AURIOS MEDICAL INC.

INVESTOR RELATIONS
2018

“LIFE-SAVING PERFECTION”

Our goal is not only to become a leader in medical devices and technology, but also to devote to the long-term healthy life of people without cardiovascular disease.

1. About Aurios
2. Benetis™ OCT system
3. Benetis™ 2nd generation
4. Market analysis
5. Business strategy

1. About Aurios

Aurios Medical
Life-saving perfection

CEO	Kim Hyungil
Founding date	2016. 10. 24
Business field	OCT, OCT Catheter, Balloon Catheter
Num. of employees	10
Established capital	2.66 million RMB

Founding story

Aurios is a company that co-founded and gathered together experts such as CEO Kim Hyungil and other experts in different fields. These experts are composed of biomedical professors, mechanical engineering professors, and cardiovascular specialists who are responsible for the actual operation. And they all have a career in research at Harvard Medical School's affiliated hospitals.

They returned to Korea and formed a fusion team. After that, he joined the professor of mechanical engineering who developed 3D high-resolution endoscopy for the first time in the world, and eventually came to the founding of Aurios. Here, by joining the Canadian optical experts CTO, it was the team complete, Aurios can build out the company which is also convergence advanced technology can not imitate.

About Aurios

Members

CEO
Hyung-il Kim, M.D., Ph.D.

- 2012-2016, CEO of Suntech Co., Ltd.
- 2016-Present, Chief representative member of ISO TC 194
- 2013-Present, Representative member of ISO TC 150, TC 194
- 2013-Present, Representative member of the Korean Society for Biomaterials
- Ph.D. in Bioengineering, University of Tokyo
- M.D. in School of Medicine, Seoul National University

Yosuf Ahmed, CTO

- 2010-2016, Vice President R&D, Plexis Precision
- 2008-2010, Engineering Project Manager, Mmm Group
- 2004-2008, Research Scientist, Cmacn
- Queens University

Alfred SHIA, Ph.D. Director

- 2007-2018, Program Manager, Amaranth Medical
- 2003-2006, Project Manager, School of Materials Science & Engineering, Materials Technology Group
- PMP®, Certified Project Management Professional

Ryan Choi, Project Manager

- 2016-2018, Co-Founder, COO, VNTC
- 2015-2016, Co-Founder, Director, Intivision Co., Ltd.
- 2012-2015, LG Electronics HE UX LAB, Silicon Valley, SF
- Seoul National University

About Aurios

Co-Founder & Shareholders

Jin-won Kim, M.D., Ph.D.

- 2015-Present, Professor Cardiology Division, Department of Internal Medicine, Korea University Medical Center
- 2009-2015, Associate Professor, Cardiology Division, Department of Internal Medicine, Korea University Medical Center
- 2009-2011, Postdoctoral Research Fellow, Cardiovascular Research Center, Harvard Medical School

Wang-yeol Oh, Ph.D.

- 2009-Present, Associate Professor, Department of Mechanical Engineering, KAIST
- 2004-2009, Instructor/Research Fellow, Harvard Medical School
- Ph.D. in Physics, KAIST (1997)

Hong-ki Yoo, Ph.D.

- 2016-Present, Associate Professor, Department of Biomedical Engineering, Hanyang University
- 2012-2016, Assistant Professor, Department of Biomedical Engineering, Hanyang University
- 2011-2012, Instructor of Wellman Center for Photomedicine, Harvard Medical School

Jun-woo Lee, Ph.D.

- 2016-Present, Leader of Seoul-Kangwon Team, KISTI
- 2014-Present, Adjunct Professor, Department of Knowledge and Information Engineering, UST
- 2011-Present, Adjunct Professor, Department of Technology and Innovation Management, Hanyang University
- Ph.D industrial Chemistry, Hanyang University

