



# WITH TMR.

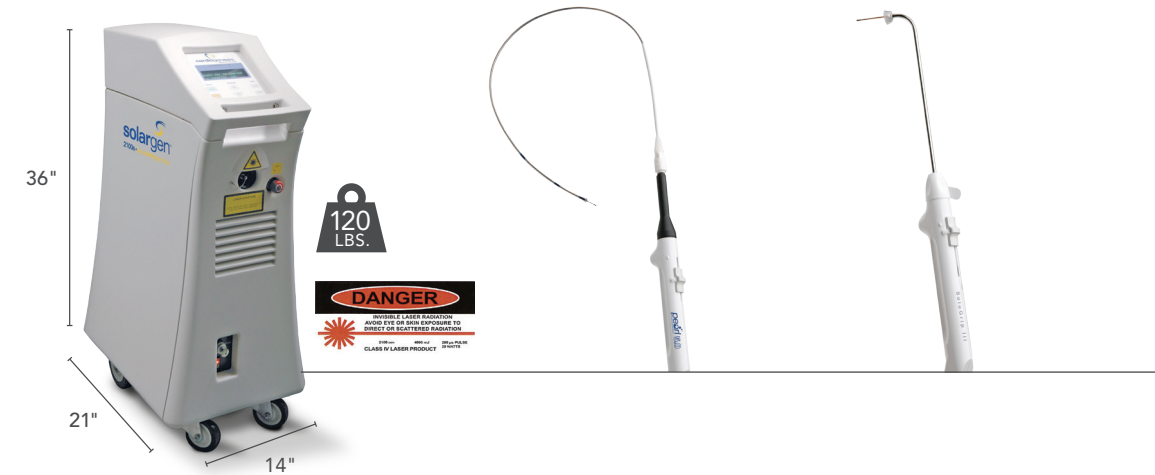
Transmyocardial revascularization (TMR) is a clinically proven laser therapy procedure for chronic angina patients refractory to medical treatment.



## THE MOST ADVANCED TMR LASER THERAPY SYSTEM.

Differentiate your practice by giving your last line patients another option with TMR, a procedure that uses a leading technology Ho:YAG laser system to deliver clinically significant results. Easy to implement and user-friendly, TMR helps you give your last line patients:

- Relief from refractory angina<sup>10</sup>
- Longer-term, event-free survival<sup>10</sup>
- Decreased major adverse cardiac events (MACE) and cardiac rehospitalization<sup>7</sup>



### SolarGen 2100S

- Rapid start-up time (less than 60 seconds)
- Can be used on pump or off pump
- Smoke evacuation not required
- No articulating arm requiring a drape
- No EKG and TEE requirements by FDA
- Simple, user-friendly touch pad controls

### Pearl 5.0

- Catalog # HP-PRL5
- For a true minimally invasive TMR procedure
- Compatible with the da Vinci robotic system
- Color-coded grasping points withstand maximum robotic forces

### SoloGrip® III

- Catalog # HP-SG3
- Steerable design allows for access to all ischemic areas of the left ventricle
- Manual fiber advancement allows the surgeon full control of energy delivery
- Delivered via sternotomy, small thoracotomy or subxiphoid approach

Draw the line on chronic angina. See how TMR works and find out more at [www.cardiogenesis.com](http://www.cardiogenesis.com)

### Professional Society Guidelines Recommend TMR for Adjunctive Use

ACC/AHA Guideline Update for Coronary Artery Bypass Graft Surgery <sup>14</sup>	Class IIb, Level B
STS Practice Guideline for Transmyocardial Laser Revascularization <sup>15</sup>	Class IIa, Level B
ISMICS Consensus Statement for Transmyocardial Laser Revascularization <sup>16</sup>	Class IIa, Level B

### Professional Society Guidelines Recommend TMR for Stand Alone Use

ACC/AHA Guideline for Management of Patients with Chronic Stable Angina <sup>17</sup>	Class IIa, Level A
STS Practice Guideline for Transmyocardial Laser Revascularization <sup>15</sup>	Class I, Level A
ISMICS Consensus Statement for Transmyocardial Laser Revascularization <sup>16</sup>	Class I, Level B

## References

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# TAKE CHRONIC ANGINA ON



# REFRACTORY.

There is a complex and underserved patient population suffering from chronic angina refractory to medical treatment. You know them—last line patients whose pain keeps them coming back for help. Those patients who haven't been completely revascularized through conventional means experience:

