First Choice Treatment
For most ophthalmic oncologists, the first-line treatment is plaque radiotherapy whenever applicable, as this is technically straightforward and very effective. When choosing a Ru-106 Eye Applicator, it requires no assembly and just needs to be sterilized before use. Due to the long half-life of 373.6 days, Ru-106 Eye Applicators can be used multiple times over a one-year period.

Ergonomic Design
For more than 30 years, ophthalmologists have favored Ru-106 Eye Applicators due to their superior design. With a thickness of only 1 mm, they are very easy to handle. The applicators are available in 13 different types to provide a match to the individual tumor size and location. They are spherically shaped with a radius of 12 to 14 mm and have special eyelets that are sutured to the sclera.

Beneficial Beta Radiation
Because the beta radiation emitted by Ru-106/Rh-106 has a limited range, there is an advantageous steep dose fall-off. As a result, tumors with a height of up to 5 mm can be treated with a high dose, while sparing sensitive structures such as the optic disc or fovea.

Quality of Life
The conservation of central vision is the primary goal of Ru-106 Eye Applicator brachytherapy. If this is not possible, the treatment will aim to conserve peripheral vision or at least maintain the physical appearance of the eye, depending on the location of the tumor.

Source Strength and Depth Dose Rate
All plaques come with an extensive individual source certificate. The source strength is stated as the reference dose rate at the axis at a distance of 2 mm from the applicator surface. Beyond the reference dose rate, the respective certificate provides the absolute depth dose rate as well as a relative dose rate distribution at a 1 mm distance from the applicator surface. For production reasons, the actual value at the date of shipment can deviate from the reference dose rate (80 mGy/min) in the range of -10%/+60%. To apply for a handling license, users should refer to the user manual and quote the maximum activity.

Accessories
- Transparent or Silver Dummies help to optimize the positioning of the applicators. They are available for all types of Ru-106 Eye Applicators.
- The dedicated Safety and Sterilization Container supports proper handling.
- The diaphanoscope, a fiber-optic light source, illuminates the eyeball and makes the tumor visible as a dark spot or shadow on its surface. This supports the proper positioning of the plaque above the tumor.

“Made in Germany” Quality
Eckert & Ziegler BEBIG is the only global provider of Ru-106 Eye Applicators. Each single applicator is produced, tested, and certified in Berlin, Germany, in compliance with high quality standards. Of course, Eckert & Ziegler BEBIG also accepts the return of used applicators.
Ru-106 Eye Applicators

Retinoblastoma

Peripheral uveal/choroidal melanoma

Tumors close to the optical nerve

Ciliary body melanomas or melanomas close to the iris

13 types suggested for different tumor sites and sizes

Unique Plaque Design
The core of the Ru-106 Eye Applicator consists of a foil coated with Ru-106/Rh-106. This core is safely encapsulated within pure silver sheets. The silver backing acts as a radiation shield and absorbs approximately 95% of the beta radiation.

Safety and Sterilization Container
This specialized container combines an aluminum insert and an outer stainless steel shield for steam sterilization and the transportation of eye plaques within the clinic. Neither for the treatment room nor for the storage are any structural measures required.

The mentioned products are not available in all markets. Please contact your local Eckert & Ziegler BEBIG representative for more information.