





Conjunctival Tumors (OSSN)

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Disclosure

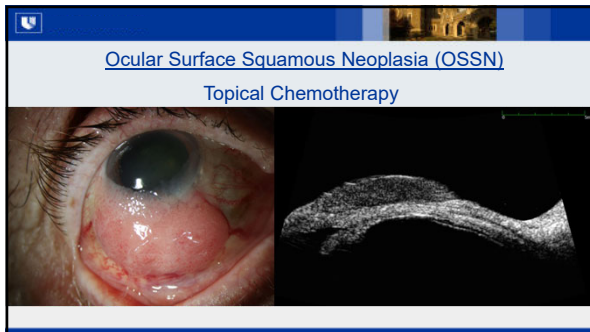
- Castle Biosciences (Advisory Board)
- Astra Zeneca (Advisory Board)
- Ideaya Biosciences (Consultant)

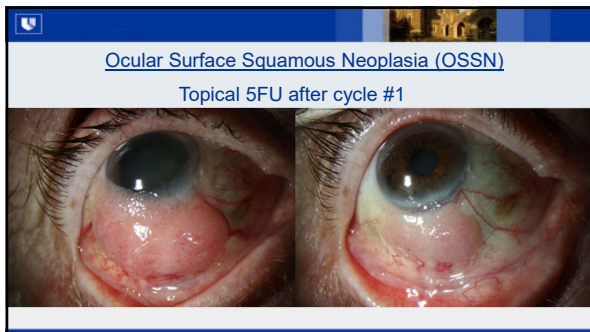


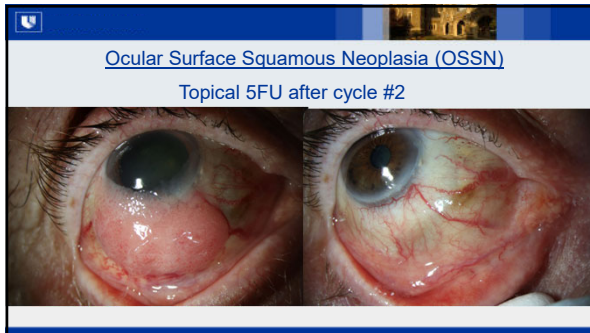
Ocular Surface Tumors

<u>Benign</u>	<u>Malignant</u>
<ul style="list-style-type: none">• Racial melanosis• Nevus• PAM without atypias• Papilloma• Others	<ul style="list-style-type: none">• PAM with atypias• Melanoma• Lymphoma• OSSN• Metastases• Others





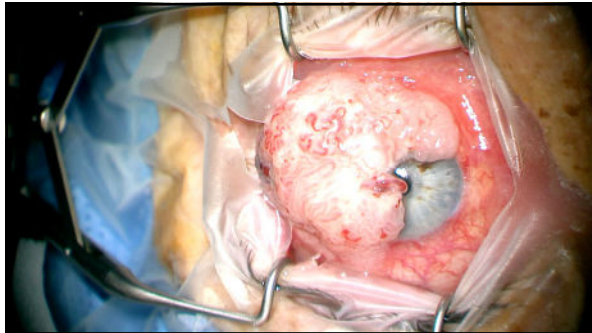




Ocular Surface Squamous Neoplasia (OSSN): Treatment

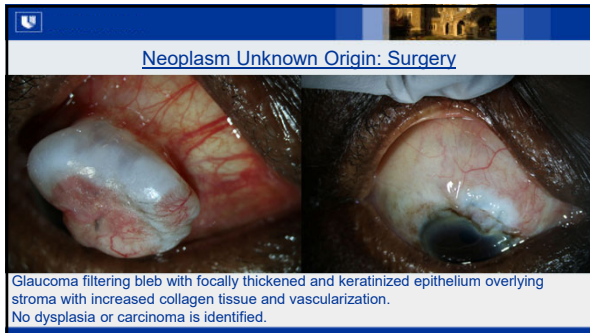
• 5 FU	• IFN alfa-2b	• MMC
• DNA synthesis (-)	• Low molecular glycoprotein from WBC	• Alkylating agent
• 1% QID, 7 days	• 1 MIU/ml, QID, daily	• 0.02-0.04% QID, 7 days
• Off 3 weeks	• Resolution: 80-100%	• Off 2-4 weeks
• Resolution: 80-100%	• Irritation, conjunctivitis	• Resolution: 75-100%
• Pain, hyperemia	• Well tolerated	• Pain, corneal toxicity
• Not expensive		• Stem cell deficiency

