



MyoSPECT

[gehealthcare.com](http://gehealthcare.com)



# Get to the heart of every challenging case

Cardiac procedures now account for over 50 percent of all nuclear medicine studies in the U.S.<sup>1</sup> As the number of challenging cardiac patient cases grows, there's a real need for cardiac-specific imaging solutions. This is why we built MyoSPECT™, a cardiac-dedicated SPECT designed and engineered from the inside out by the same manufacturer to accurately see the story in every heartbeat.

MyoSPECT combines our exclusive stationary detector complete with our own CZT module design and delivers two attenuation compensation solutions, automated motion correction on Xeleris™ and absolute myocardial blood flow readings. From form to function to the future, there has never been a more complete solution for cardiac imaging.

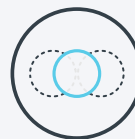




**Extended FOV  
processing for a 76%  
increase in FOV volume<sup>2</sup>**



**Smart Positioning  
workflow for automated  
scan position and FOV  
recommendations**



**Two different attenuation  
compensation solutions**



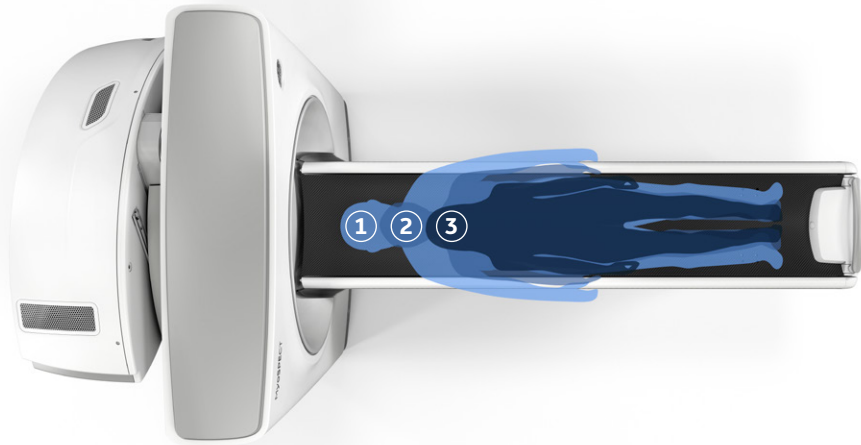
**True dynamic imaging  
with SPECT Flow**

## Design

# A perfect fit for today's practice of cardiology

MyoSPECT was designed with the same focused attention to the heart that defines the entire practice of cardiology. With extended field-of-view processing and a more capable table, that's also wider<sup>2</sup>, it comfortably accommodates all patients, large and small, with a complete picture of their heart. It's the right balance of comfort and quality to fit your practice.

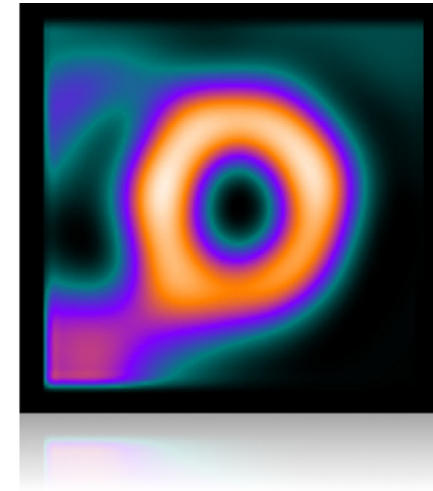




**1**  
Height: 6'6"  
Weight: 485 lbs  
BMI: 55.5

**2**  
Height: 6'0"  
Weight: 280 lbs  
BMI: 38

**3**  
Height: 5'6"  
Weight: 180 lbs  
BMI: 29



## Always have their comfort at heart

Your heart patients come to you with physical challenges that can make it difficult to get comfortable. Obese patients may have difficulty balancing their weight on a narrow table or seat and weak patients may not have the energy to sit up through an entire scan. With MyoSPECT, your patients can lie down comfortably on an all-new wider table<sup>2</sup> design that can accommodate up to 500 pounds.

## The view from here is complete

A little extra space is better for everyone, which is why we designed MyoSPECT to provide a 76 percent increase in field-of-view volume<sup>2</sup>. This gives you greater flexibility to position all of your patients, including obese patients. It's a clear, more complete look at every patient's heart.



**Extended FOV**  
processing for a 76%  
increase in FOV volume<sup>2</sup>

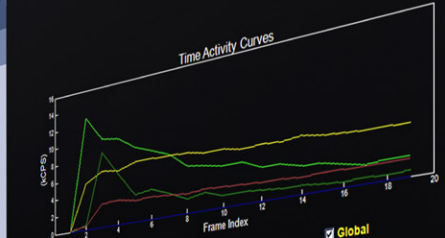
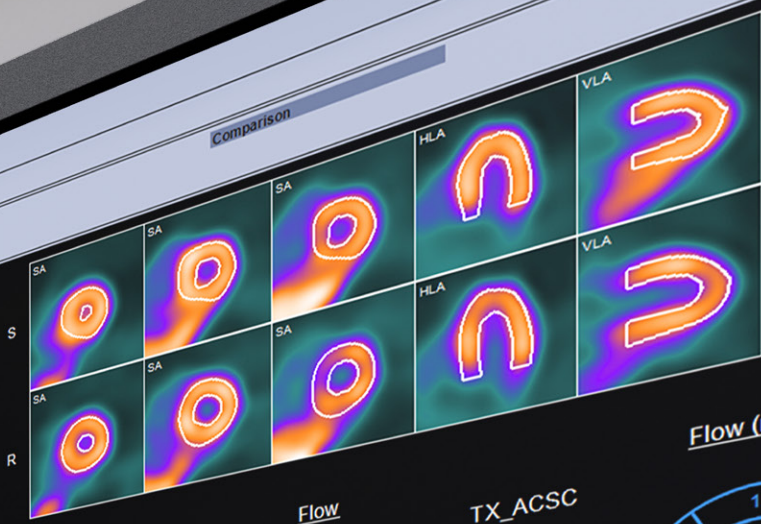
## Technology

# Never miss a beat with CZT

A true negative diagnosis starts with CZT. The excellent energy and spatial resolution of our CZT detector technology is at the heart of every MyoSPECT image. CZT is also incredibly compact, which allowed us to pair it with a novel multi-pinhole collimator design, creating a tomographic imaging arc of the heart with motionless detectors, so every detector is focused on the heart simultaneously. Also, MyoSPECT ES<sup>3</sup> comes with nine detectors, so you can choose the level of performance to meet the needs of your practice.



Comparison

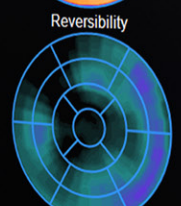


Algorithm (MC Str): GE 530c Tc-99m ROI NetRet Leppo  
 Algorithm (MC Rst): GE 530c Tc-99m ROI NetRet Leppo

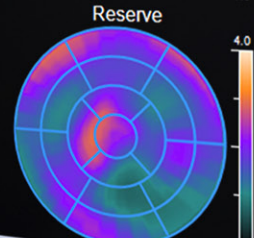
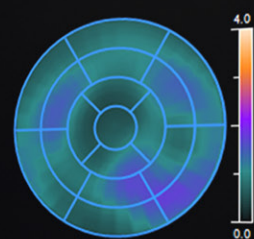
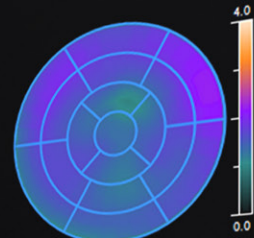
Global Results

Region	Mean		Flow (ml/min/g)		Reserve
	MC.Str	MC.Rst	MC.Str	MC.Rst	
LAD	92 %	87 %	1.54	0.87	1.78
LCX	91 %	92 %	1.63	1.15	1.42
RCA	92 %	90 %	1.45	0.98	1.47
TOT	92 %	89 %	1.53	0.94	1.62

Perfusion-Normalized



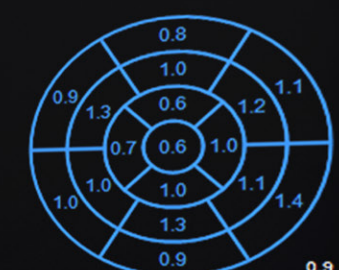
Flow



TX\_ACSC



TX\_AC



Reserve-Stats



Software interface sidebar with buttons: Load to New, Add to Current, Migration, QGS OPS.

