

# GAMMAPEN

## All in one Version of GammaProbe

Radioguided Surgery has Proven to be a Feasible and Promising Alternative for Management of Oncological Patients. This Technique is Useful in Cases where the Suspect Lesions are Difficult to Identify Intraoperatively due to Their Dimensions or Anatomical Location, Enabling More Conservative Excisions and Reducing the Morbidity Related to Surgery.

So Some of the Applications of GammaProbe are:

- **Sentinel Lymph Node (SLN) Mapping.**
- **Identification, Localization & Detection of SLN.**
- **Sentinel Lymph Node Biopsy (SLNB).**



### Advantages of GammaPen

- Portable All-in-One
- Wireless Stand Alone Probe (without any Console)
- Digital Easy to Read Display
- Sound Modulated with Count Rate (FM/Beep Sound)
- Advanced Lymphatic Mapping
- Depict Low-Uptake or Deep Seated Nodes
- High Shielding Efficiency
- Adequate Dimension
- Rechargeable Long Life Battery
- Light Weight
- Ergonomic and Easy to Use
- ISO, CE and Other Production Licenses



**Parto Negar Persia Co.**

Pioneer in Healthcare Technology

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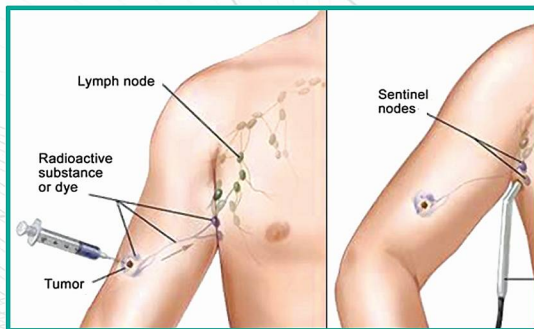


📍 **Factory:**  
No. 15, Derakhshan Alley, Km.19 Shahid  
Lashgari Highway, Tehran, Iran.

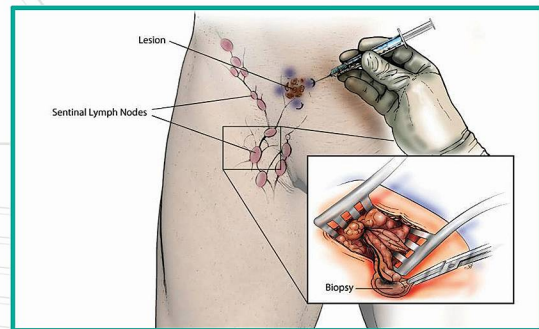
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## Clinical Applications:

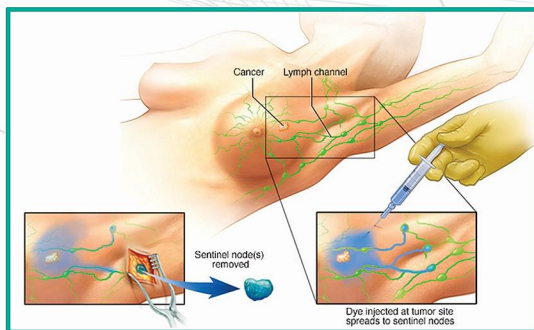
- Breast Cancer
- Gynecological Cancers (Cervical, Ovarian, Uterine, Vaginal and Vulvar)
- Melanoma and Other Types of Skin Tumors
- Gastrointestinal Tumors
- Head & Neck
- Endocrine Cancers (Thyroid, Parathyroid)
- Urology Cancers (Prostate, Bladder, Testicular, Kidney and Penile)
- Bone Tumour (Such as Osteoid Osteoma)
- Nuclear Medicine (Localization of Gamma Labeled Areas)



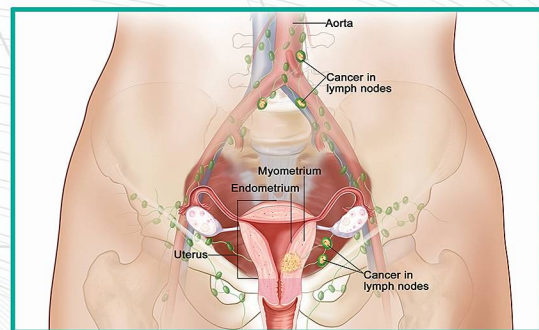
Sentinel Lymph Node Biopsy for Bone Tumor



Sentinel Lymph Node Biopsy for Skin Cancer



Sentinel Lymph Node Biopsy for Breast Cancer



Sentinel Lymph Node Biopsy for Gynecological Cancers

## GammaPen Specifications: (Based-on NEMA-NU3 Standard Test)

- Length: 22 cm
- Tip Diameter: 14 mm
- Detector Crystal: CsI (TI)
- Total Weight: 230 gr
- Sensitivity: >3K cps/MBq @ 3 cm
- Shielding Efficiency: 99% for Tc-99m
- Energy Resolution: <11% FWHM for Tc-99m
- Angular Resolution: Between 65° to 75°
- Spatial Resolution: <45 mm FWHM at 3 cm Distance (For Large Probe)
- Energy Range: 60 keV (Am-241) to 364 keV (I-131) "Optimized for 140 keV Tc-99"



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