Heart Regeneration becomes Reality –
Shockwave Device for Regeneration of Ischemic Myocardium

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What is Shockwave Therapy?

Shockwaves in Medicine

- Lithotripsy since 1980s
- Low-energy regenerative Shockwave Therapy since 1990s in broad clinical use

Advantages - USP

- > 30 years use in medicine
- millions of patients treated
- no side-effects
- working mechanism fully described
- short time to market

shedded microvesicles stimulate neighbouring cells
Direct Cardiac Shockwave Therapy

**Shockwave Effects**
- **new vessel** formation
- **strengthening** of hybernating **heart muscle**
- **increased heart function**

**Medical Device**
- world’s **smallest applicator**
- for **direct cardiac** application
- **sterile, single-use**
- highly **differentiated**
**Human Pilot Trial**

**First in men**
- 10 patients during bypass surgery, beating heart
- post infarction, EF < 35%
- Safety & Feasibility

**First in men**
- 10% increase of ejection fraction
- no side-effects

Baseline - Dyskinesia

8w FUP - Akinesia