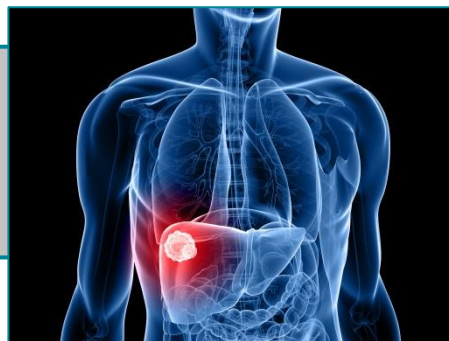


Cherenkov photodynamic therapy in deep tissues

phototherapy / PDT / Cherenkov / targeted therapy /
tumor / oncology



CONTEXT

Classic photodynamic therapy (PDT) functions with an external light source. This external light source limits the use of classic PDT to treatment of superficial tumors (dermatology applications or during open surgery when removing the tumor).

The objective of our new approach is to extend the use of classic PDT to treatment of deeper tumors. The technology used, incidentally also allows a much better targeting of the tumors.

DESCRIPTION

The core innovative step is to go from a multimolecular approach as used in classic PDT to a monomolecular approach that we call PDT Cherenkov.

The molecule that we developed contains its own radiation source that leads the molecule to improve the production of oxygen free radicals (highly toxic for cells) more than classic PDT. This molecule can be linked to specific antibodies, for instance, to target it against tumor cells only.

Exogenous light source is not necessary anymore and Cherenkov PDT can be applied, through injection, on deep tissues (invasive tumor, metastasis) without surgery.

COMPETITIVE ADVANTAGES

- Targeting deep tumors and metastasis
- Intravenous administration
- No exogenous or endoscopic light source



Markets & applications

Oncology :

- ❖ Nuclear medicine
- ❖ Targeted therapy
- ❖ Surgical assistance in oncology



Development stage

TRL 3

Targeting the molecular structures with antibodies are ongoing - *In vivo* studies are to come



Intellectual property

French patent application submitted on October 26th, 2018



Target partnership

Patent licensing

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