

# ***Cardiospec™***

***ESMR™***

***Extracorporeal Shockwave Myocardial Revascularization***



**Optimal Cardiac Revascularization**



# Why Use Shockwaves in Cardiology?

## Shockwave Characteristics

### What are Shockwaves?

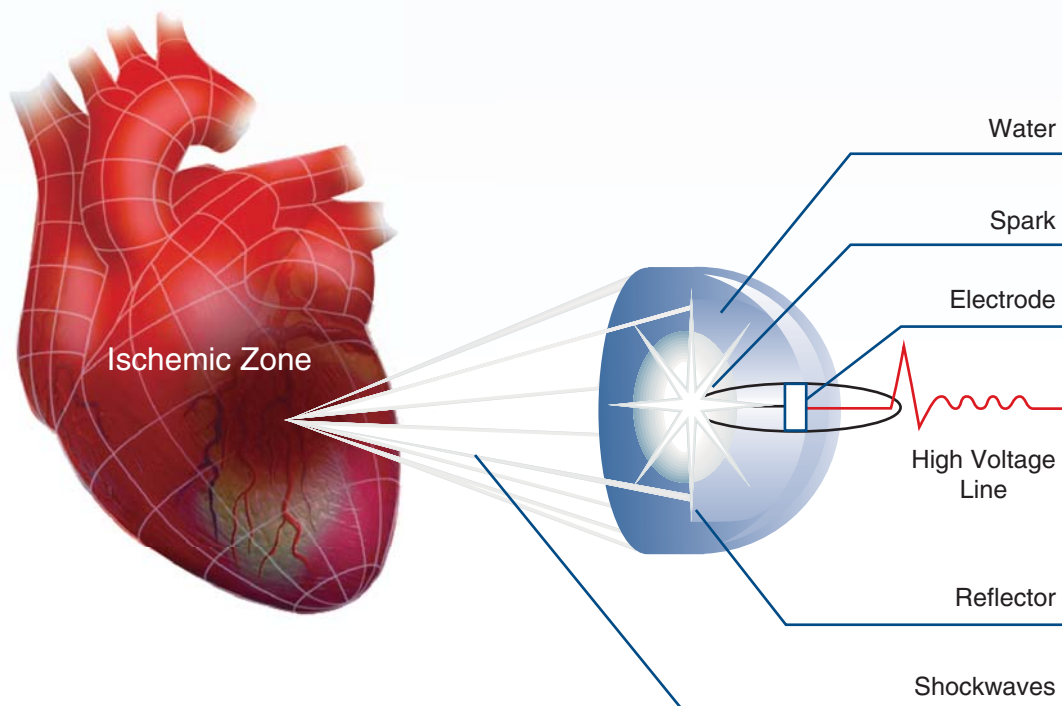
Shockwaves are acoustic waves, similar to ultra-sound waves, that are generated by an underwater high-voltage spark.

Shockwaves are single pulse waves with high-pressure amplitude, small pulse width and a short rise time.

Shockwaves are delivered non-invasively, focused by a special ellipsoid reflector.

The reflector is coupled to the patient's skin near the affected area with a water cushion.

The focal zone distance into the patient's body is adjusted according to the clinical requirements.





## What is ESMR?

ESMR therapy is a new non-invasive therapy approach using Extracorporeal Shockwave technology for Myocardial Revascularization. Ischemic myocardial areas no longer accessible by conventional revascularization therapies could be treated with the Cardiospec ESMR therapy to relieve symptoms resulted from the myocardial ischemia. The treatment is performed using a shockwave generator that is designed to address the unique clinical-anatomical requirements of the chest cavity.

A cardiac ultrasound imaging system is used to locate the treatment area and to map the exact position and extent of the ischemic zone. Shockwaves are then delivered via the anatomical acoustic window to the treatment area under E.C.G. R-wave gating.

