Japanese medical device developer is seeking distributors and commercial agents in the EU for their handheld magnetic probe utilized in sentinel lymph node detection and occult lesion localization.

**Summary**

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<th>Profile type</th>
<th>Company's country</th>
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<th>Profile status</th>
<th>Type of partnership</th>
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**General Information**

**Short summary**

A Japanese company specializing in magnetic probe research & development for sentinel lymph node identification and occult lesion localization is looking for partners with experience and connections in the bioengineering and medical devices sector to support their entry into the EU market. The partnership sought is a distribution services or commercial agency agreement.

**Full description**

Established in 2005, this Japanese SME has developed a handheld magnetic probe designed to detect magnetic fluids injected during sentinel lymph node biopsy (SLNB), as well as magnetic markers inserted during occult lesion localization (MOLL). The company specializes in research & development of medical devices and equipment for diagnosis of cancer metastasis, anti-Tenascin antibody therapy, medical supplies, medical-use cells, pharmaceuticals and diagnostic agents, as well as new technologies for diagnosis and treatment in regenerative medicine.

Sentinel lymph node biopsy is the current standard in early breast cancer therapy. It involves the removal of just 2-3 lymph nodes from the underarm area, therewith greatly reducing the risk of lymphedema or morbidity compared to traditional lymph node dissection, which requires the removal of almost all lymph nodes from the patient’s armpit.
Supported by prominent Japanese public organisations, this SME’s device – consisting of a permanent magnet and a hall sensor – is the result of a joint collaboration between researchers at a famous Japanese university and a team of renowned surgeons, aiming to create an alternative to conventional radioisotope techniques. The magnetic probe is CE Marking certified. Furthermore, the company has a European Authorized Representation agreement for their product with a German partner since 2018.

Clinical trials to prove the magnetic method’s non-inferiority to the conventional radioisotope technique in detecting sentinel lymph nodes was conducted in recent years resulting in an overall successful detection rate of 94.9%. Originally developed for diagnosing breast cancer metastases, clinical trials to investigate the magnetic probe’s effectiveness in other types of cancer are currently in progress.

Furthermore, to prevent false negatives when operating a magnetic probe, the SME also designed non-magnetic titanium retractors to be used in conjunction with the device. This addition to the magnetic probe is planned for launch onto the Japanese market in 2021.

The company wants to make its market debut in the EU and is seeking partners in the form of distribution services and commercial agency agreements. The Japanese company will provide the partner with technical information on the device in English and German and is also willing to support distribution partners or commercial agents with on-demand assistance and information.

Advantages and innovations

Unlike conventional radioisotope methods, sentinel lymph node biopsy with magnetic tracers and probes enables even small- to medium-sized medical institutions, that may not have nuclear medicine facilities, to accurately diagnose cancer metastasis. The diagnosis of cancer metastasis can be performed during surgery, has a short lead time, and is radiation-free and minimally invasive. This greatly increases cancer patients’ overall quality of life.

Where similar devices require a cable-connected external unit, this reusable handheld magnetic probe is lightweight, cordless and battery-powered, hence only requiring one operator. No other competitor currently provides a cordless, battery-powered magnetic probe for sentinel lymph node identification or occult lesion localization. The operation itself is kept simple and straightforward, with only three buttons and an easy-to-understand LED display.

The device is not sterile and must be covered with a single-use sterile sheath, when operated in contact with body tissue/liquid. The company also complies with a large variety of certification standards, which is a testament to their high-quality standards.

Stage of development

Sustainable Development goals

- Not relevant

IPR Status

No IPR applied

Partner Sought

Expected role of the partner

The Japanese company is looking for partners that have profound expertise in EU and governmental regulations. Connections to small- or medium-sized hospitals and medical institutions are highly desirable. The partnership envisaged will be in the form of a distribution services or commercial agency agreement.

Type of partnership

Type and size of the partner
Supplier agreement  • SME <=10
Commercial agreement  • SME 11-49
  • Big company
  • SME 50 - 249

Dissemination

Technology keywords

Market keywords
  • 05004001 - Electromedical and medical equipment
  • 05004005 - Diagnostic equipment

Targeted countries  • World

Sector groups involved  • Healthcare
Media

Images

- Takumi_case.jpg
- SLNB_model.png
- Takumi_1.jpg