



# CARDIOSPEC™

## ESMR™

EXTRACORPOREAL SHOCKWAVE MYOCARDIAL  
Optimal Cardiac Revascularization

**GROUNDBREAKING TECHNOLOGY** *Within Your Reach*



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### WHAT IS CARDIOSPEC ESMR?

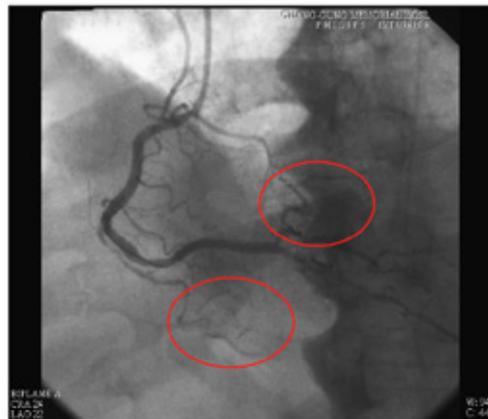
ESMR therapy is a new non-invasive therapy approach using Extracorporeal Shockwave technology for Myocardial Revascularization. Ischemic myocardial areas no longer accessible by conventional revascularization therapies could be treated with the Cardiospec ESMR therapy to relieve symptoms resulted from 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 requires to obtain optimal results.

The angiogram below demonstrates collateral formation and improved perfusion.



**Pre Treatment**



**Post Treatment**

Courtesy of Prof. Morgan Fu, Division of Cardiology, Chang Gung Memorial Hospital, Kaohsiung, Taiwan

### WHY CARDIOSPEC ESMR?

Patients with advanced Coronary Artery Disease (CAD) frequently have recurrent Angina Pectoris. Surgical and Interventional options for these patients typically have been exhausted or will result in only partial revascularization.

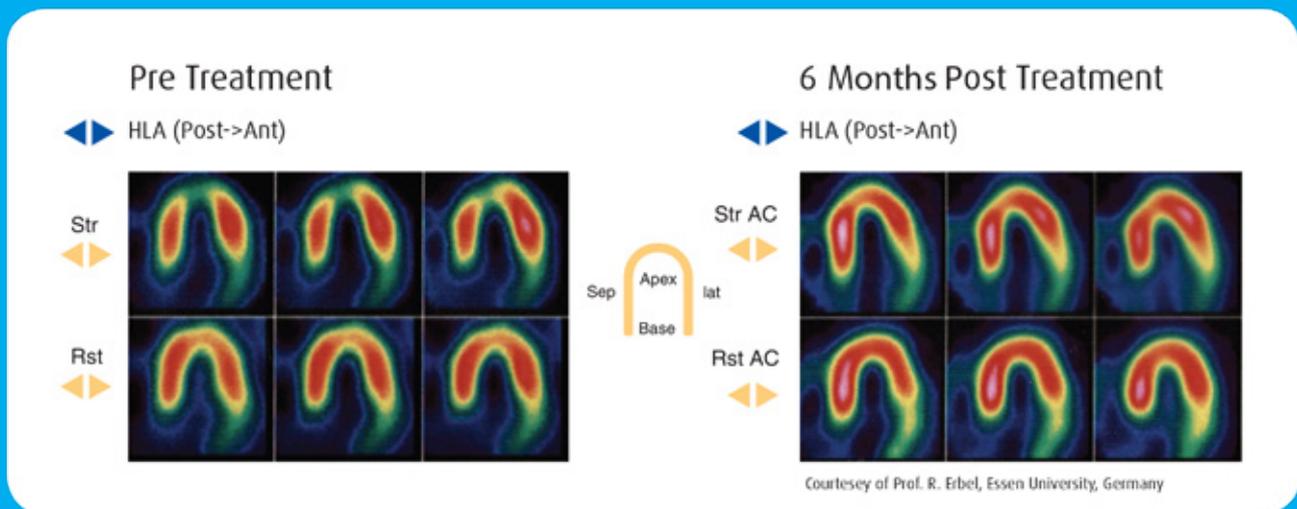
ESMR offers new hope for these patients and provides therapy which complement existing treatment procedures.

## CLINICAL BENEFITS

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

6 Months Post Baseline demonstrates: 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 figure below demonstrates an improvement perfusion, 6 months following ESMR, assessed by SPECT.



Recently, ESMR beneficial effects were demonstrated also in the treatment of Chronic Total Occlusion (CTO), Diastolic Dysfunction and Chronic Heart Failure (CHF). Medispec has also a strong basis to believe that the ESMR might be suitable for the treatment of Post Myocardial Infraction (Post MI) patients and now exploring this horizon as well.



## BENEFITS

- Quick and safe non-invasive treatment for non-option patients with myocardial ischemia
- Large focal zone - quick treatment time and total transmural coverage
- Precision of localization system - high success rates and safety of treatment
- Broad echocardiography compatibility
- Reduces symptomatic manifestation
- Improves patient's quality of life

## ABOUT MEDISPEC

With over 25 years of experience and expertise in shockwave therapy solutions, Medispec continuously introduces competitive systems and technological breakthroughs to the market. The company specializes in shockwave-based systems for urology, cardiovascular and orthopedics applications. Medispec services clinics, medical centers and hospitals in over 80 countries worldwide. All of the company's systems offer modular design, versatility, ease of use and high degree of mobility, for delivering innovative technology in a fast and efficient manner. All Medispec products comply with FDA\* and CE regulations.



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\* Excluding Theraspec, Cardiospec, ED1000, Radialspec