

CAR T-Cell Grading and Management: ICANS

ICANS Grading				
ICANS Parameter	Grade 1	Grade 2	Grade 3	Grade 4
ICE Score*	7 -9	3 – 6	0 – 2	0
Level of Consciousness	Awakens spontaneously	Awakens to voice	Awakens to tactile stimuli	Unarousable or difficult to arouse; stupor or coma
Seizure	--	--	< 5 minutes	≥ 5 minutes
Motor findings	--	--	--	Hemiparesis or paraparesis
Elevated ICP / Cerebral edema	--	--	Focal edema seen on imaging	Diffuse edema on imaging; posturing; Cushing's triad
Management				
ICANS Grade	Grade 1	Grade 2	Grade 3	Grade 4
Diagnostic	MRI, CT; neuro consultation; EEG; diagnostic LP to rule out infection			
Supportive	IV fluids, NPO; avoid CNS depressants; prophylactic levetiracetam; may consider low doses of lorazepam or haloperidol for agitation		Supportive care as in grade 1/2; ICU level care	
Anti-CAR T-cell Therapy	Dexamethasone 10 mg IV x1		Dexamethasone 10 mg IV x1; dexamethasone 20 mg IV x1 if seizure present	
ICANS: immune effector cell-associated neurotoxicity syndrome; ICE: immune effector cell-associated encephalopathy EEG: electroencephalogram; LP: lumbar puncture				