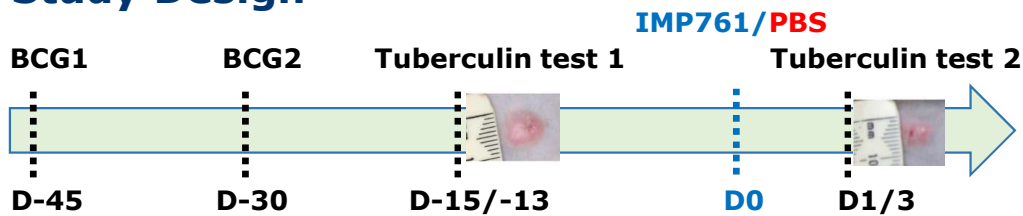
Activation of (CD25⁺) CD8⁺ T cells



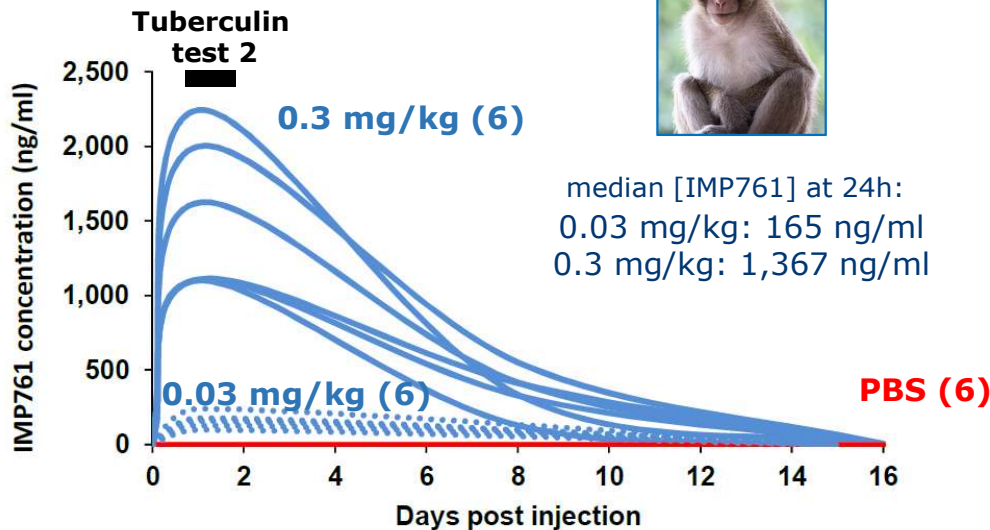


Delayed-type hypersensitivity model in cynomolgus monkey

Study Design

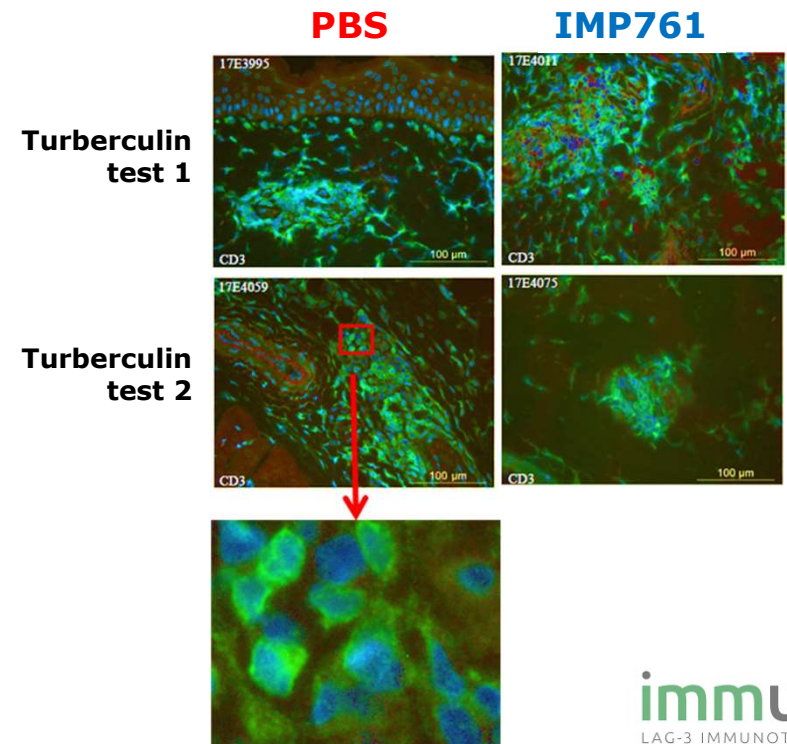


Pharmacokinetics



Immunofluorescence staining

Inflammatory T cells infiltration at Tuberculin test site before and after **IMP761/PBS** injection

