



## BOTOX A NEW RADIO/CHEMOTHERAPY- ENHANCING AGENT

Sopartec, the technology transfer company of the Université catholique de Louvain (UCL), presents a new indication for BOTOX in the treatment of cancer.



Source: National Cancer Institute; Author: Bill Branson.

### Technology Keywords

- Anticancer treatment, Tumor sensitization
- Radiotherapy, Radio-sensitizer
- Botulinum toxin (BOTOX)

### Technology Market : Cancer

In order to enhance anticancer treatment, there is a need to develop effective chemotherapy, radiotherapy treatment and/or combination thereof, especially for cases where **surgical operations are difficult and the risk of recurrence is high**. Among anticancer drugs developed to date, it has been reported that taxol and cisplatin may be used as radiotherapy-enhancing agents (or so called "radio-sensitizer"). However, even though they are rather effective in enhancing radiotherapy, they still have some critical defects, especially causing toxicity to patients.

### The UCL invention

Researchers at the Unit of medicinal Chemistry and Radiopharmacy have discovered that administering a **botulinum toxin** (BOTOX) to cancerous cells or a tumor in combination with radiotherapy is synergistically effective in treating said cells in comparison with radiotherapy only or with BT only.

Using validated tumor models, they demonstrated that local administration of BOTOX dramatically increases tumor oxygenation and perfusion, leading to a substantial **improvement in tumor response to radiotherapy and chemotherapy**.

### Technology Status

This work is the subject of a patent application : PCT patent application filed on 17/10/2005 and published under No. WO 2006/094539 (internal file reference number : SOP-192).

### Representative References

1. Cron Go, *et al.* Magn Reson Med. 59, 19-27, **2008**.
2. Ansiaux R, *et al.* Clin Cancer Res., 12, 1276-83, **2006**.

Sopartec would like to talk to companies interested in developing and commercializing this opportunity.

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