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**Manuscript NO:** 53980

**Manuscript Type:** OPINION REVIEW

**Liver-directed therapies for liver metastases from neuroendocrine neoplasms: can laser ablation play any role?**

Sartori S *et al.* LA in NEN

Sergio Sartori, Lara Bianchi, Francesca Di Vece, Paola Tombesi

### Abstract

Aggressive cytoreduction can prolong survival in patients with unresectable liver metastases (LM) from neuroendocrine neoplasms (NEN), and minimally invasive, liver-directed therapies are gaining increasing interest. Catheter-based treatments are used in disseminated disease, whereas ablation techniques are usually indicated when the number of LM is limited. Although radiofrequency ablation (RFA) is by far the most used ablative technique, the goal of this opinion review is to explore the potential role of laser ablation (LA) in the treatment of LM from NEN. LA uses thinner needles than RFA, and this is an advantage when the tumors are in at-risk locations. Moreover, the multi-fiber technique enables the use of one to four laser fibers at once, and each fiber provides an almost spherical thermal lesion of 12-15 mm in diameter. Such a characteristic enables to tailor the

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Liver-directed therapies for liver metastases from neuroendoc



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## Neuroendocrine Cancer - Liver directed therapy - Ronny ...

<https://ronnyallan.net/2020/01/22/neuroendocrine-cancer-liver-directed-therapy> ▾

Interest point: Clinical Trials **for Liver Directed Therapy**. Lu177 Based. There's a clinical trial looking at the use of Lu177 in a **liver** directed modality. Based in Netherlands, you **can** read about the Intra-arterial Lu177 (PRRT) for **Neuroendocrine Cancer liver metastases** ...

## Liver-Directed Therapies for Metastatic Neuroendocrine ...

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**Radiofrequency ablation (RFA)** is another form of liver-directed therapy used as a means of treating smaller **tumors**. The growing experience with **RFA** in **hepatocellular carcinoma** and **colorectal cancer metastases** has led to its use in **neuroendocrine tumors** also.

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## Liver-Directed Therapies for Metastatic Neuroendocrine Tumors

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## Neuroendocrine Cancer - Liver directed therapy - Ronny ...

<https://ronnyallan.net/2020/01/22/neuroendocrine-cancer-liver-directed-therapy>

The following **liver directed therapies** may be used to **treat NETs** in the **liver**. You may have other **treatments** before or after **liver directed therapy**. **Liver Embolization**. As stated above, **NETs** are known to be a highly vascular, that is they live on **blood supply**. **Tumour embolization** is a procedure to shrink a **liver tumour** by cutting off its blood supply. The doctors put a thin, ...

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## Liver directed therapy for neuroendocrine tumours (NETs ...

<https://www.cancer.ca/.../neuroendocrine/treatment/liver-directed-therapy/?region=on>

If **neuroendocrine** tumours (NETs) spread, they often spread to the **liver** (called **liver metastases**). **Liver directed therapy** directly targets the cancer in the **liver** and is often used to



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## [Liver directed therapy for neuroendocrine tumours \(NETs ...](#)

<https://www.cancer.ca/en/cancer-information/cancer...>

If **neuroendocrine** tumours (NETs) spread, they often spread to the **liver** (called **liver metastases**).

**Liver** directed **therapy** directly targets the cancer in the **liver** and is often used to treat NETs that have spread to the **liver**. **Liver** directed **therapy** is mainly used when surgery **can't** be done. You may have **liver** directed **therapy** to:

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## [Liver-Directed Therapies for Metastatic Neuroendocrine Tumors](#)

<https://www.sciencedirect.com/science/article/pii/S0889858807000287>

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