



International Society for Apheresis

2nd International Congress



Final Program – Abstracts

Saarbrücken – Germany, April 15 – 18, 1999

Table of Content

Presidential Addresses	2-4
International Society for Apheresis (ISFA)	5, 6
Sponsoring	7
Congress Overview	8, 9
Thursday, 15. April 1999	10
Friday, 16. April 1999	11 - 17
Saturday, 17 April 1999	18 - 25
Sunday, 18 April 1999	26 - 29
Postersession I	30 - 32
Postersession II	33 - 35
General Information	36 - 38
Abstracts	39 - 194
Author Index	195 - 199
Sponsoring	

Under the Patronage of His Excellency

The Prime Minister of Saarland

Mr. Reinhard Klimmt

Supported by

World Apheresis Association (WAA)

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International Faculty for Artificial Organs (INFA)

European Society for Artificial Organs (ESAO)

Dear Participants of the 2nd ISFA-Congress,

On behalf of the World Apheresis Association and it's Member Societies I am honored and privileged to extend a cordial welcome to all the participants of the 2nd ISFA Congress in Saarbrücken, Germany.

The very optimistic prediction about the expansion of apheresis technology in the early 80ties are now much closer to reality. WAA is the worldwide umbrella organization of today 11 international and national societies and will do everything possible to guide and support this development by fostering international cooperation between professional societies, academic institutions, research centers, hospitals and the relevant industry.

ISFA is one of the Member Societies of WAA that has directed itself towards the therapeutic application of plasma treatment by apheresis technology often in combination with the exciting new field of immunoadsorption.

The program of the 2nd ISFA meeting reflects the increasing interest worldwide in this promising therapeutic approach in different fields of medicine.

Thanks to the large number und quality of the submitted abstracts, the International Program Committee was able to put a sientific program together that certainly is on of the most comprehensive presentation of its kind in recent times.

On behalf of WAA I wish you a fruitful scientific meeting and a pleasant time in Saarbrücken.



Horst Klinkmann
President, WAA

Presidential Message

It is my great pleasure to welcome you to the Second Congress of the International Society for Apheresis (ISFA) organized by Dr. Rolf Bambauer in Saarbrücken, Saar, Germany. The First Congress was held in Kyoto, Japan, 3 years ago, when the organization of the Society was established. The value of apheresis therapy has been recognized in many fields of medicine and new devices have been developed to cure patients suffering from intractable diseases. As the life expectancy becomes longer and longer, it is necessary to keep people in healthy state as long as possible and medical science should serve this purpose.

The apheresis therapy originally started in the form of plasma exchange. Now, cytapheresis is attracting the attention of many physicians and researchers working in the field of autoimmune diseases, cancer, and metabolic diseases. Apheresis therapy now occupies the most important part of the artificial organ. For this treatment to continue developing, it is imperative that we expand our knowledge of medicine, biology, biophysics, and engineering in order to refine our tools and techniques. We are confident that the scientific congress of our Society will establish a standard of excellence for this field, while providing younger physicians and technical specialists with the support they need when confronted with technical problems and choice of treatments.

The International Society for Apheresis is now one of the strongest constituent society of the World Apheresis Association (WAA) and is expected to serve the development of the apheresis techniques in the countries and regions, where the national societies have not yet been completely organized or are not yet so much internationalized. The first event (congress) is usually relatively easy; it is just like flare. But the second one is more difficult. On behalf of the Board of Directors of the Society, I would like to extend our gratitude to Dr. Bambauer and his German colleagues for organizing the second major scientific meeting overcoming many difficulties.

Akira Yamamoto

A handwritten signature in black ink that reads "Akira Yamamoto". The signature is written in a cursive, flowing style with a long horizontal stroke at the end.

President, International Society for Apheresis

Welcome in Saarbrücken/Saar, Germany

It is my great pleasure to welcome you to the Second Congress of the International Society for Apheresis (ISFA) to be held in Saarbrücken/Saar, Germany on April 15 – 18 (Thursday to Sunday) 1999 under the auspices of the World Apheresis Association (WAA), the International Society for Artificial Organs (ISAO), the European Society for Artificial Organs (ESAO), and the International Faculty for Artificial Organs (INFA).

The ISFA was founded in Kyoto in April 1996. The first Congress successfully assembled approximately 500 participants under the presidency of Dr. Akira Yamamoto. The official ISFA journal "Therapeutic Apheresis" was established in January 1997. This journal will also serve as the official publication organ for papers presented at the ISFA Congresses. The successful application of different apheresis modalities are more and more recognized in many different fields of medicine especially for the treatment of severe and refractory diseases. New technological developments as well as medical insights have also contributed to progressive expansion of therapeutic and donor apheresis. The present congress aims at providing the state of the art knowledge by international recognized experts as well as encouraging scientific discussion on open problems and new approaches. With this we provide a forum for interdisciplinary discussion with physicians, basic scientists and technical aspects.

When I was given the challenge 3 years ago to organize the 2nd ISFA Congress in 1999, I agreed upon several objectives:

- We wanted to give the 2nd ISFA Congress a unique identity: Showing the future, the next millenium and what will be possible.
- Through a sequence of 20 workshops, free communications and poster sessions with the main topics (Therapeutic plasma exchange, clinical results, selective plasmapheresis techniques and clinical results, LDL-apheresis, donor apheresis, apheresis technologies), we want to present the status of different apheresis technologies. Further we want to discuss how can we sustain innovation, inform and protect the public by including economic, ethical and public health considerations in our activities.
- Because it is an international congress, we wanted to make a special forum for advances in the science and technology of apheresis.
- Apheresis technologies bring together physicians, clinicians, surgeons, engineers, biologists and other scientists with a common interest in specialized aspects of apheresis methods. More than 150 slide presentations, posters and different invited lectures will focus on innovation for all disciplines.
- The 2nd ISFA Congress would not exist without industry contributions to research and development. The need for continous interchange of ideas between industry, scientists and physicians is reflected in the choice of invited speakers and the invitation to start-up companies to participate the industry exhibition which is organized during the congress.
- Last but not least, we have organized a social program of visits and excursions both during and after the congress. In April is springtime in Germany and you can enjoy this beautiful season in the southwestern part of Germany. Saarbrücken, the capital of Saarland, is situated at the border between France and Germany and looks back on a history of more than 1000 years. Saarbrücken is an elegant historical city with a french influence not far from Paris, Strassbourg, Metz, Nancy, Luxembourg and Brussels. We want to organize on the second evening a dinner in the cultural monument Völklinger Hütte used to embody the Saarland's prosperity and economic clout. We will do everything to help ISFA participants enjoy the southwestern part of Germany.



