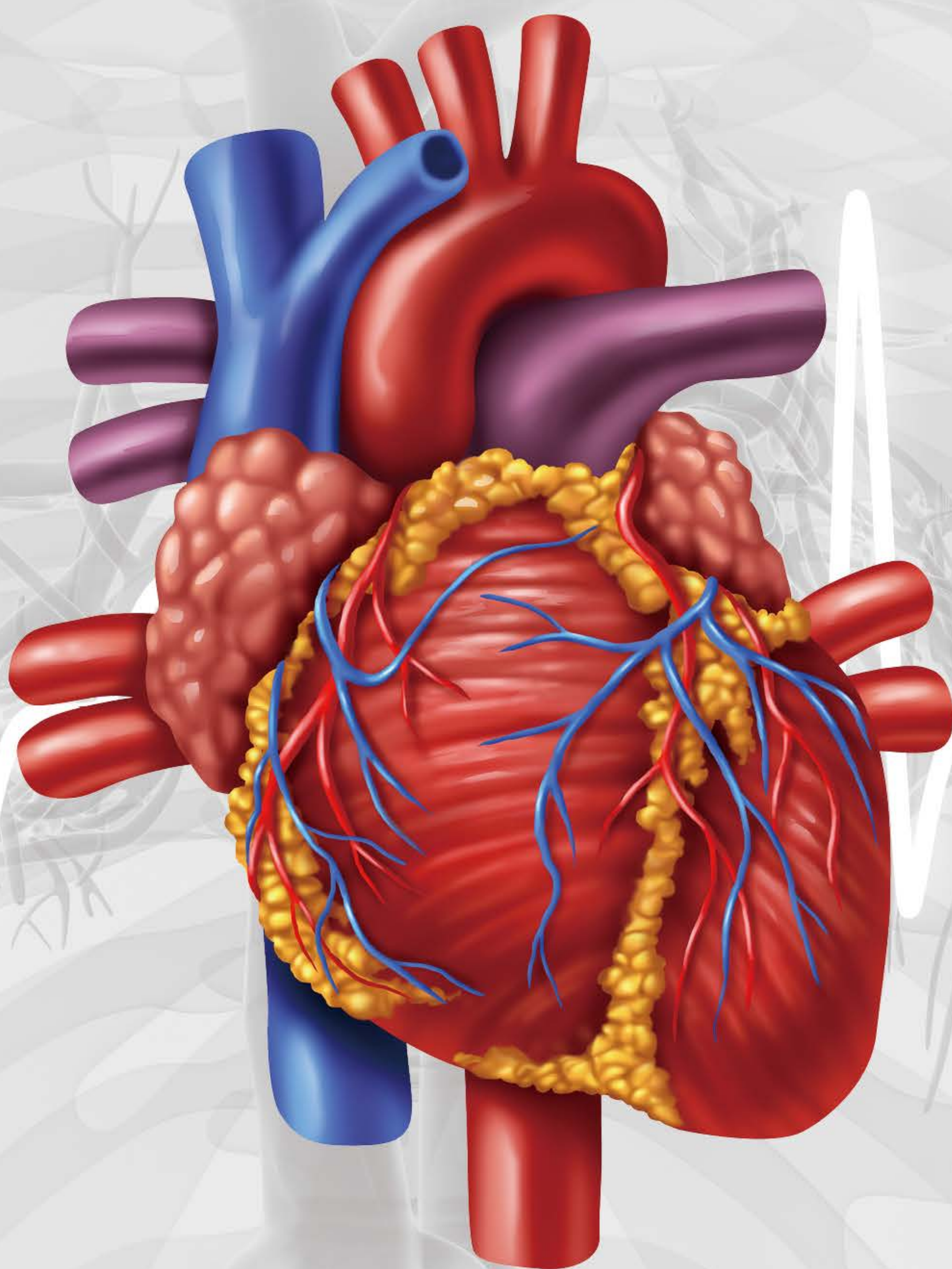


Hybrid Atrial Fibrillation Ablation

Thoracoscopic RFCA(TS) +
Endocardial RFCA(Cardiology)
for the treatment of atrial fibrillation

Innovative arrhythmia treatment
Hope of chronic atrial fibrillation patients
having little chance of full recovery





What is Hybrid Atrial Fibrillation Ablation?

