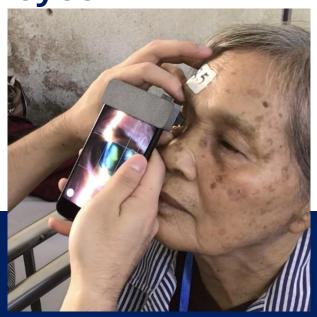


~Reduce 50% of World Blindness and save people's health through their eyes!!~







# OUI Inc. –Start up from KEIO UNIVERSITY

**BUSINESS** 



Shintaro Nakayama VP of Global Business





Eisuke Shimizu MD. PhD



**ENGINEER** 

Makoto Tanji PhD Chief Al Engineer



Development

Manager



Naoto Hamashima Naoko Sato

Strategy

Manager



Keio MFD



Nippon MED



Yo Nakahara Yui Kojima Ryota Yokoiwa Toshiki Ishikawa

Chief

Sub-chief

Hardware Engineer

Al Engineer

etc、Sales · PR · Viet Nam · East Africa 10-15 member Intern (Med student Keio · Nippon Med · Keio · Hitotsubashi)



# Reduce 50% of World Blindness and save people's health through their eyes!!







# A smartphone attach Slit-lamp device\*

Which have equal function to conventional ophthalmology medical device









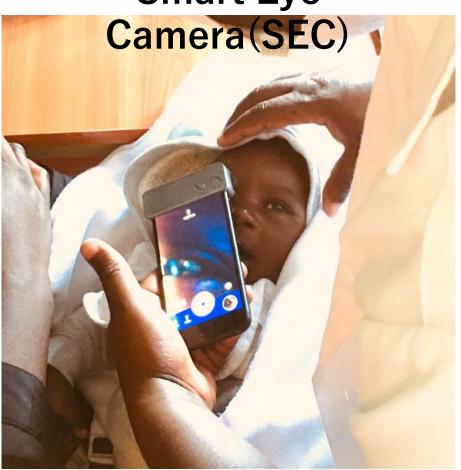
<sup>\*</sup>Patent 6627071,2019-140855(JP), PCT/JP2021/029578,16/964822 (USA), 19743494.7(EU), 201980010174.7 (NCN)

# Conventional medical device and SEC

Slit-lamp microscope =

**Smart Eye** 





30,000-50,000

**USD/unit** 

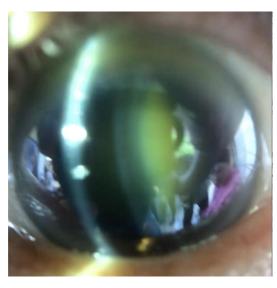
2,000 USD/unit (JP)

OULINC

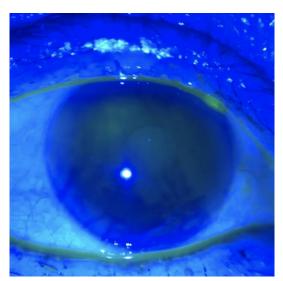
## SEC – Feature of the device

# Only using light source and camera of smartphone No external light source, no extra battery Only 150g including smartphone

Slit light (Cataract\*) Diffuse light Blue light (Ocular Allergy\*\*) (Dry Eye Disease\*\*\*)







<sup>\*</sup> Yazu H, et al. *Diagnostics*. 2020. \*\*Yazu H, et al. *Diagnostics*. 2021.



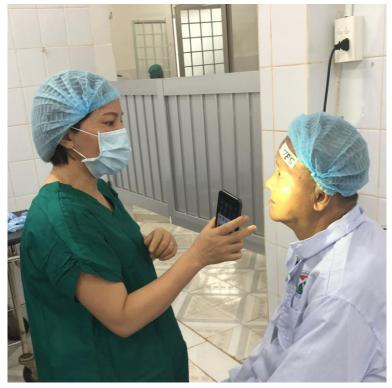
<sup>\*\*\*</sup> Shimizu E, et al. *Transl Vis Sci Technol.* 2021.