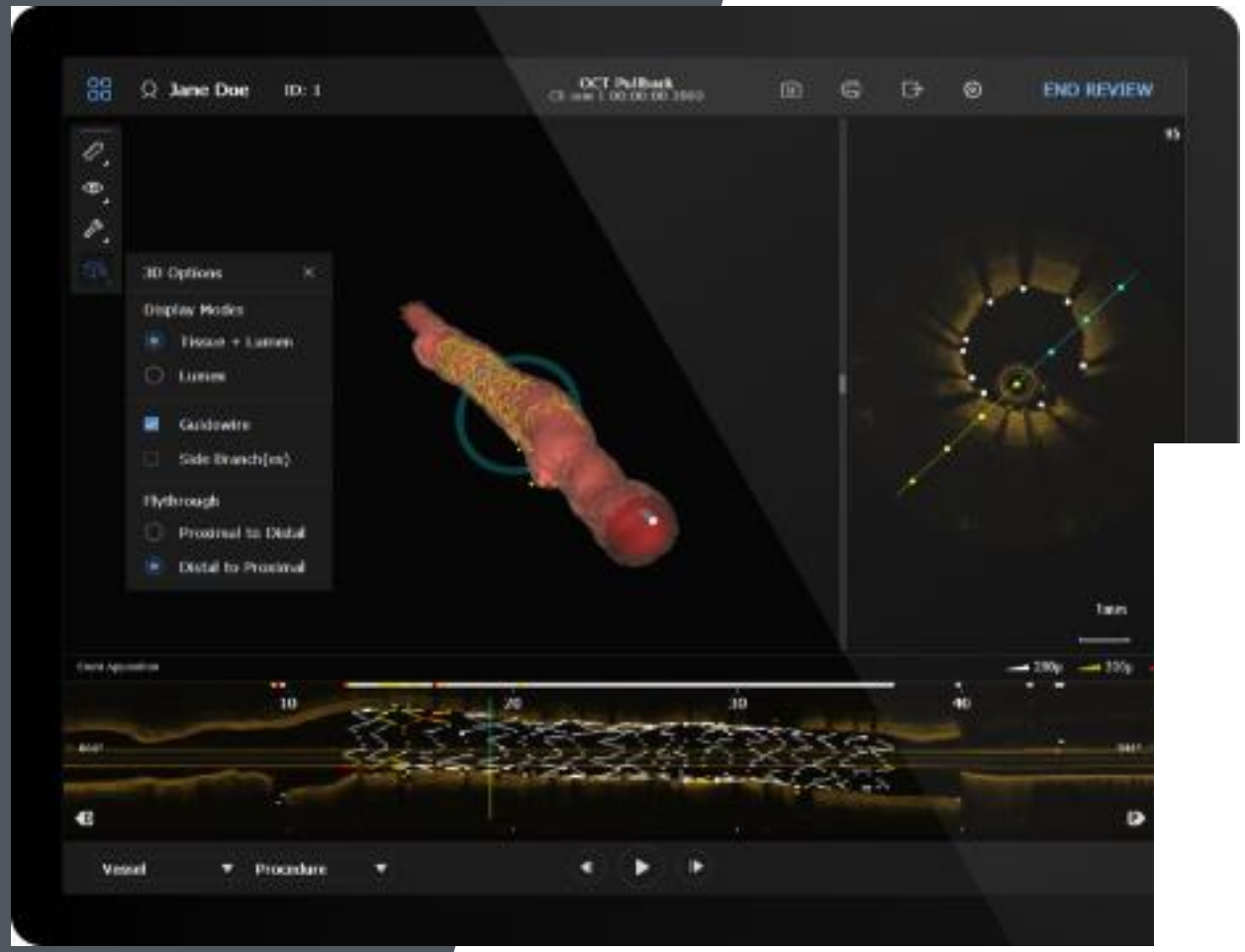
Benetis™

OCT System

Benetis™

2nd Generation

Benetis™



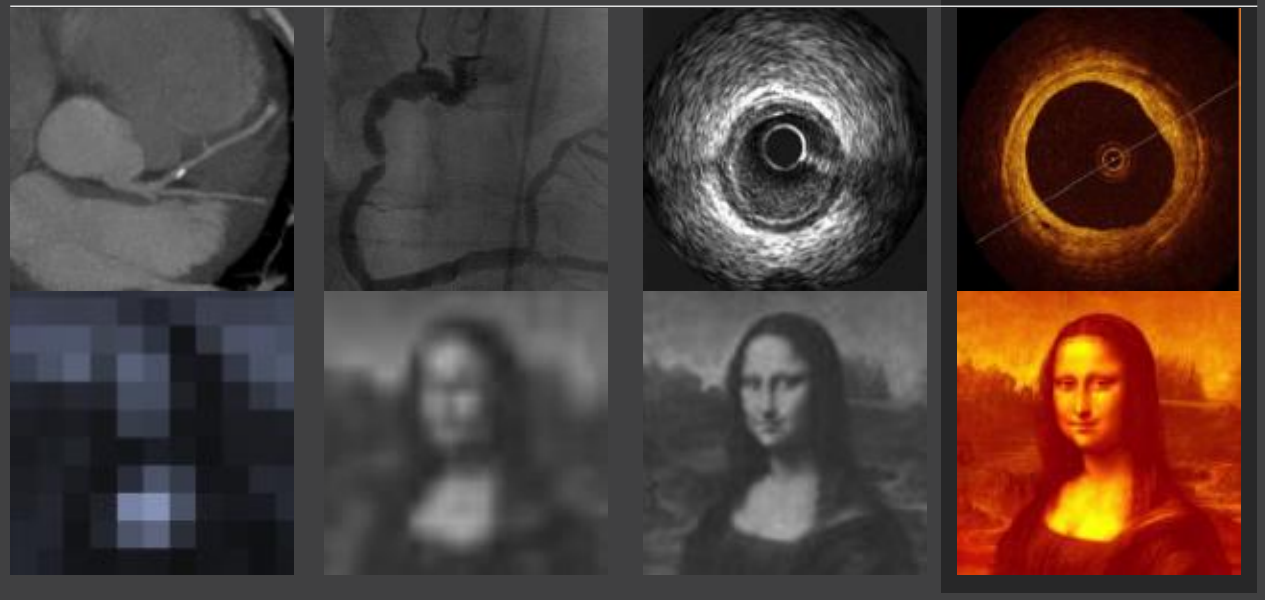
Optical Coherence Tomography

- Technique of imaging three-dimensional in vivo using light interference phenomenon
- Technique of imaging the inside of blood vessel wall by inserting a catheter made of optical fiber
- Higher technology than angiography and intravascular ultrasound (IVUS)