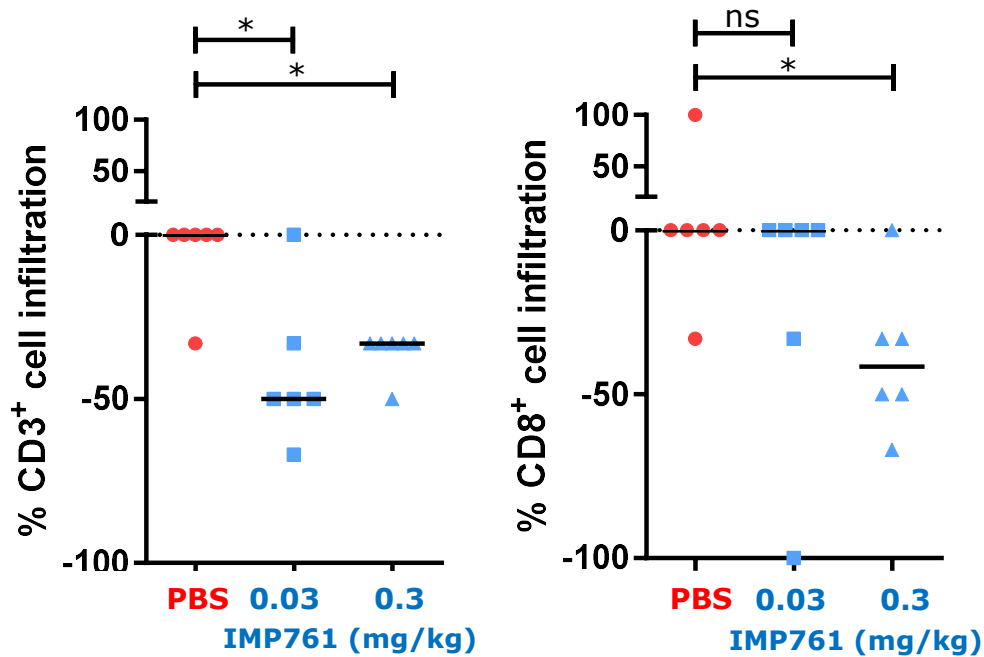




IMP761 inhibits inflammatory T cell infiltration

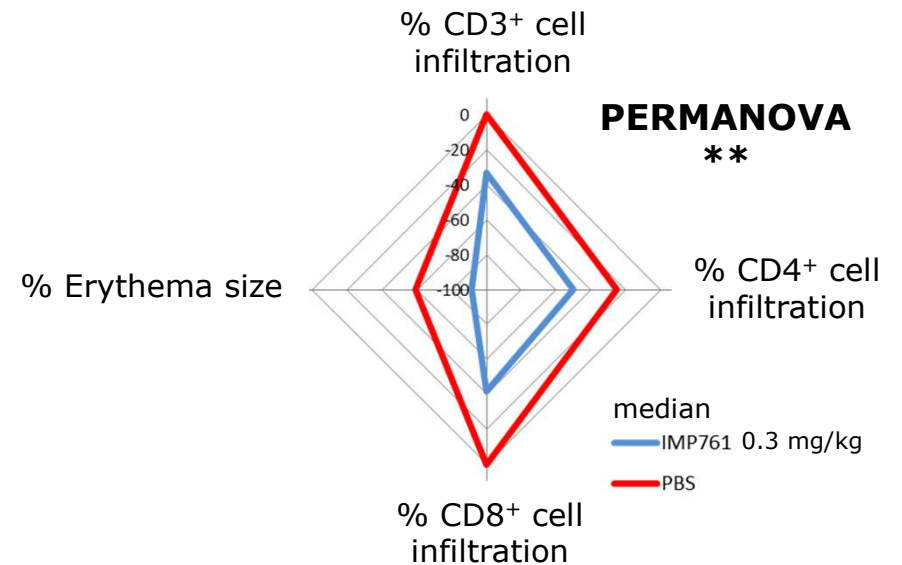
T cell infiltration

Inflammatory T cell infiltration at tuberculin site injection before compared to after treatment



IMP761 is able to inhibit significantly T cell infiltration of an antigen-specific intradermal reaction

Multivariate analysis





Conclusions

- **The Goal:** a more targeted therapeutic approach for AID
- **The Target:** the self-peptide-specific “exhausted” memory T cells harboring LAG-3
- **The Tool:** IMP761, an agonistic LAG-3-specific mAb down-modulating self-peptide-induced TCR signaling
- **The Evidence:**
 - *in vitro* inhibition of peptide-induced human T cell proliferation and activation
 - *in vivo* down-modulation of an antigen-induced inflammatory T cell infiltration in a new NHP model
- **The Status:** CHO cell line development for GMP manufacturing ongoing in order to progress to clinical development

IMP761