Rolf Bambauer, President of the 2nd ISFA Congress 1999

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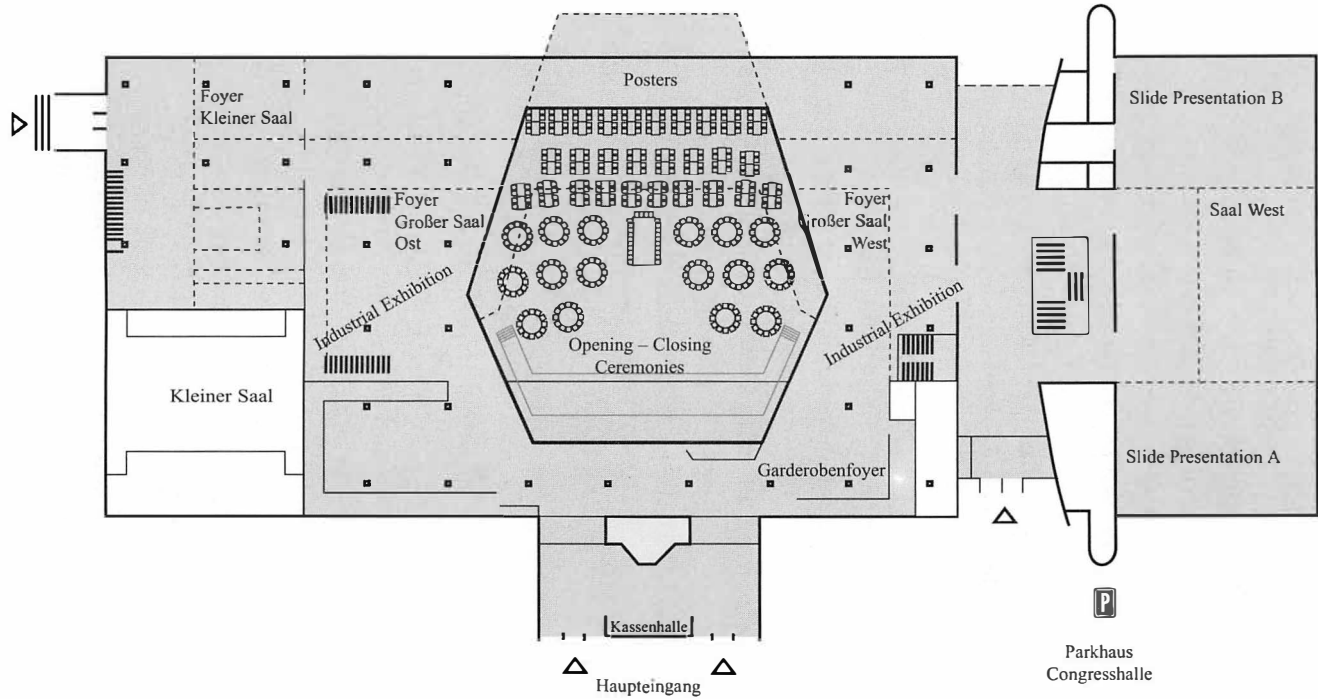
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**2nd International Congress
of the International Society for Apheresis (ISFA)
April 15 –18, 1999 Saarbrücken, Germany**

Thursday, 15.04.99 15.00-18.00 Registration
17.30 Opening Ceremony, Welcome Party, Staatskanzlei, Saarbrücken
19.00 Concert: Ludwigskirche, Saarbrücken

Friday, 16.04.99 8.00 – 17.00 Registration

8.00-10.00	Apheresis in Different Parts of the World	
10.00-10.30	Coffee break and visit to the industrial exhibition	
10.30-12.30	Immunoadsorption in Autoimmune Diseases	Rheopheresis-Pathogenetic Mechanisms and Clinical Outcomes
12.30-14.00	Postersession I with boxed Lunch	
14.00-16.00	Apheresis in Systemic Lupus Erythematosus	Pathomechanism-Immunomodulation
16.00-16.30	Coffee break and visit to the industrial exhibition	
16.30-18.00	Immunoadsorption in Systemic Lupus Erythematosus	Cryofiltration and Plasma Fractionation

19.30 Departure Congress Center with buses to Völklingen
20.00 Dinner in the Gasgebläsehalle Völklingen

Saturday, 17.04.99 8.00-17.00 Registration

8.00-10.00	Apheresis Technology	Apheresis - Varia
10.00-10.30	Coffee break and visit to the industrial exhibition	
10.30-12.30	Apheresis in Haematology and Neurology	Apheresis in Critical Care
12.30-14.00	Postersession II with boxed Lunch	
14.00-16.00	Apheresis in Neurological Disorders	Apheresis in Surgery and Transplantation
16.00-16.30	Coffee break and visit to the industrial exhibition	
16.30-18.00	Current Status and Future of Adsorption Technologies	Apheresis in Sepsis
18.00 –18.30	General Assembly	

Sunday, 18.04.99 20.00 Gala-Dinner in the Congress Center, Saarbrücken
08.00 Registration

8.00-10.00	LDL-Apheresis I	Preparative Hemapheresis Photopheresis
10.00-10.30	Coffee break and visit to the industrial exhibition	
10.30-12.30	LDL-Apheresis II	Leukocyte Filters and their Immunomodulation Vascular Access
12.30-13.00	Closing Ceremony	

Thursday, 15 April 1999

15.00-18.00 **Registration**
17.30 **Opening Ceremony, Welcome Party, Staatskanzlei,**
 Saarbrücken
19.00 **Concert: Ludwigskirche, Saarbrücken**

15.00-17.00 **Satellite Symposium: Challenge in the Management of**
Diabetes mellitus: Established and new therapeutic
approaches
Chair: Solimena M (USA) & Schiel R (Germany)

Pathogenesis of diabetes mellitus. New autoantigens of
type 1 diabetes mellitus

M. Solimena, Yale University, New Haven, USA

Current quality of diabetes care in Germany
the results of population-based surveys

R. Schiel, Friedrich-Schiller-University, Jena, Germany

How to improve care for type 2 diabetic patients?
*V. Jörgens and M. Grüsser, Heinrich-Heine-University,
Düsseldorf and Zentralinstitut der Kassenärztlichen
Vereinigung für die Versorgung der Bundesrepublik
Deutschland, Cologne, Germany*

The challenge to treat type 1 diabetes.