It is the latest hybrid treatment method that combines surgery and medical procedure. While the heart is beating, a thoracoscope is inserted to the outside of the heart, and the area that causes arrhythmia is ablated with radiofrequency. Radiofrequency catheter ablation, a medical procedure, is subsequently done inside of the heart so that all the areas that cause arrhythmia from the inside and outside of the heart are removed. **It is a surgical method that has the highest full recovery rate.**

Object

- Atrial fibrillation patient with a medical history of stroke
- Chronic atrial fibrillation patient with high risk of stroke or recurrence
- Patient experiencing recurrence after radiofrequency catheter ablation

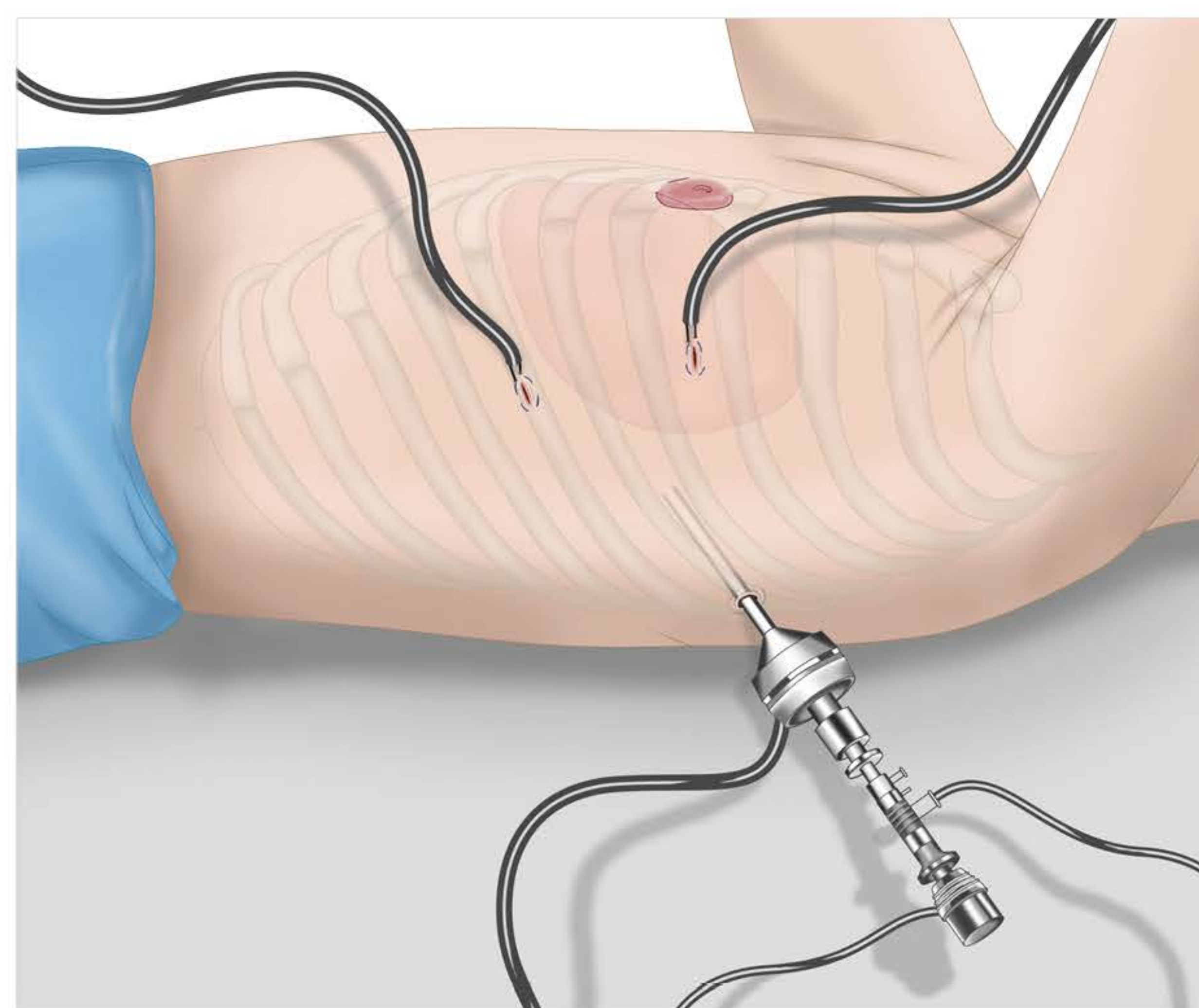
What is arrhythmia?

Because of abnormality in the electrical system of the heart, the heart does not beat regularly. It is a serious disease that causes the heart to beat too fast, slow, or irregularly, which can result in chronic tiredness, heart failure, or even stroke.

Advantage of the Procedure

Compared to the previous surgery that requires the heart to be stopped, it is the latest surgical method that is performed while the heart is still beating. As such, surgery time is reduced, and stability is improved. As it is performed while seeing the heart directly through a thoracoscope, **it has the highest success rate among arrhythmic procedures with a low recurrence rate.**

The cut area is small so that scar is also small. Pain is light and recovery is fast after surgery. Surgery lasts for about two hours, and the average admission period is about eight to nine days. As there is no drug (warfarin) required to be taken after surgery, the quality of the patient's life is significantly improved by enabling daily activities such as exercise, etc.





Why Samsung medical Center?

Since Korea’s first successful surgery in February 2012, the most number of cases have been performed in Samsung Medical Center. Moreover, **Samsung Medical Center is the only hospital in Korea where hybrid surgeries have been successfully performed.**

The success rate of hybrid surgery largely depends on the proficiency of the physician. Many cases have been performed in SMC for a short time, and it is the world’s best in both the number of surgery cases and the proficiency of physicians. Professor Dong Sub Jeong of the Cardiovascular Center, who leads hybrid surgery, was selected for the Graham Foundation Fellowship

program. Every year, this program offers talented physicians selected by the American Association For Thoracic Surgery from all over the world with a training opportunity in American hospitals. Also, he was invited to various international conferences, thus introducing the medical level of SMC to many physicians all over the world.

In addition, Professor Young Keun On, Chair of Division of Cardiology, is a highly experienced RFCA specialist as well as a physician who has an expertise for cardiac arrhythmia. SMC has Korea’s best cardiac resynchronization therapy and ventricular arrhythmia procedure.

Surgical Outcome in Samsung Medical Center

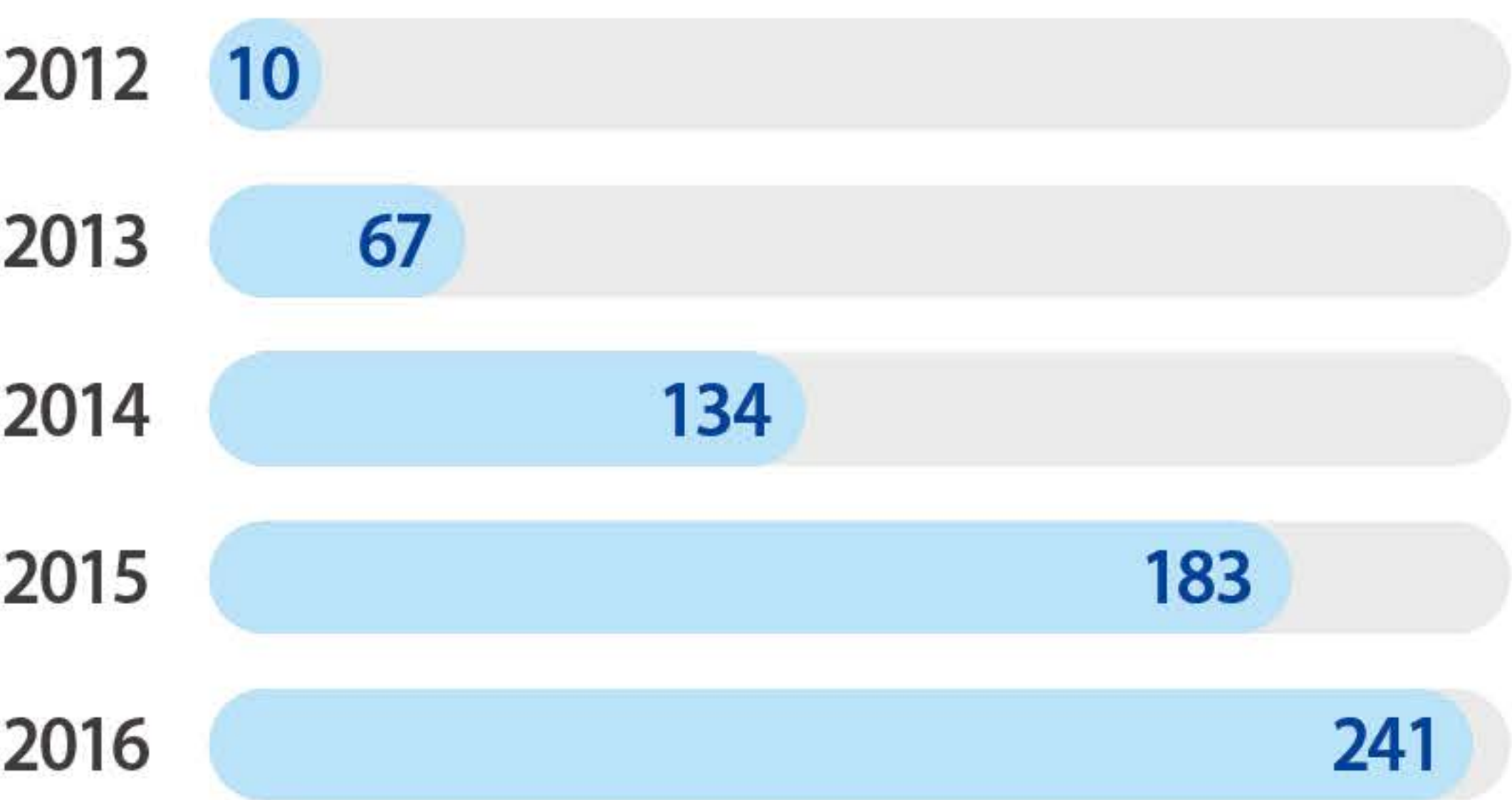
Number of procedures : More than 200 cases of thoracoscopic arrhythmia surgeries by 2016 (in 4 years)

Mortality rate : 0%

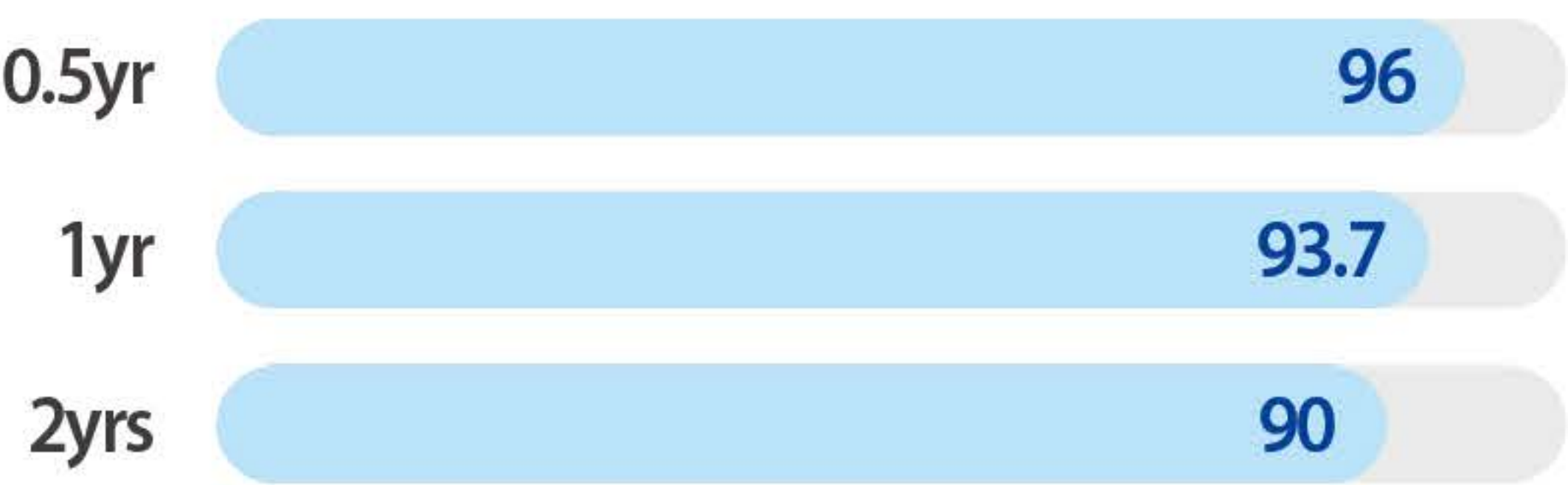
Early events (conversion to surgical procedure) : 0.7% (2/260)

Successful rate at 1 year (freedom