

**THE 3RD WORLD CONGRESS
OF THE INTERNATIONAL SOCIETY FOR APHERESIS (ISFA)**
January 11-14, 2001, Taipei, Taiwan

Thursday, January 11

13:30-15:00	Wu Ho-Su Memorial Lecture (Clinical Application of Apheresis)	
15:00-15:30	Coffee break	
15:30-17:00	Wu Ho-Su Memorial Lecture (Clinical Application of Apheresis)	

Friday, January 12

08:00-08:40	Opening Ceremony	
08:40-09:20	Plenary Lecture : Nosé Y	
09:20-09:40	Coffee break	
09:40-12:00	Apheresis in Neurology	Apheresis in Critical Care
12:00-13:30	Lunch	
13:30-15:00	Apheresis in Immunology	Artificial Liver - I
15:00-15:30	Coffee break	
15:30-17:00	Apheresis in Cancer & Transplantation	Artificial Liver - II
17:00-18:00	Poster Session	

Saturday, January 13

08:00-09:20	Plenary Lecture : Yamamoto A, Niki E	
09:20-09:40	Coffee break	
09:40-12:00	LDL Apheresis	Apheresis Technology
12:00-13:30	Lunch	
13:30-15:00	Obesity & Dyslipidemia	Apheresis in TTP/HUS
15:00-15:30	Coffee break	
15:30-17:00	Apheresis in Nephrology	Preparative Hemapheresis
17:00-18:00	Poster Session	

Sunday, January 14

08:00-09:20	Plenary Lecture: Klinkmann H, Agishi T	
09:20-09:40	Coffee break	
09:40-12:00	Apheresis in Asia	Free Radicals

Thursday, January 11, 2001

13:00-17:00

WU HO-SU MEMORIAL LECTURE

Chairperson: Chiu HC (Taiwan)

Apheresis in hematology

Lian ECY (USA)

Apheresis in rheumatology

Sawada K (Japan)

Apheresis in critical care

Hirasawa H (Japan)

Artificial liver

Hu WS (USA)

LDL apheresis

Schuff-Werner P (Germany)

The role of rheology in haemapheresis

Borberg H (Germany)

Friday, January 12, 2001

8:40-9:20

PLENARY LECTURE

Chairperson: Ivanovich P (USA)

Review and perspectives of therapeutic apheresis (for end-stage heart failure patients)

Nosé Y (USA)

Friday, January 12, 2001

9:40-12:00

S1 APHERESIS IN NEUROLOGY

Chairpersons: Hung TP (Taiwan), Khatri BO (USA)

New indications for therapeutic plasma exchange in neurological disorders: based on a critical review of current literature by the American Society for Apheresis

Weinstein R (USA)

Antibodies in myasthenia gravis

Vincent A (UK)

Immunoabsorption plasmapheresis in myasthenias

Takamori M, Maruta T (Japan)

The clearance of anti-acetylcholine receptor antibody by double filtration plasmapheresis in the treatment of myasthenia gravis

Chiu HC, Yeh JH, Chen WH, Lee MF (Taiwan)

Therapeutic apheresis in multiple sclerosis

Khatri, BO (USA)

Selective removal of CD4+ T cells in treatment of multiple sclerosis

Shibuya N, Matsuo H, Goto H, Onodera H, Yoshida M, Yamawaki N (Japan)

How to divide into pathogenic and non-pathogenic antibodies?

Schneidewind JM, Haase CG, Zettl UK, Ramlow W, Tieß M, Michelsen A, Hebestreit G, Winkler RE, Benecke R (Germany)

Friday, January 12, 2001

9:40-12:00

S2 APHERESIS IN SEPSIS AND MULTI-ORGAN FAILURE

Chairpersons: Hirasawa H (Japan), Chaudry I (USA)

Current topics of apheresis in sepsis

Kodama M, Hanasawa K, Tani T (Japan)

Clinical benefits of extracorporeal endotoxin removal in septic patients

Hanasawa K, Tani T, Tsuzuki H, Endo Y, Oka H, Mori T, Shimizu T, Tabata T, Kodama M (Japan)

Clinical characteristics of effective cases treated with endotoxin adsorption

Uriu K, Osajima A, Kamochi M, Kaizu K (Japan)

Efficacy of continuous hemodiafiltration as a cytokine modulator in critical care

