

Iron controlled cancer therapy

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What is the best nutrition in cancer treatment?

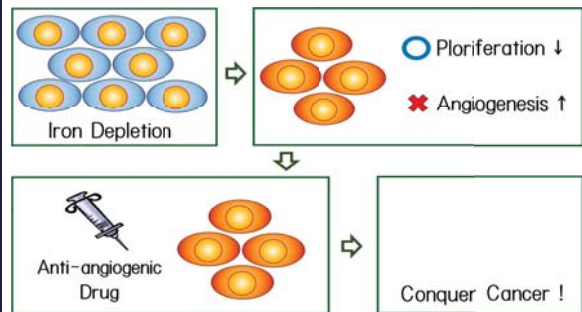
Cancer cells deprive the abundant nutrient?



Iron depleted status can enhance the molecular targeting drug !



Iron controlled Cancer therapy



Iron controlled Cancer Therapy

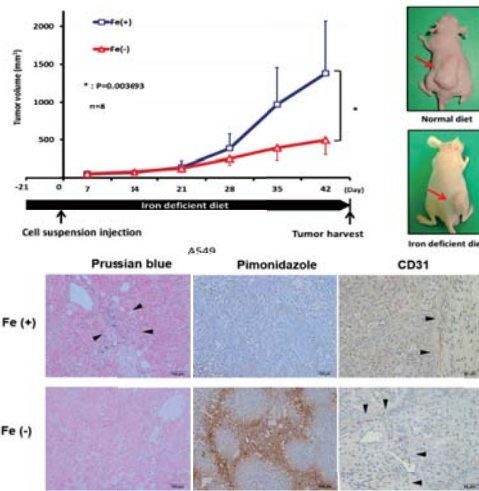


A novel synergistic effect of iron depletion on antiangiogenic cancer therapy. *Int J Cancer*. 2013; 132: 2705-2713

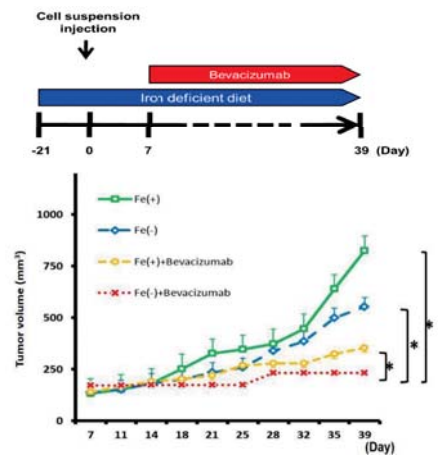
Patent

特願2010-057284 PCT/JP2011/55947

Iron depletion inhibits cancer cell proliferation and induces angiogenesis.



The efficacy of an anti-angiogenic drug was enhanced under iron depleted conditions.



Clinical analysis in HCC

The patient study included 58 HCC patients who were treated with sorafenib in Okayama University Hospital and affiliated hospitals from February 2009 to November 2011.

Clinical data including background information was reviewed retrospectively using medical records.

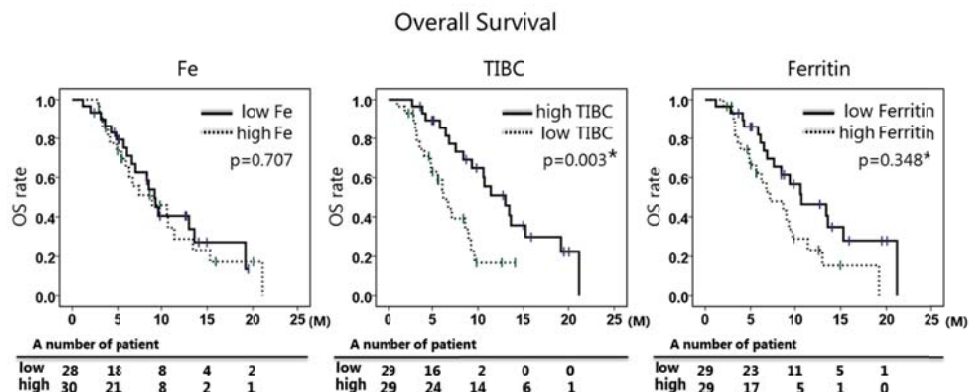


Response at 1M

	CR	PR	SD	PD	Total
n	0	4 (7%)	26 (45%)	28 (48%)	58

Low iron conditions prolonged overall survival in sorafenib treated patients

This work was supported by the Princess Takamatsu Cancer Research Fund



New Application

New Chelation Agent

OICA(Okayama University Iron Chelating Agent) Series

Polyphenolic Polymer

Depolymerizing Lignin

OICA-SP1

OICA-SP5

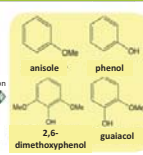
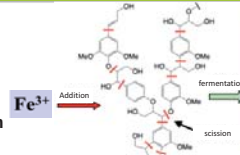
OICA-SP9

OICA-L

OICA-L Depolymerizing Lignin



Plants
Compression extraction



Patent : Cascade laboratory
P.A. 2008-192875 2010-030921

Lignin

Depolymerizing Lignin

Anti-cancer effect

Anti-bacterial effect

Anti-virus effect