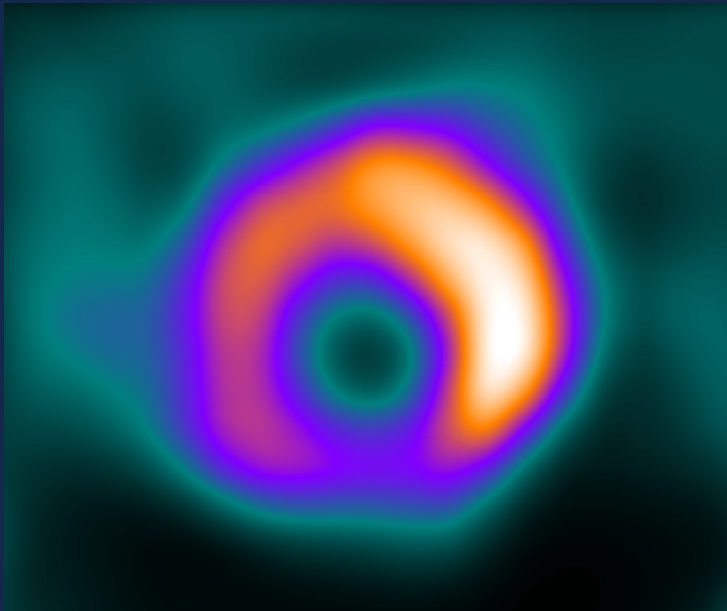
Study Name	Task Date
Study 001	2012/01/01
Study 002	2012/01/02
Study 003	2012/01/03
Study 004	2012/01/04
Study 005	2012/01/05
Study 006	2012/01/06
Study 007	2012/01/07
Study 008	2012/01/08
Study 009	2012/01/09
Study 010	2012/01/10
Study 011	2012/01/11
Study 012	2012/01/12
Study 013	2012/01/13
Study 014	2012/01/14
Study 015	2012/01/15
Study 016	2012/01/16
Study 017	2012/01/17
Study 018	2012/01/18
Study 019	2012/01/19
Study 020	2012/01/20
Study 021	2012/01/21
Study 022	2012/01/22
Study 023	2012/01/23
Study 024	2012/01/24
Study 025	2012/01/25
Study 026	2012/01/26
Study 027	2012/01/27
Study 028	2012/01/28
Study 029	2012/01/29
Study 030	2012/01/30
Study 031	2012/01/31
Study 032	2012/02/01
Study 033	2012/02/02
Study 034	2012/02/03
Study 035	2012/02/04
Study 036	2012/02/05
Study 037	2012/02/06
Study 038	2012/02/07
Study 039	2012/02/08
Study 040	2012/02/09
Study 041	2012/02/10
Study 042	2012/02/11
Study 043	2012/02/12
Study 044	2012/02/13
Study 045	2012/02/14
Study 046	2012/02/15
Study 047	2012/02/16
Study 048	2012/02/17
Study 049	2012/02/18
Study 050	2012/02/19
Study 051	2012/02/20
Study 052	2012/02/21
Study 053	2012/02/22
Study 054	2012/02/23
Study 055	2012/02/24
Study 056	2012/02/25
Study 057	2012/02/26
Study 058	2012/02/27
Study 059	2012/02/28
Study 060	2012/02/29

Software interface sidebar with buttons: Report, Screen Capture, Preferences, Help.

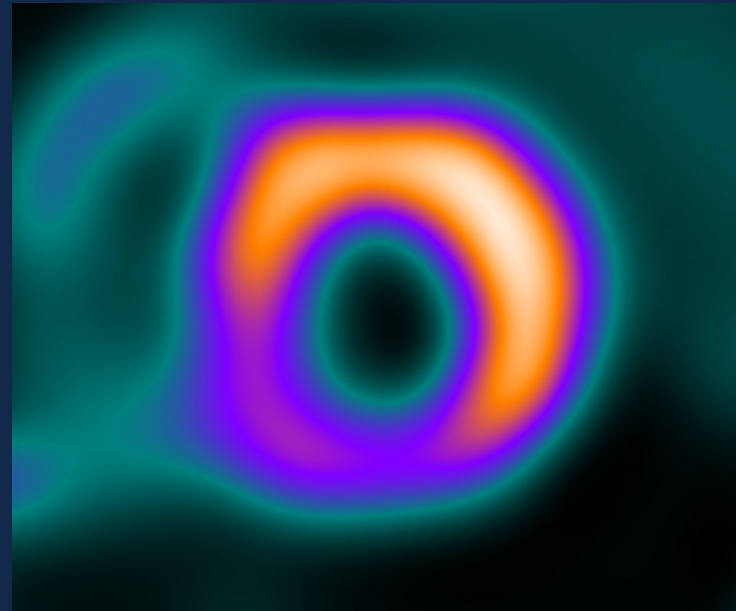
# Smart heart imaging solutions

Because every patient is different, there is no one formula for image quality. Everything from positioning, to movement, to a patient's BMI can affect your images. This can be especially challenging for high-throughput environments under pressure to maintain quality across a wide range of patient and exam types. MyoSPECT includes several new automated features that help make it easier to consistently achieve quality results.

First, Smart Positioning Workflow is designed to bring your patients to the optimized position for scanning and guides you with prompts to help you get them there quickly. Then, MyoSPECT leverages device-less Alcyone Motion Detection and Correction on Xeleris to generate MotionFree images. With intelligent solutions like these, it's hard not to acquire a quality image with MyoSPECT.



