

# Immune Checkpoint Inhibitors

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**Management of Immune Checkpoint Inhibitor-Related Toxicities**

OCULAR ADVERSE EVENT(S)	ASSESSMENT/GRADING	MANAGEMENT BASED ON COLLABORATION WITH OPHTHALMOLOGY <sup>d</sup>		
Vision changes <sup>a</sup>	<ul style="list-style-type: none"> <li>Ophthalmology evaluation and management essential with vision testing to include:                             <ul style="list-style-type: none"> <li>Visual acuity in each eye</li> <li>Color vision</li> <li>Pupil size, shape, and reactivity</li> <li>Red reflex</li> <li>Fundoscopic examination</li> </ul> </li> <li>Evaluate for other common causes, including infectious disease<sup>b</sup></li> </ul>	<ul style="list-style-type: none"> <li>Hold immunotherapy to observe for worsening uveitis; if uveitis is stable on topical therapy, consider restarting immunotherapy in discussion with ophthalmology<sup>e</sup></li> <li>Treatment guided by ophthalmology to include ophthalmic ± systemic prednisone/methylprednisolone<sup>f,g</sup></li> <li>Hold immunotherapy<sup>e</sup></li> <li>Treatment guided by ophthalmology to include ophthalmic and systemic prednisone/methylprednisolone<sup>f,g</sup></li> </ul>		
			Uveitis	<ul style="list-style-type: none"> <li>Anterior or intermediate uveitis (G1 or G2)</li> </ul>
			<ul style="list-style-type: none"> <li>Posterior or Pan-uveitis (G3)</li> <li>20/200 vision (G4)</li> </ul>	
			Episcleritis <sup>c</sup>	<ul style="list-style-type: none"> <li>Mild (G1)</li> </ul>
			<ul style="list-style-type: none"> <li>20/40 vision or better (G2)</li> <li>Worse than 20/40 (G3)</li> <li>20/200 vision (G4)</li> </ul>	
			Scleritis	<ul style="list-style-type: none"> <li>Mild (G1)</li> </ul>
	<ul style="list-style-type: none"> <li>20/40 vision or better (G2)</li> <li>Worse than 20/40 (G3)</li> <li>20/200 vision (G4)</li> </ul>	<ul style="list-style-type: none"> <li>Continue immunotherapy</li> <li>Artificial tears</li> <li>Hold immunotherapy<sup>e</sup></li> <li>Treatment guided by ophthalmology to include ophthalmic NSAID or prednisolone or systemic prednisone/methylprednisolone<sup>f</sup></li> <li>Oral NSAIDs (eg, flurbiprofen, indomethacin)</li> <li>Hold immunotherapy<sup>e</sup></li> <li>Treatment guided by ophthalmology to include systemic prednisone/methylprednisolone<sup>f</sup></li> </ul>		

<sup>a</sup> Patients experiencing ocular AEs may present with any of the following symptoms: blurred/distorted vision, blind spots, change in color vision, photophobia, tenderness/pain, eyelid swelling, and proptosis. Both uveitis and episcleritis can be associated with eye redness but slit lamp examination is essential to rule out anterior chamber inflammation.

<sup>b</sup> Etiologies such as HLA-B27, syphilis, toxoplasmosis, and tuberculosis can cause uveitis and therefore should be evaluated for and ruled out prior to stopping ICI therapy and/or initiating other local therapies.

<sup>c</sup> Treat blepharitis per the episcleritis algorithm.

<sup>d</sup> See [Principles of Immunosuppression \(IMMUNO-A\)](#).

<sup>e</sup> See [Principles of Immunotherapy Rechallenge \(IMMUNO-C\)](#).

<sup>f</sup> Treat with 1 mg/kg/day, not to exceed 60 mg/day until symptoms improve to Grade ≤1, then taper over 4–6 weeks.

<sup>g</sup> If refractory to high-dose systemic steroids, consider adding infliximab, FDA-approved biosimilar, or antimetabolites (eg, methotrexate) for pan-uveitis.

Note: All recommendations are category 2A unless otherwise indicated.  
 Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

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