Benetis™ OCT system

OCT vs. Other imaging devices

CT Angiography	Angiography	IVUS	* OCT
600 μm	200 μm	100 μm	10 μm



*** OCT provides more detail with a 10 micrometers resolution**

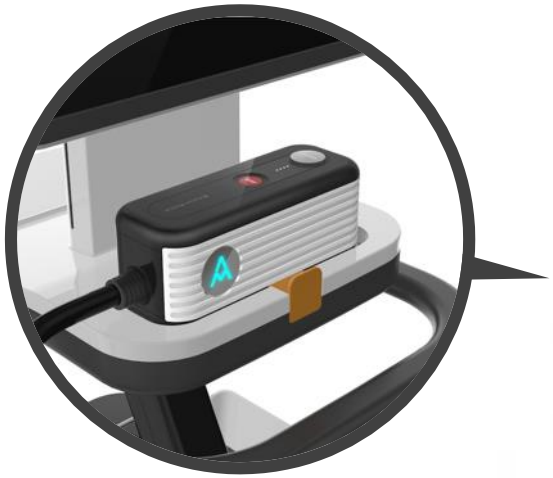
Advantages of OCT

- High resolution (10x or more)
- Small probe size (Distal 2.7Fr)
- Quick pullback speed (approximately 2 seconds / IVUS compared to 10 times)
- Vascular stenosis lesion analysis, stent incomplete insertion mark
- Available for myocardial infarction studies
- The only imaging device capable of clinical tracking of BRS (bioresorbable stent)

	OCT	IVUS
Axial resolution	10-20 μm	100-150 μm
Penetration depth	1.5-2 mm	8~10 mm
Probe size	0.7 mm	1.1 mm
Pullback speed	20 mm/s	0.5~1 mm/s

