第 24 回　札幌国際がんシンポジウム

テーマ

″Pharmacogenomics in Cancer Chemotherapy:Recent Advances in ABC Transporters and Genome Analyses″

日時

2004 年 6 月 20 日～22 日

会場

北海道大学 学術交流会館（札幌市北区）

世話人代表

石川　智久（東京工業大学）

The 24th Sapporo International Cancer Symposium

Theme:

″Pharmacogenomics in Cancer Chemotherapy:Recent Advances in ABC Transporters and Genome Analyses″

Date:

July 4-6, 2001

Venue:

Hokkaido University Conference Hall, Sapporo, Japan

Organizers (*Chairperson)

Toshihisa Ishikawa*

Yoshikazu Sugimoto

Tetsuya Kamataki

Piet Borst

Michael M. Gottesman

Victor Ling

Program

Session I: ABC Transporters: Over View

(Chairmen: Piet Borst and Tetsuya Kamataki)

ABC transporters in cancer drug resistance and liver function.

Victor Ling, Vancouver

ABC protein: Multidrug resistance and lipid homeostasis.

Kazumitsu Uede, Kyoto

Mechanisms of MDR-1 activation involving gene rearrangements and aberrant promoters.

Antonio T. Fojo, Bethesda

Pharmacogenomics of drug transporters: From high-speed screening to drug molecular design.

Toshihisa Iashikawa, Tokyo

Session II: Genome Analysis in Cancer Prevention and Therapy (Chairmen, Victor Ling and Takashi Tsuruo)

Genetic polymorphorphism od CYP2A6 alters tobacco- related cancer risk: Oriented towards translational research.

Tetsuya Kamataki, Sapporo

SNPs in ABCC2 and ABCB1 genes and their clinical impact in physiology and drug response.

Morimasa Wada, Fukuoka

The role of Cu homeostasis mechanisms in the development of resistance to platinum-containing drugs.

Roohangiz Safaei and Steven B. Howell, San Diego

Roles of ABCC1 and ABCB6 in resistance to anticancer agents.
Shinnichi Akiyama, Kagoshima

Session III: Recent Advances in ABC transporters
(Chairmen, Antonio T. Fujo and Yoshikazu Sugimoto)

A genomic approach to multidrug resistance in Cancer.
Michael M. Gottesman, Bethesda

The role of ABCG2(MXR/BCRP) in cancer multidrug resistance.
Balazs Sarkadi, Budapest

Suppression of intestinal polyposis in Mdr1-deficient Ap(Min+) mice.
Tesshi Yamada, Tpkyo

MRP3,4 and 5 in health and disease.
Piet Borst, Amsterdam

Luncheon Seminar
Masaaki Muramatsu, Tokyo
Hitoshi Endou, Mitaka
Pssvo Kinnuenn, Helsinki

Session IV: Pharmacogenomics in Drug Resistance: Clinical Aspect (Chairmen, Michael M. Gottesman and Michihiko Kuwano)

Phar5macogennetics of drug transporters: Clinical implications.
Rheinhold Kerb, Molndal

Functional SNPs of BCRP and P-gp in drug effect and inhibitor development.
Yoshikazu Sugimoto, Tokyo

Adverse effects of Paclitaxel can be precisely predicted by combinations of polymorphisms on two genomic loci.
Yoshio Miki, Tokyo

Polymorphism in drug metabolism of irinotecan.
Maja de Jonge and Jaap verweij, Rotterdam

Combination of MS209 in CAF-therapy against breast cancer.
Takashi Tsuruo, Tokyo

Poster session:

CYP2A6 polymorphism and lung cancer risk in masle Japanese smokers.
Masaki Fujieda et al, Sapporo

CYP2A6 gene deletion reduced oral cancer risk in betel quid chewers.
Zeki Topcu et al, Sapporo

Microanalysis for MDR1 ATPase by high-performance liquid chromatography with a titanium dioxide colmn.
Yasuhisa Kimura et al, Kyoto

