

## International Intraocular Retinoblastoma Classification

The IIRC was developed to predict outcome from combination chemotherapy and focal therapy. This system was developed by Dr. Linn Murphree, paediatric ocular oncologist at Children's Hospital of Los Angeles. More relevant to modern therapies than the preceding Reese-Ellsworth Classification, it became the standard staging system globally in the early 2000s, for tumours contained in the eye(s).

Ranging from A (lowest) to E (highest), the higher the stage, the lower the chance of controlling tumours, and thus preserving the eye with any useful vision. If both eyes are affected, each eye is staged independently of the other.

**Group A:** Small intraretinal tumours away from foveola and disc.

- All tumours are 3 mm or smaller in greatest dimension, confined to the retina *and*
- All tumours are located further than 3 mm from the foveola and 1.5 mm from the optic disc.

**Group B:** All remaining discrete tumours confined to the retina.

- All other tumours confined to the retina not in Group A.
- Tumour-associated subretinal fluid less than 3 mm from the tumour with no subretinal seeding.

**Group C:** Discrete local disease with minimal subretinal or vitreous seeding.

- Tumour(s) are discrete.
- Subretinal fluid, present or past, without seeding involving up to one-fourth of the retina.
- Local fine vitreous seeding may be present close to discrete tumour.
- Local subretinal seeding less than 3 mm (2 DD) from the tumour.

**Group D:** Diffuse disease with significant vitreous or subretinal seeding.

- Tumour(s) may be massive or diffuse.
- Subretinal fluid present or past without seeding, involving up to total retinal detachment.
- Diffuse or massive vitreous disease may include "greasy" seeds or avascular tumour masses.
- Diffuse subretinal seeding may include subretinal plaques or tumour nodules.

**Group E:** Presence of any one or more of these poor prognosis features.

- Tumour touching the lens.
- Tumour anterior to anterior vitreous face involving ciliary body or anterior segment.
- Diffuse infiltrating retinoblastoma.
- Neovascular glaucoma.
- Opaque media from hemorrhage.
- Tumour necrosis with aseptic orbital cellulites.
- Phthisis bulbi.