Oda S, Hirasawa H, Shiga H, Nakanishi K, Matsuda KI, Kitamura N, Ueno H (Japan)

Effects of direct endotoxin adsorption (PMX-DHP) on patients with perforative peritonitis when utilized as a cytokine treatment

Matsuno N, Hama K, Iwamoto H, Uchiyama M, Narumi Y, Kikuchi K, Kozaki K, Degawa H, Ikeda K, Ikeda T, Nagao T (Japan)

Combined use of direct endotoxin hemoabsorption with continuous hemodiafiltration in postoperative multiple organ failure following urgent abdominal surgery

Matsuno N, Ikeda T, Ikeda K, Hama K, Iwamoto H, Narumi Y, Kikuchi K, Uchiyama M, Kozaki K, Degawa H, Nagao T (Japan)

A 6-year experience with peritoneal lavage under local anesthesia in patients with necrotizing enterocolitis perforation

Lin KJ (Taiwan)

Friday, January 12, 2001

13:30-15:00

S3 APHERESIS IN IMMUNOLOGY

Chairpersons: Siama GA (USA), Tsuda H (Japan)

Leukocytapheresis for the treatment of rheumatoid arthritis patient – comparison with double filtration plasmapheresis and change in adhesion molecule

Kempe K, Matsuda Y, Yang KS, Moriya Y, Kida I, Yamaji K, Kanai Y, Tsuda H, Hashimoto H (Japan)

Evaluation of the level of serum soluble CD40 ligand in systemic lupus erythematosus patients treated with plasmapheresis

Yasuda M, Kon T, Sugimoto K, Sekiya H, Kondo I, Kimura K, Kenpe K, Yamazaki Y, Kim YJ, Yang KS, Kida I, Yamaji K, Kanai Y, Tsuda H, Hashimoto H (Japan)

Centrifugal leukocyte apheresis is capable inducing remission for patients with active ulcerative colitis refractory to glucocorticoid therapy

Mamoto A, Ashida T, Nomura M, Ayabe T, Kohgo Y (Japan)

Treatment of cryoglobulinemia in the United States using different methods of plasmapheresis

Siami GA, Siami FS (USA)

Treatment of cold IgM hemagglutinin disease with cryofiltration apheresis using cryoglobulin filter in the United States

Siami FS, Siami GA (USA)

Friday, January 12, 2001

13:30-15:00

S4 ARTIFICIAL LIVER – I

Chairpersons: Kodama M (Japan), Klinkmann H (Germany)

An overview of bioartificial liver – from technology, public safety and bioethics

Hu WS, Sielaff TD, Ruiz LP, Anderson DK (USA)

Albumin dialysis MARS® for the extracorporeal treatment of acute and chronic liver failure

Mitzner SR, Stange J, Klammt S, Peszynski P, Hickstein H, Korten G, Schmidt R (Germany)

Randomized clinical trials of liver dialysis in treatment of hepatic failure and hepatorenal failure

Ash SR, Kuczek T, Steczko J, Blake DE, Gingrich CH (USA)

Recent progress in the treatment of fulminant hepatic failure in Japan

Yoshiba M (Japan)

Friday, January 12, 2001

15:30-17:00

S5 APHERESIS IN CANCER AND TRANSPLANTATION

Chairperson: Agishi T (Japan), Kawamura A (Japan)

Ex vivo blood manipulation method for cancer treatment

Tani T, Mekata E (Japan)

Induction of antitumor activities in spleen cells from mice and rats activated with immobilized lipopolysaccharide beads

Abe H, Tani T, Endo Y, Hanasawa K, Kodama M (Japan)

Apheresis and ABO incompatible renal transplantation

Matsuno N, Hama K, Iwamoto H, Narumi Y, Kikuchi K, Uchiyama M, Degawa H, Kozaki K, Nagao T (Japan)

Cryofiltration apheresis for removal of anti-blood group antibodies for major ABO incompatible renal transplantation

Masuko Y, Arikura J, Tsuchihashi S, Murai N, Kaizu T, Iida JI, Horie T, Tanaka M, Tamaki T, Kukita K, Meguro JI, Yonekawa M, Kawamura A (Japan)

Friday, January 12, 2001

15:30-17:00

S6 ARTIFICIAL LIVER – II

Chairpersons: Mitzner SR (Germany), Hu WS (USA)

The indication and limitation of apheresis therapy in acute hepatic failure

Horie T, Arikura J, Masuko Y, Tanaka M, Meguro JI, Tamaki T, Kukita K, Yonekawa M, Kawamura A (Japan)