Kinetic analysis on the effect of P-glycoprotein on oral absorption of drugs.
Yoshiyuki Shirasaka et al, Hirakata

High speed screening and structure-activity relationship analysis for the substrate specificity of ABCB1(P-glycoprotein/MDR1).
Yuko Onishi et al, Yokohama

Functional differences between NBD1 and NBD2 of MRP1 protein in ATP-dependent solute transport.
Xiu-bao Chang, Scottsdale

Investigation of cisplatin transporter in lung cancer cell lines.
Toshihiro Suzuki et al, Kiyose

Verapamil and derivative-induced apoptosis of multidrug resistance protein 1(MRP1)-exprfessing cells through glutathione efflux.
Helene Cortay et al, Lyon

Identification of SNPs in the human ABCC2 gene and its association with hepatopathy induced by methotrexate in childhood acute lymphocytic leukemia patients.
Kohei Doi et al, Fukuoka

The multidrug transporter MRP4/ABCC4 confers resistance to irinotecan in vitro and is a marker of poor prognosis in neuroblastoma.
Murray D. Norris, Sydney

Expression profile of human ATP-binding cassette transporter ABCC10.
Shin-ichiro Takayama et al, Yokohama

Molecular cloning human ABCC11 and ABCC12 as well as mouse Abcc12.
Hidetada Shimizu et al, Yokohama

Full-length Abcc12(Mrp9) is ezpressed in mouse testis.
Nobuhito Ono et al, Amsterdam

ABCC13 an unusual truncated ABC transportter, is highly expressed in fetal human liver.
Shin-ichiro Takayanagi et al, Yokohama

Transporter of SN-38 by the wild type of human ABC transporter ABCG2 and its inhibition by quercetin, a natural flavonoid.
Toshihisa Ishikawa et al, Yokohama

Substrate specificity of ABCG2(BCRP) toward new CPT analogues.
Misako Takeda et al, Tokyo

A new approach to drug molecular design based on neural network analysis and molecular orbital calculation: Olecular modeling to circumvent cancer drug resistance associated with ABCG2.
Sachiko Aida-Hyugaji et al, Hiratsuka

A functional study on polymorphism of the ATP-binding cassette transporter ABCG2: Critical role of Arg-482 in methotrexate transport.
Hideyuki Mitomo et al, Yokohama

High-speed screening and structure-activity relationship analysis for the evaluation od drud-drug interaction of human ABCG2(BCRP).
Toshihisa Ishikawa et al, Yokohama

Effect of Gefinitib('Iressa', ZD1893) on BCRP/ABCG2-Mediated efflux of anticancer drug.
Kurika Satake et al, Kiyose

The effect of gefinitib oral pre-administration on pharmacokinetics of CPT-11 in rats.
Kazumi Sano et al, Kiyose

Molecular and cytogenetic characteriztion of the mouse ATP-binding cassette transporter Abeg4.
Toshihisa Ishikawa et al, Yokohama

Relevance between multidrug resistances related ABC-transporters and chemosensitivity assessed by collagen gel droplet embedded culture drug sensitivity test(CD-DST).
Naoya Kamiyama et al, Sapporo

Variation of gene expression profile by the inhibition of single molecular target LAT1, system L amino acid transporte in laryngeal squamous-cell-carcinoma cells.
Taku Hirata et al, Mitaka

LATs as novel targets for diagnosis of malignant tumors.
Takeshi Sakata et al, Mitaka

Live image analysis of subcellular structures visualized with fluorescent proteins in the presence of microtubule-destabilizing compound.
Kenji Sugimoto et al, Sakai

Drug target database based on therapeutic category.
Kotoko Nakata et al, Tokyo

Database of human ABC transporter genes.
Jose Martin Ciloy et al, Fukuoka

Interaction between cisplatin and the copper transporter ATP7B in human ovarian carcinoma cells analyzed by confocal microscope.
Kuniyuki Katano et al, Yonago