

## Wireless photodynamic therapy device

### MARKET OPPORTUNITY

Primary market: Oncology market

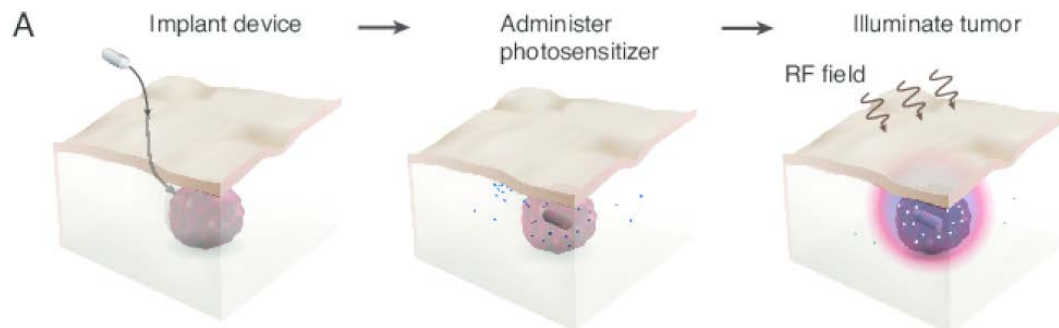
- \$109 billion by 2020
- Segmented into drugs, surgery, chemotherapy, radiation therapy, targeted therapy, immunotherapy, hormonal therapy, hyperthermia, stem cell transplant and other therapies

Specific market: Photodynamic therapy market

- Valued at USD 2,031.3 Million in 2016.
- Estimated to reach USD 3,095.9 Million in 2022, growing at a compound annual growth rate of 7.30% between 2016 and 2022

### TECHNOLOGY

It is a light-emitting device that can be implanted near a tumour and powered wirelessly by a radio-frequency field. The light delivered by the device activates light-sensitive drugs (photodynamic therapy), destroying malignant cells with minimal side effects outside of the treatment region.



### CATEGORY

Medical devices

### STAGE OF DEVELOPMENT

TRL3

### APPLICATIONS

1. Glioblastoma
2. Hepatocellular carcinoma

## ADVANTAGES

1. Non-mutagenic (can be performed multiple times without fear of introducing oncogenic DNA mutations)
2. Non-scarring
3. High selectivity to cancer tissue
4. Can deliver multiple doses of light to suppress tumour growth.
5. Can activate photosensitizers through thick tissues (>3 cm).

## STATUS

Patent pending. Available for research collaboration and licensing

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