IOWA | Health and Human Services

Iowa PDL New Drug Review

Proprietary Name: Tryptyr®
Common Name: acoltremon
PDL Category: Ophthalmologic Agents

Pharmacology/Usage: Acoltremon, the active ingredient of Tryptyr®, is an agonist of transient receptor potential melastatin 8 (TRPM8) thermoreceptors. TRPM8 thermoreceptor stimulation has been shown to activate trigeminal nerve signaling leading to increased basal tear production. The exact mechanism of action for Tryptyr® for its approved indication is not known.

Indication: For the treatment of the signs and symptoms of dry eye disease.

There is no pregnancy category for this medication; however, the risk summary indicates that there are no adequate and well-controlled studies on use in pregnant women. Systemic exposure to acoltremon from ocular administration is negligible. The safety and efficacy of use in the pediatric population have not been established.

Dosage Form: Ophthalmic solution in a single-dose vial: 0.003% acoltremon.

Single-dose vials are to be used immediately after opening and can be used to dose both eyes; however, discard the single-dose vial immediately after use.

Recommended Dosage: Wash hands before use. Instill one drop in each eye BID (about 12 hours apart).

Tryptyr® can be used concomitantly with other topical ophthalmic eye drops. If more than one topical ophthalmic drug is being used, the drugs should be administered at least 5 minutes apart.

Contact lenses should be removed prior to administration of Tryptyr® and may be reinserted 15 minutes following administration.

Drug Interactions: There are no drug interactions listed with this product.

Box Warning: There is no box warning listed with this product.

Common Adverse Drug Reactions: *Listed % incidence for adverse drug reactions= reported % incidence for drug (Tryptyr®). There was no placebo data in the prescribing information to compare with.* The most frequently reported adverse event included instillation site pain (50%). Less than 1% of patients discontinued therapy due to burning or stinging sensation in the eyes.

Contraindications: There are no contraindications listed with this product.

Manufacturer: Alcon Laboratories, Inc.

Analysis: The efficacy of Tryptyr® for the treatment of dry eye disease (DED) was supported by two randomized, multicenter, double-masked, vehicle-controlled studies (COMET-2 and COMET-3) that included dry eye patients (N=931). Patients were randomized to Tryptyr® or vehicle for 90 days, and use of artificial tears was not allowed

during the studies. The mean age of included patients was 61 years (range 30-93), while most were female (74.8%). Enrollment criteria included signs (i.e., corneal fluorescein staining score [2-15] and anesthetized Schirmer tear test [2-9mm]) and symptoms (i.e., SANDE Score [≥50] and Ocular Discomfort Score [≥50]) of DED.

Tear film production was measured by unanesthetized Schirmer tear test assessed using a Schirmer strip (0-35mm). The average baseline unanesthetized Schirmer scores for Tryptyr® and vehicle treated patients was 6.2mm and 5.9mm in the COMET-2 study, and 6.8mm and 6.4mm in the COMET-3 study, respectively. Of the patients treated at day 14 (primary endpoint) with Tryptyr®, 42.6% achieved ≥10mm increase in Schirmer score from baseline in the COMET-2 study and 53.2% achieved a ≥10mm increase in Schirmer score from baseline at day 14 in the COMET-3 study, compared to 8.2% and 14.4% of vehicle-treated patients in the COMET-2 study and COMET-3 study, respectively. A statistically significant improvement in tear production favoring Tryptyr® ($p<0.01$) was observed in both studies. Results are presented in the table below, which was adapted from the prescribing information.

Tear Production				
	COMET-2		**COMET-3**	
	Tryptyr® (N=230)	**Vehicle (N=235)**	**Tryptyr® (N=232)**	**Vehicle (N=234)**
≥10mm increase in tear production at day 14	42.6%	8.2%	53.2%	14.4%
Difference	34.4%		38.8%	
p-value	<0.01		<0.01	
NNT *calculated by Optum Rx*	3		3	

Consistent results were observed at all timepoints through day 90.

Place in Therapy: Tryptyr® is a TRPM8 thermoreceptor agonist indicated for the treatment of the signs and symptoms of dry eye disease (DED). Its efficacy was assessed in two randomized, double-blind, vehicle-controlled studies that compared Tryptyr® with vehicle for 90 days. Results suggested that a statistically significant improvement in tear production favoring Tryptyr® ($p<0.01$) was observed in both studies (NNT 3 for both studies). Tryptyr® has a different mechanism of action than the currently available DED products, to increase tear production. Head-to-head studies with other active ingredients were not currently found.

Summary

There is no evidence to suggest that Tryptyr® is safer or more effective than other currently preferred, more cost-effective medications. It is therefore recommended that Tryptyr® remain non-preferred and require prior authorization and be available to those who are unable to tolerate or who have failed on preferred medications.

PDL Placement: ☐ **Preferred**
☒ **Non-Preferred**

References

[1] Tryptyr [package insert]. Fort Worth, TX: Alcon Laboratories, Inc; 2025.