U. A. Müller, Friedrich-Schiller-University, Jena, Germany

Friday, 16 April 1999 08.00 - 10.00 am

Opening Session

Apheresis in Different Parts of the World

Chair: Klinkmann H (Germany) & Bambauer R (Germany)

Future Aspects and New Developments in Plasmapheresis

Nose Y (USA) – *Introductory Lecture* –

Apheresis Registry in France – Indication, Techniques and Complications

Guillevin L (France)

Practical Use of Therapeutic Apheresis in Japan

Shimizu M, Takenaka M, Sanaka T, Tuda Y (Japan)

Evidences for Multifactorial Effects of LDL

Adsorption on Vascular diseases

Agishi T (Japan)

Current Status of Therapeutic Apheresis in Taiwan

Lin KJ (Taiwan)

**Clinical Results of Three Hundred and Fourteen Treatments with
Double Filtration Plasmapheresis**

Liu JD, Li WS, Lun LD, Zhu X, Gu Q (PR China)

Apheresis Activities in India

Srivastava R (India)

An Overview on Therapeutic Plasmapheresis

Szterling L (Brasil)

Patient Registry for LDL Apheresis: Design and Initial Results

Gordon BR (USA)

Friday, 16 April 1999 10.30 – 12.30 am

Immunoadsorption in Autoimmune Diseases

Chair: Schneider M. (Germany) & Derfler K. (Austria)

Immunoadsorption for the Treatment of Rheumatoid Arthritis

Furst D (USA)

Primary Vasculitis

Taube D (UK)

Immunoadsorption in Guillain-Barre Syndrome and Myasthenia Gravis

Haupt WF, Rosenow F, van der Ven C, Birkmann C (Germany)

Immunoadsorption in Dilated Cardiomyopathy

Dörffel WV, Staudt A, Baumann G, Felix S (Germany)

A New Immunomodulatory Treatment Regime in Aquired Hemophilia with IgG Therasorb Immunoadsorption – A Modified Bonn Protocol

Zeitler H, Nettekoven W, Stier S, Hess L, Effenberger C, Brackmann B, Vetter H (Germany)

Inhibitor Associated Haemophilia – Experience of Immune Adsorption using Protein A

Freiburghaus C, Berntorp E, Nilsson IM (Sweden)

Long-Term IgG-Immunoapheresis in Highly Sensitized Renal Transplant Recipients

Derfler K, Sautner TH, Hörl WH, Banyai S, Streicher J, Jansen M, Mayer W, Druml W (Austria)

sponsored by Therasorb

12.30-14.00 Postersession I

Chair: Sztterling L (Brazil) & Srivastava R (India)

Friday, 16 April 1999 10:30-12:30 am

Rheopheresis – Pathogenetic Mechanisms and Clinical Outcomes

Chair: Gümbel H (Germany) & Kiesewetter P (Germany)

Rheopheresis- Rheologic, Functional and Structural Aspects

Klingel R, Fassbender B, Erdtracht B (Germany)

Specific Microrheological Effects of α_2 -Macroglobulin in vitro and in vivo: causes and consequences of 'Clump Aggregation'

Schmidt-Schönbein H, Gallasch G, Goebel H, Horstkott H, Heidtmann H (Germany)

The Impact of Endothelial Function on Diseases with Impaired Microcirculation

Holvoet P (Belgium)

Improvement of Visual Acuity after Elimination of High-Molecular-Weight Proteins and Lipids by Membrane Differential Filtration in Patients with Age-Related Macular Degeneration

Widder RA, Brunner R, Walter P, Soudavar F, Lüke C, Fisher R, Heimann K, Borberg H (Germany)

Improvement of Visual Acuity and Visual Field in Patients with Diabetic Retinopathy after Membrane Differential Filtration

Lüke C, Widder RA, Soudavar F, Walter P, Brunner R, Heimann K, Borberg H (Germany)

Rheopheresis - A Promising New Treatment for Age-Related Macular Degeneration

Swartz M, Rabetoy G, Cheung A, Davis R (USA)

Potential of Rheopheresis for the Treatment of Acute Ischemic Stroke

Rössler A, Berrouschot J, Barthel H, Köster J, Schneider D (Germany)

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Friday, 16 April 1999 14.00-16.00

Apheresis in Systemic Lupus Erythematosus

Chair: Euler H (Germany) & Guillevin L (France)

Synchronization of Plasmapheresis and Adjuvant Treatment in Autoimmune Diseases

Euler HH (Germany)

Synchronization of Plasma Exchanges and Adjuvant Treatments

Guillevin L (France)

Plasmapheresis Helps to Reduce Cytotoxic Drugs in the Management of Severe Systemic Lupus Erythematosus (SLE)

Kern PM, Rech J, Manger B, Kalden JR (Germany)

Successful Treatment of Systemic Lupus Erythematosus By C1q-Immuno-adsorption

Pfueller B, Wolbart K, Bruns A, Leinenbach HP, Hepper M, Otto V, Burmester GR, Hiepe F (Germany)

Therapeutic Plasma Exchange and Cyclosporin in the Treatment of Systemic Lupus Erythematosus

Bambauer R, Schiel R (Germany)

Immunomodulatory Treatment of Autoimmune Disease Synergy between Plasma Exchange und iv Immunoglobulins

Nydegger U (Schwitzerland)

Plasma Exchange in Treatment of Rapidly Progressive Glomerulonephritis Especially ANCA - positive Nephritis

Szpiert WM (Denmark)

Friday, 16 April 1999 14.00-16.00

Pathomechanism - Immunomodulation

Chair: Pineda AA (USA) & Ramlow W (Germany)

Immunomodulation by Apheresis

Pineda AA (USA) – *Introductory Lecture* –

Removal of Autoantibodies by Extracorporeal Immunoabsorption (IA)-Does it Truly Matter?

