

Antolimab (AK002), an Anti-Siglec-8 Monoclonal Antibody, in Severe Allergic Conjunctivitis: Results from an Open-label Phase 1b Study (KRONOS)

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Nothing to disclose

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Nothing to disclose

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Nothing to disclose

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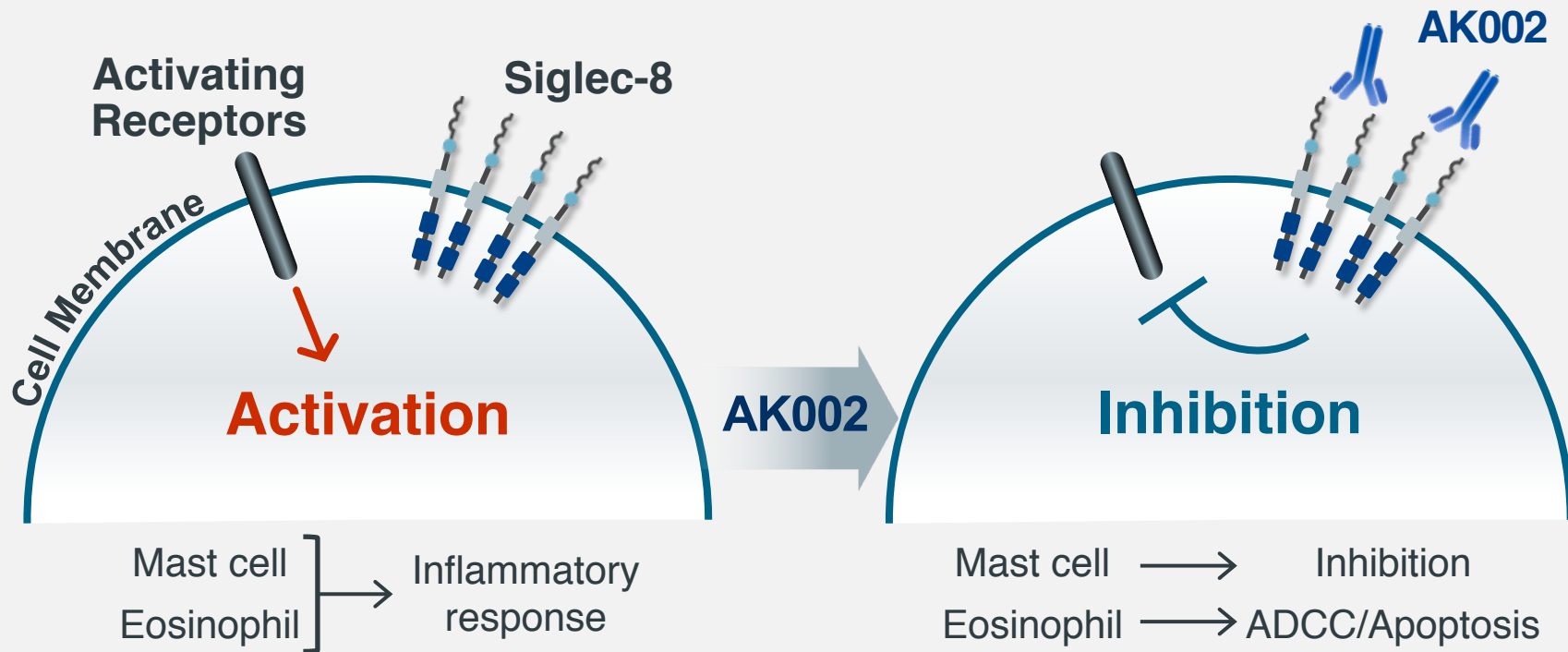
Stock or stock options: Eyegate Pharma

	CLINICAL FEATURES	IMPACT
Symptoms	Extreme Itching, Photophobia, Pain, Sensation of Foreign Body, Burning, Watering, Mucous Discharge	Poor Quality of Life
Signs	Redness (Hyperemia), Swelling (Chemosis, Periorbital Edema), Tarsal Papillae, Cicatricial Changes, Corneal Damage (Keratitis, Epithelial Erosion, Ulcers)	Vision Loss, Poor Quality of Life
Atopic Comorbidities	Common atopic comorbidities include Atopic Dermatitis, Asthma, and Rhinitis	High Systemic Disease Burden, Poor Quality of Life

	Perennial Allergic Conjunctivitis (PAC)	Vernal Keratoconjunctivitis (VKC)	Atopic Keratoconjunctivitis (AKC)
Mast Cells	+++	+++	++
Eosinophils	++	++	+++
T and B cells	+	++	+++
Fibroblasts		++	++

Leonardi A. "Immunopathogenesis of ocular allergy: a schematic approach to different clinical entities." *Curr Opin in Allergy Clinical Immunol.* 2007, 7:429-435;
 Tsubota K. "Detection by brush cytology of mast cells and eosinophils in allergic and vernal conjunctivitis." *Cornea.* 1991;10(6):525.

