

Centers of Excellence at Liv Hospital

Liv Cancer Center

What is unique about LIV Hospital's Cancer Center?

Cancer cases at Liv Hospital are evaluated based on a 360 degree multidisciplinary approach by specialists in a range of disciplines. Complex cancer surgeries performed with high precision at **Robotic Surgery Center with Center of Excellence Certificate**.

Liv Hospital has a wide repertoire of diagnosis, surgery, treatment and follow-up processes as well as **state of the art** medical and technologic equipment.

Robotic Cancer Surgery

Robotic surgery is not only a hi-tech investment. As the surgeons operate the system, the experience of the lead doctor is what makes the real difference. **Like a car and its driver**. So, a robotic surgery patient should question who the driver is.

As LIV Hospital, we are proud of having the most experienced and talented Robotic Surgeons in different branches, who have been performing high number of complex cancer surgeries through a real multidisciplinary approach. Liv Hospital is the first and only hospital in Turkey which received **Robotic Surgery Center of Excellence Certificate** from the Surgical Review Corporation (SRC). The Center of Excellence Accreditation which can be achieved by very few **hospitals** in the world and was granted to Liv Hospital that is the only organisation **accredited** outside the Unites States for the first time by SRC.

Radiation Oncology

Trubeam STx

TruebeamSTx technology is the latest Truebeam Technology that only a few hospitals all over the world possess. The main advantages of the Truebeam system at LIV Hospital are ease, precision and speed. Thanks to its pinpoint accuracy, the TruebeamSTx system can be used to treat many different types of tumors, including those in sensitive areas such as the abdomen, liver, lung, breast, and head and neck. Treatments focus powerful radiation on the tumor while minimizing exposure of surrounding healthy tissues. Truebeam was designed from the ground up to seamlessly integrate sophisticated imaging and radiation delivery treatments. What this means for our patients, is accuracy, speed and comfort. What it means for our doctors, is the ability to treat many different types of complex cancer cases.

Intraoperative Radiotherapy (IORT)

The main advantages of the IORT at LIV Hospital are efficiency, precision and time. **IORT protects healthy tissues and organs during a cancer surgery and the treatment period with IORT is much shorter with IORT compared to Standard Radiation Therapy.** Standard radiation therapy requires a 6-week treatment including approximately 5 days a week. However, the same treatment can be completed in a single-dose application with IORT. IORT can be used to treat many different types of tumors, including stomach, pancreas, intestine, colon, breast, soft tissue, lung, pediatric and gynecological cancers.

Nuclear Medicine

Liv Hospital Nuclear Medicine and Molecular Imaging Department is including **PET/CT, PEM**(One of the three PEM devices in Europe is only located in Liv Hospital in Turkey), **Gamma Camera and Administration of Radioactive Iodine Therapy**(I131 for Thyroid Cancer Treatments), Gamma Probe, Gamma Counter,

Yttrium-90 Microsphere Therapy (for Liver Cancer Treatments) and **Samarium 153** (to control and relieve pain in patients with widespread bone metastasis).

Immunotherapy

Immunotherapy is one of the biggest scientific discoveries in recent years. Immunotherapy is the technique that is considered a new era for cancer treatment and uses the immune system to work harder or smarter to attack cancer cells thus preventing growth and spreading of the cells and produces 'Extraordinary' results in Cancer patients.

T-cell therapy shows promise for treating cancer at late phases, making Immunotherapy a 'pillar' of cancer care.

Colorectal Surgery

Colorectal cancers often start out as polyps and when doctors find polyps early, colorectal cancer is highly curable. It happens when abnormal cells grow in the lining of the large intestine (also called the colon) or rectum. This is a common cancer in both men and women. It has the second highest rate of cancer deaths. Liv Hospital is the only hospital in Turkey which received Colorectal Surgery Center of Excellence Certificate awarded by the Surgical review Corporation. The Center of Excellence Accreditation which can be achieved by very few hospitals in the world and Liv Hospital that is the only organisation accredited outside the Unites States for the first time by SRC.