Matic GB, Michelsen A, Hofmann D, Winkler RE, Tiess M, Schneidewind JM, Weber G, Keysser M, Müller W, Kinze E, Ramlow W (Germany)

Changes in Lymphocytic Subpopulations During Apheresis Treatment

Schneidewind JM, Ramlow W, Winkler RE, Tiess M, Reinke P, Döcke W, Volk HD, Michelsen A, Hofmann D, Weber G, Prophet H, Kinze EM, Müller W, Klinkmann H (Germany)

Immunoglobulin Production in Peripheral Blood Mononuclear Cells after Antibody-Based Immunoabsorption Therapy

Toepfer M, Tuma E, Sitter T, Müller-Felber W, Pongrat D, Schiffel H (Germany)

Can Fibronectin-IgG-Complexes Pretend Anti-C1Q Autoantibodies in Patients with SLE?

Pfueller B, Bruns A, Kuhn S, Hiepe S (Germany)

Adhesion Molecules Expression in Familial Hypercholesterolemia Patients who Underwent Long-Term DFPP Treatment

Yamane S, Motohashi K, Suzuki H, Matsugane T, Nobuto T, Azuma N, Nishide T, Suzuki M (Japan)

Friday, 16 April 1999 16.30-18.00

Immunoadsorption in Systemic Lupus Erythematosus

Chair: Schneider M. (Germany) & Braun N. (Germany)

Introduction

Schneider M (Germany)

Clinical Experiences using Protein A

Taube D (UK)

Identification of Disease Relevant Antigens in Eluates from SLE Patients undergoing Immunoadsorption onto Staphylococcal Protein A

Braun N, Jakubetz HJ, Gutenberger S, Risler T (Germany)

Treatment with Dextrane Sulfate-Cellulose Columns

Suzuki K (Japan)

High Volume Immunoadsorption using Ig-Therasorb as Treatment in Severe Systemic Lupus Erythematosus

Perniok A, Fischer R, Specker C, Schneider M (Germany)

Immunoadsorption in Systemic Lupus Erythematosus: Randomised Trial of two Adsorbers

Gaubitz M, Seidel M, Schotte H, Schneider M, Domschke W (Germany)

Friday, 16 April 1999 16.30-1800

Cryofiltration and Plasma Fractionation

Chair: Malchesky PS (USA) & Sueoka A (Japan)

Introduction

Malchesky P (USA)

Possibilities and Limitations of Membrane Fractionation

Sueoka A (Japan)

Membrane Plasma Fractionation in the United States

Siami GA, Siami FS (USA)

Separation / Selective Sorption (S/SS) Technology for Safe, Rapid and Simple Removal of Molecules from the Blood: The Device Based Approach

Mc Rea JC, Malchesky PS (USA)

Push-Pull Sorbent-Based Pheresis (Biologic-DTPF System⁴) in Treatment of Systemic Inflammatory Response Syndrome (SIRS)

Ash SR, Levy H, Steczko J, Carr DJ, Blake DE (USA)

Saturday, 17 April 1999 08:00-10:00 am

Apheresis Technology

Chair: Vienken J (Germany) & Koll R (Germany)

Membrane Technologies in Apheresis Methods

Vienken J (Germany) – Introductory Lecture _

Membrane Plasma Fractionation: 12 Years Experience

Siami FS, Siami GA (USA)

Elimination of Immunoglobulin Classes by a Protein A Versus an Anti-Human-Immunoglobulin-Antibody Based System: Evaluation of 602 Sessions of Extracorporeal Immunoabsorption (IA)

Matic GB, Michelsen A, Hofmann D, Winkler RE, Tiess M, Schneidewind JM, Weber G, Keysser M, Müller W, Kinze E, Ramlow W (Germany)

A New Module Arrangement for Plasma Apheresis

Albrecht W, Hilke R, Weidemann S, Groth Th, Weigel Th, Paul D, Plagge A (Germany)

Therapeutic Apheresis in Children Technical Difficulties and Clinical Indications

De Palo T, Bellantuono R, Collella V, Giordano M, Caringella AD (Italy)

Comparison of Fresh Frozen Plasma (FFP) with a Standardized Serum Protein Solution (Biseko®) Following Membrane Plasma Separation in Patients with Autoimmune Disease (A Prospective Controlled Clinical Trial)

Keller E, Beeser E, Peter HH, Arnold A, Kotitsche R (Germany)

Use of Plasmapheresis in Dialysis Centre – 15 Years Experiences

Mydlik M, Derzsiová K, Mizla P (Slovak Republic)

Saturday, 17 April 1999 08:00-10:00 am

Apheresis - Varia

Chair: Kawamura A (Japan) & Klinkmann J (Germany)

Apheresis: Different Techniques - Similar Results

Ramlow W (Germany)

Immunoadsorption and Plasma Exchange in Dermatology

Ullrich H, Stolz W, Hohenleutner S, Lackner K, Landthaler M, Schmitz G (Germany)

Immunoadsorption Improves Cardiac Performance in Patients with Severe Dilated Cardiomyopathy

Müller J, Wallukat G, Dandel M, Bieda H, Hummel M, Hetzer R (Germany)

Application Extracorporeal Blood's Purification for Treatment Arrhythmias of Heart

Nedostup AV, Ragimov AA, Soloviova LN, Panasiuk VV, Tzaregorodtsev DA, Bol-direv DA, Ivanov MI, Alekseeva LA (Russia)

