Enzyme prodrug therapy:
safe, specific anticancer medicine

Where drug delivery fails, we perform localized drug synthesis, using the unique enzymatic repertoire of the tumor

**Technology Description**

Tumor microenvironment has a unique enzymatic repertoire. Our technology is to use these enzymes so as to synthesize anticancer medicine specifically within the tumor volume. Key to our technology is the structure of prodrugs: inactive and non-toxic molecules that reveal highly potent toxin upon enzymatic bioconversion. We have synthesized prodrugs that exhibit enhanced tumor accumulation and at the same time have over 100-fold lower toxicity than the incorporated toxin – comprising a two-level safety enhancement and making an efficacious, cancer-specific drug.

**Intellectual Property Rights**

US priority patent application. Improved compounds for therapy No. 16/544,446 (August 2019).

**Current State**

In vivo proof-of-concept studies in murine human xenograft models of triple negative breast cancer. Next in line is to validate this platform in cancers with high unmet medical needs: pancreatic, hepatic, lung, and brain cancers, and metastasis. For the cancer(s) showing the best treatment outcome we will assess this mode of anticancer action in patient derived xenografts.

**Team**

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**Business opportunity and Call to action**

We aim to attract funding or investors to expedite R&D and prodrug design and generate proof-of-concept in cancers with high unmet medical needs (pancreatic, hepatic, lung and brain cancers, and metastasis). We are looking for industrial partners that permit engagement in clinical trials.

**Contact information**

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