An Effective Anti-Cancer Combination Therapy, with Substantially Reduced Side Effects

Tech ID: 20801 / UC Case 2010-482-0

ABSTRACT

An image guided effective anti-cancer therapy, with greatly reduced side effects, using liposomal copper doxorubicin.

FULL DESCRIPTION

Researchers at the University of California, Davis have developed an effective local therapeutic strategy with substantially reduced side effects using a combination of doxorubicin (Dox) and copper (II). Cu-liposomes were loaded with Dox up to a maximum concentration of 0.6mg-drug/mg-lipid. UC Davis researchers have studied the efficacy of Cu-Dox liposomes and optimized the treatment strategy using the highly invasive and metastatic Met-1 tumor, a syngeneic model of human breast carcinoma. All animals receiving the combined therapy survived throughout the 28 day course of treatment and did not show any side effects. Significant tumor regression was accomplished by combining Cu-Dox liposomes with another drug and tumor insonation.

APPLICATIONS

- Anti-cancer combination therapy

FEATURES/BENEFITS

- Reduced side effects
- Enhanced anti-tumor activity when combined with entire tumor insonation

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,844,656	12/19/2017	2010-482

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OTHER INFORMATION

KEYWORDS

Anti-cancer combination therapy, Image guided cancer therapy, Liposomal Copper Doxorubicin

CATEGORIZED AS

- **Biotechnology**
  - Health
  - Other
- **Imaging**
  - Medical
- **Medical**
  - Disease: Cancer
  - Imaging
  - Therapeutics

RELATED CASES

2010-482-0

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- Targeted Delivery to the Heart Endothelium
- Modular Piezoelectric Sensor Array with Beamforming Channels for Ultrasound Imaging

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