A Comparative Study Between Plasma Exchange and Immunoadsorption on the Removal of ANCA

Kjellberg BM, Segelmark M, Freiburghaus C (Sweden)

New Lymphocytapheresis (LCAP) Technique for Cytokine Control – Application to Inflammatory Bowel Disease (IBD) –

Kawamura A, Saitoh M, Yonekawa M, Hanamoto T, Osanai M, Hanada H, Masuko Y, Yasuhara M, Tanaka M, Tamaki T, Kukita K, Meguro J, Ohizumi H, Konoeda Y (Japan)

β 2-Microglobulin Adsorption in Chronic Hemodialysis Patients Associated with Dialysis-Related Amyloidosis

Gejyo F (Japan)

Erythrocytapheresis – Clinical Results

Kiesewetter P (Germany)

Saturday, 17 April 1999 10:30-12:30 am

Apheresis in Haematology and Neurology

Chair: Kaplan A (USA) & Ivanovich P (USA)

Therapeutic Plasma Exchange in the Treatment of Cancer Related Hemolytic Uremic Syndrome (HUS)

Kaplan AA (USA) – *Introductory Lecture* –

Prospective Randomised Multicenter Study in Thrombotic Microangiopathy (Prodromi)

Röthele E, Krumme B, Rump LC for the *PRODROMI Study Group* (Germany)

The Efficacy of Continuous Plasma Exchange and Sequential Continuous Hemodiafiltration (CPE + CHDF) for Thrombotic Thrombocytopenic Purpura/Hemolytic Uremic Syndrome (TTP/HUS)

Kawakami M, Hirasawa H, Sugai T, Oda S, Shiga H, Nakanishi K, Kitamura N, Sadahiro T, Yokohari K (Japan)

Antibody-based Immunoabsorption in Peripheral Neuropathy Associated with Benign Monoclonal IgM Paraproteinaemia

Toepfer M, Schroeder M, Reilich P, Sitter T, Hirschmann M, Pongratz D, Schiffel H, Müller-Felber W (Germany)

Optimal Volume of Plasma Treated and Numbers of Plasmapheresis in the Treatment of Myasthenia Gravis

Yeh JH, Chiu HC (Taiwan)

Comparison Between Immunoabsorption and Double Filtration Plasmapheresis in the Treatment of Myasthenia Gravis

Chiu HC, Yeh JH (Taiwan)

Treatment by Plasma Exchange in two Patients of Hereditary Polyneuropathy with Recent Aggravation

Chen WH, Yang CC, Hsieh ST (Taiwan)

L-Tryptophan degrading Bioreactor

Schmer G (USA)

12.30 – 14.00 Postersession II

Chair: Matic C (Germany) & Valbonesi (Italy)

Apheresis in Critical Care

Chair: Falkenhagen D (Austria) & Hirasawa H (Japan)

New Adsorption Technologies – A Necessity for Intensive Care Medicine

Falkenhagen D, Strobl W, Vogt G, Scherfl A, Lindsberger I, Loth F, Kramer L, Losert U, Schima H, Loth F, Schoenhofen M (Austria)

Development and Application of an Adsorption-Apheresis Procedure for the Elimination of Endotoxins and Lipoteichoic Acids from Human Plasma

Bengsch S, Boos K-S, Samleben W, Inthorn D, Seidel D (Germany)

Push-Pull Sorbent-Based Pheresis (Biologic-DTPF™) in treatment of hepatic failure: Preliminary Results of a Clinical Trial

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

Effect of Endotoxin Adsorption with Polymyxin B Immobilized Fiber on Hemodynamics in Severe Sepsis

Kanesaka S, Ogata H, Akizawa T, Takahashi Y (Japan)

Therapeutic Plasma Exchange (TPE) for Fulminant Hepatic Failure (FHF) in ICU

Hirasawa H, Sugai T, Oda S, Shiga H (Japan)

Plasmaexchange (PE) May Improve Survival of Patients with Multiorgan Dysfunction Syndrome (MODS) Including Acute Renal Failure

Stegmayr BG, Norda R, Banga R, Rydvall A (Sweden)

Cytokine changed in Patients with Multiple Organ Failure Treated by Plasmapheresis

Lin KJ, Yang MD (Taiwan/Japan)

Therapeutic Plasma Exchange in the Treatment of Nontraumatic Rhabdomyolysis with Acute Renal Failure

Siebenlist D, Klobe R, Gernert S (Germany)

Saturday, 17 April 1999 14:00 - 16:00

Apheresis in Neurological Disorders

Chair: Khatri BO (USA) & Haupt WF (Germany)

Science and Ethics of Apheresis in Neurological Disorders

McQuillen MP (USA)

**Apheresis in Acute Multiple Sclerosis - A Double Blind
Randomized Cross-Over Trial**

Pineda A (USA)

Apheresis in Chronic Multiple Sclerosis

Khatri BO (USA)

Apheresis and Combination Therapy in Guillain-Barré Syndrome

Haupt WF (Germany)

Apheresis in Chronic Inflammatory Demyelinating Polyneuropathy

Koh CS (Japan)

Therapeutic Apheresis in Neurological Diseases in Japan

Shibuya N (Japan)

Apheresis in Surgery and Transplantation

Chair: Agishi T (Japan) & Kodama M (Japan)

Membrane Auto-transfusion System (Mats)

Fukunaga K, Shimoyama T, Sawada K, Drake M, Mueller J, Sueoka A, Nosé Y (Japan/USA)

Correlation between Plasma Endotoxin, Plasma Cytokines and Plasminogen Activator Inhibitor-1 Activities in Septic Patients

Tani T, Hanasawa K, Kodama M, Imaizumi H, Yonekawa M, Saito M, Ikeda T, Yagi Y, Takayama K, Amano I, Shimaoka H, Ohta M, Katayama H, Okahisa T, Kato M, Koga M, Fujita N (Japan)

Efficacy of Continuous Hemodiafiltration in the Management of Postoperative Multiple Organ Failure

Hirasawa H, Sugai T, Oda S, Shiga H, Matsuda K, Kitamura N, Kawakami M (Japan)

Plasmapheresis plus Continous Hemodiafiltration as a Bridge to Living Related Liver Transplantation for fulminant Hepatic Failure

Haruguchi H, Fuchinioue S, Nakajima I, Tojimbara T, Agishi T, Takasaki K, Tanaka K (Japan)

Removal of Anti-A/B Antibodies using DFPP in ABO Incompatible Kidney Transplantation

Shimmura H, Tanabe K, Ishikawa N, Tokumoto T, Oshima T, Fuchinioue S, Takahashi K, Toma H, Agishi T (Japan)

Extracorporeal Immunomodulation by Cryofiltration in Transplantation

Osanai M, Kawamura A, Yonekawa M (Japan)

Saturday, 17 April 1999 16.30 - 18:00

Current Status and Future of Adsorption Technologies

Chair: Bosch T (Germany)

Adsorption Technology – Quo Vadis?