Mast cells and eosinophils are key effector cells in allergic conjunctivitis



AK002 depletes eosinophils and inhibits mast cells via Siglec-8 engagement

Screening

2 – 4 weeks

Pre-Treatment

- Daily ACS questionnaire completion
- Baseline OSS assessment
- Screening and baseline assessments

Treatment Period

6 monthly doses of AK002 (mg/kg)

0.3
mg/kg

1.0
mg/kg

1 or 3
mg/kg

1 or 3
mg/kg

1 or 3
mg/kg

1 or 3
mg/kg

Primary Objective – Safety and Tolerability:

- Vital signs, physical exam, safety labs, ADA, and collection of adverse events

Secondary Objectives:

- Daily **ACS** questionnaire (Patient reported-outcome)
 - Itching, photophobia, foreign body sensation, ocular pain, and lacrimation
- Monthly **OSS** (Investigator assessment)
 - Itching, redness, tearing, and chemosis
- Atopic comorbidities assessment:
 - Asthma, Atopic dermatitis, Rhinitis

Follow-Up

5 months

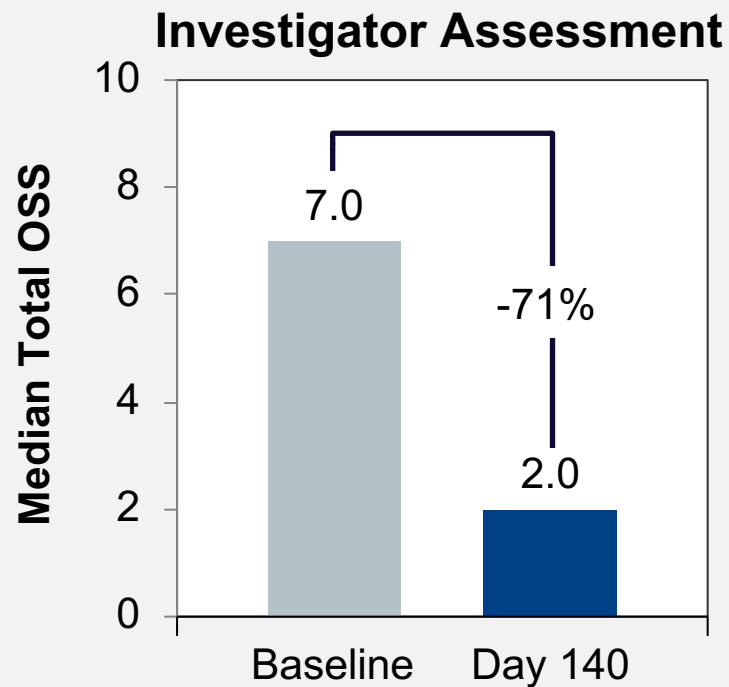
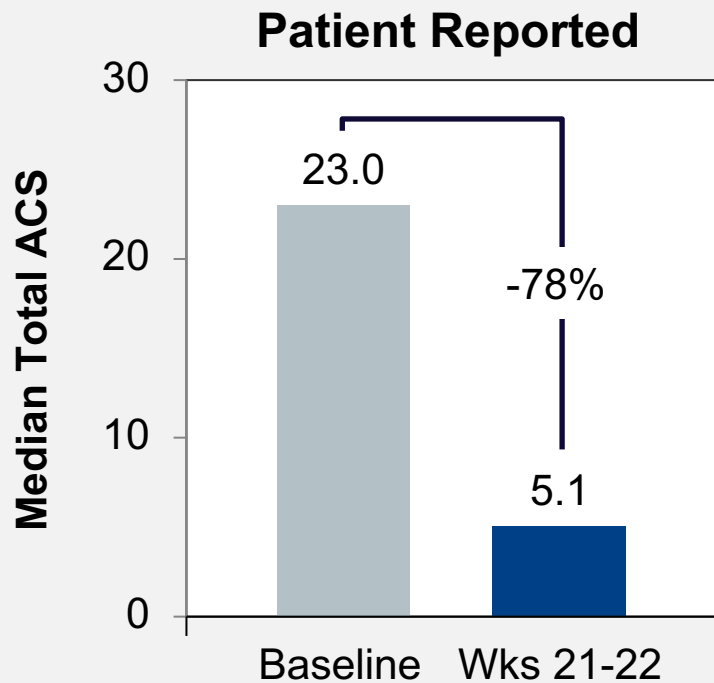
Post-Treatment

- Monthly visits
- Safety, tolerability, PD, and efficacy measures are assessed
- Time to relapse is captured for responders

