Ru-106 Eye Applicators

Beta Radiation for Eye Tumor Treatment

Ru-106 Eye Applicators

Ophthalmic plaques with excellent safety profile and proven efficacy.

A well-established treatment of uveal melanoma and retinoblastoma which preserves the eye.

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 16 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 NIST Traceable Dosimetry

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. Its absolute calibration is traceable to the standard of the National Institute of Standards and Technology, USA (NIST). 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

- Reusable Acrylic 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.

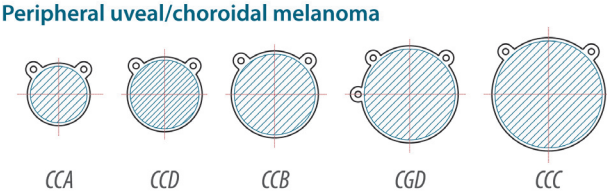
Eckert & Ziegler

Contributing to saving lives

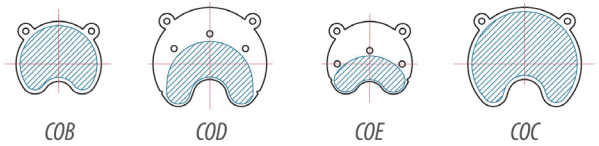
Ru-106 Eye Applicators

Retinoblastoma

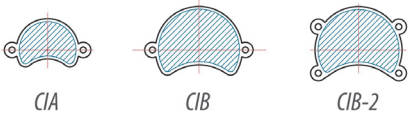
Peripheral uveal/choroidal melanoma



Tumors close to the optical nerve



Ciliary body melanomas or melanomas close to the iris



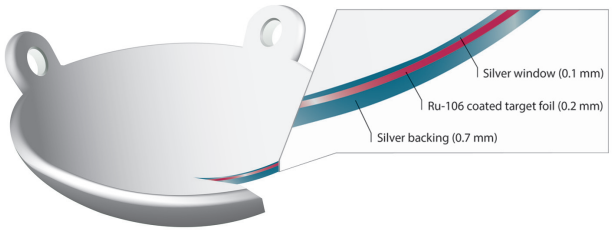
16 types suggested for different tumor sites and sizes

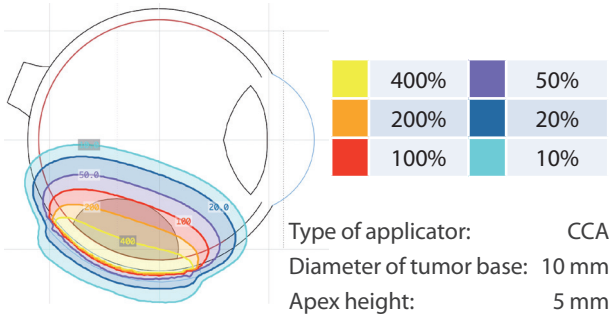
Type	Diam. in mm	Spherical radius in mm	Order code	Related Acrylic Dummy	Related Silver Dummy
CCZ	11.6	12	Ru6.A01	ACD.A21	AGD.A21
CCY	11.6	12	Ru6.A02	ACD.A22	AGD.A22
CCX	11.6	12	Ru6.A03	ACD.A23	AGD.A23
CXS	11.6[a]	12	Ru6.A033	ACD.A23	AGD.A23
CCA	15.3	12	Ru6.A04	ACD.A24	AGD.A24
CCD	17.9	12	Ru6.A05	ACD.A25	AGD.A25
CCB	20.2	12	Ru6.A06	ACD.A26	AGD.A26
CGD	22.3	13	Ru6.A07	ACD.A27	AGD.A27
CCC	24.8	13	Ru6.A08	ACD.A28	AGD.A28
COB	19.8	12	Ru6.A09	ACD.A29	AGD.A29
COD	25.4	14	Ru6.A10	ACD.A30	AGD.A30
COE	19.8	12	Ru6.A11	ACD.A31	AGD.A31
COC	25.4	14	Ru6.A12	ACD.A32	AGD.A32
CIA	15.3	12	Ru6.A13	ACD.A33	AGD.A33
CIB	20.2	12	Ru6.A14	ACD.A34	AGD.A34
CIB-2	20.2	12	Ru6.A15	ACD.A35	AGD.A35

[a] *Active diameter for CXS only: 8 mm*

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.





High dose at the base of the tumor while sparing the organs at risk

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. The validated sterilization parameters are as follows: temperature: 134 °C, pressure: 3 bar, and time: 3.5 min. The holding time can be extended up to 30 min.

Safety and Sterilization Container BEH.201

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

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