Hepper M, Leinenbach HP, Kannenberg A, Zimmermann M (Germany)

In Vitro Endotoxin Adsorption Properties and In Vivo Hemocompatibility of Immobilized Human Serum Albumin

Zimmermann M, Hepper M (Germany)

LDL-Apheresis using the DALI-System – State of the Art

Bosch T (Germany)

Safety and Adsorption Kinetics of the C1q-Adsorber

Eil A, Matic W, Drobnik W, Ullrich H, Glück T, Pickenpack A, Barlage S, Porch-Özcürümez M, Klucken J, Lang B, Lackner K, Rothe G, Schmitz G (Germany)

sponsored by Fresenius Medical Care

Saturday, 17 April 1999 16.30 - 18.00

Apheresis and Plasma Exchange in Sepsis

Chair: Stegmayr B (Sweden) & Bosch T (Germany)

What Toxins are Expected to be Released from Bacteria Such as Group A Streptococci

Holm S (Sweden)

Pathophysiology of Septic Shock and MODS and Various Therapeutical Approaches with Special Emphasis on Immunoglobulins

Werdan K (Germany)

Apheresis as Therapy for Patients with Severe Sepsis and MODS

Stegmayr B (Sweden)

Analysis of Efficiency of Plasmapheresis in the Treatment of Severe Sepsis and Septic Shock: A Prospective, Randomized, Clinical Trial.

Koukline V, Utrobin U, Busund R, Nedashkovsky E (Russia/Norway)

Apheresis Technologies in Cancer Therapy

Lentz MR (USA)

sponsored by Therasorb and Baxter

LDL Apheresis I

Chair: Yamamoto A (Japan) & Richter WO (Germany)

Can Statin Benefit Patients with Homozygous Familial Hypercholesterolemia on LDL-Apheresis?

Yamamoto A (Japan) – *Introductory Lecture* –

Efficacy of Different LDL-Apheresis Methods

Parhofer K (Germany)

Evidences for Multifactorial Effects of LDL Adsorption on Vascular Diseases

Agishi T (Japan)

Long-Term Assessment of LDL Apheresis to Heterozygous Familial Hypercholesterolemia

Kawaguchi A, Shiba-Harada M, Ryomoto K, Tsushima M, Yamamoto A (Japan)

LDL-Apheresis in Treatment of Hyperlipidaemia – A Comparison of Four Different Technologies

Bambauer R, Schiel R, Latza R (Germany)

A Trial of LDL-Apheresis Therapy for Uremic and Diabetic Neuropathy

Sasaki S, Himuro K, Kurioka K, Yamada A, Maruyama T, Wada S (Japan)

HELP-Report 1999: An Update of Clinical and Experimental Studies on Heparin-Mediated Extracorporeal LDL/Fibrinogen Precipitation

Jaeger BR, Seidel D (Germany)

Long-Term Results of LDL-Apheresis with Differential Filtration

v. Baeyer H, Schwartl M, Schwerdtfeger R (Germany)

Sunday, 18 April 1999 08.00 - 09.00 am

Preparative Hemapheresis

Chair: Nydegger U (Switzerland) & Schoonemann F (France)

Multicomponent Blood Donation by Apheresis

Matthes (Germany)

Platelet Concentrates with Trima: Preliminary Results

Schooneman F, Claise C (France)

New Procedure for the Inline Separation of Whole Blood

Taborski U, Basser S, Wohlgemuth L, Geigle P (Germany)

Development of Rapid Blood Transfusion System with a Capability of Blood Purification

Omokawa S, Notoya T, Kumagai M, Takada G (Japan)

Sunday, 18 April 1999 09.00 - 10.00 am

Photopheresis

Chair: Knobler R (Austria) & Robinson J (USA)

Photopheresis in Heart and Lung Transplantation

Robinson J (USA)

Extracorporeal Photoimmunotherapy in 1999

Knobler R (Austria)

6 Years Experience with Photopheresis Procedures: A Critical Look

Schoonemann F, Claise C (France)

Apheresis in the Treatment of Haematological Disorders

v. Baeyer H (Germany)

Transfusion Technologies Today

Zeyler T (Germany)

Sunday, 18 April 1999 10.30 - 12.30 am

LDL-Apheresis II

Chair: Schuff-Werner P (Germany) & Schwandt P (Germany)

Lp(a) Apheresis: Patient Selection Criteria

Anichini M, Avanzi G, Cesaretti S, Lepori M, Lombardo P, Cepparrone F (Italy)

Lp(a) Reduction by LDL-Immunoapheresis

Banyai-Falger S, Streicher J, Gabriel H, Hörl WH, Derfler K (Austria)

Direct Adsorption of LDL and Lp(a) from whole Blood:

Interim Analysis of a Clinical Long-Term Study

Bosch T, Schenzle, Dräger J (Germany)

LDL-Apheresis: Longitudinal Study of Three Patients Treated with DALI and HELP

Draeger LJ, Kassner U, Münzberg H, Steinhagen-Thiessen E (Germany)

Influence of Whole Blood and Plasma LDL-Apheresis on the antioxidative status of plasma in patients with familial hypercholesterolemia

