Method of Improving Anti-angiogenic Therapy Efficacy

Tech ID: 21458 / UC Case 2011-082-0

BACKGROUND

Current anti-angiogenic therapies for the treatment of cancer are a rapidly growing market led by Genentech's Avastin® (bevacizumab). Avastin® and other anti-angiogenic therapies work by preventing new blood vessel formation, thus starving tumor cells of glucose and oxygen. However, due to rapid development of resistance, Avastin® has shown only modest increases in overall survival of cancer patients. Therefore, there is a significant need for therapies which can synergize with Avastin® and other anti-angiogenic agents to significantly increase patient survival.

TECHNOLOGY DESCRIPTION

UCSF investigators have identified a major mechanism of antiangiogenic resistance. This target is involved in multiple factors which contribute to therapeutic evasion including invasion, proliferation, survival signaling, and a distinct role in angiogenesis. Inhibition of this target by a monoclonal antibody is shown to reduce the growth of certain cancer cells in vitro including Avastin® resistant tumor cells derived from patient specimens.

APPLICATIONS

In addition to anti-angiogenic therapy in multiple cancer indications (including breast, colon, lung, liver and kidney) antibodies and small molecules against this target can be used for imaging and diagnostic purposes.

ADVANTAGES

- Inhibition of this target may potentially synergize with current anti-angiogenic therapies by suppressing multiple mechanisms of resistance in cancer cells

RELATED MATERIALS

INVENTOR INFORMATION

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	11,185,585	11/30/2021	2011-082
Canada	Issued Patent	2,830,908	09/24/2019	2011-082

CONTACT

Lei Wan

lei.wan@ucsf.edu

tel: .

OTHER INFORMATION

KEYWORDS

angiogenesis, cancer

CATEGORIZED AS

- Medical
  - Diagnostics
  - Disease: Cancer
  - Imaging

RELATED CASES

2011-082-0

Belgium	Issued Patent	2688585	09/05/2018	2011-082
Switzerland	Issued Patent	2688585	09/05/2018	2011-082
Germany	Issued Patent	2688585	09/05/2018	2011-082
Spain	Issued Patent	2688585	09/05/2018	2011-082
France	Issued Patent	2688585	09/05/2018	2011-082
United Kingdom	Issued Patent	2688585	09/05/2018	2011-082
Ireland	Issued Patent	2688585	09/05/2018	2011-082
Italy	Issued Patent	2688585	09/05/2018	2011-082
Australia	Issued Patent	2012230809	10/12/2017	2011-082
United States Of America	Published Application	20140079637	03/20/2014	2011-082

ADDRESS

UCSF

Innovation Ventures

600 16th St, Genentech Hall, S-272,

San Francisco,CA 94158

CONTACT

Tel:

innovation@ucsf.edu

https://innovation.ucsf.edu

Fax: