

Interstitial photodynamic therapy

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[Interstitial photodynamic therapy](#) (iPDT) is a [minimally invasive treatment](#) relying on the interaction of light, a [photosensitizer](#) and [oxygen](#).

[Photodynamic therapy](#) is an exciting treatment modality that combines the effects of a chemical agent with the physical energy from light or radiation to result in the lysis of cells of interest.

Based on the light activation of a [photosensitizer](#) (PS) in the presence of oxygen, which results in the formation of cytotoxic species. The delivery of fractionated light may enhance treatment efficacy by reoxygenating tissues.

Photodynamic therapy (PDT) constitutes a treatment modality that combines a photosensitizing agent with exposure to laser light in order to elicit phototoxic reactions that selectively destroy tumor cells and spare normal cells. PDT is a local treatment modality without long-term systemic effects. Its application can be repeated more than once to the same area without accumulative effects.

However, oxygen depletion during PDT is a well known problem. Modulation of light delivery could address this issue by counteracting tumor hypoxia, thereby improving tumor cell killing.

Interstitial photodynamic therapy for glioblastoma

[Interstitial photodynamic therapy for glioblastoma](#).

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