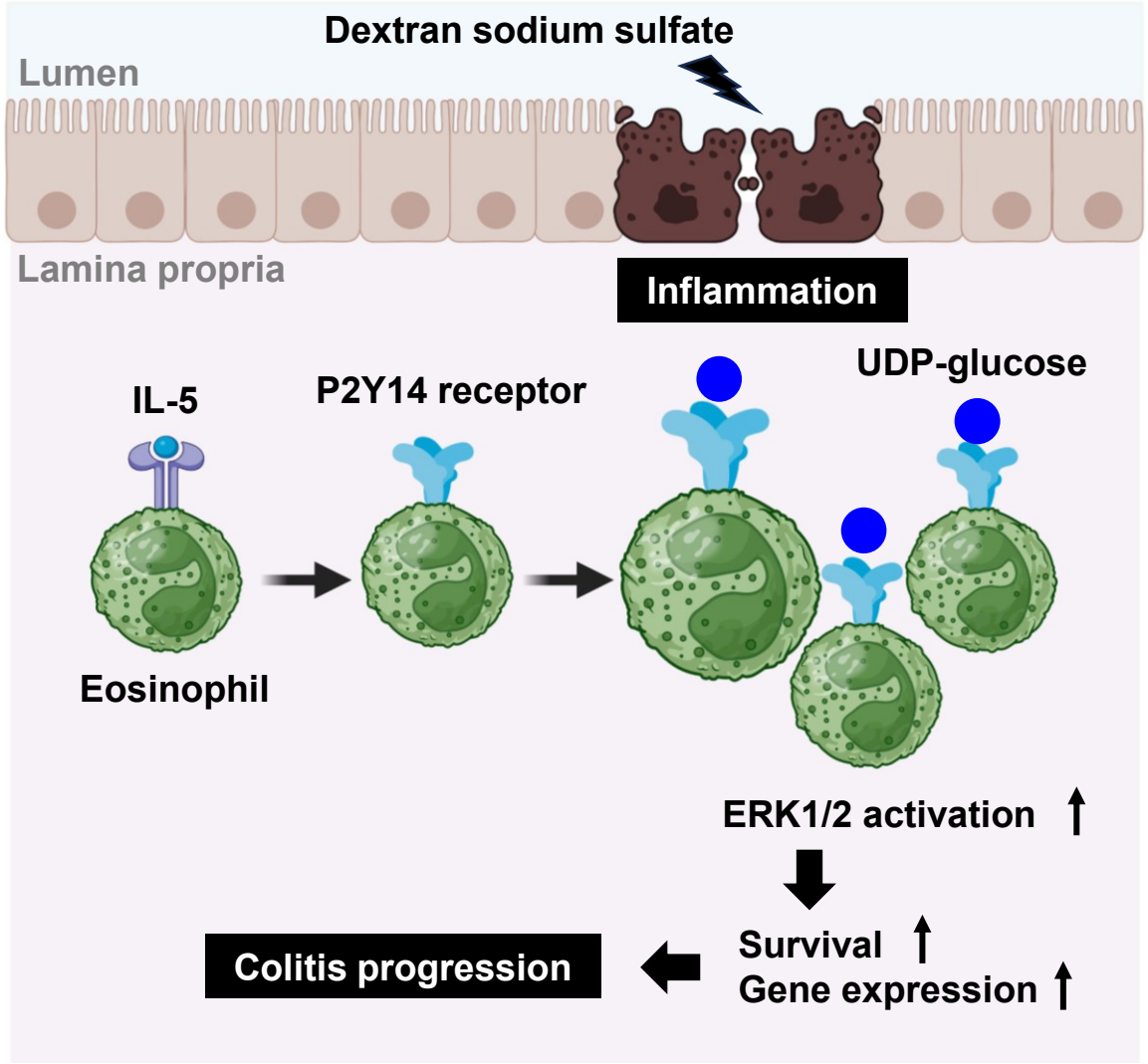

Graphic abstract: The expression of purinergic receptor P2Y14 is upregulated in colonic eosinophils in response to IL-5. The P2Y14 receptor ligand UDP-glucose is increased in the large intestinal tissue of mice during intestinal inflammation. UDP-glucose prolongs the lifespan of eosinophils and promoted gene transcription in the cells through P2Y14 receptor-mediated activation of ERK1/2 signaling and thereby aggravates large intestinal inflammation.