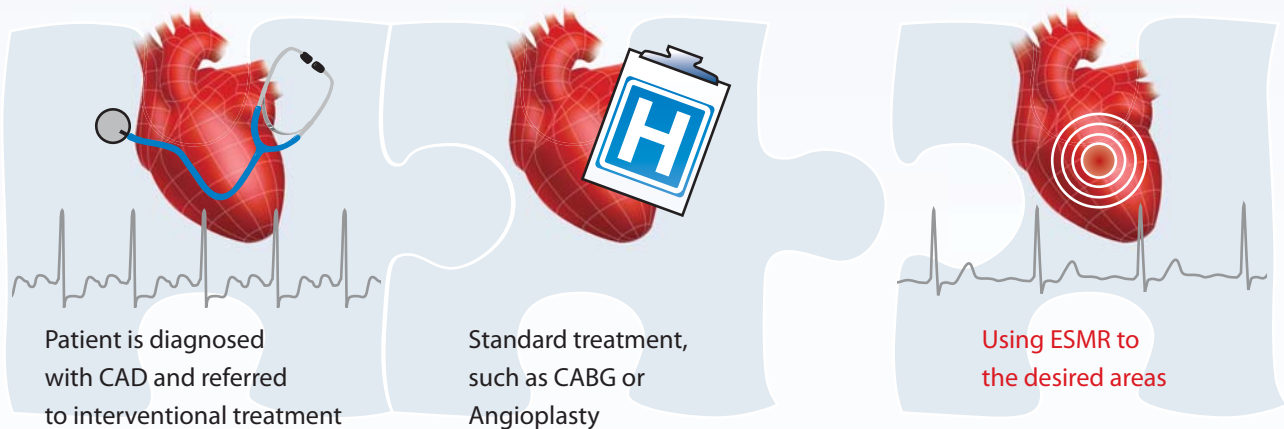
Several treatment sessions are required to obtain optimal results.

## Why ESMR?

Patients with advanced CAD frequently have recurrent Angina.

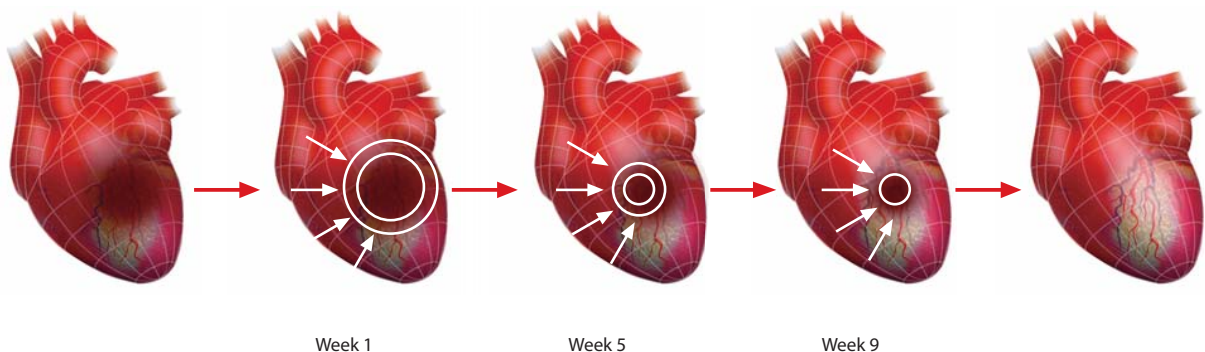
Surgical and interventional options for these patients typically have been exhausted or will result in only partial revascularization.

ESMR offers new hope for these patients and provides therapy which complement existing treatment procedures.



## Treatment Strategy

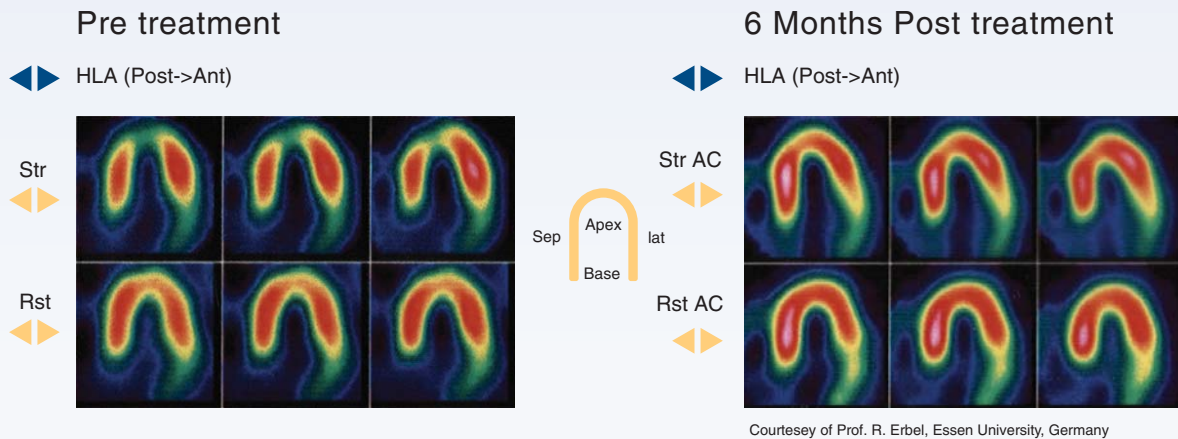
At each treatment session, shockwaves are delivered to the border of the ischemic area.