Neurosurgery – Spinal Surgery

LIV Hospital's Neurosurgery Clinic performs all kinds of adult and pediatric neurologic surgery. Brain and spinal cord surgery is carried out in conjunction with intraoperative ICG angiography. In addition, functional neurosurgery (**deep brain stimulation** for Parkinson's disease and other movement disorders, trigeminal neuralgia, hemifacial spasm, pain and spasticity surgery), pediatric neurosurgery (hydrocephalus, congenital nervous system malformations, and craniosynostosis) and pediatric and adult epilepsy cases are treated with advanced surgical techniques. Disk herniations, hydrocephalus and traumatic lesions can also be treated within the remit of general neurosurgery.

The Neurosurgery Clinic physicians come together for Neurology Tumor Council weekly where patient's current condition and the stage of the disease is examined in light of recent scientific studies and guided treatment process.

As a result of multidisciplinary approach to tumor cases **mortality rate of Neurosurgery Clinic was %0 in 2015.**

Orthopedics - Traumatology

Liv Hospital Orthopedics and Traumatology Department brought in something new to Turkey and created with "Regional Orthopedics" clinical infrastructure. Tailor-made treatments are offered by physicians specialized in hand, knee, hip, shoulder, spine, feet and ankle issues. This clinical structure is supported by specialist physicians in their clinical areas 7/24:

- Knee Surgery Clinic
- Foot and Ankle Surgery Clinic

- Spine Clinic
- Shoulder Surgery Clinic
- Hip Surgery Clinic
- Hand, Wrist and Elbow Surgery
- Pediatric Orthopedics

Robotic Surgery in Orthopedics - Traumatology Clinic

MAKOplasty® partial knee resurfacing is an innovative treatment option for adults living with early to mid osteoarthritis (AO). MAKOplasty is a procedure which begins before the patient is admitted into surgery, where the two implants **are positioned** and their interactive motion is optimally planned digitally on a computer. Following this, the bones are resurfaced with the aid of the robotic arm in accordance with the surgical plan, with excellent accuracy.

"Robots" period in Spine surgery

Renaissance robot enables the major surgeries such as scoliosis, kyphosis, sliding of the spine, lumbar fracture, obtaining biopsy from the spine to be performed through small incisions. In particular, it allows the surgeon to plan applications to be made in the operation to the smallest point in a virtual environment through the program installed on the surgeon's computer before the operation. Thus, surgical implants are positioned with a minimum margin of error. In addition, the exposure of radiation to the patient and the surgical team during surgery is prevented.

Obesity Center

LIV Hospital Obesity Center was co-authorized after completing the "Center of Excellence Accreditation" in the field of bariatric surgery by succeeding the stringent audit conducted by the Surgical Review Corporation (SRC) which is an impartial international commission. **The Center of Excellence Accreditation which can be achieved by very few hospitals in the world and was granted to Liv Hospital that is the only organisation accredited outside the United States for the first time by SRC.**

360 degrees follow-up with Bariatric Surgery Team– **Permanent Weight Loss Method - 0% Mortality**

"Bariatric Surgery Team" consisting of surgery, cardiology specialist, chest disease specialist, intensive care specialists, anesthesiologist and endocrine specialist, and the assistant team consisting of dietitian, psychologist and specialist nurse are highly effective in the success of obesity surgery. At the same, the technical equipment of the center also has an important role in the success of the surgery.

Liv Hospital physicians use laparoscopic and robotic technology to perform bariatric surgery that is known as the "**Permanent Weight Loss Method**" as a result of significant body weight loss. This method begins to show significant results after 6 months, and takes up to 18 months in total.

More successful results with the Center of Excellence

Obesity surgery is tried to be carried out in many centers, but the results of the operations performed by the teams without adequate training and in the centers without sufficient technical equipment will be poor and the mortality rates will be increasing. **"Centers of Excellence (COE)" are created in order to increase the success of the centers and to improve the results.**

640 patients were performed obesity surgery in Liv hospital between the years of 2013 - 2015 with 0% mortality, %2 morbidity rate. Between those years, the rate of weight loss of the patients was realized as 20%, 37%, 54% and 71% respectively at 1st, 3rd, 6th and 12th months.