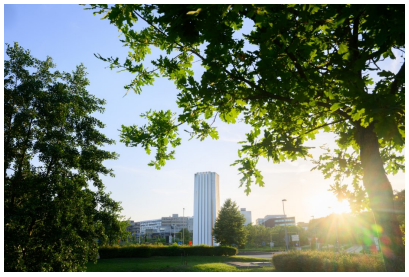
As Belgium’s largest university hospital, University Hospital Leuven (UZ Leuven) and its 10,147 staff members combine specialized care and innovative treatments with a strong focus on human attention and respect. Future healthcare providers and employees receive high-quality training, with an emphasis on lifelong learning and innovation. As a pioneer in clinical research, the hospital is continuously helping to shape the patient care of tomorrow.

In 2025, UZ Leuven performed 15,902,797 laboratory tests, an average of 1,815 tests per hour or 43,569 per day. In addition, 1,158 new studies were registered with the Clinical Trial Centre (CTC), commercial as well as academic. More than 100 studies involved human body material. In total, more than 1 million patients have participated in clinical trials, with 394,312 starting a trial in 2025.



The UZ Leuven and KU Leuven biomedical research facilities are centralised at Gasthuisberg Campus. UZ Leuven / Dries Renglé Fotografie

That same year, the hospital provided 786,608 consultations, 138,752 day admissions and 57,600 surgical procedures. A total of 388 organs were transplanted, representing 31.2% of all organ transplants in Belgium and making UZ Leuven the largest of the country’s eight transplant centres. The hospital also oversaw 2,477 deliveries.

In 2026, UZ Leuven became the first hospital in Belgium to reach the historic milestone of 10,000 transplants. This figure represents the total number of organ transplants performed at the hospital since the start of its transplantation programme in 1963.

Health Sciences Centralised on the Gasthuisberg Campus

UZ Leuven has evolved over time and was historically spread across several sites. On the outskirts of the centuries-old university city of Leuven lies the Health Sciences Campus Gasthuisberg, a 75-hectare site that has become one of Europe’s largest centres for medicine, biomedical research and training.

The foundation stone of the Gasthuisberg campus was laid in the 1970s. Since then, numerous buildings have been modernized to meet contemporary healthcare standards and the specific requirements of a university hospital. KU Leuven has consolidated its

biomedical education and research on the site. Guided by a long-term master plan for infrastructure development, the university and hospital are continuing to expand the campus. To allow older facilities to be renovated with minimal disruption to patients, several new buildings will be constructed in the coming years.

European Support for Construction Ambitions

In 2025, the European Investment Bank (EIB) granted UZ and KU Leuven a loan to further expand the Health Sciences Campus. The funding will help transform the campus into an innovation ecosystem, in line with Flanders' ambition to strengthen its knowledge economy through close collaboration with KU Leuven. The loan will support projects including the development of nuclear medicine research facilities and a tissue and biobank.

Human donor abdominal wall replaces synthetic mesh

Surgeons at UZ Leuven have achieved a double world first with a new transplant technique. They use strong connective tissue from the abdominal wall of a deceased donor to repair complex tissue defects, including in the chest wall. For the first time, this type of donor tissue has been used for chest wall reconstruction, without the need for immunosuppressive medication.

The results have been published in Annals of Surgery and The Journal of Thoracic and Cardiovascular Surgery. For large, gaping wounds in, for example, the abdominal wall, chest wall, or diaphragm, surgeons traditionally use synthetic meshes to restore structural integrity. However, in patients with an infection, these synthetic materials can cause serious problems, requiring their removal. Biological tissues of animal origin are an alternative, but they are expensive and do not always provide sufficient structural integrity.



A new transplant technique using the abdominal wall of a deceased donor. UZ Leuven

The UZ Leuven surgeons therefore began using the rectus fascia—the strong connective tissue surrounding the rectus abdominis muscles of a deceased donor. This tissue is

strong, flexible and biological. In traditional organ transplants, such as lung, kidney or liver transplants, patients must take immunosuppressive medication for the rest of their lives to prevent rejection. The Leuven researchers have shown that immunosuppressive medication can be avoided in this type of tissue transplant. They now want to investigate the technique for other conditions requiring strong biological support tissue. An important potential application is the repair of congenital diaphragmatic defects in children. *Part of the research was made possible by donations via the Second Breath project.*

Donor abdominal wall tissue could also serve as a biological alternative to synthetic material for these patients in the future. In addition, doctors are considering applications in pelvic floor surgery, such as in cases of severe bladder prolapse: here, too, strong supportive tissue is needed to restore the anatomy of the bladder. Professor Laurens Ceulemans' team is currently investigating these applications in the lab and in the hospital.