# SEC - Find the needs in Vietnam

# No Ophthalmology Device in the Rural area



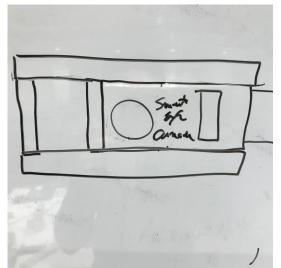
# All civilians have their Smartphones

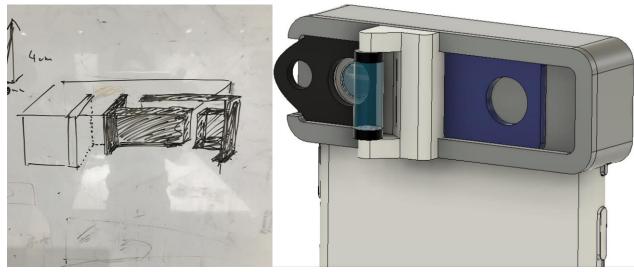




# SEC – Development

# Workshop & design to create the product





# **Experiment with our own eyes**

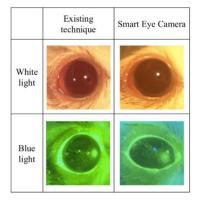




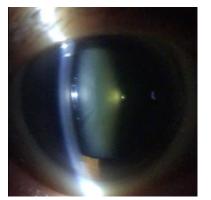


## SEC – Our evidences

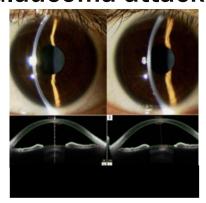
# Animal study<sup>1)</sup>



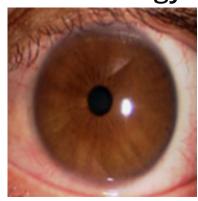
Clinical study Cataract<sup>2)</sup>



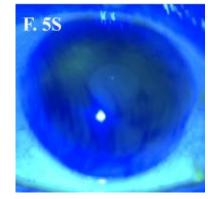
Clinical study Glaucoma attack<sup>3)</sup>



Clinical study Ocular Allergy<sup>4)</sup>



Clinical study Dry Eye Disease<sup>5)</sup>



- 1) Shimizu E, et al, *PLoS One*. 2019. 2) Yazu H, et al. *Diagnostics*. 2020. 3) Shimizu E, et al. *Sensors*. 2021.
- 4) Yazu H, et al. *Diagnostics*. 2021. 5) Shimizu E, et al. *Transl Vis Sci Technol*. 2021.

# SEC – Medical device registration

# Japanje



# **Kenyake**



PHARMACY AND POISONS BOARD

(Section 3B(2)(e) of the Pharmacy and Poisons Act, Cap 244 Laws of Kenya)

### MEDICAL DEVICE REGISTRATION CERTIFICATE

Japa : 13B2X10198030101, 13B2X10198030201

CE notification number: CH-202105-0022

Kenya:MD/2021/3610 b4be59e7a3b1e4f5de0bf364741c35f6

Vietnam: 210002066/PCBA-HN



Notification according to Art. 6 MedDO<sup>1</sup> dated 07.05.2021 regarding Smart Eye Camera / SEC

Acknowledgement of receipt

Dear Sir,

We have received the notification of the above-mentioned product and numbered it as shown below:

Notification No.: CH-202105-0022

Medical Device Class I

# Viet Namvn

PHIẾU TIẾP NHÂN

Hồ sơ công bố tiêu chuẩn áp dụng của trang thiết bị y tế thuộc loại A

- 1. Tên cơ sở công bố: CÔNG TY TNHH PARIS MIKI VIỆT NAM
- Địa chi: Tầng 7, Số 32, Phố Phó Đức Chính, Phường Trúc Bạch, Quận Ba Đình, Thành phố Hà Nổi
- Số văn bản đề nghị của cơ sở: 01-10/PMVN Ngày: 27/10/2021
- 4. Trang thiết bị y tế thuộc loại A