Schrameyer-Wernecke A, Jue D, Kontush A, Beisiegel U, Beil U

Influence of two Selected LDL-Apheresis Procedures (DALI and HELP) on Blood Coagulation

Julius U, Gromeier S, Siegert G (Germany)

LDL Apheresis by Dextran sulfate Adsorption in Patients under Oral Anticoagulation

Taborski U, Basser S, Wohlgemuth L, Seeger W, Heine C (Germany)

DALI LDL-Apheresis: Therapy without Heparin is a Safe Procedure

Thomas HP, Kassner U, Münzberg H, Steinhagen-Thiessen E (Germany)

Sunday, 18 April 1999 10.30 - 12.00 am

Leukocyte Filters and their Effect on Immunomodulation

Chair: Nose Y (USA) & Sawada T (Japan)

Therapeutic Apheresis in Ulcerative Colitis

Sawada K (Japan)

Leukapheresis for Patients with Rheumatoid Arthritis

Amano K, Amano K (Japan)

Aggressive Combination Therapy with Leukocytapheresis (LCP) and Double Filtration Plasmapheresis (DFPP) for the Treatment of Rheumatoid Arthritis (RA) Patient with Vasculitis

Matsuda Y, Kim YJ, Yamaji K, Miyatata S, Moriya Y, Kida I, Kanai Y, Tsuda H, Takasaki Y, Hashimoto H (Japan)

Lymphocyte Removal by Thoracic Duct Drainage

Funakoshi Y, Agishi T, Starzl TE (Japan/USA)

Sunday, 18 April 1999 12.00 - 12.30 am

Vascular Access

Chair: Bambauer R (Germany) & Canaud B (France)

Temporary Vascular Access for Extracorporeal Therapies

Canaud B (France)

Surface Treatment of Catheters for Prevention of Infection and Thrombosis

Sioshansi P (USA)

Surface-Treated Catheters with Ion Beam-Based Process for Blood Access

Bambauer R, Schiel R, Mestres P (Germany)

Scanning Electromicroscopy Investigations in Artificial Organs

Mestres P (Germany)

Postersession I

Chair: Sztterling LN (Brazil) & Srivastava R (India)

- 1 **2 Cases of Wegener's Granulomatosis (WG) – Experience with Extracorporeal Immunoabsorption (IA, Excorim and/or Therasorb)**
Matic GB, Michelsen A, Hofmann D, Winkler RE, Tiess M, Schneidewind JM, Weber G, Kinze E, Ramlow W (Germany)
- 2 **Plasmapheresis for Patients with Myeloperoxidase Anti-Neutrophil Cytoplasmic Antibody**
Kanai Y, Torikoe Y, Miyakata S, Moriya Y, Yang K, Kida I, Matsuda Y, Kamaji K, Tsuda H, Takasaki Y, Hashimoto H (Japan)
- 3 **Therapeutic Plasmapheresis for the Treatment of Pregnant Systemic Lupus Erythematosus Patients with Antiphospholipid Antibodies**
Yang K, Yamazaki Y, Kimura K, Kim YJ, Kenpe K, Miyakata S, Moriya Y, Watanabe, H, Kida I, Matsuda Y, Yamaji K, Kanai Y, Tsuda H, Takasaki Y, Hashimoto H (Japan)
- 4 **Protein A Immunoabsorption (IA) in a Pregnant Woman with Habitual Abortion**
Hickstein H, Korten G, Barz D, Anders O, Ohde A, Müller H, Bolz M (Germany)
- 5 **Successful Treatment of a Patient with Lupus-Nephritis by C1Q-Immunoabsorption**
Bruns A, Pfueller B, Wolbart UK, Leinenbach HP, Hepper M, Hiepe F (Germany)
- 6 **Coupling DNA to Epichlorohydrin-Activated Cellulose as Immunoabsorbent for Systemic Lupus Erythematosus**
Kong DL, Yu YT (RP China)

Postersession I (continued)

Chair: Sztterling LN (Brazil) & Srivastava R (India)

- 7 Experience With a Combined Treatment of Chronic Therapeutic Plasmaexchange and Mycophenolate in a Case of Mixed Connective Tissue Disease (MCTD) with Severe Hypertension**
Straube R, Kingreen H (Germany)
- 8 The Therapy Refractory Sharp Syndrome (MCTD, Mixed Connective Tissue Disease) – A Case of Successful Treatment with Extracorporeal Immunoabsorption (IA)**
Prophet H, Matic GB, Hofmann D, Winkler RE, Tiess M, Schneidewind JM, Weber G, Michelsen A, Kinze E, Ramlow W (Germany)
- 9 Treatment of Scleroderma with Double Filtration Plasmapheresis**
Shimizu M, Ohshita H, Hino N, Uda H, Saiki O (Japan)
- 10 Kinetics of Thyroid Hormones During Plasma Exchange with Fresh Frozen Plasma in a Patient with Severe Hyperthyroidism**
Schmitt H, Krause B, Homberger J, Saul FW, Lössle B (Germany)
- 11 Treatment of a Refractory Case of Endocrine Ophthalmopathy (EO) with Extracorporeal Immunoabsorption (IA)**
Prophet H, Matic GB, Hofmann D, Winkler RE, Tiess M, Schneidewind JM, Weber G, Michelsen A, Kinze E, Hampel R, Ramlow W (Germany)
- 12 Limb Salvage in Acute Devastating Thrombangiitis Obliterans by Means of Help Apheresis**
Gromeier S, Schellong S, Julius U (Germany)
- 13 A Novel Method for Selective Removal of Circulating Immune Complexes**
Großjohann B, Ramlow W, Boeden H, Klemke Th, Kruschke P, Kong DL, Matic GB, Hofmann D, Kunkel S, Holtz M, Klinkmann J, Tiess M, Winkler RE, Yamada R, Schütt W (Germany/Japan)

Postersession I (continued)

Chair: Sztlering LN (Brazil) & Srivastava R (India)

13 Particle Release in Extracorporeal LDL Lowering Therapies

Martins K, Ahrenholz P, Matic GB, Hofmann D, Thiess M, Winkler RE, Ramlow W (Germany)

14 Controlled Clinical Study to Compare the Efficacy and Tolerance of the Two Plasma Exchange Preparations: Human Serum Protein Selection (HSP) and Human Albumin (HA) in Patients with Autoimmune Diseases.

