

第 12 回 札幌国際がんシンポジウム

テーマ

“Oxylradicals and Anti-oxidative Responses in Cancer”

日時

1992 年 7 月 14 日～16 日

会場

センチュリーロイヤルホテル（札幌市中央区）

代表世話人

谷口 直之（大阪大学）

The 12nd Sapporo International Cancer Symposium

Theme:

“Oxylradicals and Anti-oxidative Responses in Cancer”

Date:

July 14-16, 1992

Venue:

Century Royal Hotel, Sapporo, Japan

Organizing Committee(*Chairperson):

Taniguchi N aoyuki*

Pickett Cecil B

Nishimura Susumu

Griffith Owen W.

Program:

Opening Lecture

On the antioxidant effects of glutathione and ascorbate—relationships to treatment of drug— and radiation—resistant tumors

A. Meister

Session I. Glutathione and Glutathione S-Transferase

Regulation of glutathione transferase P gene during hepatocarcinogenesis of the rat

M. Muramatsu

Regulation of glutathione S-transferase and quinone reductase gene expression by xenobiotics

C. B. Pickett

Session II. Nitric Oxide (NO)

Biochemistry and physiology of cytokine induced synthesis of nitric oxide from L-arginine

J. B. Hibbs Jr.

Nitric oxide synthetase and its implication in carcinogenesis

H. Esumi

Cytokines in cancer therapy: pharmacological control of nitric oxide synthesis

O. W. Griffith

Session III. DNA Damage

Use of gas chromatography/mass spectrometry to measure DNA damage

B. Halliwell

Photosensitized formation of 8-hydroxydeoxyguanosine (7,8-dihydro-8-oxodeoxyguanosine) in DNA by riboflavin

H. Kasai

The role of oxidative DNA damage and mitogenesis in cancer

M. K. Shigenaga

c-Ha- ras containing 8-hydroguanine at codon 12 induces point mutations at the modified and adjacent positions

E. Ohtsuka

Oxidative DNA damage by renal and hepatic carcinogens

Y. Kurokawa

Activated oxygen mediated formation of 8-oxoguanine in DNA and RNA

R. A. Floyd

Formation and cleavage of 8-oxo dGTP, a potent mutagenic substrate for DNA synthesis

M. Sekiguchi

Oxidative DNA damage by metal-mediated activation of carcinogen

S. Kawanishi

Mutations produced by oxygen free radicals

L. A. Loeb

Anti-oxidative responses in oxyradical mediated liver carcinogenesis in rats

Y. Konishi

Session IV. Anti-oxidative Enzymes, Carcinogenesis

Superoxide radical generation by cytochrome P-450 reductase plus heterocyclic amines; and alkylperoxide radical generation by alkylhydroperoxides plus heme system.

Implication for their tumor promoting effects

H. Maeda

Involvement of oxyradicals produced by host effector cells in the malignant progression of murine tumor cells

M. Hosokawa

High voltage capillary electrophoretic (HVCE) studies of superoxide dismutase (SOD)

H. F. Deutsch

The usefulness of determination of serum Mn-superoxide dismutase in ovarian carcinoma

M. Ishikawa

Superoxide dismutase and the oxidant/antioxidant balance

J. M. McCord

Exogenous TNF induces oxygen radicals in tumor cell and evokes cytolysis while endogenous TNF antagonizes this reaction and protects the cell from lysis

Y. Niitsu

Cu, Zn- and Mn-superoxide dismutases: Implication for aging, diabetes, and cancer

N. Taniguchi

Session V. Nuclear Factors Responsive to Radicals

Negative regulation of catalase gene expression in some hepatoma cell lines

H. Endo

The effect of antioxidants on the activation of the transcription activator NF- κ B by transactivators from hepatitis B virus and HTLV-1

P. A. Baeuerle

Active oxygens as possible mediators of cell growth control

K. Nose

OxyR-regulated defenses against oxidative stress

G. Storz

Redox regulation of cell activation and transformation by ADF/TRX

J. Yodoi

Poster session

Purification and characterization of mammalian repair enzymes for 8-hydroxyguanine (8-oxo-7, 8-dihydroguanosine) in DNA

T. Bessho

Effects of oxidative stress induced by redox-enzyme modulations on initiation and progression of rat hepato-carcinogenesis

A. Denda

Antioxidant activity in cancer and normal tissue of human digestive organs

S. Inuma

The possible involvement of free radical scavenging properties in the actions of TNF-alpha

H. Iwagaki

High levels of Mn-superoxide dismutase in serum of patients with neuroblastoma and in human neuroblastoma cell lines

N. Kawamura

Role of glutathione S-conjugate transport system in the resistance to cisplatin

T. Kondo

Inhibitory effect of superoxide dismutase (SOD) on experimental and spontaneous pulmonary metastasis of murine tumor cells

Y. Mogi

Mn SOD and histological virulence of ovarian epithelial cancer

T. Nishida

Site-specific and random fragmentation of Cu, Zn-superoxide dismutase by glycation reaction: Implication of reactive oxygen species

T. Ookawara

Experimental study on promotion effects of combination exposure of NO₂, O₃, and H₂SO₄ on lung tumor formation in rats

M. Sagai

Release of hydrogen peroxide and phosphorylation of 30 kilodalton proteins as early responses of cell cycle-dependent inhibition of DNA synthesis by transforming growth factor beta1

M. Shibnuma

Involvement of active oxygen species in hepatocarcinogenesis in LEC rats

H. Sone

Tumor necrosis factor-alpha and interleukin-1 alpha cause induction and release of Mn-superoxide dismutase from mitochondria in human umbilical vein endothelial cells

T. Nakata

Structure of the human Mn-superoxide dismutase gene and the regulation of its expression

J. Fujii