**Conventional (NaI)**

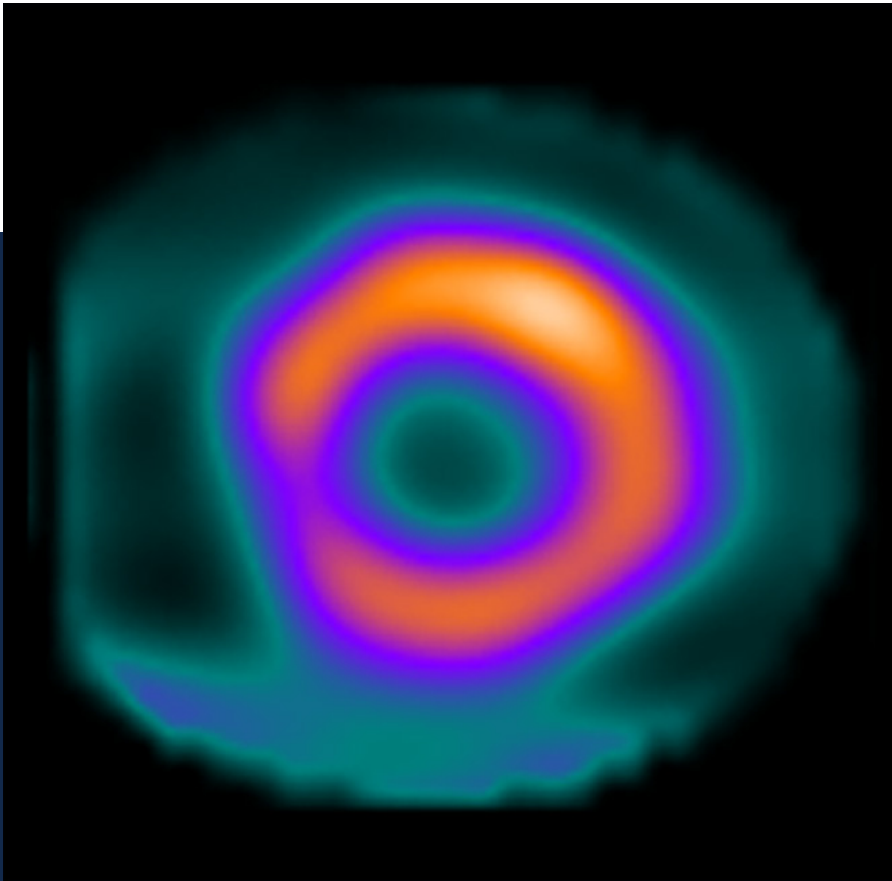


**MyoSPECT**

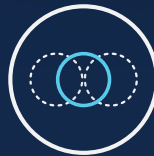


# Straight to the heart of the matter

With two out of every 10 SPECT exams resulting in inconclusive stress perfusion<sup>4</sup>, attenuation correction and evaluation solutions are essential to capturing quality cardiac images. MyoSPECT gives you two options. You can correct attenuation by combining perfusion images with separate CT images on Xeleris. Or, since MyoSPECT uses a table for patient positioning, you can evaluate attenuation artifacts by imaging both prone and supine positions without adding additional radiation exposure. Both options have the added benefit of excellent CZT resolution. No matter which option you choose, you can be sure that nothing will get between you and a clear look at each patient's heart.



**Smart Positioning workflow  
for automated scan position  
and FOV recommendations**

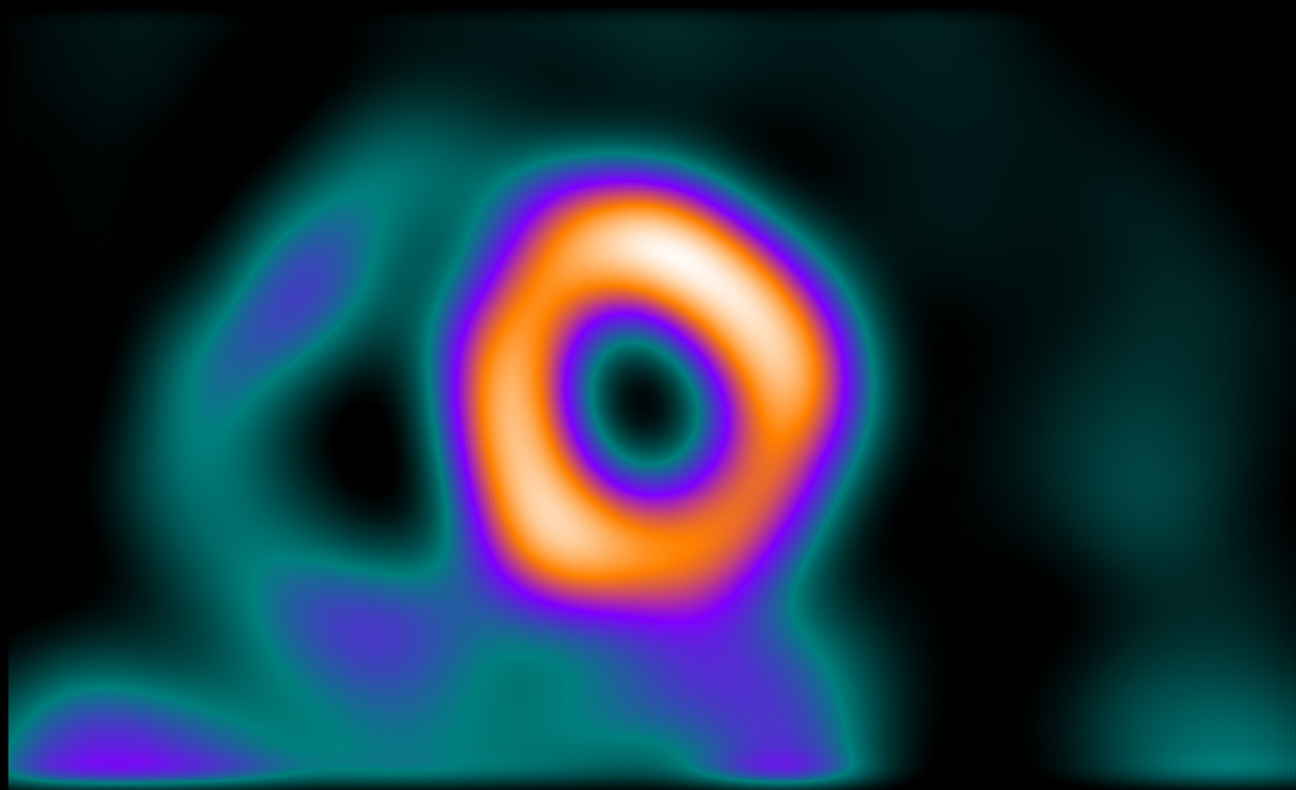


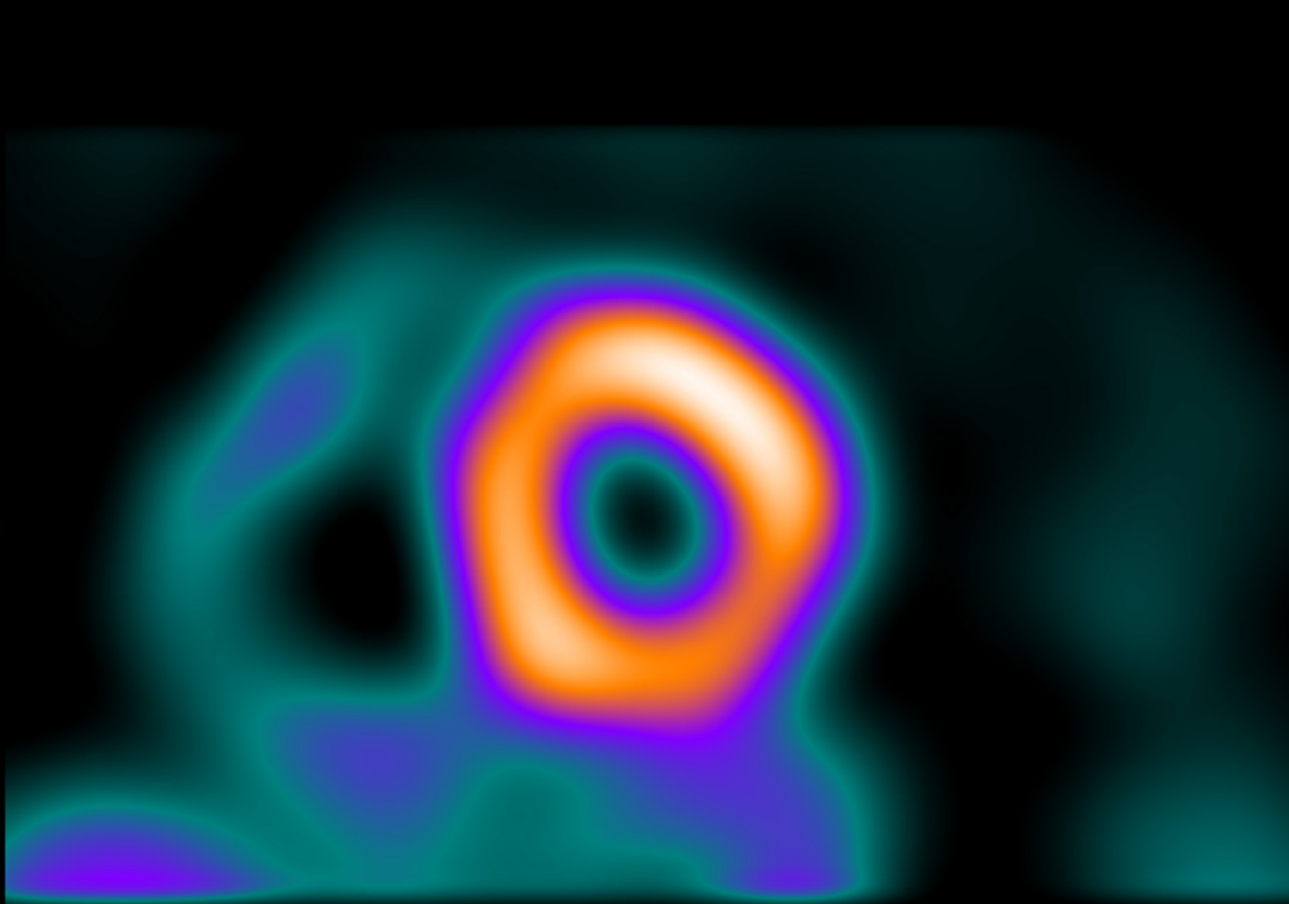
**Two different attenuation  
compensation solutions**