Outcome of Biological-DT treatment in patients with fulminant hepatic failure

Ko WJ, Lee PH, Lai MY (Taiwan)

**Push-pull sorbent-based pheresis and hemodiabsorption in treatment of hepatic failure:
preliminary results of a clinical trial**

Ash SR, Blake DE, Carr DJ, Harker KD, Levy H (USA)

Arterial infusion of prostaglandin E₁ (PGE₁) and apheresis therapy ameliorate the postoperative liver failure

Asanuma Y, Sato T, Nanjo H, Yasui O, Kurokawa T, Koyama K (Japan)

Removal of albumin bound drugs in albumin dialysis (MARS) - a new liver support system

Peszynski P, Majcher-Peszynska J, Klammt S, Hehl EM, Wacke R, Stange J, Mitzner SR, Schmidt R, Drewelow B. (Germany)

Comparison of immunomodulation effect of hepatic tissue xenograft by cyclosporin a and azathioprine in rabbits

Gupta RC, Mathur AK, Gupta N, Prasad N, Jain R, Srivastva R (Indian)

Saturday, January 13, 2001

8:00-9:20

PLENARY LECTURE

Chairpersons: Schuff-Werner P (Germany), Wei YH (Taiwan)

Apheresis technology for prevention and regression of atherosclerosis - twenty years experience

Yamamoto A (Japan)

Free radicals and disease

Niki E (Japan)

Saturday, January 13, 2001

9:40-12:00

S7 LDL APHERESIS

Chairpersons: Yamamoto A (Japan), Bosch T (Germany)

Heparin-free DALI LDL-apheresis in hyperlipidemic patients: efficacy, safety and biocompatibility

Bosch T, Wendler T, Lennertz A, Heinemann O, Duhr C, Samtleben W (Germany)

LDL/fibrinogen-precipitation (H.E.L.P) and plaque stabilization due to rapid reduction of multiple coronary risk factors

Schuff-Werner P, Schettler V, Rexer H, Kohlschein P (Germany)

Comparison between different modes of treatment in a case of familial homozygous hypercholesterolemia

Palcoux JB, Meyer M, Jouanel P, Vanlieferhingen P, Malpuech G (France)

Effect of LDL apheresis on regression of coronary atherosclerosis - Fukuoka LDL apheresis study

Horiuchi M, Tasaki H, Takatsu H, Nagai Y, Tsutsui M, Kouzuma R, Okazaki M, Nakashima Y, FLAS Group (Japan)

Long-term effects of LDL apheresis on carotid arterial atherosclerosis in familial hypercholesterolaemic patients

Koga N (Japan)

Successful LDL apheresis treatment in a FH patient with severe diabetic scleroderma

Koga N, Sato T (Japan)

Saturday, January 13, 2001

9:40-12:00

S8 APHERESIS TECHNOLOGY

Chairpersons: Chang YL (Taiwan), Sueoka A (Japan)

Recent membrane technologies for therapeutic apheresis

Sueoka A (Japan)

Membranes for blood treatment

Wiese F, Meierling H (Germany)

Membranes for therapeutic apheresis

Nakaji S (Japan)

Membrane for plasma separation

Hirata N, Shizume Y, Shirokaze JI, Yoshida M, Yamawaki N (Japan)

Adsorbent: a determinant for the development of therapeutic apheresis

Akizawa T (Japan)

Saturday, January 13, 2001

13:30-15:00

S9 OBESITY & DYSLIPIDEMIA

Chairpersons: Hong CY (Taiwan), Pan WH (Taiwan)

Epidemiology of obesity and dyslipidemia

Pan WH (Taiwan)

Life style intervention on dyslipidemia and obesity

Lin W (Taiwan)

Chinese herbal medicine on dyslipidemia and atherosclerosis

Shiao MS (Taiwan)

Pharmacological approaches for dyslipidemia and obesity

Caterson ID (Australia)

Maximal lipid lowering by regular LDL-apheresis

Schuff-Werner P (Germany)

Economic issues in managing dyslipidemia and obesity

Gill T, Crowley S, Dalton A (Australia)

Saturday, January 13, 2001

13:30-15:00

S10 APHERESIS IN TTP/HUS

Chairpersons: Dimitrijević G (Yugoslavia), Lian ECY (USA)

