Retinoblastoma treatment at St. Jude Children’s Research Hospital focuses on:

SURVIVAL • OCULAR SALVAGE • VISION PRESERVATION

250 to 300 children in the U.S. annually are found to have retinoblastoma

40% heritable retinoblastoma
60% sporadic retinoblastoma

Clinical Presentation

- Leukocoria
- Strabismus
- Red or painful eye with glaucoma
- Orbital cellulitis
- Unilateral mydriasis
- Heterochromia iridis

A primary hurdle for chemotherapeutic treatment of retinoblastoma is drug penetration through the blood-ocular barrier. SJRET6 addresses the challenge by using a more effective agent and a novel drug-delivery approach to evaluate whether topotecan and carboplatin in upfront therapy improves ocular survival in participants with advanced bilateral retinoblastoma.

Novel chemotherapeutic agent for retinoblastoma treatment

St. Jude preclinical discoveries

- Substantial penetration of blood-ocular barrier
- Optimal activity against retinoblastoma when combined with carboplatin

Clinical significance

- Effective and feasible as upfront therapy for advanced bilateral disease in previous St. Jude clinical trial
- Minimizes long-term risk of secondary malignancies

Standard chemotherapeutic agent for retinoblastoma treatment

St. Jude preclinical discovery

- Effective penetration of the vitreous with local delivery

Clinical significance

- Improves drug concentration to the tumor
- Increases retinal and vitreous penetration
- Limits systemic toxicity

sjude.org/sjret6-referral