Bambauer R, Arnold A (Germany)

15 The Effect of Filtration Leukocytapheresis Therapy on Various Cytokine Concentrations in the Circulating Blood and Synovial Fluid of Patients with Rheumatoid Arthritis

Hidaka T, Suzuki K, Kawakami M, Kataharada K, Takamizawa-Matsumoto M, Okada M, Matsuki Y, Ohsuzu F (Japan)

16 Immunomodulatory Role of Plasmapheresis in Ankylosing Spondylitis

Srivastava R, Vishwakarma GK (India)

17 Double Filtration Plasmapheresis in Treating Ankylosing Spondylitis: Clinical Study in 20 Cases

Liu JD, Li WS, Zhu X, Shang S, Zhang C, Gu Q, Wu J (PR China)

18 Improvement of Inner Ear Hearing Loss Associated with Monoclonal Gammopathy of Underdetermined Significance (MGUS) Using C1Q-Immunoabsorption

Wolbart UK, Pfueller B, Bruns A, Leinenbach HP, Hepper M, Hiepe F (Germany)

19 Extracorporeal Immunoabsorption for Urticaria Vasculitis and Monoclonal Gammopathy of IgM Type

Julius U, Blasum C, Patzak A, Wildbrett J, Wozel G, Meurer M (Japan)

Postersession II

Chair: Matic G B (Germany) & Valbonesi (Italy)

- 20 Plasmapheresis in Myasthenia Gravis – Comparative Study of Daily versus Alternately Daily Schedule**
Yeh JH, Chiu HC (Taiwan)
- 21 Therapy of Chronic Idiopathic Demyelinating Polyradiculo-Neuropathy with Intermittent Immunoabsorption – A Case Report**
Kresse S, Deuber HJ, Koall W, Osten B (Germany)
- 22 Effect of Immuno-Adsorption Therapy for Autoimmune Neuropathy**
Ikedo J, Kohriyama T, Kozuka K, Harada A, Nakamura S (Japan)
- 23 Therapeutic Plasma Exchange (TPE) in Treatment of Adrenoleucodystrophy (ALD)**
Bambauer R, Schiel R (Germany)
- 24 Effect of Plasma Exchange (PE) on a Refractory Hemophagocytotic Syndrome (HPS) Complicated with Myelodysplastic Syndrome (MDS)**
Satomi A, Nagai S, Nagai T, Niikura K, Akizawa T, Ideura T (Japan)
- 25 Rapid Reduction of Platelet Count in Thrombocytosis**
Liunbruno G, Centoni PE, Sodini ML (Italy)
- 26 Plasma Exchange (PE) for Acquired Hemophilia – A Case Report**
Ogata H, Sakai, S, Koiwa F, Tayama H, Kinugasa E, Akizawa T (Japan)
- 27 Role of Plasmapheresis in Inflammatory Bowel Disease – Ulcerative Colitis**
Srivastava R (India)

Postersession II (continued)

Chair: Matic G (Germany) & Valbonesi (Italy)

28 Off-Line Leukopheresis System for the Treatment of Ulcerative Colitis

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

29 Plasmapheresis Clinical Results, New Aspects

Srivastava R (India)

30 Plasmapheresis after Heart Transplantation

Ragimov AA, Alexeeva LA, Soloveva IN, Dzemeshevich SI (Russia)

31 Long Term Immunoabsorption in Recurrent Idiopathic Nephrotic Syndrome after Renal Transplantation

Schwerfeger E, Savin VJ, Rump LC (Germany/USA)

32 LDL-Apheresis in Glomerulonephritis, Nephrotic Syndrome, and Thrombosis of V. Cava – A Casereport

Seeger W, Heine C (Germany)

33 Cyclic Nucleotides During Low Density-Lipoprotein Apheresis

Kojima S, Yoshitomi Y, Saotome M, Matsumoto Y, Yano M, Kuramochi M (Japan)

34 The Influence of Plasmapheresis on the Blood Resting Levels of Superoxide Anion in Uremic Patients

Liou SY, Chen MF (Taiwan)

35 Neutrophil Activation in Immunoabsorption

Ota K, Shimizu Y, Ueda M, Akiyama N, Higuchi C, Agishi T, Iwata M (Japan)

Postersession II (continued)

Chair: Matic G (Germany) & Valbonesi (Italy)

- 36 A New Method for Removal Albumin-Binding Uremic Toxins:
Efficacy of an Albumin-Dialysate**
*Abe T Jr, Ageta S, Shono M, Uematsu I, Kodama T, Kobata T, Abe T,
Suzuki N, Hirata H (Japan)*
- 37 Immunoapheresis Alters Peripheral Type 1 and Type 2 T-Cell Cytokine
Production Profiles in Patients with Refractory Autoimmune Diseases**
Hehmke B, Salzsieder E, Matic G, Ramlow W (Germany)
- 38 Comparisons of Immunomodulation Effect on Hepatic Xenograft by
Cyclosporin A and Azathioprine in Rabbits**
Gupta RC, Mathur AK, Gupta N, Mathur DR, Sharma P, Srivastava R (India)
- 39 Platelet Membrane Markers Evaluation of Three Apheresis Concentrates**
Schooneman F, Claise C (France)
- 40 Donor Apheresis: Platelet Apheresis Donation**
Schooneman F (France)
- 41 Amicus Platelet Pheresis Procedures Comparison Bipuncture and
Unipuncture**
Schooneman F, Claise C (France)
- 42 Donor Apheresis – Role in Transfusion Transmitted Diseases in India**
Lalchandani A, Srivastava R (India)
- 43 Donor Apheresis – Role in Transfusion Transmitted HIV in India**
Lalchandani A, Srivastava R (India)
- 44 Efficacy of Donor Apheresis in Preparation & Preservation of Blood
Components**
Lalchandani A, Srivastava R (India)