# Clinical Benefits

Shockwave therapy is the optimal therapy approach for Ischemic Heart Disease.

Typical SPECT data Pre and Post shockwave application results show:



6 Months Post Baseline show: Reduction in CCS Angina class, increase in maximal exercise capacity, increase in exercise tolerance time, improvement in physical limitation, improvement in anginal frequency, improvement in myocardial perfusion, reduction in nitrates intake per week, no acute or long term side effects were reported.

## The Medispec Advantage:

One-Stop-Shop from diagnostic to treatment

### Large Focal Zone

- Fast treatment time, total transmural coverage and optimal therapeutic effect

### Unique system configuration

- Real-time treatment view, unrestricted treatment angles and high accessibility to distal areas

### Precision of localization system

- High success rates and safety of treatment

### Custom made ultrasound configuration

The Cardiospec is a cost effective and user friendly system with proven results and efficient technology

### Shockwave Technology advantages:

- Non invasive
- Ultra sound guided
- R-wave E.C.G. gated

## About Medispec

Founded in 1992, Medispec develops, manufactures and markets high-tech medical equipment using shockwave technology for the fields of Urology (Extracorporeal and Intracorporeal lithotripsy ESWL, Treatments for Erectile Dysfunction using Extracorporeal Shock Wave for Sexual Therapy – ESST), Cardiology (Extracorporeal Shockwave for Myocardial Revascularization – ESMR), Orthopedics (ESWT), Physiotherapy (Radial Wave Therapy – RWT) and Thermotherapy (for Prostatitis & BPH), Aesthetic (Cellulite reduction using Acoustic RWT), as well as Veterinary applications. Medispec provides advanced, high quality products that comply with the worldwide standards of today's marketplace.

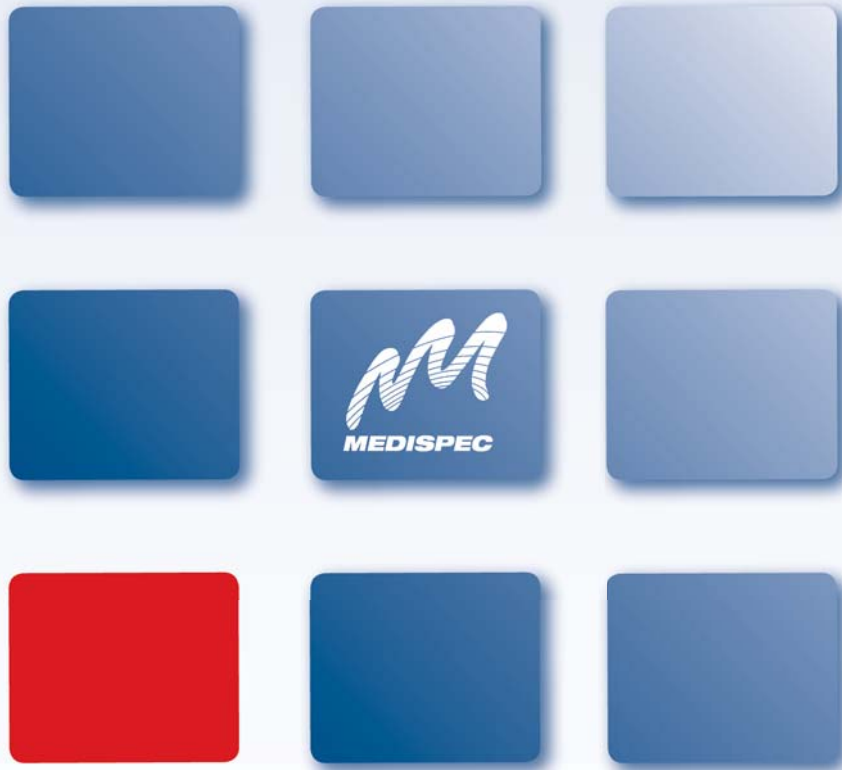
Medispec has a proven track record of delivering high performance shockwave therapy products to international medical institutions. We customize solutions that meet our clients' specific medical and business requirements, ensuring that they receive the highest quality, reliability and cost efficiencies available.

Medispec is active in over 80 countries around the world and is continuously expanding into new territories and therapies.

### Technical Specifications:

Energy Level	ED (mJ/mm <sup>2</sup> )
1	0.03
2	0.05
3	0.07
4	0.09
5	0.11
6	0.15
7	0.20





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