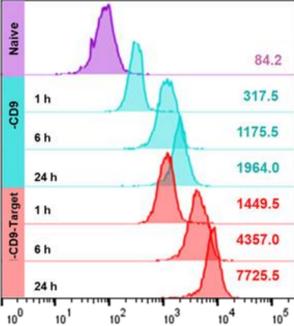
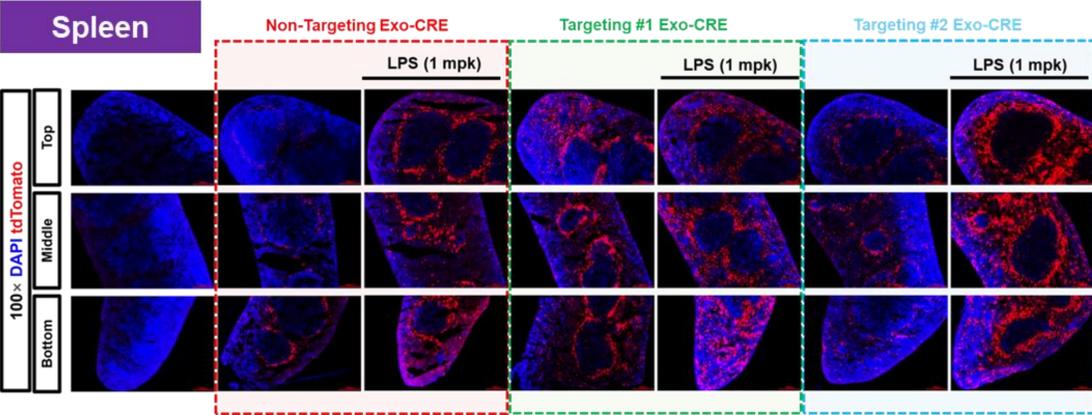


# Development of inflammatory cell-targeting exosome-based therapeutics for Ophthalmology via \*\*\*\* inhibition

ILIAS Biologics

<b>Disease Area</b>	<b><i>Ophthalmology</i></b>
<b>Product Type</b>	Exosome-based therapeutics
<b>Indication</b>	Confidential
<b>Target</b>	Monocyte, Neutrophils
<b>Mechanism of Action</b>	<ol style="list-style-type: none"> <li>1) Targeted intracellular delivery of protein inhibitor for cellular signaling</li> <li>2) Dose-Dependent reduction in the expression of pro-inflammatory cytokines and chemokines and subsequent infiltration of neutrophil and monocytes</li> </ol>
<b>Competitiveness</b>	<ol style="list-style-type: none"> <li>1) Inhibition of disease progression by direct suppression of immune cell activity</li> <li>2) Selective effects on inflammatory responses</li> <li>3) Biocompatible and safe profiles</li> </ol>
<b>Development Stage</b>	<b><i>Lead</i></b>
<b>Route of Administration</b>	Confidential
<b>Key Data</b>	<p>The ability of exosomes to target specific cell types is one the key advantages as next-generation drug delivery system (DDS). Modification of exosome transmembrane proteins can change the cellular tropisms of therapeutic exosomes. For targeted delivery of anti-inflammatory drugs to the inflammatory cells, Specifically, ILIAS has introduced inflammatory cell-targeting ligands on the surfaces of engineered exosomes, enhancing their uptake by human monocytic cells (HL-60, shown in the left panel) in vitro and improving the delivery of cyclic recombinase in reporter transgenic mice in vivo (spleen, shown in the right panel). This targeted delivery system is crucial for effectively delivering anti-inflammatory drugs to inflammatory cells, providing a powerful approach for treating various inflammatory conditions including inflammatory retinal degeneration.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p><b>HL-60</b></p>  </div> <div style="text-align: center;"> <p><b>Spleen</b></p>  </div> </div>
<b>IP</b>	27 Patents (Granted 15)