

Materials List for

# Retinal Pigment Epithelium Transplantation in a Non-human Primate Model for Degenerative Retinal Diseases

Ivan Seah<sup>\*1,2</sup>, Zengping Liu<sup>\*1,3,4</sup>, Daniel Soo Lin Wong<sup>1</sup>, Wendy Wong<sup>2</sup>, Graham E. Holder<sup>1,2,5</sup>, Veluchamy Amutha Barathi<sup>1,4,6</sup>, Gopal Lingam<sup>1,2,4</sup>, Xinyi Su<sup>1,2,3,4</sup>, Boris V. Stanzel<sup>1,7,8</sup>

<sup>1</sup>Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore <sup>2</sup>Department of Ophthalmology, National University Hospital, Singapore <sup>3</sup>Institute of Molecular and Cell Biology (IMCB), Agency for Science, Technology and Research (A\*STAR) <sup>4</sup>Singapore Eye Research Institute (SERI) <sup>5</sup>UCL Institute of Ophthalmology <sup>6</sup>Academic Clinical Program in Ophthalmology, Duke-NUS Medical School <sup>7</sup>Macula Center Saar, Eye Clinic Sulzbach, Knappschaft Hospital Saar <sup>8</sup>Department of Ophthalmology, University of Bonn

\* These authors contributed equally

## Corresponding Authors

**Xinyi Su**  
xinyi\_su@nuhs.edu.sg

**Boris V. Stanzel**  
boris.stanzel@kksaar.de

## Citation

Seah, I., Liu, Z., Soo Lin Wong, D., Wong, W., Holder, G.E., Amutha Barathi, V., Lingam, G., Su, X., Stanzel, B.V. Retinal Pigment Epithelium Transplantation in a Non-human Primate Model for Degenerative Retinal Diseases. *J. Vis. Exp.* (172), e62638, doi:10.3791/62638 (2021).

## Date Published

June 14, 2021

## DOI

10.3791/62638

## URL

jove.com/video/62638

## Materials

Name	Company	Catalog Number	Comments
1% Mydracyl (Tropicamide 1.0%) Sterile Ophthalmic preparation	Alcon	SIN 4715P	Surgical procedure
10% Neutral buffered formalin	Leica	3800598	Histology procedure
2.5% Mydrin (Phenylephrine hydrochloride) Ophthalmic solution	Alcon	No. 01785	Surgical procedure
25 G AWH Vivid Chandelier	Synergetics	56.54.25P	Surgical procedure
25 Ga Bi-Blade Vitreous Cutter Combined Wide-Field Stellaris Elite Pack	Bausch & Lomb	SE5525WVB	Surgical procedure
AMO ENDOSOL Balanced Salt Solution for ophthalmic irrigation	Abbott Medical Optics	15020	Surgical procedure
Apo-minocycline	Apotex Inc	2084104	Immunosuppression
AUROVISC - Hypromellose Ophthalmic Solution USP 2% w/v	Aurolab	TN 00002387	Surgical procedure
Autoclave MELAG, Vacuklav	MELAG	1131-B2300	Surgical procedure
Autostainer XL (ST5010)	Leica	2433	Histology procedure
Balanced Saline Solution	Beaver Visitec	581732	Surgical procedure
Cotton Bud	WINNER MEDICAL	1NA6-100	Surgical procedure
Diagnosys Espion E3 Console	Diagnosys	272	Ophthalmic imaging
Doxycycline	Yung Shin	MAL 19950403AEZ	Immunosuppression
Eosin Y	Merck Millipore	1.15935.0100	Histology procedure
ERG-Jet contact lens electrodes	Fabrinal	F-06	Ophthalmic imaging
Extendable PolyTip Cannula 25 G/38 G	MedOne	3247	Surgical procedure
FlexTip Brush (25 g) 1.5 mm	MedOne	3222	Surgical procedure

Fluoresceine 10% Faure	Curatis AG	5030376	Ophthalmic imaging
Gauze Swab	WINNER MEDICAL	1NP3275	Surgical procedure
Hamilton gas tight syringe 250 µL	Hamilton	81101	Surgical procedure
Heidelberg Spectralis HRA + OCT Computer System	Heidelberg Engineering	N.A.	Ophthalmic imaging
Hematoxylin Gill II	Merck Millipore	3801520	Histology procedure
Inverted microscope eclipse Ti-E main body (100-240V)	Nikon	33131	Histology procedure
Ketamin injection	Ceva	37711/58317	Surgical procedure
Lithium carbonate	Merck Millipore	1.05680.0250	Histology procedure
Monkey plasminogen	Molecular Innovations	SKU-CYPLG	Surgical procedure
Non-contact wide angled 128 degree fundus lens	C. Zeiss Medtech	Resight 700	Surgical procedure
Non-woven Ophthalmic Drape	Alcon	8065103120	Surgical procedure
Ophthalmic Corneal/Scleral V-Lance Knife 20 G	Alcon	8065912001	Surgical procedure
Paraffin Embedding Station	Leica	EG1150 H	Histology procedure
Paraplast High Melt Paraffin	Leica	39601095	Histology procedure
Phloxin B	Merck Millipore	1.15935.0025	Histology procedure
Prepowdered Surgical Gloves	MAXITEX	85-173-2/85-173-3/85-173-4	Surgical procedure
PRODINE Povidone-Iodine Solution BP	ICM PHARMA	PMLBLP20-01	Surgical procedure
Righton Slit Lamp Model MW50D (RAA133CB)	Righton-Oph	5200162	Ophthalmic imaging
Rotary microtome	Leica	RM2255	Histology procedure
Safil Polyglycolic acid, braided, coated, absorbable surgical suture 7/0	B.Braun	G1048711	Surgical procedure
SHINCORT I.M. INJ. Triamcinolone Acetonide 40 mg/mL	Yung Shin	SHI40 SGP-2610015-001	Surgical procedure
Single-Use Hypodermic Needle 21 G	B.Braun	4657527	Surgical procedure
Single-Use Hypodermic Needle 23 G	B.Braun	4657667	Surgical procedure
Sirolimus	Pfizer	SIN12034P	Immunosuppression
Stainless steel subdermal needle electrode	OcuScience	F-E2	Ophthalmic imaging
Stellaris Elite vision enhancement system	Bausch & Lomb	BL15455	Surgical procedure
Sterican Single Use Insulin Needles Long Bevel 27 G 12 mm	B.Braun	4665406	Surgical procedure
Sterican Single Use Insulin Needles Long Bevel 30 G 12 mm	B.Braun	4656300	Surgical procedure
Surgical gown + 2 Hand Towels	STERIL	APP10 00 01	Surgical procedure
Tegaderm Film	3M	1626W	Surgical procedure
TERUMO Syringe 1 cc/mL Luer SlipTip with needle 26 G	Teruma	SS-01S	Surgical procedure
TERUMO Syringe 3 cc/mL Luer LockTip	Teruma	SS-03L	Surgical procedure
TERUMO Syringe 5 cc/mL Luer LockTip	Teruma	SS-05L	Surgical procedure
TobraDex (Tobramycin, Dexamethasone) Sterile Ophthalmic Ointment	Alcon	No. 01577	Surgical procedure
Topcon Retinal Camera TRC-50DX	Topcon	948605	Ophthalmic imaging
Vidisc Gel	Bausch & Lomb	GB41789155517	Surgical procedure

---

Xylazil-20	Ilium	38653/50276	Surgical procedure
Zeiss Opmi Rescan 700	Carl Zeiss Meditec AG	7210	Surgical procedure