Benetis™ OCT system

Competitors

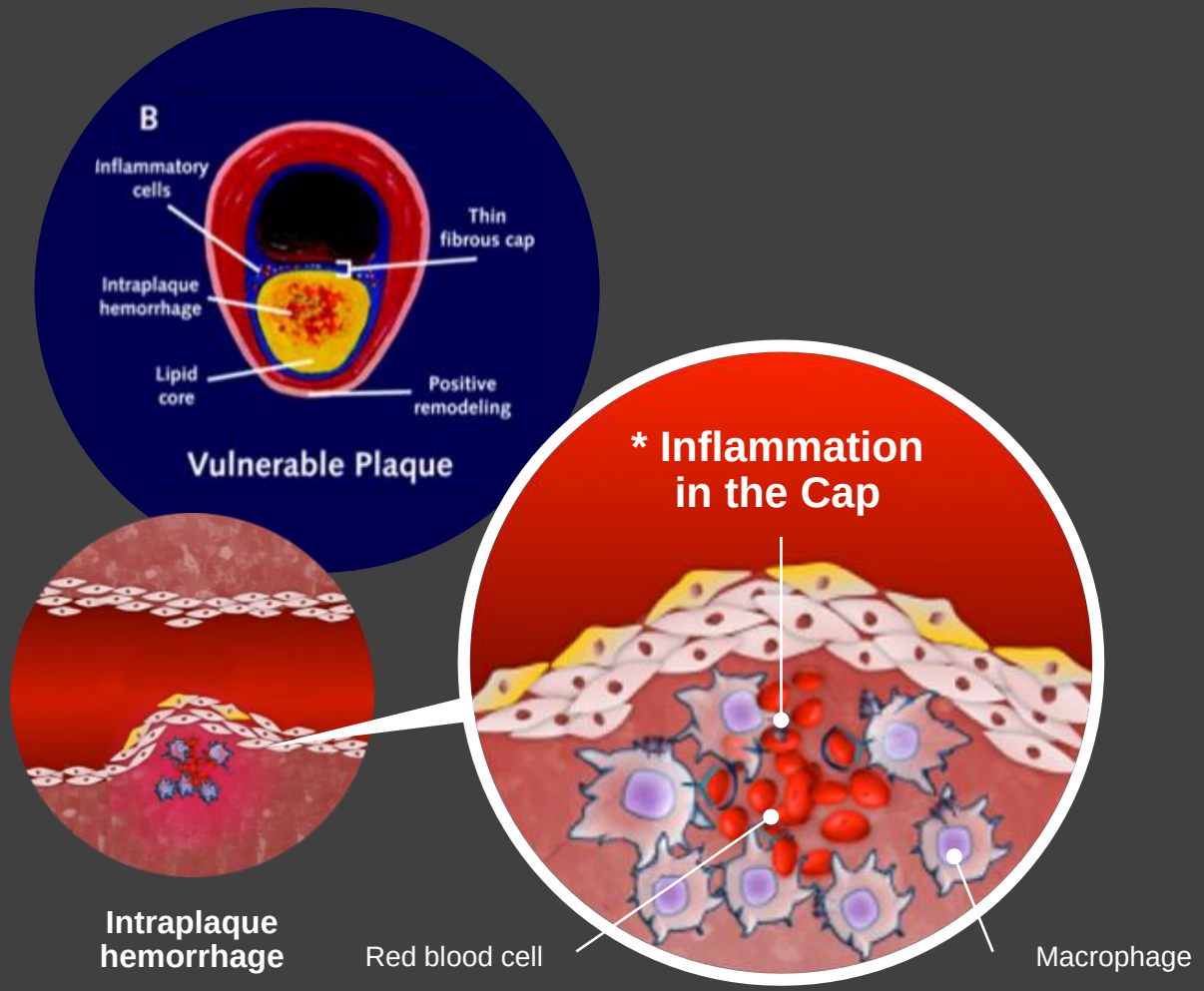


	* Aurios	Abbott	Terumo
Image Acquisition (Frame/s)	**300**	180	158
Laser wavelength (nm)	1250-1360	1250-1360	1250-1360
Lateral Resolution (㎛)	25~60	25~60	25~60
Axial Resolution (㎛)	20	15	20
Max. Pullback speed (㎜/s)	**50**	36	20
Max. Pullback Distance (㎜)	100	75	150

*** More than 2X the resolution & 2X the image acquisition speed of existing OCT equipment**

Benetis™ 2nd Generation

Why 2nd Generation?



F.D. Kolodgie et. Al, N Engl J Med 348, 24 (2003)

▶ **To diagnosis High Risk Plaque**

OCT (Optical coherence tomography)

✓ **3D structural information**

\+

FLIM (Fluorescence Lifetime Imaging)

✓ **Chemical & molecular information**

✓ **Related to Inflammation**

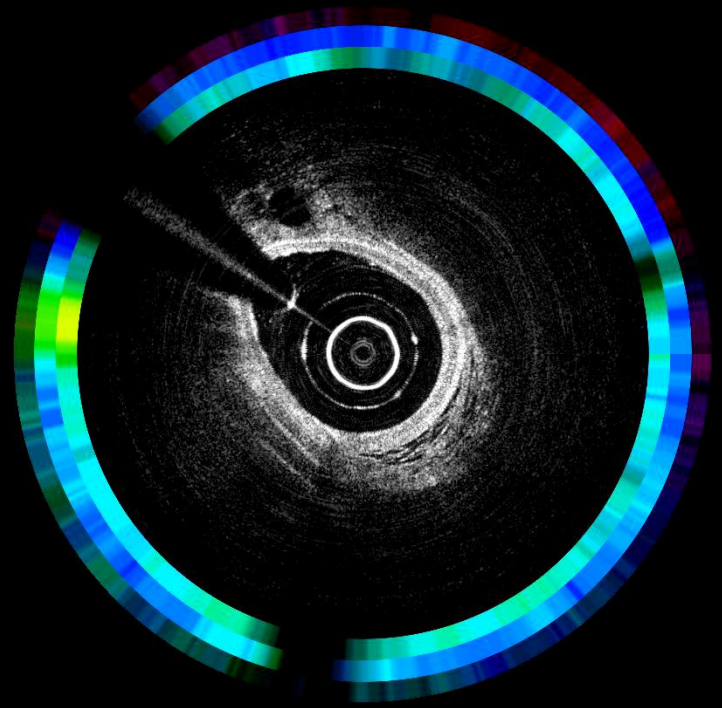
2nd Generation

Benetis2.0™

OCT-FLIM

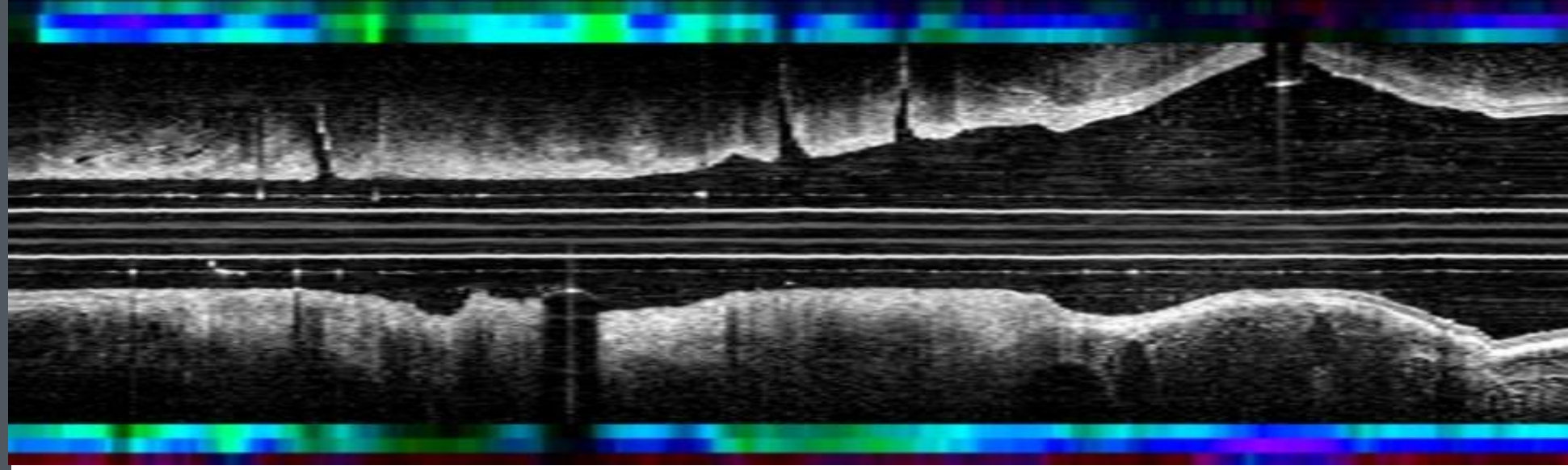
Fluorescence Lifetime Imaging
FLIM utilizes the attenuation characteristics of the fluorescence signal to measure the fluorescence lifetime and obtain biochemical characteristics of the biotissue.

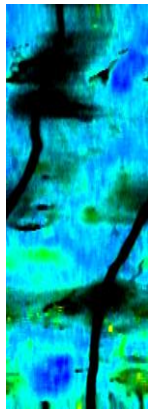
Morphologic features (OCT) + chemical analysis (FLIM)
It is a more advanced imaging device that can more accurately determine the cause of cardiovascular disease and observe the prognosis of the disease.



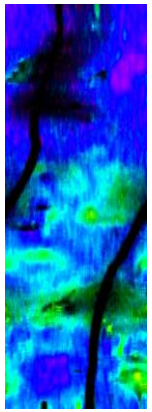
Benetis™ 2nd Generation

Chemical Morphology

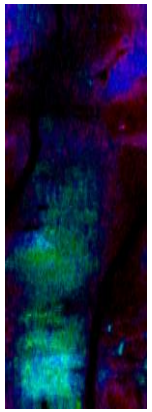




Chanel 1



Chanel 2



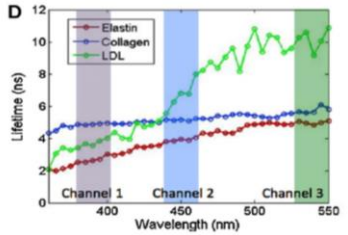
Chanel 3

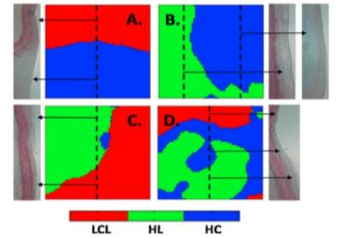
Lifetime (nesc)

2 6

Chemical Morphology

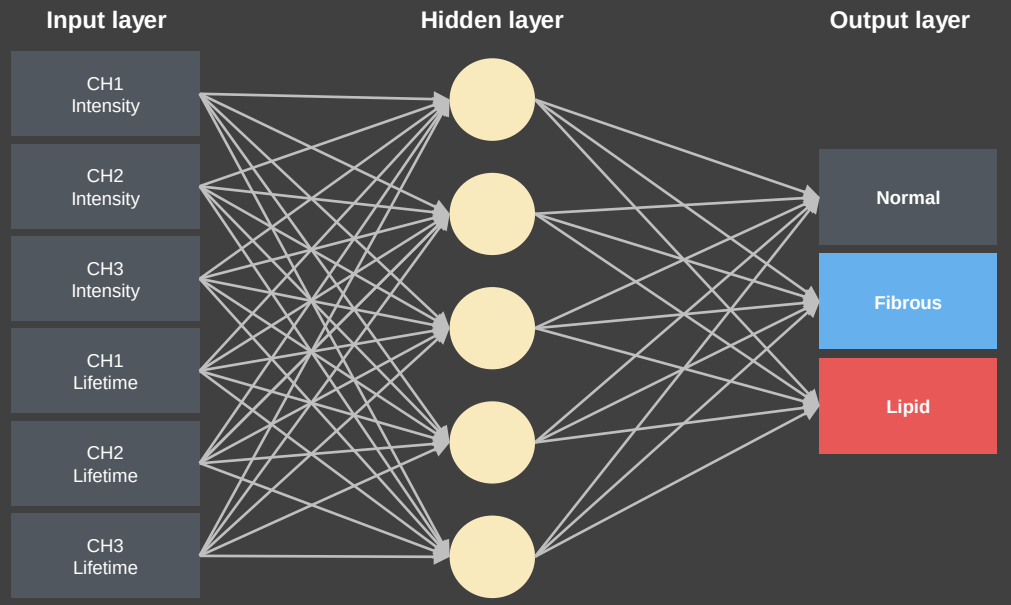
- FLIM can assess biochemical compositions associated with atherosclerosis, such as collagen, elastane, lipid, macrophages, etc.,
- FLIM can differentiate between types of arteriosclerosis using multi-wavelength.