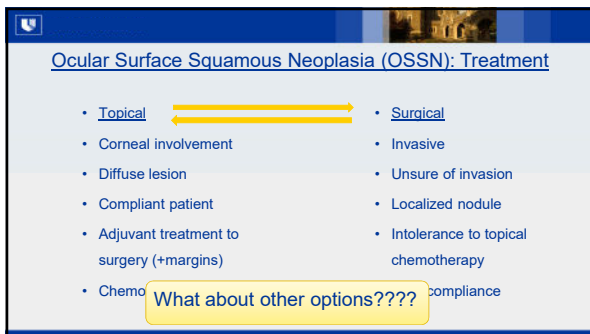




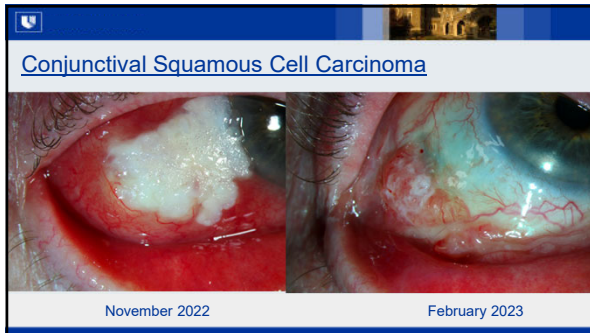


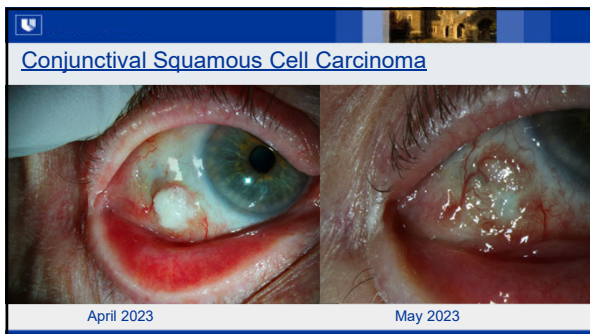














Brachytherapy 22 (2023) 416–427

BRACHYTHERAPY

First clinical implementation of Yttrium-90 Disc Brachytherapy after FDA clearance

Paul T. Finger^{1,2,3*}, Robert Stewart², Mark J. Rivard³, Raymond J. Beers², Jacob Kamen², Shyam Lama², Kimberly J. Chin^{1,2}, Kyle Mohney¹, Toby S. Welles³, Wolfgang A.G. Sauerwein³, Kenneth Rosenzweig²

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³Scientific Advisory Board and Employees of Liberty Vision Corporation, Portsmouth, NH

> J Appl Clin Med Phys. 2023 Sep 14:e14140. doi: 10.1002/acm2.14140. Online ahead of print.

Monte Carlo dosimetry of a novel Yttrium-90 disc source for episcleral brachytherapy

Xiangyun Chang ^{1 2}, Lyu Huang ², Jian Liu ³, Yijian Cao ^{1 2 4}, Jenghwa Chang ^{1 2 4}