from AF) : 92.6+3.3% (including antiarrhythmic drug administration)

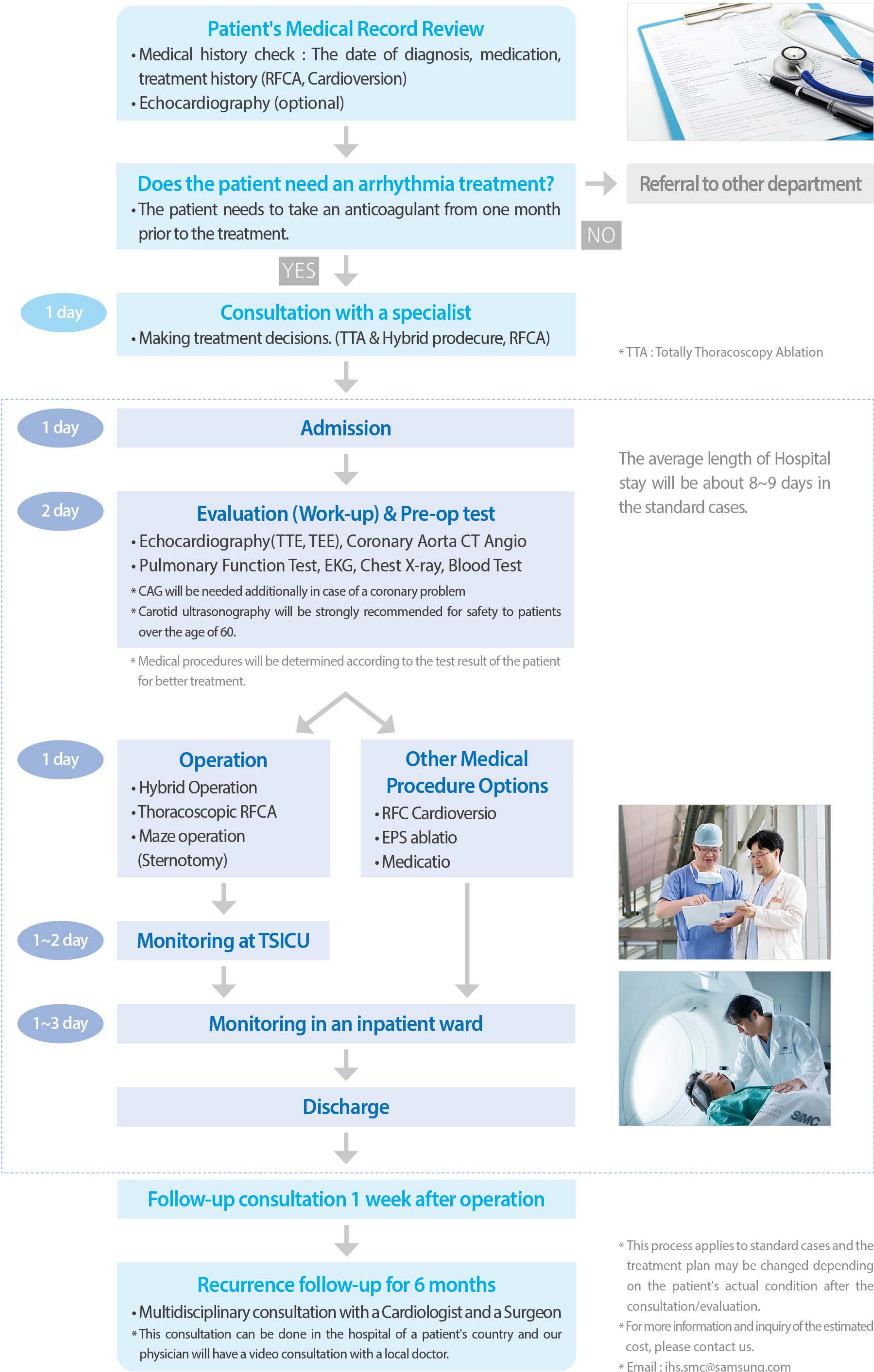
Accumulated no. of surgery cases from 2012–2016