## Myocardial Blood Flow

# Analyze blood flow with absolute clarity

A dedicated cardiac imaging system requires dedicated technology to analyze blood flow. MyoSPECT includes SPECT Flow, which combines dynamic acquisition on MyoSPECT with CFR and absolute myocardial blood flow, should you wish to use an external CT for attenuation correction. All dynamic data processing and corresponding results are derived using Xeleris applications. The stationary design of MyoSPECT is one of the key features that makes SPECT Flow possible.





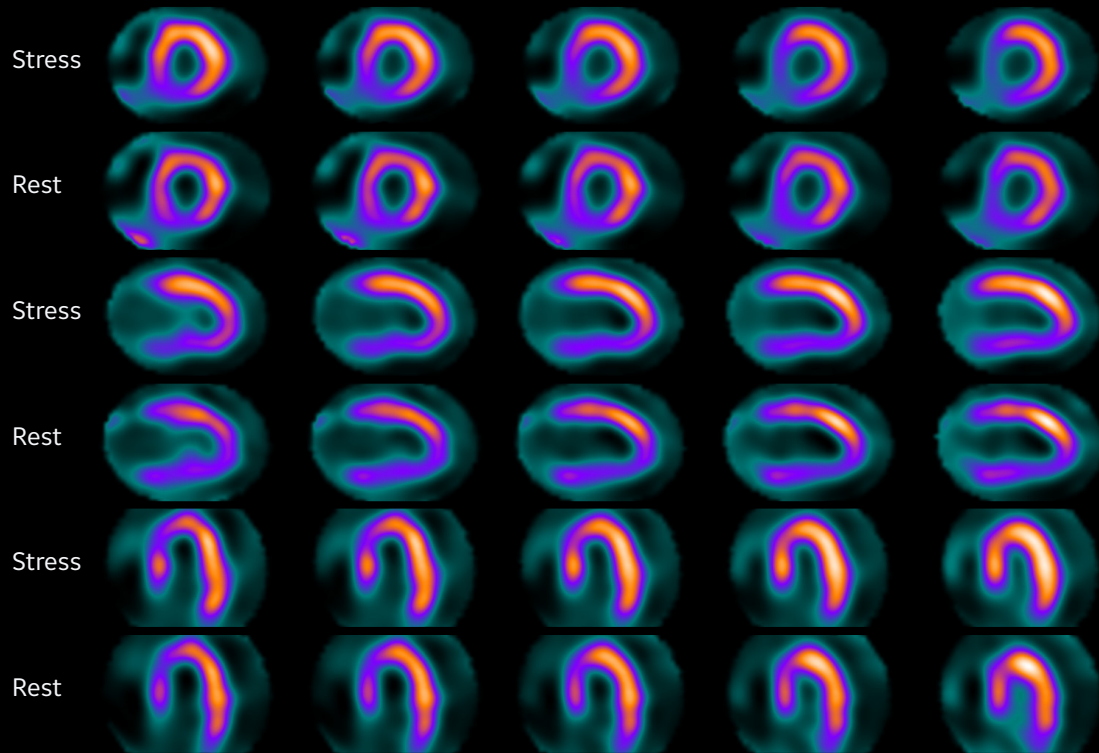
In addition, high sensitivity enables short acquisition times, translating to reduced risk of motion artifacts associated with patient movement. With SPECT Flow, MyoSPECT provides valuable insight into each patient's blood flow for true dynamic cardiac imaging and great diagnostic confidence.



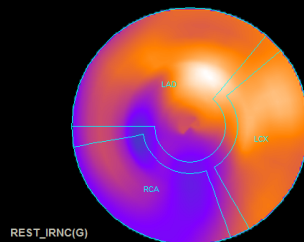
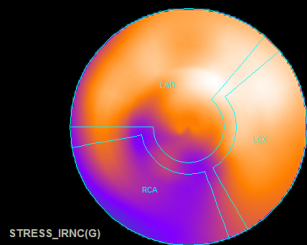
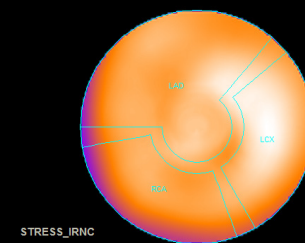
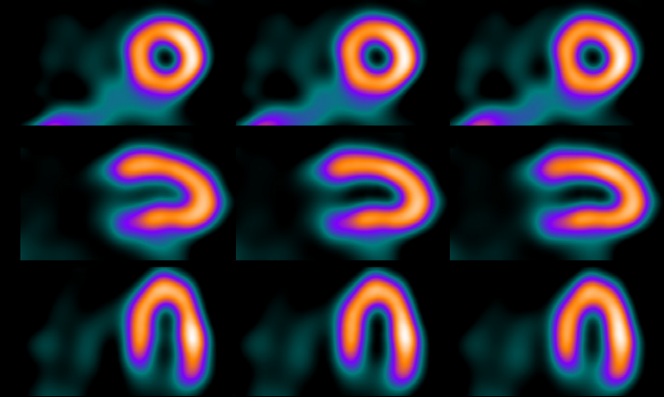
**True dynamic imaging  
with SPECT Flow**