- Higher mortality rates<sup>1,2</sup>
- Higher incidence of major adverse cardiac events (MACE)<sup>3</sup>
- Decreased quality of life<sup>1</sup>

## Give your last line patients an option, with TMR.

TMR is a minimally invasive procedure that uses a leading technology Ho:YAG laser system. With TMR, you can treat patients who are otherwise considered inoperable, including those who have:

- One or more non-bypassable vessels or branches
- Areas of anticipated but not grafted vessels
- Small vessels (<1.5mm diameter)
- Poor distal targets/diffuse disease
- Symptomatic diabetes

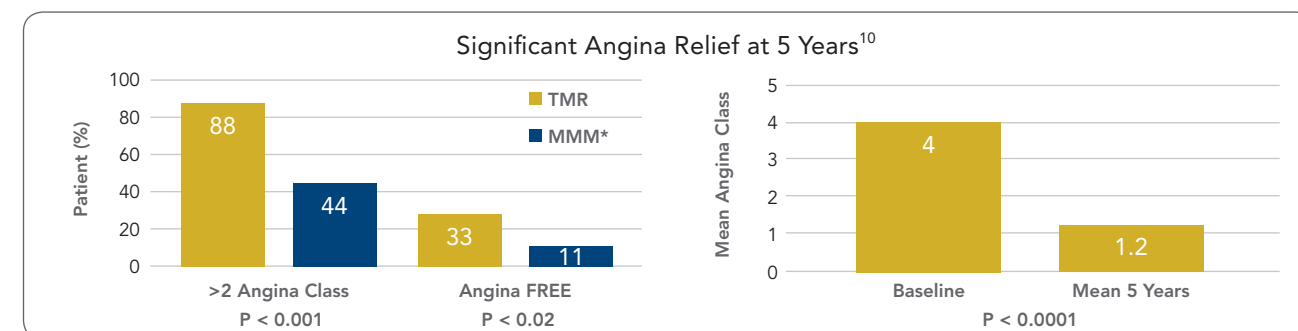
### Consider patients for TMR if they meet the following criteria:

- Refractory to medical therapy including Ranexa<sup>®</sup>
- Non-responsive to EECF<sup>®</sup>
- A region of the myocardium with reversible ischemia not amenable to PCI or CABG
- Exhibit an ejection fraction (EF)  $\geq$  30

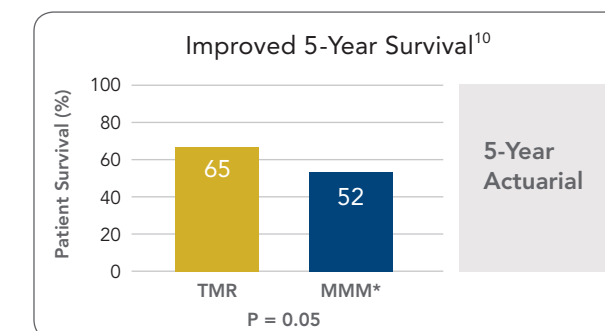
# RELIEF.

The results are clinically significant, with patients moving from class IV to a two-class or greater reduction in angina. From pain to relief. A growing number of cardiologists and cardiac surgeons are seeing these life-changing effects. Proven in six prospective, randomized control trials, involving more than 1,000 patients, TMR's stand-alone five-year results include:<sup>4,5,6,7,8,9,10</sup>

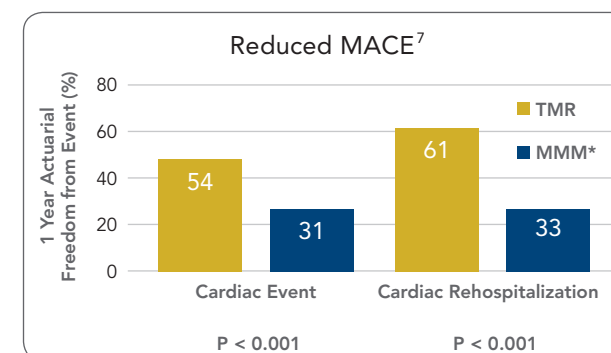
- 67-75% reduction in chronic pain associated with angina
- Longer-term, event-free survival
- Reduced readmission
- Improved quality of life