Heart beat maintenance rate



Process flow of Hybrid Atrial Fibrillation Ablation



Our doctors of excellence



On, Young Keun M.D., Ph.D

Chair of division of Cardiology, Samsung Medical Center

Professor, School of Medicine, Sungkyunkwan Univerisity
Director, CPR operation office, Samsung Medical Center
Specializing in cardiac arrhythmia
Internationally renowned RFCA specialist
Pioneer of Hybrid Atrial Fibrillation Ablation in South Korea

* RFCA : Radiofrequency Catheter Ablation
* CPR : Cardiopulmonary resuscitation

TITLES	Professor, Division of Cardiology, Samsung Medical Center, Sungkyunkwan University School of Medicine
SPECIALTY INTERESTS	Arrhythmia, Atrial fibrillation, Radiofrequency catheter ablation Cardiac resynchronization, Syncope
INTERNATIONAL EDUCATION CAREER	Visiting Physician, Cardiac Electrophysiology, Detroit Medical Center, Harper University Hospital, Detroit, MI, USA Post doc research scholar, Pacing and Electrophysiology Lab, Heart Center, Cleveland Clinic, Cleveland, OH, USA Visiting Physician, Clinical EP Rotation, Utah Valley Regional Medical Center, Provo, UT



JEONG, DONG SEOP M.D., Ph.D

Developer of novel surgical techniques

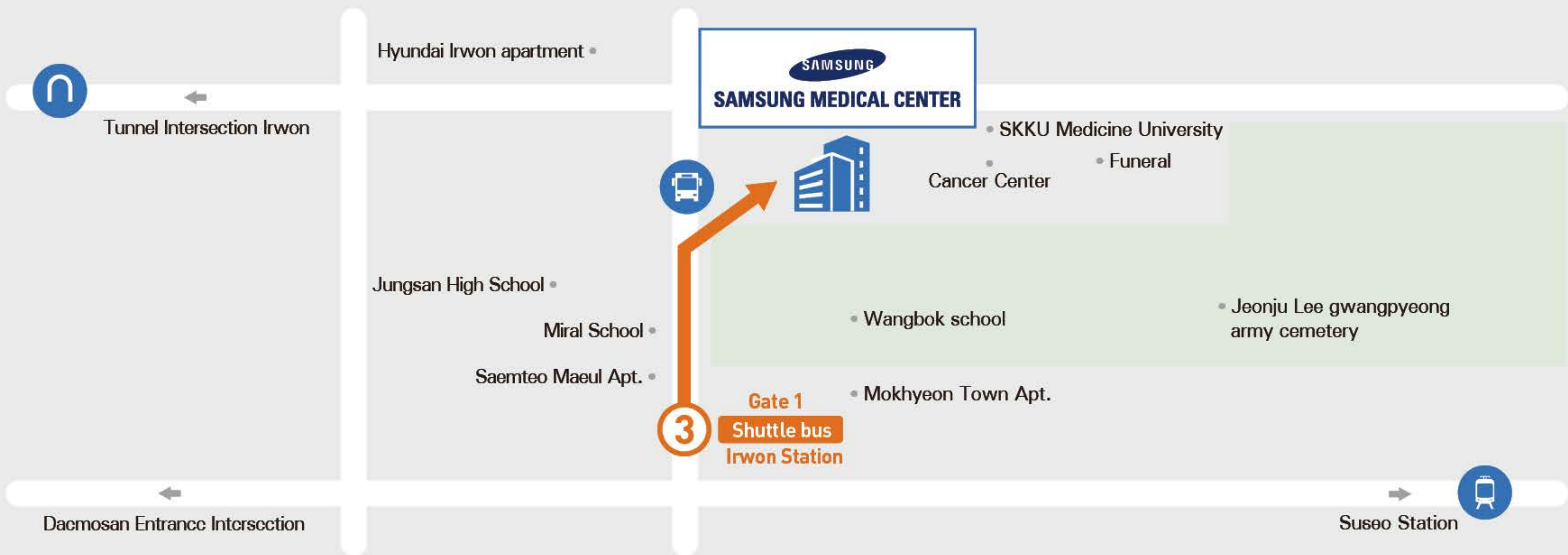
Hybrid Atrial Fibrillation Ablation and thoracoscopic Ablation that is known as techniques with high level difficulty and the most challenging clinical skill to be learned.
World renowned cardiac surgeon for Arrhythmia surgery, Minimally invasive cardiac surgery.
No. 1 for Hybrid Atrial Fibrillation Ablation in the number of cases with outstanding results in South Korea. (Performed over 200 cases successfully)

TITLES	Associate Professor of Thoracic and Cardiovascular Surgery, Sungkyunkwan University School of Medicine
SPECIALTY INTERESTS	Adult Cardiac Surgery, Heart valve surgery, Off pump coronary artery bypass Minimally invasive cardiac surgery, Mechanical assist device, Arrhythmia surgery Transcatheter aortic valve implantation, Heart and Heart-Lung transplantation
MILESTONES ON SURGICAL HISTORY	2012 Performed the Hybrid Atrial Fibrillation Ablation a first in South Korea 2013 Performed the Live surgery (totally thoracoscopic ablation) a first in Asia 2016 Performed the most cases of thoracoscopic ablation in South Korea (200 cases)
HONORS AND AWARDS	Award for Best presentation by Korean coronary artery symposium (2007) Award for Best presentation by Korean heart valve forum (2008) Graham Foundation Fellowship program (2016)

Contact US

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Address Samsung Medical Center, 81, Irwon-Ro, Gangnam-Gu, Seoul, 06351, Korea



Services

- Cashless** SMC currently has contracts with world-wide insurance companies. For insurance inquiry, contact us at +82-2-3410-0203/0230
- Language** SMC International Health Services offer medical interpretation services during working hours (Arabic/Russian/Mongolian/Japanese)
- Concierge** Airport pick-up and drop-off, domestic transportation, accommodation reservations are available.

From Incheon International Airport

- Departure** Incheon International Airport 5A : 6009 (Get off at the main gate of SMC)
- Arrival** Samsung Medical Center, across the main entrance, About a 5 minute walk.

▶▶▶ If you take a taxi, please show this message to a driver. ◀◀◀

서울시 강남구 일원동 삼성서울병원으로 부탁드립니다.
Please take me to Samsung Medical Center.

SAMSUNG MEDICAL CENTER

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