# Cardiac like you've never seen it before

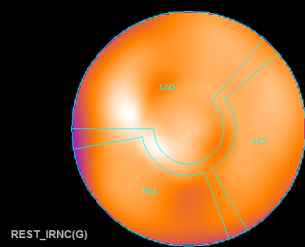
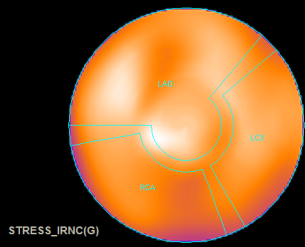
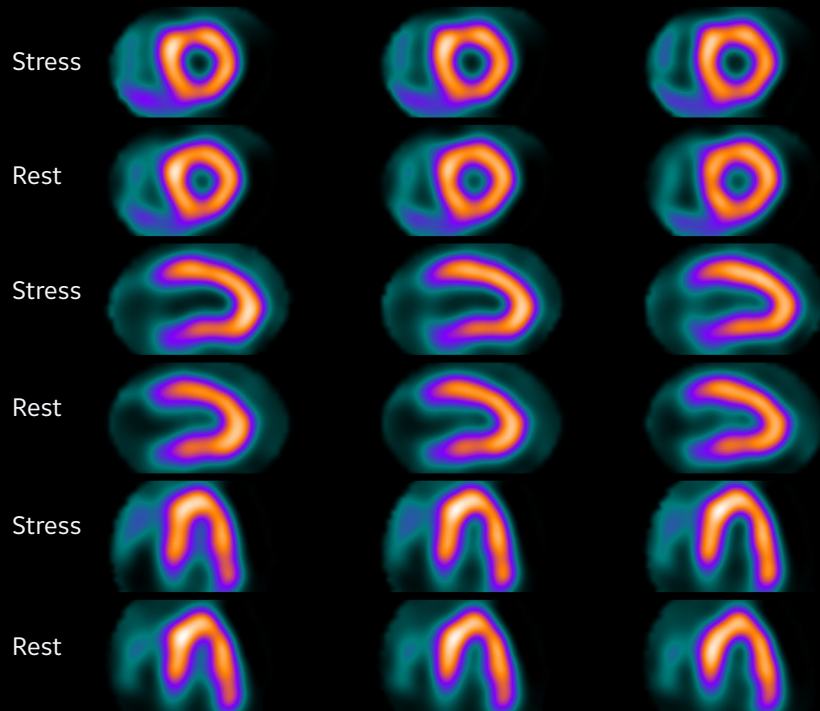
High BMI male patient  
Abnormal case



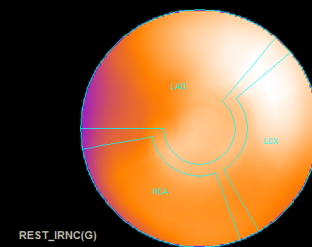
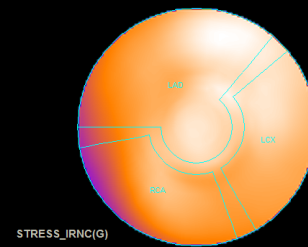
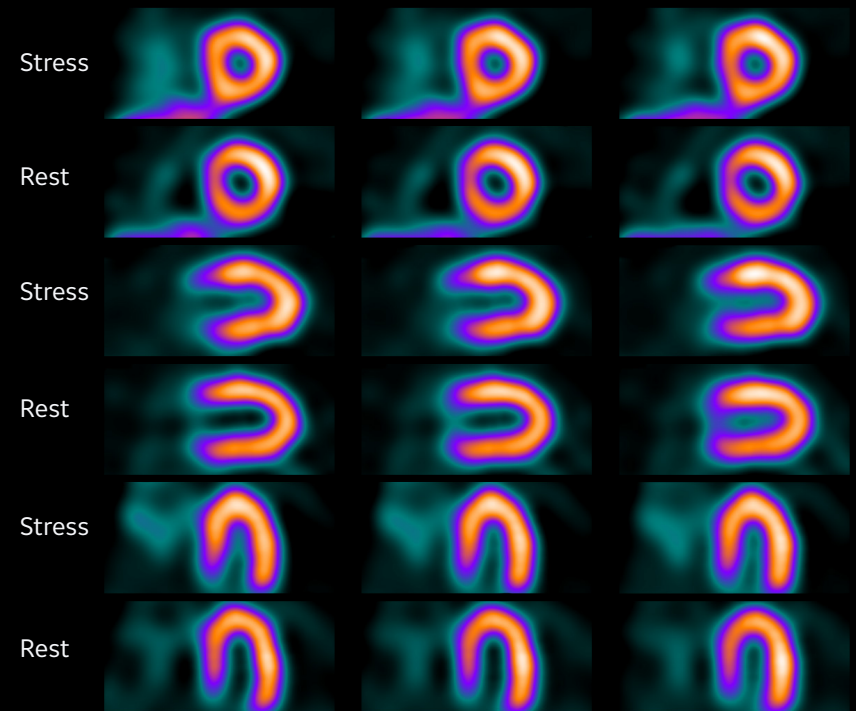
Low dose, stress-only female patient  
Normal case