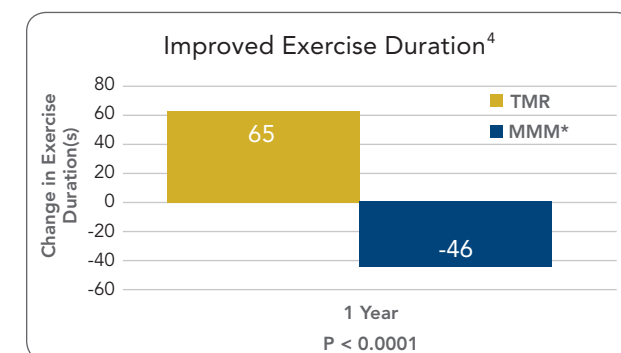
- 88% of patients experienced a two-class or greater reduction in angina, compared to 44% using maximal medical management (MMM)
- 33% of patients were angina free at five years, compared to 11% with MMM
- From a baseline of class IV angina, TMR patients after five years were at a mean angina class of 1.2



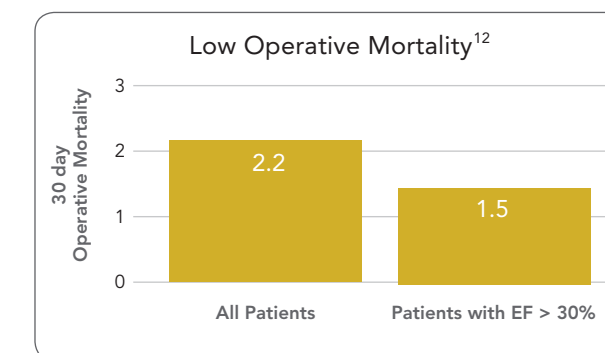
- Ho:YAG laser TMR is the only TMR therapy that has demonstrated a survival benefit for this patient group<sup>6,10,11</sup>



- Decreased major adverse cardiac events (MACE) and cardiac rehospitalization with TMR.



- A difference of 111 seconds between patients treated with TMR and MMM

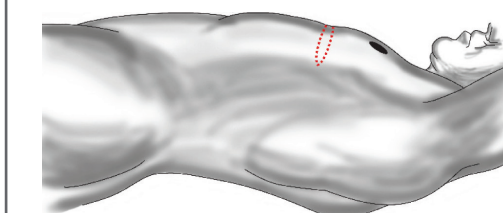


- Results are even better when patients have an ejection fraction (EF) greater than 30%

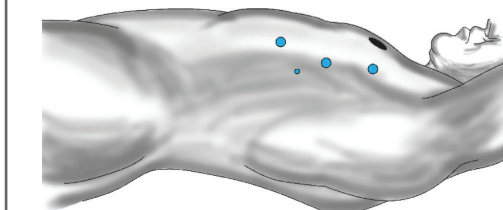
\* Maximal Medical Management

## Multiple approaches. Real results.

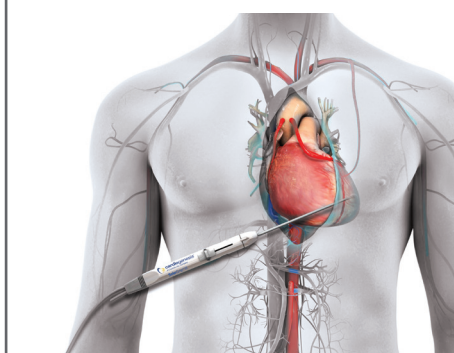
TMR is a minimally invasive procedure that uses a leading technology Ho:YAG laser system. TMR procedures can be performed:



- Via a limited thoracotomy (3-4" incision in the fifth intercostal space)



- With the da Vinci<sup>®</sup> robotic system through four ports



- Through a median sternotomy if an area can't be bypassed

## Perform TMR with a CABG procedure to aid in revascularization.

Up to 25% of all angina patients are not completely revascularized by CABG alone.<sup>13</sup> Performing TMR with a CABG procedure for patients with an ischemic area that cannot be completely revascularized adds only three minutes to a case once set up—and can help with the pursuit of revascularization to maximize patient outcomes. TMR is a safe, clinically proven procedure approved by the FDA.

// TMR gives hope to those patients who have no other options. TMR provides these patients with a better quality of life and a greater chance of survival."

— Dr. Gregory Brewer  
Cardiologist

// The ability to perform TMR should be a part of every cardiac surgeon's skill set. All of us face situations in which traditional coronary artery bypass will not achieve complete revascularization, or, cannot be performed at all. TMR offers these patients improved survival and a better quality of life with minimal risk."

— Dr. Thomas Pollard  
Cardiac Surgeon

