



York and Scarborough
Teaching Hospitals
NHS Foundation Trust

Minimally Invasive Robotic Assisted Surgery

Information for patients, relatives and carers

① For more information, please contact:

Department of Urology

York Hospital, Wigginton Road, York, YO31 8HE
Main hospital switchboard Telephone: 01904 631313

Mr B Blake-James, Consultant
Telephone: 01904 725985

Department of General Surgery

Mr P Chitsabesan, Consultant
Telephone: 01904 725761

Contents	Page
Are there different kinds of surgery?	3
Why your surgeon may recommend robotic-assisted surgery	4
What is the surgical system?	5
Potential benefits of robotic surgery.....	6
Procedures	7
Frequently asked questions.....	8
How can you prepare for surgery?	9
Notes:	10
Tell us what you think of this leaflet	11
Teaching, training and research.....	11
Patient Advice and Liaison Service (PALS).....	11
Leaflets in alternative languages or formats	12

Having surgery at York hospital with the da Vinci Xi surgical system

York Hospital has installed a da Vinci surgical system, allowing patients access to minimally invasive robotic-assisted surgery. This leaflet explains what robotic-assisted surgery entails and provides information about what this means for you, if your surgeon recommends this surgical approach.

Are there different kinds of surgery?



.... Yes. Traditional open surgery, where your surgeon operates through a long incision (cut), may be the first method that comes to mind. However, you may be a candidate for minimally invasive surgery, which requires just one or a few small cuts.

Minimally invasive surgery includes:



Robotic-assisted surgery

Surgeons can perform robotic-assisted surgery with one of the different surgical systems available on the market. While the word “robotic” is in the description, a robot doesn’t perform surgery. Your surgeon is the one performing surgery controlling the instruments remotely and enabling features the surgical system offers.



Traditional laparoscopic surgery

Surgeons perform laparoscopic surgery using special long-handheld tools while viewing magnified images from the laparoscope (camera) on a video screen.

Why your surgeon may recommend robotic-assisted surgery

Just as technology, such as MRI and CT scanners, enhances doctors' skills beyond what the human body allows, robotic-assisted surgery may extend the capabilities of a surgeon's eyes and hands.

With the da Vinci surgical system, your surgeon:

- Stays with you in the operating room and uses his or her hands to control a camera and surgical instruments to perform the procedure.
- Views the entire operation in 3D HD, giving your surgeon a crystal clear view of the surgical area that is magnified 10 times to what the human eye sees.
- Uses wristed instruments that move like a human hand but with an even greater range of motion. The system's built-in tremor-filtration technology helps your surgeon move smoothly each instrument with precision.

What is the surgical system?

Different surgical systems are available on the market around the world and may present different architecture resulting in various features. The da Vinci surgical system consists of three components:



Surgeon console

Is the control center where your surgeon sits to perform the operation



Patient cart

Holds the camera and surgical instruments your surgeon controls from the console



Vision cart

Manages communication between all the system components and provides a screen for the care team to view the operation.

Care team







There are several people in the operating room during a robotic-assisted procedure. Each person is part of your care team and plays an important role in your surgery.

Potential benefits of robotic surgery

- Shorter hospital stay
- Less pain
- Reduced blood loss and need for blood transfusion
- Lower risk of complications
- Lower risk of converting to an open procedure
- Faster recover and return to normal activities

Procedures

When recommended by your surgeon, the surgical system can be used for these procedures:

	Colorectal Colon resection Rectal resection
	General surgery Bariatric (weight-loss) surgery Gallbladder surgery Hernia repair
	Gynecology Endometriosis resection Benign hysterectomy Hysterectomy for cancer Fibroid removal (myomectomy) Pelvic organ prolapse
	Head and neck Benign base of tongue resection
	Thoracic Lung surgery
	Urology Kidney blockage surgery Kidney surgery Prostate surgery

Frequently asked questions

Does the surgical system perform surgery?

No. Your surgeon performs surgery. The da Vinci surgical system translates every hand movement your surgeon makes in real time to bend and rotate the instruments with precision.

Why should I choose robotic-assisted surgery?

People choose robotic-assisted surgery for a variety of reasons. Your doctor may have recommended this surgical approach for you to enable more complex procedures to be performed using key-hole surgery, to perform the surgery more accurately or more safely.

How do surgeons train on robotic-assisted surgery?

A comprehensive training and accreditation process is used to ensure surgeons operating using the da Vinci surgical system are fully trained.

How can I get robotic-assisted surgery?

If your doctor recommends robotic-assisted surgery for your condition, he or she can let you know your next steps.

To find out more about surgery with da Vinci systems visit <https://www.davincisurgery.com/>

How can you prepare for surgery?

1. One way to learn more about your surgery is to ask your doctor and care team questions.
2. What medical and surgical options are available for me?
3. Which is best for my situation?
4. What are the differences between open, laparoscopic, and robotic-assisted surgery?
5. If you suggest I have surgery, how should I prepare for it?
6. What am I likely to experience after surgery?
7. What is the risk of complication from this surgery?

[illegible]

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact:

Mr B Blake-James, Consultant, York Hospital, Wigginton Road, York, YO31 8HE or telephone 01904 725985.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email yhs-tr.patientexperienceteam@nhs.net.

An answer phone is available out of hours.

Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website:

www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/

Owner	Mr B Blake-James, Consultant
Date first issued	May 2022
Review Date	May 2028
Version	1 (reissued May 2025)
Approved by	Robotic Steering Group
Document Reference	PIL 1568 v1.2
© 2025 York and Scarborough Teaching Hospitals NHS Foundation Trust.	
All Rights reserved.	