New insights in thrombotic thrombocytopenic purpura

Lian ECY (USA)

Total recovery of acute renal failure after dialysed hemolytic uremic syndrome treated with or without membrane plasma separation

Müller-Wiefel DE, Tönshoff B, Bulla M, Kuwertz-Bröking E, Balzar E, Klare B, Negel D, Kemper MJ (Germany)

Severe cardiomyopathy in TTP during pregnancy reversed by plasma exchange and infusion

Cosmai E, Puzis L, Lian ECY (USA)

Treatment of HELLP syndrome by use of plasma exchange and hemodiafiltration

Hanasawa K, Tani T (Japan)

HELLP syndrome treated with plasma exchange -a case presentation

Dimitrijević G, Uzurov V, Dimitrijević G, Rakić S (Yugoslavia)

Saturday, January 13, 2001

15:30-17:00

S11 APHERESIS IN NEPHROLOGY

Chairpersons: Bambauer R (Germany), Akizawa T (Japan)

Therapeutic apheresis for renal disorders

Kaplan AA (USA)

Effect of β 2-microglobulin adsorption column on dialysis related amyloidosis

Abe T, Uchita K, Narukawa N, Hasegawa H, Kaketaka A, Matuo T, Kobata H, Abe T, Akizawa T (Japan)

Rapid and persistent reduction of proteinuria by plasma exchange in a case of steroid-resistant focal segmental glomerulosclerosis

Ishii E, Ando Y, Tamba K, Masunaga Y, Kusano E, Asano Y (Japan)

Saturday, January 13, 2001

15:30-17:00

S12 PREPARATIVE HEMAPHERESIS

Chairpersons: Shimizu M (Japan), Lin M (Taiwan)

Apheresis and transfusion medicine

Dimitrijević G, Bogdanović G (Yugoslavia)

Collection of autologous haematopoietic progenitor cells from peripheral blood in pediatric patients

Reddy R, Thoreen L, Polland P, Klein R (USA)

Allogeneic peripheral blood stem cell transplantation in Taiwan---NTUH experience

Lin DT, Lo SC, Tang JL, Lee TY, Chen YC, Lin KS (Taiwan)

Autologous peripheral blood stem cell transplantation in breast cancer in Taiwan-NTUH experience

Lin DT, Lo SC, Yeh KH, Lee TY, Chen YC, Lin KS (Taiwan)

Studies of the leucodepletion failure of the Haemonetics MCS+ plateletpheresis system with LRF6H filter

Seghatchian J, Krailadsiri P (UK)

Sunday, January 14, 2001

8:00-9:20

PLENARY LECTURE

Chairpersons: Nosé Y (USA), Borberg H (Germany)

The prospects of apheresis in the 21st century by new adsorber technologies

Klinkmann H (Germany)

From a birth to the up-to-date of double filtration plasmapheresis

Agishi T (Japan)

Sunday, January 14, 2001

9:40-12:00

S13 APHERESIS IN ASIA

Chairpersons: Malchesky PS (USA), Yamamoto A (Japan)

Apheresis technologies and clinical applications: an international perspective

Malchesky PS, Koo AP (USA)

Recent trends in therapeutic apheresis in Japan: focused on techniques and replacement fluid used in main diseases with apheresis

Shimizu M, Takenaka M, Scientific Committee of JSFA (Japan)

Therapeutic apheresis in Taiwan

Yeh JH (Taiwan)

Therapeutic apheresis in India

Srivastava R (India)

Experience of plasmapheresis in Malaysia

Chong HT, Tan CT (Malaysia)

Therapeutic plasmapheresis in Vietnam

Hinh LD (Vietnam)

Sunday, January 14, 2001

9:40-12:30

S14 FREE RADICAL

Chairpersons: Miyazawa T (Japan), Wei YH (Taiwan)

Mitochondrial DNA mutation and 8-hydroxy 2'-deoxyguanosine as markers of oxidative stress in patients with end-stage renal disease

Wei YH, Lim PS, Liu CS, Targn DC (Taiwan)

Oxidative stress and chronic renal failure

Lim PS (Taiwan)

Phosphatidylcholine hydroperoxide and apheresis

Kuo TL, Chien CT, Liou SY (Taiwan)

Ascorbic acid administration selectively diminishes hydrogen peroxide activity in the patients with apheresis

Liou SY, Chien CT, Kuo TL (Taiwan)

Adaptation to chronic hypoxia enhanced renal superoxide dismutase activity in rats

Tsai SY, Chien CT, Ma MC, Chen CF (Taiwan)

PCOOH as a marker for oxidative stress

Miyazawa T (Japan)

Endogenous nitric oxide and bradykinin in noncholinergic airway constriction of guinea pigs.