2,000th liver transplant at UZ Leuven

In 2026, UZ Leuven performed its 2,000th liver transplant, a Belgian record for adult liver transplantation. Moreover, survival rates in Leuven are among the best in the world. Belgium ranks among the world leaders in liver transplantation, with more than 30 procedures per million inhabitants. This success is supported by a large number of donors and the use of advanced technologies such as machine perfusion. This technique also makes it possible to safely use livers from older donors, aged 70 or over, or from donors who have suffered cardiac arrest, enabling more patients to receive a new organ in time. The Leuven transplant team currently performs the highest number of adult liver transplants in Belgium and across the Eurotransplant region.



Liver transplant at UZ Leuven. UZ Leuven

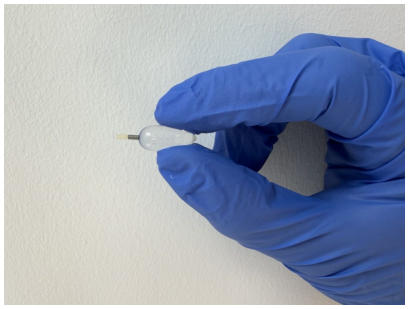
These figures are reflected in the outcomes for patients undergoing liver transplantation. At UZ Leuven, more than 90% of patients are alive one year after transplantation and 80% after five years. These results are the product of 30 years of expertise,

multidisciplinary care and a strong focus on research, as well as the generosity of donors. UZ Leuven also performs a striking number of multi-organ transplants, in which the liver and another organ—such as a kidney, pancreas, bowel, heart or lung—are transplanted at the same time.

Smart balloon avoids additional surgery

When an unborn baby has a hole in the diaphragm, known as congenital diaphragmatic hernia (CDH), organs from the abdominal cavity can shift into the chest. As a result, the lungs have insufficient space to develop properly, causing the baby to have difficulty breathing after birth and potentially resulting in death.

In severe forms of CDH, doctors insert a small balloon into the unborn baby’s trachea during pregnancy using keyhole surgery. The balloon retains fluid in the lungs, allowing them to develop more fully. UZ Leuven is known worldwide for the FETO technique, which was co-developed in Leuven by an international research team led by UZ Leuven and KU Leuven. The treatment increases survival rates in severe CDH from approximately 15% to 40%.



In severe forms of CDH, doctors insert a small balloon into the unborn baby's trachea. UZ Leuven

Risks avoided

However, the balloon must be removed before birth. Until now, this has required a second procedure, usually around 34 weeks of pregnancy. If the balloon is not removed in time, the baby will be unable to breathe after birth. The procedure carries risks, including premature rupture of the membranes and premature birth. Moreover, approximately one in three pregnant women goes into labour spontaneously while the balloon is still in place. In that case, doctors must urgently remove the balloon before the baby is born.

Because the procedure is performed only in specialized centres, pregnant women often

stay near the hospital for weeks. In 2025, approximately two-thirds of the patients treated at UZ Leuven came from abroad for FETO treatment. This makes the period particularly difficult for families and requires the permanent availability of specialized teams.

From two procedures to one

A small adjustment to the balloon eliminates the need for a second procedure. The balloon is inserted in the same way, but it contains a small magnetic sphere that seals a valve. To deflate the balloon, the pregnant woman now needs only to walk around an MRI scanner. The magnetic field sets the sphere in motion, causing the valve to open and the balloon to deflate automatically. After the procedure, doctors use ultrasound to check whether the airway is completely clear.

In the study, the balloon was successfully deflated in all cases. Thanks to this new ‘smart’ balloon, part of the follow-up could in future take place closer to home. This could make the process safer and less burdensome for families and care teams.

The study was made possible through a collaboration between multidisciplinary teams from Leuven and Hôpital Antoine-Béclère in Paris, together with the developers of the SMART-TO balloon at the University of Strasbourg.

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