Table 3. Treatments for Thyroid-Associated Ophthalmopathy.

Therapy	Mode of Action	Pros and Cons	Common Doses
Mild active disease			
Topical solutions			
Artificial tears	Maintain tear film	Rapid action, minimal side effects	
Glucocorticoids	Reduce inflammation	Rapid action, minimal side effects	
Avoidance of wind, light, dust, smoke	Reduces ocular surface desiccation, reduces irritation		
Elevation of head during sleep	Reduces orbital congestion		
Avoidance of eye cosmetics	Reduces irritation	Benefits not yet confirmed	
Selenium[59]	Uncertain	Benefits not yet confirmed	
Moderate or severe active disease			
Systemic glucocorticoids			
Oral	Reduce inflammation and orbital congestion	Hyperglycemia, hypertension, osteoporosis	Up to 100 mg of oral prednisone daily, followed by tapering of the dose[60]
Intravenous	Reduce inflammation and orbital congestion	Rapid onset of anti-inflammatory effect, fewer side effects than oral delivery, liver damage on rare occasions	Methylprednisolone, 500 mg/wk for 6 wk followed by 250 mg/wk for 6 wk[61,62]
Orbital irradiation	Reduces inflammation	Can induce retinopathy	2 Gy daily for 2 wk (20 Gy total)[63]
B-cell depletion*	Reduces autoreactive B cells	Very expensive; risks of infection, cancer, allergic reaction	Two 1000-mg doses of intravenous rituximab 2 wk apart
Emergency orbital decompression†	Reduces orbital volume		
Stable disease (inactive)			
Orbital decompression (fat removal)	Reduces orbital volume	Postoperative diplopia, pain	
Bony decompression of the lateral and medial walls	Reduces proptosis by enlarging orbital space	Postoperative diplopia, pain, sinus bleeding, cerebrospinal fluid leak	
Strabismus repair	Improves eye alignment, reduces diplopia		
Eyelid repair	Improves appearance, reduces lagophthalmos, and improves function		

* B-cell depletion with the use of rituximab is currently considered an experimental treatment for ophthalmopathy; rituximab is not approved by the Food and Drug Administration for this indication.
† Emergency orbital decompression is indicated for optic neuropathy or severe corneal exposure.