Lai YL, Tseng TH (Taiwan)

Antioxidants and human disease: a neurologist's view point

Chang CY (Taiwan)

Monitoring the oxidative stress status of human erythrocytes by laser viscodiffractometer: correlation with biochemical parameters

Liu TZ (Taiwan)

De novo demonstration and co-localization of free-radical production and apoptosis formation in rat kidney subjected to ischemia/reperfusion

Chien CT, Lee PH, Chen CF, Ma MC, Lai MK, Hsu SM (Taiwan)

POSTER SESSION-I

Chairperson: Shibuya N (Japan), Tani T (Japan)

Long-time effect of protein a immunoabsorption in myasthenia gravis patients- a nine-years follow-up

Schneidewind JM, Zettl U K., Ramlow W, Schmidt M, Tieß M, Michelsen A, Hebestreit G, Adam U, Roland E, Winkler, Beneck R (Germany)

Prethymectomy plasmapheresis in myasthenia gravis

Hsu RL, Yeh JH, Chen WH, Chiu HC (Taiwan)

Pulmonary function study on patients with myasthenia gravis treated with plasmapheresis

Yeh JH, Chen WH, Chiu HC (Taiwan)

Plasmapheresis in immune disorder of neurosystem

Wang GX (China)

Clinical experience in neurological disorder treated with plasmapheresis

Mei SN, Lin YJ (Taiwan)

Plasma exchange for HTLV-1 associated myopathy - a case report

Narukawa N, Shiizaki K, Shibaji H, Kitabata Y, Okamoto M, Uematsu K, Kamimura M, Negi S, Akizawa T (Japan)

Plasmapheresis in the treatment of painful neuropathy

Chen WH, Yeh JH, Chiu HC (Taiwan)

Changes of vasoactive factors in the septic patients during extracorporeal PMX treatment

Shimizu T, Tani T, Hanasawa K, Tabata T, Mori T, Endo Y (Japan)

Comparative study on anticoagulants in the septic patients during PMX treatment

Tsutamoto Y, Hanasawa K, Tani T (Japan)

Plasmapheresis in the medical ICU

Yeolekar ME, Hase NK, Trivedi T, Shejale S (India)

Change of serum matrix metalloproteinase-3 (mmp-3) concentration of patients with rheumatoid arthritis who had plasmapheresis

Kondo I, Kimura K, Kon T, Sugimoto K, Sekiya H, Yasuda M, Kim YJ, Kenpe K, Yamazaki Y, Yang KS, Kida I, Yamaji K, Tamura N, Kanai Y, Kobayashi S, Tsuda H, Hashimoto H (Japan)

Therapeutic plasmapheresis for the treatment of pregnant systemic lupus erythematosus patients with antiphospholipid antibodies

Yang KS, Kon T, Sugimoto K, Sekiya H, Yasuda M, Kondo I, Kimura K, Kenpe K, Kim YJ, Kenpe K, Yamazaki Y, Kida I, Yamaji K, Kanai Y, Tsuda H, Hashimoto H (Japan)

Plasma pheresis in the treatment of systemic lupus erythematosus-a case report

Wei G, Gu YF, Zhang CS, Xu XH, Sheng LM, Hu VY, Chen YP (China)

Effective maintenance leukocytapheresis for patients with ulcerative colitis in steroid dependence or resistance

Kondo K, Shinoda T, Yoshimoto H, Takazoe M, Hamada T (Japan)

Off-line leukopheresis system for the treatment of ulcerative colitis

Fujino M, Tani T, Tsuzuki H, Kondo H, Endo Y, Hanasawa K, Kodama M, Matsuda K (Japan)

Plasmapheresis for MPO-ANCA positive microscopic polyarteritis

Kida I, Kenyamaji, Kanai Y, Tsuda H, Hashimoto H (Japan)

Plasmapheresis in the treatment of rheumatic diseases -- a nine year experience

Chen TL, Lin M, Lee CS (Taiwan)

Double filtration plasmapheresis for the treatment of bullous pemphigoid

Kitabata Y, Sakurane M, Orita H, Oda M, Sumikado S, Ebisu T, Sakaguchi T, Ageta S, Akizawa T (Japan)

Plasma exchange and hemofiltration for postoperative hepatic failure

Endo Y, Hanasawa K, Tani T (Japan)

The efficiency of plasma exchange and continuous hemodiafiltration in patients with fulminant hepatitis

Iwai M, Suzuki K, Kawakami T, Sato A, Endo R, Takikawa Y, Kato A, Inoue Y (Japan)

Improvement of hepatic encephalopathy following treatment of fulminant hepatic failure with extracorporeal blood detoxification.

