

How Transcatheter Aortic Valve Replacement Works

What is severe aortic stenosis?

Your aortic valve controls the flow of blood through your heart. The valve is made of three flaps of tissue, called leaflets, that swing open when blood pushes against them. When these leaflets stiffen and lose their flexibility, they no longer fully open or close properly. This results in a narrowing (stenosis) of the valve opening.

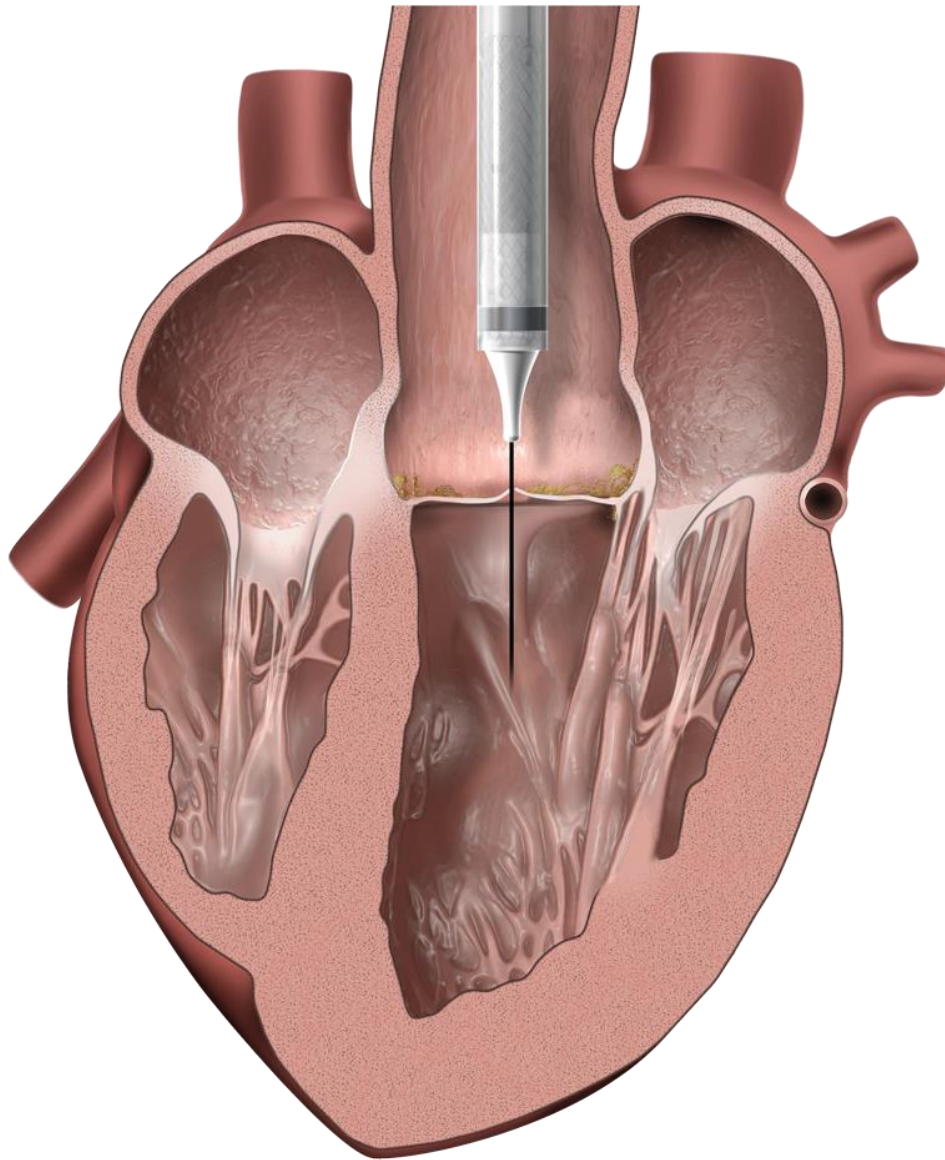
This narrowing reduces and restricts blood flow, requiring your heart to work harder. As a result, less oxygen-rich blood flows from your lungs to the brain and the rest of your body.

Why TAVR?

