



GMC seeks to purchase a PET-CT machine, which is the standard of care for battling cancer



# Establishing a PET-CT Institute

## The Situation Today

The population of the Western Galilee does not currently have timely access to PET-CT scans – a life-saving technology that is today the standard of care for battling cancer. There are very few of these machines in northern Israel, especially in the large area north of Haifa. As a result of this situation, the wait time for PET-CT appointments in the Western Galilee is three months on average. These long wait times cause delays in diagnosing and treating malignancies, and in the meantime the disease can worsen. Moreover, patients hospitalized at GMC who require a PET-CT scan must be transported to a different medical center by ambulance accompanied by a medical team, which is a complicated and inefficient process.

Since there is no PET-CT machine at the Galilee Medical Center (GMC) and appointments at the closest hospitals sometimes take months, many local cancer patients travel to distant hospitals instead of waiting so long. This is especially distressing for people in poor health who must endure long trips to the center of the country every time they require a PET-CT scan, often by themselves and using public transportation.

The Galilee Medical Center (GMC) treats the region's cancer patients through its Oncology Department and its ambulatory care services. Unfortunately, the number of cancer patients in the area is growing. Thousands are actively being treated at GMC and 500-600 new patients are diagnosed every year.





GMC's cancer patients must travel to other hospitals for life-saving PET-CT scans



GMC's Oncology Department treats thousands of cancer patients

Those who can afford private health care can secure earlier PET-CT appointments at private hospitals. Consequently, Western Galilee residents with financial means have a significant advantage combatting cancer. Since the region's population is on the lower end of the socio-economic spectrum, most are unlikely to be able to afford private PET scans – a fact which can have serious consequences for their health.

## Essential Tool for Cancer Treatment

PET-CT is a medical imaging procedure which combines two technologies in a single hybrid device: computed tomography (CT) and positron emission tomography, which is based on nuclear medicine. A radioactive substance, usually fluorodeoxyglucose (FDG), is injected into the patients' veins. Since cancerous tumors consume much larger quantities of glucose than healthy cells, the substance is captured by the cancerous cells and these diseased cells are visibly differentiated from the others when scanned.

**PET-CT scans are performed at all stages of cancer treatment from the moment of diagnosis. They are used to determine the stage of the disease and help predict the response to various treatments, and they are central to long-term follow-up.** Patients with all types of cancer regularly undergo PET-CT scans so that their doctors can determine the disease's current severity and identify metastasized cells. These scans are also used to assess the treatment's success or failure.

In recent years, doctors have started relying on PET-CT scans for other medical purposes as well. These include using PSMA markers to detect prostate cancer and to diagnose systemic infectious and inflammatory diseases.

## The Goal: Filling a Void

As part of GMC's goal of upgrading the level of health care in the Western Galilee and enabling the region's population to benefit from similar medical services as those available in central Israel, GMC wishes to boost its Oncology Department by purchasing a PET-CT scanner. **This is considered a basic piece of equipment in most hospitals around the world, and installing a machine at GMC is expected to have a significant impact on the health and quality of life of thousands of people.**

GMC would also like to develop the increasingly important field of nuclear medicine so that the hospital can approach the level of nuclear medicine offered at medical centers in the rest of the country.



However, this is not possible without a PET-CT machine.

Moreover, GMC is affiliated with Bar-Ilan University's Faculty of Medicine and its students receive clinical training at the hospital. The lack of a PET-CT scanner harms their training as future doctors. In addition, establishing a PET-CT institute at GMC will create new opportunities for medical research at the hospital.

### Budget

Galilee Medical Center is seeking \$7M in funding to establish a PET-CT Institute: \$3.5M for purchasing and installing the actual PET-CT machine, and \$3.5M to build fortified facilities where it will be housed. PET-CT machines require large spaces with high levels of protection against radiation, as well as expanded power supply and cooling requirements.

Item	Estimated Cost (USD)
Construction, including structural changes to the Isotope Institute	812,000
Electricity and Communications	406,000
Plumbing	304,500
Air-conditioning	350,000
Elevator	101,500
Furniture	101,500
Fortification	348,000
Protection against radiation, as per Ministry of Health guidelines	116,000
<b>Total Construction Cost</b>	<b>2,500,000</b>
<b>Additional costs, including consultants</b>	<b>1,000,000</b>
<b>Cost of purchasing a PET-CT machine</b>	<b>3,500,000</b>
<b>Total Estimated Cost</b>	<b>7,000,000</b>



For more information about Galilee Medical Center and to donate, please contact: Avrum Lapin, Director, **American Friends of Galilee Medical Center**. Tel: (215) 885-1550, POB 789856, Philadelphia PA 19178-9856, Email: [alapin@thelapingroup.com](mailto:alapin@thelapingroup.com), [www.afgmc.org](http://www.afgmc.org)  
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