Affiliations + expand
PMID: 37708092 DOI: 10.1002/acm2.14140

Yttrium 90 Brachytherapy (Y90): Anterior Tumors

LV Y-90 Disc

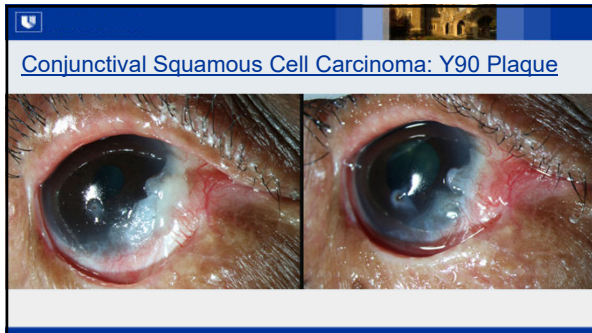
Wand With See-Through Polymer Shield

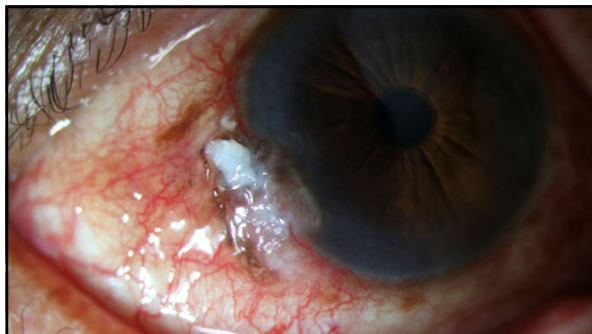
Light Weight Ergonomic Handle

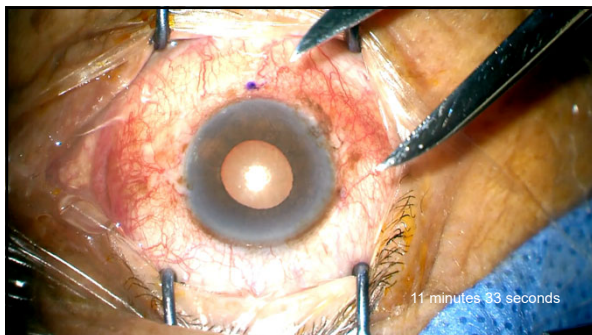
Conjunctival Squamous Cell Carcinoma

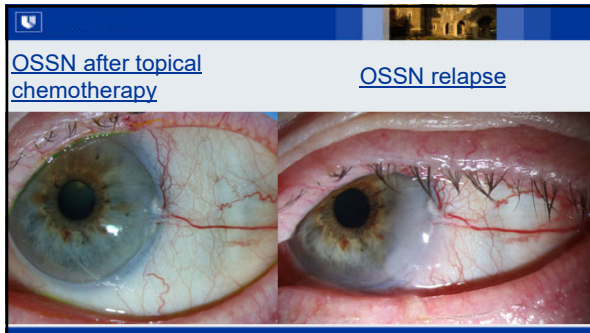
July 2023

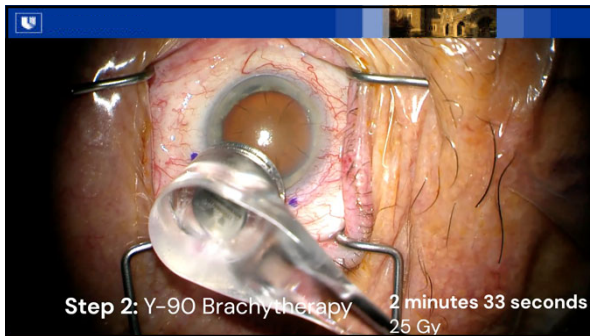
October 2023













Y-90 patient treatment time calculation - PRIMARY DISC				Y-90 patient POST PLAN calculation - PRIMARY DISC				
patient name	Planned date of surgery	Thursday, August 15, 2024	Planned time of surgery	8:00 AM	Actual date of surgery	Thursday, August 15, 2024	Actual time of surgery	8:00 AM
patient DOB	Planned date/time of surgery	8/15/23 12:00 PM	Actual date/time of surgery	8/15/23 12:00 PM	patient name	Female White	Actual date of surgery	8/15/23 12:00 PM
Reference oncologist	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	patient DOB	8/28/2023	Reference date and time	8/28/2023 12:00 AM
Actual surgeon	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	Reference oncologist	Reference date and time	Reference date and time	8/28/2023 12:00 AM
Surgeon	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM
Half life (days)	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM
Prescription dose (Gy)	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM
Reference date	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM
Reference time	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM
Prescription depth (mm)	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM
Depth correction factor	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM	Reference date and time	8/28/2023 12:00 AM
Actual surgery	Time closest to actual surgery time	8/15/23 12:00 PM	8/15/23 12:00 PM	8/15/23 12:00 PM	8/15/23 12:00 PM	8/15/23 12:00 PM	8/15/23 12:00 PM	8/15/23 12:00 PM
8/15/23 6:00 AM	6:00 AM	6:00 AM	6:00 AM	6:00 AM	6:00 AM	6:00 AM	6:00 AM	6:00 AM
8/15/23 7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM	7:00 AM
8/15/23 8:00 AM	8:00 AM	8:00 AM	8:00 AM	8:00 AM	8:00 AM	8:00 AM	8:00 AM	8:00 AM
8/15/23 9:00 AM	9:00 AM	9:00 AM	9:00 AM	9:00 AM	9:00 AM	9:00 AM	9:00 AM	9:00 AM
8/15/23 10:00 AM	10:00 AM	10:00 AM	10:00 AM	10:00 AM	10:00 AM	10:00 AM	10:00 AM	10:00 AM
8/15/23 11:00 AM	11:00 AM	11:00 AM	11:00 AM	11:00 AM	11:00 AM	11:00 AM	11:00 AM	11:00 AM
8/15/23 12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM
8/15/23 1:00 PM	1:00 PM	1:00 PM	1:00 PM	1:00 PM	1:00 PM	1:00 PM	1:00 PM	1:00 PM
8/15/23 2:00 PM	2:00 PM	2:00 PM	2:00 PM	2:00 PM	2:00 PM	2:00 PM	2:00 PM	2:00 PM
8/15/23 3:00 PM	3:00 PM	3:00 PM	3:00 PM	3:00 PM	3:00 PM	3:00 PM	3:00 PM	3:00 PM
8/15/23 4:00 PM	4:00 PM	4:00 PM	4:00 PM	4:00 PM	4:00 PM	4:00 PM	4:00 PM	4:00 PM
8/15/23 5:00 PM	5:00 PM	5:00 PM	5:00 PM	5:00 PM	5:00 PM	5:00 PM	5:00 PM	5:00 PM
8/15/23 6:00 PM	6:00 PM	6:00 PM	6:00 PM	6:00 PM	6:00 PM	6:00 PM	6:00 PM	6:00 PM

Summary: Y90 Plaque Brachytherapy

- Easy to use
- Fast delivery radiation (few minutes)
- Anterior and posterior tumors
- Longer follow up is needed (for results and adverse side effects)
- Tumors adjacent to optic nerve head might be a challenge
- Plaque size (6mm)
- Plaque size (10mm) hopefully this year

Thank you!!!