High BMI male patient  
Normal case



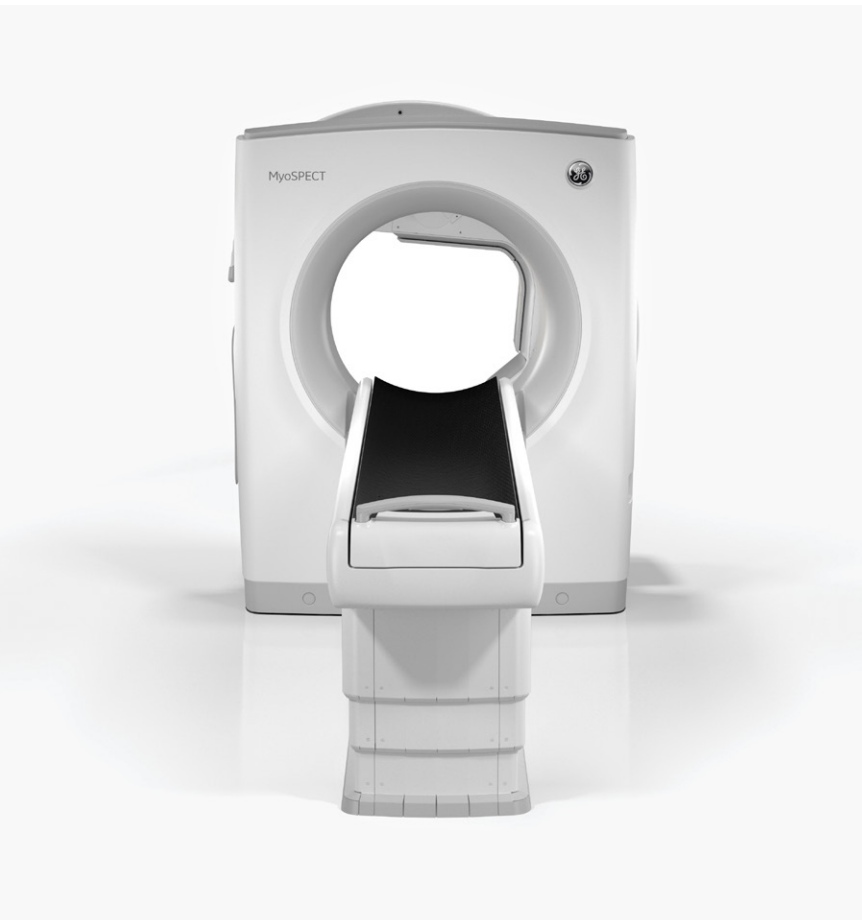
Low dose female patient  
Normal case





MyoSPECT





## Future

# Plan on a future of imaging every patient

An important part of our commitment to advancing cardiac SPECT technology is making it accessible to more people. It requires a thoughtful approach to how your system grows with your practice. With MyoSPECT ES<sup>3</sup>, you have a system built with flexibility. You can start with the essential cardiac imaging performance and add greater capacity and implement Quantitative Flow procedures when you need it. You can be confident that you are making the right investment to meet the needs of the community you serve today with a plan in place for the future.



Building a world that works

<sup>1</sup>IMV 2018 NM Market Outlook Report

<sup>2</sup>As compared to Discovery™ NM 530c

<sup>3</sup>Not CE marked. MyoSPECT ES may not be placed on the market nor put into service before CE marking.

<sup>4</sup>Desmarais et al., JACC, 1993

## About GE Healthcare:

GE Healthcare is the \$18 billion healthcare business of GE (NYSE: GE). As a leading global medical technology and digital solutions innovator, GE Healthcare enables clinicians to make faster, more informed decisions through intelligent devices, data analytics, applications and services, supported by its Edison intelligence platform. With over 100 years of healthcare industry experience and around 50,000 employees globally, the company operates at the center of an ecosystem working toward precision health, digitizing healthcare, helping drive productivity and improve outcomes for patients, providers, health systems and researchers around the world.

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