

Table: Table of Reported Results Using Radiation Therapy for Uveal Melanoma.

Authors	Radiation	Patients Reported	Mean Dose (Gy)	Mean follow-up (months)	Recurrence (%)	Secondary Enucleation (%)	Neovascular Glaucoma (%)	Metastasis (%)	Visual Acuity
COMS ¹⁻³	I-125	623	= or >85 Gy to 5 mm	60	10	13	N/A	10 (5year) 18 (10year)	57% > 20/200 at 3 years
Packer ⁴	I-125	64	91	64	7.8	17.2	10.9	15.6	45% better or 20/100 at 5.3 years
Fontanesi ⁵	I-125	144	79	46	2.3	9.7	5.5	5.5	41% better or 20/200 at 3.9 years
Lommatzsch ⁶	Ru-106	205	100	80	15	26	1.3	20	N/A
Char ³²	Helium	218	70	110	5	22	35	18.6 (5year) 23.6 (10year)	33% better or 20/200 at 10 years
Brovkina ⁷	Proton	63	100-125	34	19	25	N/A	6	N/A
Gragoudas ⁸	Proton	128	70	64	3	6	N/A	20.5	42% better than 20/200 at 5.3 years
Mean			87	65	9	17	11.7	13.7	variable
Finger et al ⁹	Pd-103	400	73	51	3%	3%	2.5%	6%	79% better or 20/200 at 5 years 69% better or 20/200 at 10 years

Gy=Gray, COMS=Collaborative Ocular Melanoma Study, N/A=data not available, I-125=Iodine-125, Ru-106 = Ruthenium-106

References

- Melia BM, Abramson DH, Albert DM, et al. Collaborative ocular melanoma study (COMS) randomized trial of I-125 brachytherapy for medium choroidal melanoma. I. Visual acuity after 3 years. COMS report No. 16. *Ophthalmology*. 2001;108:348-366.
- Jampol LM, Moy, CS, Murray TG, et al. The COMS randomized trial of iodine 125 brachytherapy for choroidal melanoma: IV. Local treatment failure and enucleation in the first 5 years after brachytherapy. COMS report no. 19. *Ophthalmology*. 2002 Dec;109(12):2197-206.
- Collaborative Ocular Melanoma Study Group. The COMS randomized trial of iodine 125 brachytherapy for choroidal melanoma: V. Twelve-year mortality rates and prognostic factors: COMS report No. 28. *Arch Ophthalmol*. 2006 Dec;124(12):1684-93.
- Packer S, Stoller S, Lesser ML, et al. Long-term results of iodine 125 irradiation of uveal melanoma. *Ophthalmology*. 1992;99:767-774.
- Fontanesi J, Meyer D, Xu S, et al. Treatment of choroidal melanoma with I-125 plaque. *Int J Radiat Oncol Biol Phys*. 1993;26:619-623.
- Lommatzsch PK. B-irradiation of choroidal melanoma with 106-Ru/106-Rh applicators: 16 years' experience. *Arch Ophthalmol*. 1983;101:713-717.
- Gragoudas ES, Seddon JM, Egan K, et al. Long-term results of proton beam irradiated uveal melanomas. *Ophthalmology*. 1987 Apr;94(4):349-53.
- Char DH, Kroll SM, Castro J. Ten-year follow up of helium ion therapy for uveal melanoma. *Am J Ophthalmol* 1988;125:81-9.
- Brovkina AF, Zarubei GD. Ciliochoroidal melanomas treated with a narrow medical proton beam. *Arch Ophthalmol* 1986;104:402-4.
- Finger PT, Chin KJ, Duvall BS for The Palladium-103 for Choroidal Melanoma Study Group. Palladium-103 Ophthalmic Plaque Radiation Therapy for Choroidal Melanoma: 400 Treated Patients. *Ophthalmology* 2009;116:790-6.