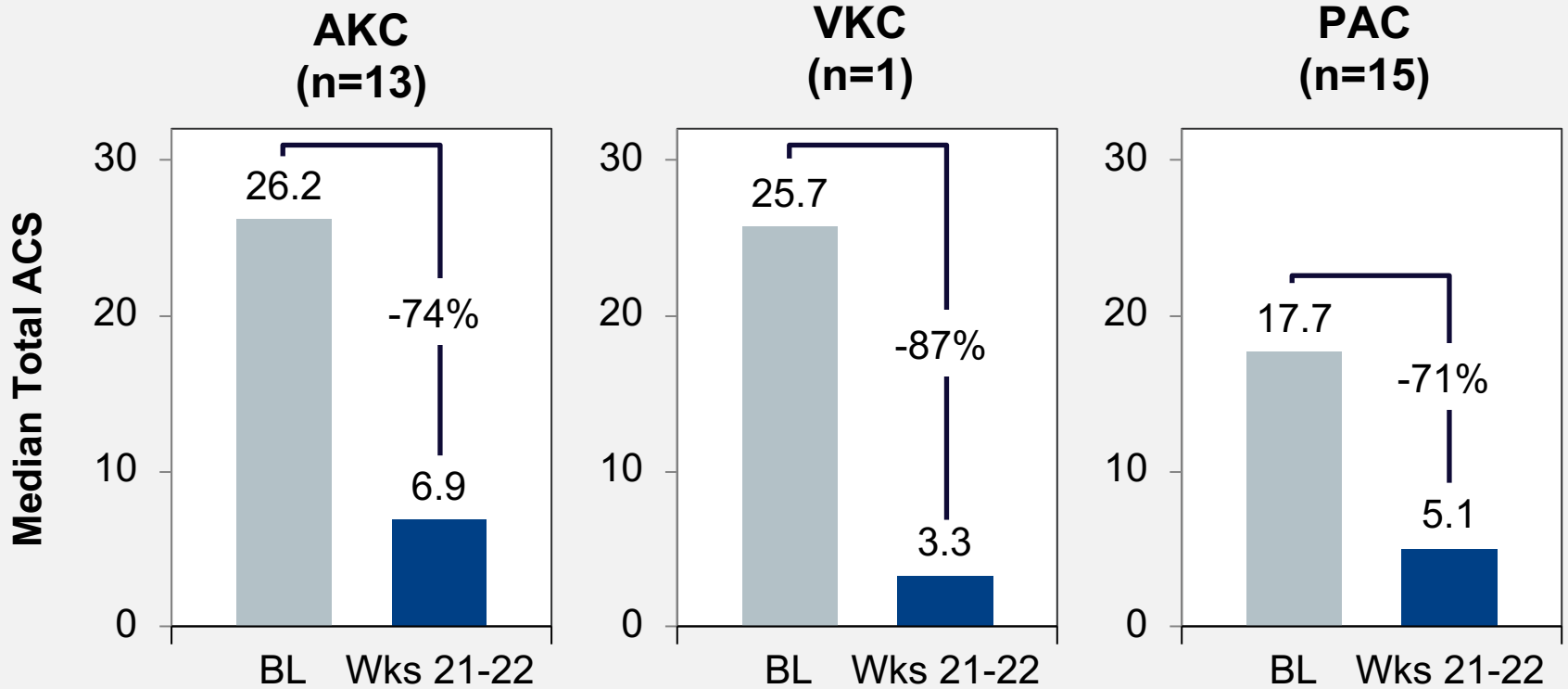
		AKC (N=13)	VKC (N=1)	PAC (N=16)	Total (N=30)
Age, Median (Range)		50 (23-72)	25	55 (29-79)	52 (23-79)
Female		38%	0	63%	50%
Age of AC Onset, Median (Range)		36 (7-72)	12	46 (19-69)	43 (7-72)
Years with AC, Median (Range)		6 (0-38)	13	4 (0-19)	6 (0-38)
Atopic Comorbidities ¹	≥1 Comorbidity	85%	100%	88%	87%
	≥2 Comorbidities	69%	100%	44%	57%
	Atopic Dermatitis	85%	0	44%	60%
	Asthma	54%	100%	25%	40%
	Rhinitis	54%	100%	75%	67%

(1) By medical history

All Subjects (n=29)