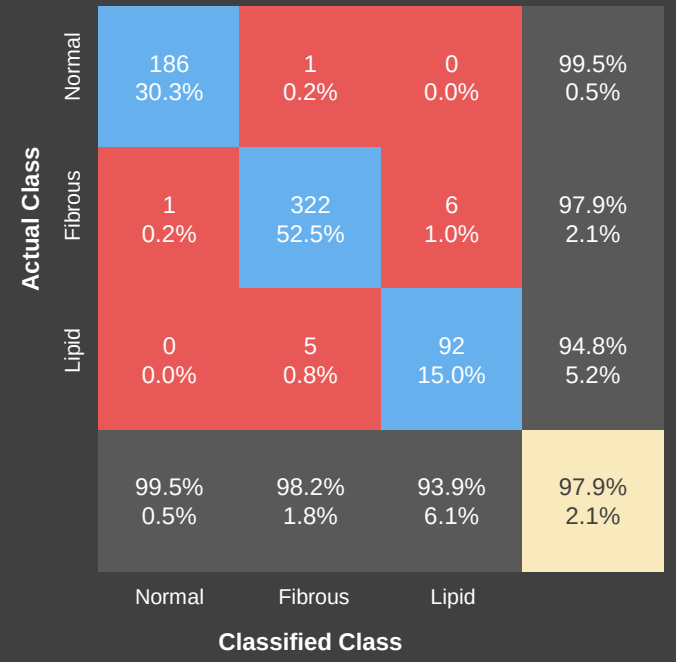




Benetis™ 2nd Generation

Analysis using AI





01

Parameter extraction

- Morphological processing
- Peak detection
- Binary processing

02

Character Extraction / Component Analysis

- Dispersion
- Absorption
- Lifetime, etc.

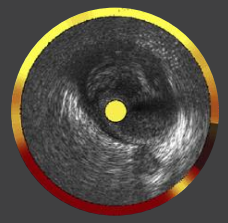
03

Machine Learning

- K-means classification
- Linear discriminant analysis

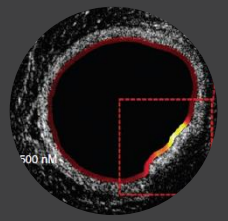
- **Perform precise diagnosis of lesion**
- **Predicting risk of lesion**

Benetis™ 2nd Generation



About IVUS-NIRS

NIRS detects lipid to compensate for the limitations of IVUS, but it does not show clearly the microstructure of high risk arteriosclerosis due to low resolution of IVUS.



Light and Contrast of OCT-NIRF Technology

OCT-NIRF (near-infrared fluorescence) proved that plaque inflammation and arterial microstructure can be demonstrated simultaneously using a single imaging catheter and fluorescent contrast agent.

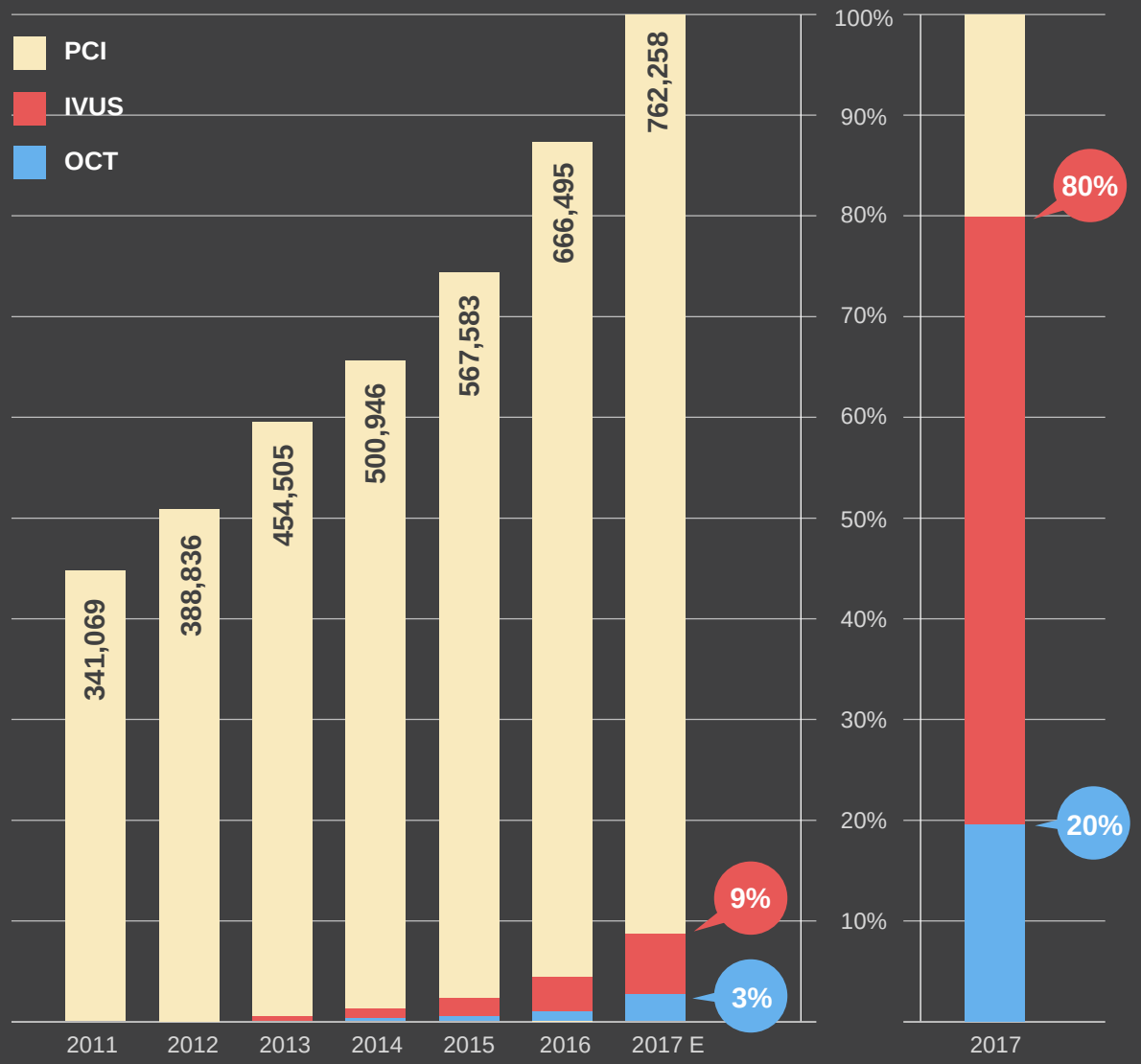
However, despite the development of successful technology, it is difficult to be clinically applied due to the need to inject FDA-approved contrast agents.