Tên trang thiết bị y tế: Đèn khe camera soi mắt thông minh

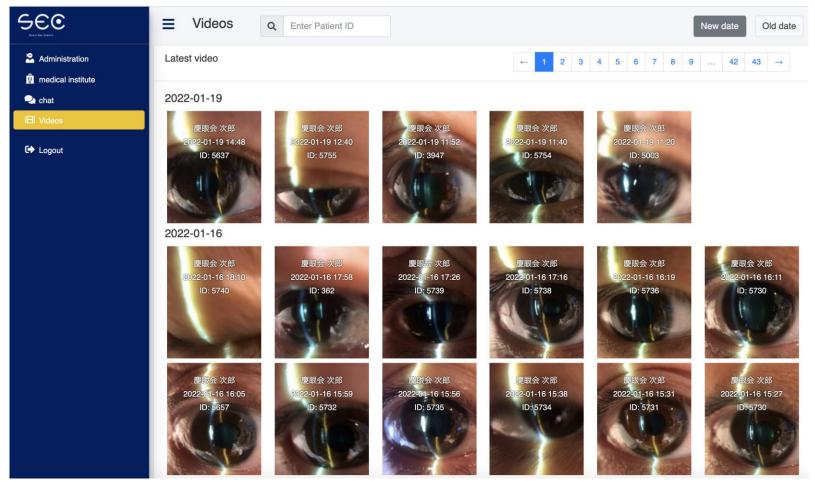
Chùng loại/mã sản phẩm: Smart Eye Camera Slit-lamp device/ Smart Eye Camera Slit-lamp device SLM-i07

Smart Eye Camera Slit-lamp device SLM-i08/SE

Smart Eye Camera Slit-lamp device SLM-unv100



# SEC – Functional App for online consultation



- Filing eye data on the cloud.
- Unlimited data capacity.
- Online consultation to the ophthalmologists.



# SEC – Demographic use of SEC

# Pediatric ICU in Indonesia



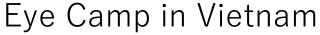
# Rural clinic in Malawi





# SEC – Demographic use of SEC

Indio in Brazil









# SEC – Over 20 countries and over 100 SECs!!

Kenyake Githogolo hospital





Mongliами

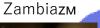


Indnesiard Harapan Kita Mother and Children Hospital



Japanje







GobiX

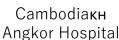
Gertrude's

















DRCcd







essilor



Malawiмw **BICO** 



India IN Aravind Eye Hospital



BrazilBR







\*This document is solely for discussion purposes and cannot be

# Smart Eye Camera – User's voice







# "SEC is the game changer, great device for telemedicine and reduce medical cost!! "

Prof. Khumbo Kalua, M.D., M.P.H. Director of BICO MALAWI

"We were very impressed with the clarity of the images taken by the SEC!! We tried the lens on several older Android phones without the rest of the attachment and it produced excellent images despite those phones having much worse cameras than the iPhone."

Dr. Nakul Singh Shekhawat M.D., M.P.H. Assistant Professor. The Johns Hopkins University

"SEC is quite handy and user friendly. Good clarity and focus at lid, cornea, conjunctiva, and anterior chamber depth. Also, cataract status can be assessed."

Dr. Preethika Gandhi, M.D. Medical doctor at Aravind Eye Hospital



# World's first medical device of anterior segment diagnostic AI

## Non-ophthalmology



Non-ophthalmologist (nurse, other HCPs) Use SEC to record video

## Diagnostic Al



Auto Diagnose by Al



Referral letter if needed
For the treatment
or
No need for any treatment





Medical device approval in 2023!!



# Reduce 50% of World Blindness and save people's health through their eyes!!