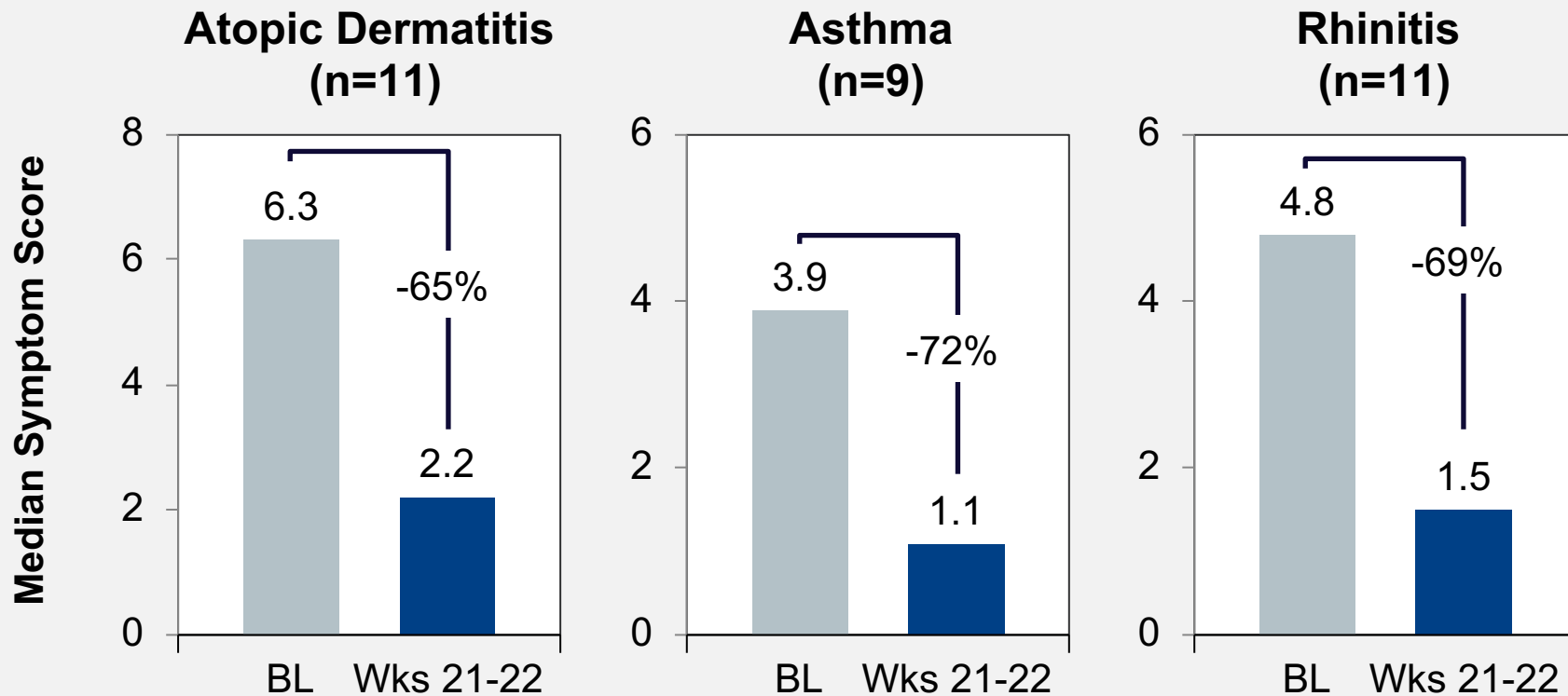
Improvements in allergic conjunctivitis signs & symptoms



Improvements in multiple forms of severe allergic conjunctivitis

	Symptom	Median % Δ from BL to Wk 21-22
Allergic Conjunctivitis Symptom (ACS) Patient Reported - Daily	Itching	-75%
	Light Sensitivity	-57%
	Eye Pain	-75%
	Foreign Body Sensation	-80%
	Watering Eyes	-76%
	Symptoms & Signs	Median % Δ from BL to Day 140
Ocular Symptom Score (OSS) Investigator Assessment - Monthly	Itching	-67%
	Redness	-67%
	Tearing	-50%
	Chemosis	-100%

Consistent improvements across all signs & symptoms measured



Substantial improvement in atopic comorbidities

- Generally very well-tolerated
- No drug-related Serious Adverse Events
- Most common adverse event was mild to moderate infusion-related reactions (IRRs; flushing, feeling of warmth, headache, nausea, or dizziness)
 - 16.7% IRRs rate on first infusion
 - 0.7% IRRs rate on subsequent infusions

- Mast cells and eosinophils are key effector cells in the pathogenesis and perpetuation of allergic conjunctivitis
- Antolimab (AK002) is a novel anti-Siglec-8 antibody that has demonstrated selective and rapid depletion of eosinophils and inhibition of mast cells in preclinical and clinical studies
- Antolimab demonstrated substantial and consistent symptomatic improvements in multiple forms of severe allergic conjunctivitis
- Clinical activity observed in comorbid atopic dermatitis, asthma, and rhinitis
- Antolimab was generally well-tolerated
- Antolimab may be a promising treatment for severe allergic conjunctivitis as well as atopic dermatitis, asthma and other atopic conditions