	X-ray Angio.	IVUS	OCT	IVUS-NIRS	OCT-NIRF	OCT-NIRAF	* OCT-FLIM
Resolution	+	++	+++	++	+++	+++	**+++**
Speed	+++	+	+++	+	+++	+++	**+++**
Lumen area	-	+++	+++	+++	+++	+++	**+++**
TCFA	-	+	+++	++	+++	+++	**+++**
Lipid plaques	-	+	+	+++	+	+++	**+++**
Plaque burden	-	+++	+	+++	+	+	**+**
Thrombus	-	+	++	+	++	+	**+++**
Stent analysis	**-**	+	+++	+	+++	+++	**+++**
Inflammation	**-**	-	+	-	+++	+	**+++**
Safety	+++	+++	+++	+++	-	+++	**+++**

Intellectual Property

Optical coherence tomography system	PCT/KR2017/013715
Optical coherence tomography system	PCT/KR2017/013727
Vascular Imaging Device And Methodology Using Multiple Light Sources	KOREA/10-1146652
Ring type resonator for high-speed wavelength conversion of optical signal and its resonant method	KOREA/10-1317931
Resonators for wide-band and multi-band wavelength conversion	KOREA/10-1540346
Polarization-multiplexed wavelength tunable light source device and polarization-sensitive optical coherence tomography imaging system using the same	KOREA/10-2014-0165122
Dual wavelength optical coherence tomography for tissue classification of atherosclerotic plaque and tissue classification method	KOREA/10-1681065
Catheter-based Imaging Enrollment Systems and Methods	KOREA/10-1679049
Coronary artery vessel high-speed scanning device and method	PCT/KR2015/013504
Method and Devices for performing OCT imaging by avoiding systole	PCT/KR2017/004544
Vascular analysis methods and devices	PCT/KR2017/002213

Market analysis



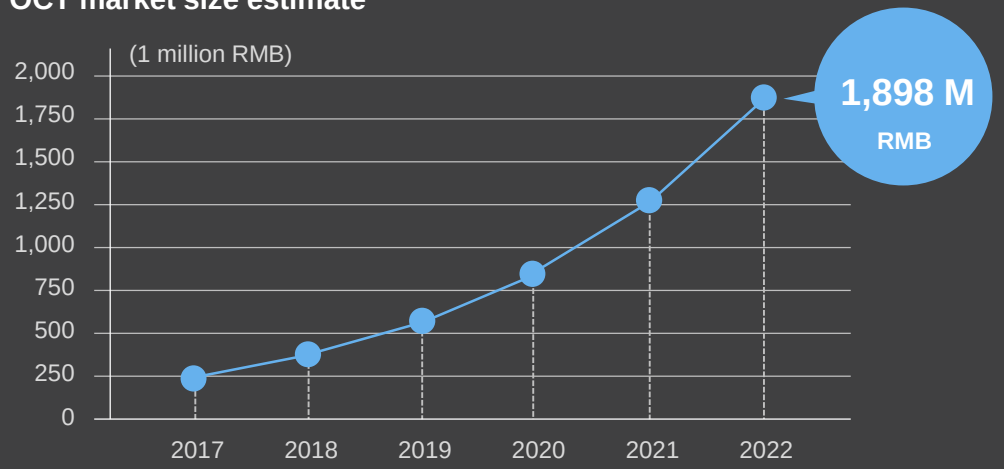
PCI Volume of China and IVUS/OCT Catheter Usage Rate