Huang KW, Ko WJ, Lee PH, Lai MY (Taiwan)

Plasma exchange in the management of hyperlipidemic pancreatitis

Chen JH (Taiwan)

Evaluation of the therapeutic effect of artificial liver support system on severe viral hepatitis

Jiang YS, Chen YM, Yao JL, Ai ET (China)

POSTER SESSION-II

Chairpersons: Srivastava R (India), Liou SY (Taiwan)

The effect of double filtration plasmapheresis on lipid levels

Liou SY, Chen TJ, Lin MP, Shu LC, Chang YL (Taiwan)

Performance evaluation of plasma fractionation membrane

Zhao CS, Zhang XH, Yue YL (China)

IL-8 as a marker of biocompatibility in dialyzed patients

Lin KJ (Taiwan)

The hemodynamic effects of the different vascular accesses used for double filtration

plasmapheresis

Yeh JH, Chen WH, Chiu HC (Taiwan)

Review of 38 cases in CRRT

Chong SN, Kao MT, Chung WK, Lin CY, Lai MN, Chou MY, Chen CC, Chung SY (Taiwan)

Plasma endotoxin, TSST-1, and zinc levels in chronic hemodialysis patients.

Kondo H, Tsutamoto Y, Shimizu T, Fujino M, Tabata T, Hanasawa K, Tani T (Japan)

Association of serum levels of soluble adhesion molecules and carotid atherosclerosis in dialysis patients

Lim PS, Wang TH, Lu TC (Taiwan)

Effect of microfilter for removing endotoxin contamination in dialysis system

Liou SY, Chen TJ, Chang YL (Taiwan)

Relationship between serum ferritin levels before apheresis and prognosis in patients with hemophagocytic syndrome

Nakajima F, Shibahara N, Ueda H, Katsuoka Y (Japan)

Therapeutic plasma exchange in infant

Lin M, Chang SL, Chu CF, Chang FC (Taiwan)

Hyperviscosity as a cause of plasma exchange—NTUH experience

Lin DT, Lo SC, Lee TY, Huang SY, Wang CH, Chen YC, Tang JL, Lin KS (Taiwan)

A case of leucodepletion failure in COBE spectra plateletpheresis

Seghatchian J, Kraladsiri P (UK)

Comparison of discomfort, knowledge and attitude of platelet and whole-blood donors

Kim HC (Korea)

Experience with peripheral blood stem cell collection

Han KS, Park KU, Kim YH, Hur M, Whang DH (Korea)

Superoxide generation in urinary bladder subjected to obstruction/relief impairs micturition function

Lai YJ, Yu HJ, Chien CT, Lai MK, Chen CF (Taiwan)

The oxygen free radicals in ischemia reperfusion injury of skeletal muscle

Chien HF, Chien CT, Cheng YJ, Hou SM, Hsu SM (Taiwan)

Cyclosporine A regulates oxidative stress-induced apoptosis in cardiomyocytes

Chen HW, Chen WJ, Wang TD, Chien CT (Taiwan)

The activity of superoxide anion in the experimental glaucoma

Ko ML, Chen CF, Chien CT (Taiwan)

Forced expression of bcl-2 and bcl-x_I by novel water-soluble fullerene, c₆₀(glucosamine)₆, reduces renal ischemia/reperfusion induced oxidative stress

Chien CT, Chen CF, Hsu SM, Chiang LY, Lai MK (Taiwan)

Chi-bao-meei-rann-dan reduces hemodialysis induced oxidative stress

Liou SY, Chien CT, Kuo TL (Taiwan)

Glutathione s-transferase m1 polymorphisms and increase of 4977 bp deletion of sperm mitochondria in Taiwanese patients with varicocele and subclinical varicocele

Chen SS, Chang LS, Wei YH (Taiwan)