

Materials List for:

A Step by Step Protocol for Subretinal Surgery in Rabbits

Sami Al-Nawaiseh¹, Fabian Thielges¹, Zengping Liu^{1,2}, Claudine Strack¹, Ralf Brinken¹, Norbert Braun³, Marc Wolschendorf³, Arvydas Maminishkis⁵, Nicole Eter⁴, Boris V. Stanzel^{1,6}

¹Department of Ophthalmology, University of Bonn

²Department of Ophthalmology, National University of Singapore

³Geuder AG

⁴Department of Ophthalmology, University of Münster

⁵Section on Epithelial and Retinal Physiology and Disease, National Eye Institute/National Institutes of Health

⁶Surgical Retina Department, Singapore National Eye Centre

Correspondence to: Boris V. Stanzel at stanzel@uni-bonn.de

URL: <https://www.jove.com/video/53927>

DOI: [doi:10.3791/53927](https://doi.org/10.3791/53927)

Materials

Name	Company	Catalog Number	Comments
s30 ultrasonic cleaning unit	Elmasonic	100 4631	2.75 L
DE-23 autoclave	Systec	C 2209	23 L
Syringe	BD	300013 300995 301285 300294 300330	1 ml x3 2 ml x3 5 ml x1 10 ml x1 20 ml x1
Needle	BD	305196 305136	18 G x1 27 G x5
Scalpel	Feather	2975#20	blade#20 x3
Surgical drape	HARTMANN LOHMANN & RAUSCHER	277 502 25 440	60 x 40 cm x2 12 x 17 cm
Ocular sticks	LOHMANN & RAUSCHER	16 516	66 x 5 mm
Twister gauze sponges	HARTMANN	481 274	x2
Closure strips	HARTMANN	540 686	x4
Opmi Visu CS Microscope	Zeiss	N/a	incl. fundus imaging system BIOM II
Chandelier endoillumination	Geuder	G-S03503 + G-S03504	25 G incl. trocar
Light machine	Geuder	G-26033	Xenotron III
Vitrectomy machine	Geuder	G-60000	MegaTRON S4 S4/ HPS
Vitrector	Geuder	G-46301	MACH2 vitreous cutter 23 G
Venturi cassette	Geuder	G-60700	
Sideport-infusion cannula	Geuder	custom	23 G x1
3-0 silk suture	ETHICON	V546G	x1
Caliper	Geuder	G-19135	x2
Vannas scissors	Geuder	G-19777	x1
Sclerotomie blade	Ziemer	21-2301	1x 23 G 1x 20 G
7-0 silk suture	ETHICON	EH6162H	x1
Needle holder	Geuder	G-32320	x2
Iris forceps	Geuder	G-18910	x1
Colibri forceps	Geuder	G-18950	x1

Extendible subretinal injection needle	DORC	1270.EXT	41 G
VR scissor	Geuder	G-36542	25 G
Grieshaber forceps holder	Alcon	712.00.41	23 G
Curved scissor forceps tips	Alcon	723.52	23 G
Implant loading station	Dow Corning	3097358-1004	SYLGARD 184 Silicone Elastomer Kit
Blunt oval implant trephine	Geuder	custom-made	2.4 x 1.1 mm
Shooter dummy	Geuder	G-32227	x1
Shooter	Geuder	G-S03443	x1
Flute needle	DORC	1281.SD	20 G (Vacuum)
Manual microliter syringe	Hamilton	24535	100 µl
Tissue culture plates	Greiner bio-one	664160	100 x 20 mm
Spectralis Multi-Modality Imaging System	Heidelberg Engineering	N/a	Spectralis HRA + OCT
Drugs and solutions			
Name	Company	Active agent	Comments
Mucadont-IS	Merz Hygiene	virucidal instrument disinfectant	2 L
Mucocit T	Merz Hygiene	Aldehyde-free instrument disinfectant	2 L
Ketamin 10%	WDT	Ketamine	10 ml (100 mg/ml)
Domitor	Orion Pharma	Medetomidine hydrochloride	10 ml (1 mg/ml)
Antisedan	Orion Pharma	Atipamezole hydrochloride	10 ml (5 mg/ml)
Neosynephrin POS 10%	URSAPHARM	Phenylephrine HCl	10 ml
Mydriacyl	Alcon	Tropicamid	10 ml (5 mg/ml)
Methocel 2%	Omni Vision	hydroxypropyl methylcellulose	10 g
PURI CLEAR	ZEISS	Balance salt solution (BSS)	500 ml
Glucose 5%	B.Braun	Glucose 5% solution	100 ml
Heparin-Natrium-25,000	Ratiopharm	Heparin	5 ml (2,500 unit/ml)
Suprarenin	SANOFI	Epinephrine	1 ml (1 mg/ml)
Triamcinolone	University of Bonn pharmacy	preservative-free Triamcinolone	1 ml (40 mg/ml)
Isoptomax eye ointment	Alcon	dexamethasone 1 mg/g neomycin sulfate 3,500 IU/g polymyxin B sulfate 6,000 IU/g	10 ml
Betasisodona	Mundipharma	Povidon-Iod	30 ml (1 g/10 ml)
Optive	ALLERGAN	sodium carboxymethylcellulose glycerol	10 ml