Usage Rate of Japan

CAGR over the last 5 years in China

PCI Volume	17%
IVUS	45%
OCT	**50%**

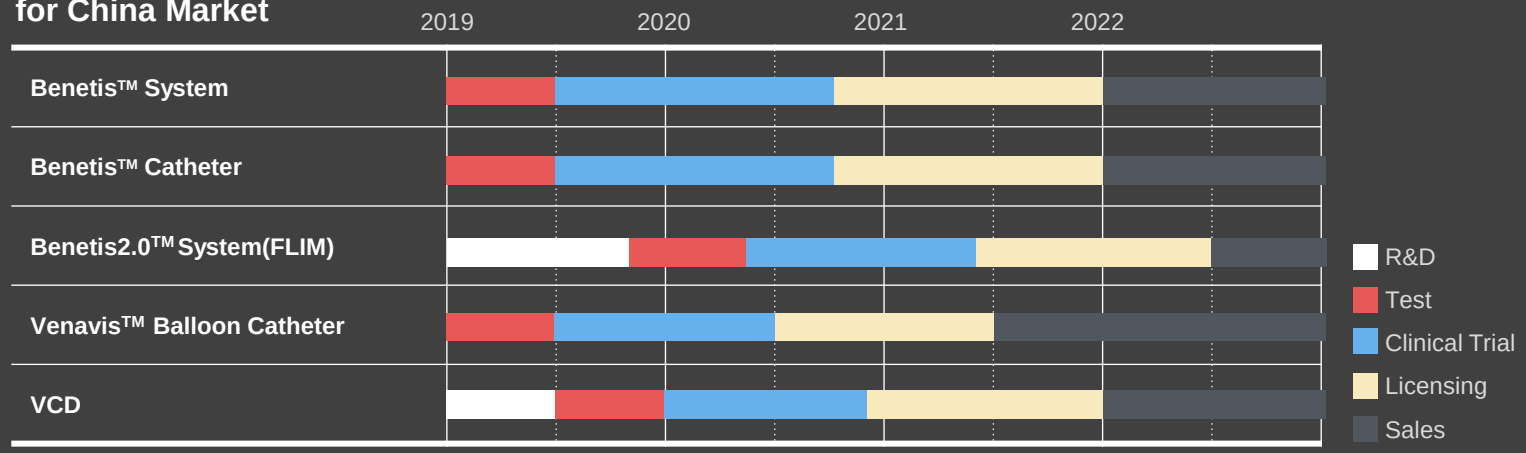
OCT market size estimate



- Benetis™ CFDA acquisition and China market entry in 2022
- In 2022, the Usage Rate of OCT during PCI in China is expected to be 10%
- In the market of 1,898 million RMB in 2022, it is expected to grow more steeply in the future, replacing IVUS

Business Strategy

Line-up and Schedule for China Market



Clinical trial and CFDA processes

Products	**Benetis™ System & Catheter**
# of Patients	**150 Patients**
Documentation	**1~2 Month**
Product test	**4~8 Month**
Clinical trial	**14 Month**
CFDA review	**10 Month**
CFDA approval	**2022**

Global market milestones

- 2019, 2Q — Start Clinical trial of Benetis™ in Europe
  Start Clinical trial of Benetis2.0™ (FLIM) in Korea
- 2019, 3Q — KFDA approval of Venavis™ Balloon Catheter
- 2020, 1Q — KFDA approval of Benetis™ Catheter
  Start Clinical trial of Benetis2.0™ (FLIM) in Europe
- 2021, 1Q — KFDA approval of Benetis™ System
  CE approval of Benetis™ Catheter
- 2021, 2Q — KFDA approval of Benetis2.0™ (FLIM)
- 2021, 3Q — CE approval of Benetis™ System
- 2022, 1Q — CE approval of Benetis2.0™ (FLIM)

Business Strategy

PCI & OCT in China	2022	2023	2024	2025	2026	2027
PCI Volume	1,464,868	1,660,309	1,881,826	2,126,499	2,402,984	2,707,271
CAGR	13.3%	13.0%	12.6%	12.3%	11.9%	11.6%
OCT Number of cases	137,632	196,727	278,661	391,237	544,552	751,545
CAGR	44.2%	42.9%	41.6%	40.3%	39.1%	38.0%
Usage Rate	9%	12%	15%	19%	23%	29%
OCT Market (1,000 RBD)	1,789,217	2,557,447	3,622,588	5,086,083	7,079,175	9,770,079
Sales Items						
Bentis™ System (EA)	5	7	14	16	12	8
Benetis™ Catheter (EA)	100	500	1,800	2,880	4,320	6,912
Benetis2.0™ FLIM (EA)	-	2	4	6	10	16
Sales Forecast						
Aurios Sales (1,000 RBD)	**14,300**	**52,000**	**166,400**	**257,140**	**372,060**	**580,736**
Market Share	**0.8%**	**2.03%**	**4.59%**	**5.06%**	**5.26%**	**5.94%**

- **Achieved market share of 5% within 5 years after launching first product in China market**
- **In 2027, it became a company with sales volume of 580M Yuan**
- **Sales of VCD and Balloon catheter can be expected for additional sales**

THANK YOU