TAVR is a less invasive procedure that replaces the aortic valve without opening your chest to reach the heart. Patients who undergo a TAVR procedure typically have an easier time recovering and experience less discomfort. How quickly you recover and return to your daily routine depends upon your overall state of health.

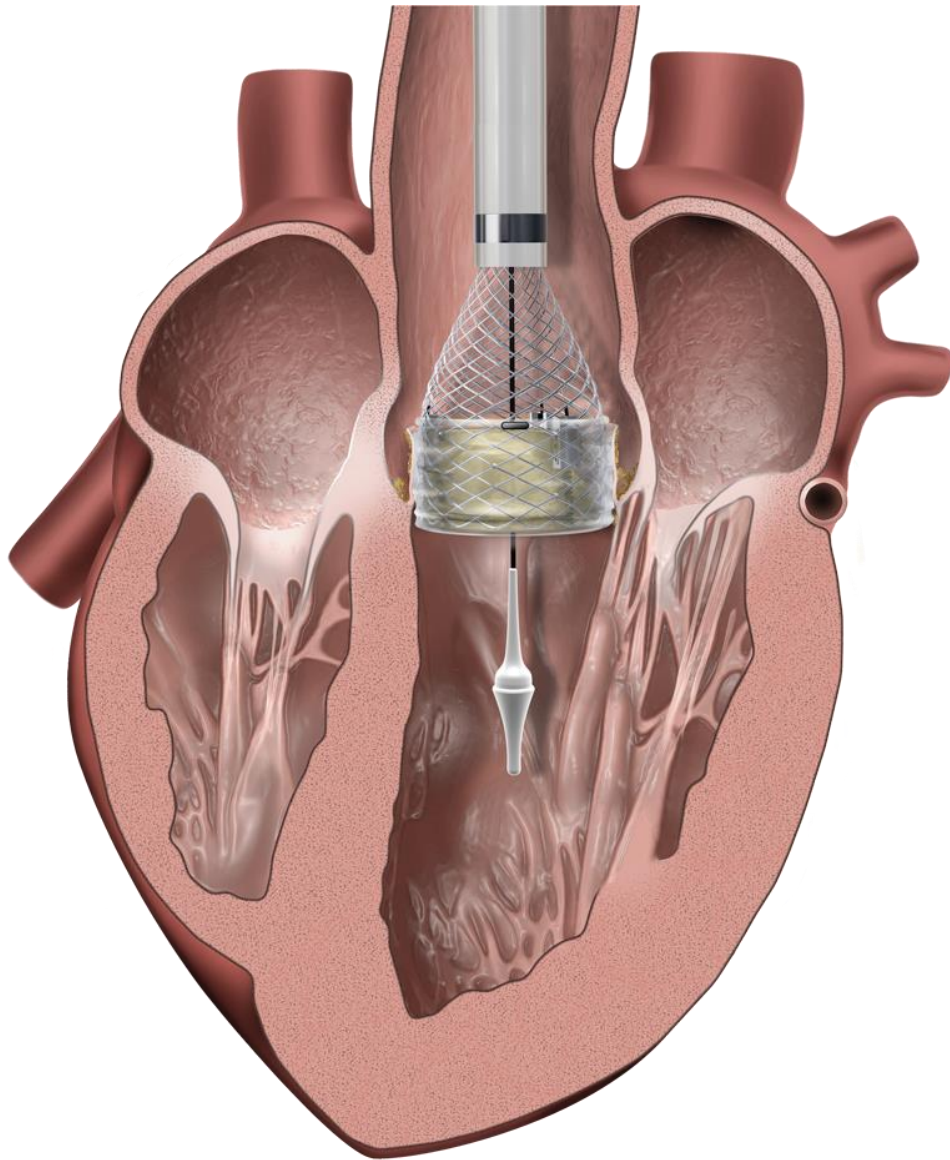
The TAVR Procedure

A replacement aortic valve is designed to restore proper function to the diseased aortic valve. It is made up of a wire valve frame and bovine (cow) animal tissue leaflets. To access your heart, your doctor will make a small incision in your artery or blood vessel, most often in the groin, and insert a small, hollow tube, called a catheter.



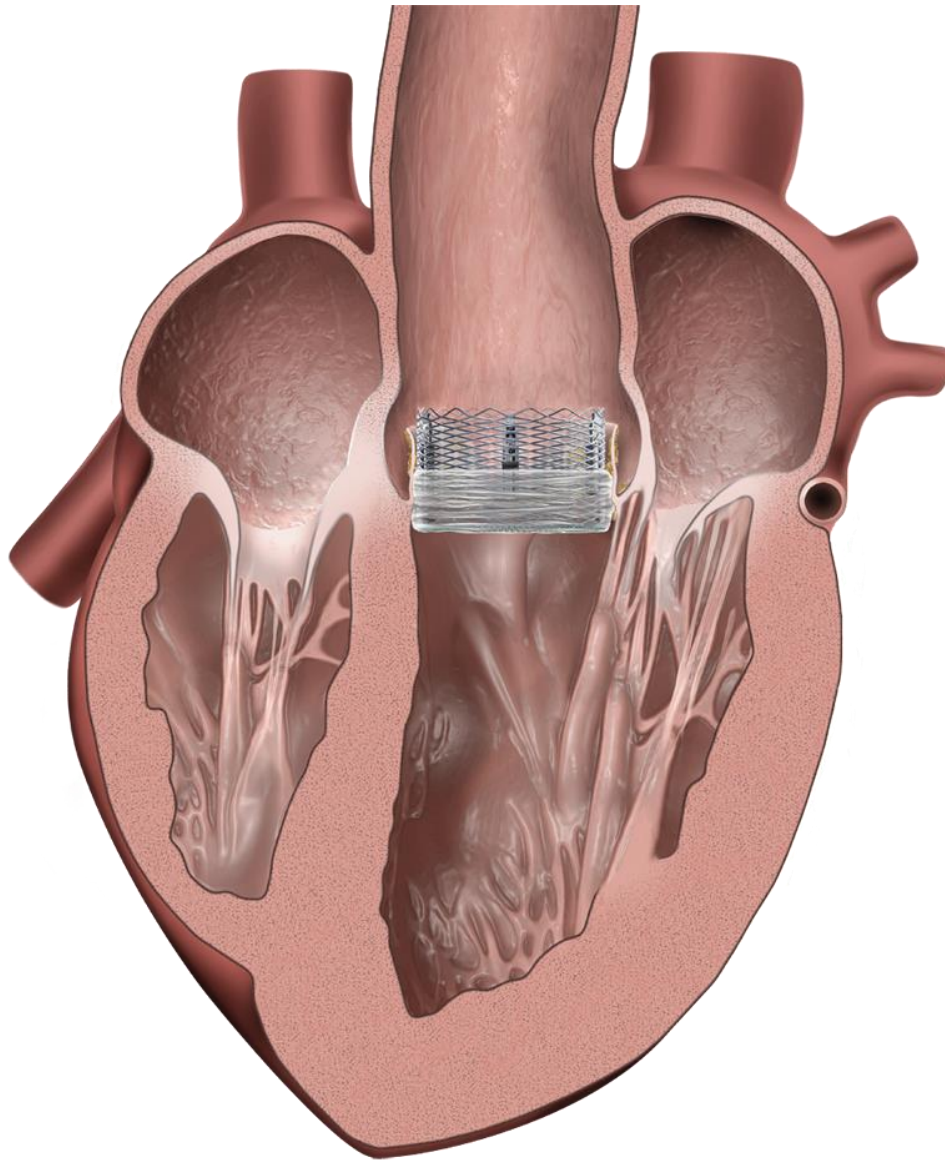
Step 1

The artificial valve is compressed and placed onto the catheter. The catheter and the compressed valve will travel through a large blood vessel until they reach the diseased aortic valve.



Step 2

Your doctor will expand the artificial valve pushing the diseased parts of the aortic valve leaflets out of the way. To guide the positioning and placement of your new valve, your doctor will use special X-ray equipment.



Step 3

Once in place, the new valve will begin to function immediately and restore healthy blood flow. Your doctor will then remove the catheter, close the incision, and transfer you to a recovery area.

Understanding Risks

A valve replacement is a major heart procedure. There are risks with all medical procedures. Refer to the Severe Aortic Stenosis and Valve Replacement Procedure patient brochure to find the risks associated with your device. Speak with your heart team to understand the risks and benefits for you.