

# *da Vinci® Mitral Valve Repair*



*Changing the Experience  
of Cardiac Surgery*

Are you a candidate  
for the latest treatment option  
for mitral valve disease?

Your doctor may be able to  
offer you a new, minimally  
invasive surgical procedure.

Your doctor is one of a growing number of surgeons worldwide who has been successfully trained in providing leading-edge treatments such as *da Vinci*<sup>®</sup> Mitral Valve Repair.

*da Vinci* Mitral Valve Repair is setting a new standard for the surgical repair of mitral valves.

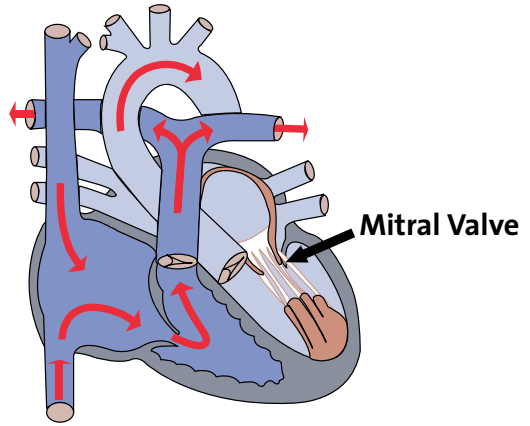
For more information on *da Vinci* Mitral Valve Repair, please visit:

[www.daVinciSurgery.com](http://www.daVinciSurgery.com)

## The Condition: Mitral Valve Disease

The mitral valve is a complex structure that controls blood flow through the left side of the heart. When open, the mitral valve allows blood to flow into the heart's main pumping chamber, the left ventricle. When the left ventricle contracts to push blood through the body, the mitral valve closes to prevent blood from flowing back toward the lungs.

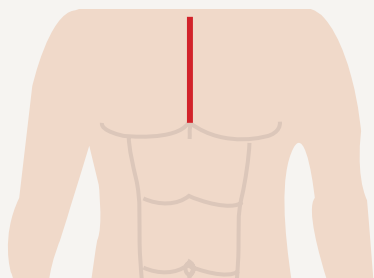
Sometimes the mitral valve is abnormal from birth or becomes damaged by infection. More often, mitral valve structures become damaged with age or from coronary artery disease. Whatever the cause, an abnormal or damaged mitral valve cannot completely seal the heart's left ventricle. With an incomplete seal, blood can escape the left ventricle and flow backwards through the mitral valve. This conflicting force can make the heart work harder, leading to further mitral valve damage and other potential complications such as congestive heart failure.



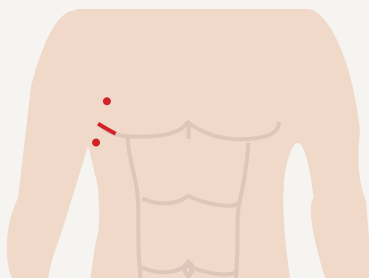
A recent clinical study suggests that *da Vinci*® MVR may significantly reduce hospital stay and the risk of serious complications when compared with open-chest surgery.\*

## The Treatment: Mitral Valve Repair

Surgical repair involves delicate reconstruction of native valve tissues in order to restore proper function. The most common approach to repair requires the surgeon to saw open the breastbone and spread the ribs to gain direct access to the heart. Cutting the sternum and opening the rib cage — the body's natural protective structure for the heart — can prolong healing time, increase risk of infection, serious complications and even mortality.



Open Chest Incision



*da Vinci* MVR Incisions

### *da Vinci*® MVR: A Less Invasive Surgical Procedure

If your doctor recommends surgical repair, you may be a candidate for a new, less invasive surgical procedure called *da Vinci* Mitral Valve Repair (*da Vinci* MVR). This procedure uses a state-of-the-art surgical system designed to help your surgeon see vital anatomical structures more clearly and to perform a more precise surgical procedure.

For most patients, *da Vinci* MVR offers numerous potential benefits over traditional open-chest surgery, including:

- > Shorter hospital stay
- > Less pain and scarring
- > Less risk of infection
- > Less blood loss and fewer transfusions
- > Faster recovery
- > Quicker return to normal activities

As with any surgery, these benefits cannot be guaranteed, as surgery is patient- and procedure-specific.



## The Enabling Technology: *da Vinci*® Surgical System

The *da Vinci* Surgical System is powered by state-of-the-art robotic technology. The System allows your surgeon's hand movements to be scaled, filtered and translated into precise movements of micro-instruments within the operative site.

The *da Vinci* System enhances surgical capabilities by enabling the performance of complex surgeries through tiny surgical openings. The System cannot be programmed, nor can it make decisions on its own. The *da Vinci* System requires that every surgical maneuver be performed with direct input from your surgeon.

The *da Vinci* Surgical System has been successfully used in tens of thousands of minimally invasive procedures worldwide.

*\*Referenced study available upon request.*



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Disclaimer

This brochure is provided for general information purposes only. Talk to your doctor about whether *da Vinci*® MVR may be appropriate for your medical condition. If you have questions about the procedure, the *da Vinci*® Surgical System or the information in this brochure, please talk with your doctor.