

September 26 to 27, 2014 Berlin, Germany





Recent Developments in the Prognostic Assessment and Differential Therapy of Cardiomyopathies

Scientific Committee

Heinz-Peter Schultheiss Carsten Tschoepe Wolfgang Poller

Dept. of Cardiology and Pneumology, Charité – Universitätsmedizin Berlin

Organizer C.T.I. GmbH



Dear colleagues,

it is a distinct pleasure for us to welcome you in Berlin to an international symposium entitled "New molecular pathomechanisms and novel therapeutic approaches in heart failure". The challenge of heart failure diagnosis and therapy is increasing worldwide as a consequence of both increasing prevalence and severitu of this clinical syndrome. The necessity to develop and evaluate novel treatment strategies arises from the rather limited efficacy of current therapeutic approaches. Drugbased and surgical approaches including heart transplantation and cardiac assist devices have improved the quality of life and prognosis of heart failure patients.

However, LVAD and HTX are available only for a very small fraction of patients worldwide, and current drug therapy has limited efficacy in advanced stages. During the symposium we will discuss the status and prospects of cell transfer-based and recombinant proteinbased approaches, but also strategies based on regulatory RNA molecules or gene transfer to the heart. These approaches have already entered or are currently entering the stage of clinical translation, thus generating a truly exciting and exceptional period in the development of heart failure research. The recent evolution of such novel therapeutic tools ready for preclinical and clinical evaluation has enabled us to address new therapeutic targets that were beyond the reach of traditional pharmaceutical strategies.

The symposium covers a spectrum of current scientific and clinical work ranging from the identification of new targets and molecular pathomechanisms, refined diagnostic procedures, to the evaluation of the therapeutic tools by rigorously designed preclinical and clinical studies.

The faculty of the symposium reflects the thoroughly interdisciplinary character of current heart failure research worldwide, and we are indeed certain that the get together of colleagues from diverse field of science is of paramount importance to achieve the ultimate and very demanding goal of translating basic research findings from well defined systems to the far more complex situation encountered when treating individual patients.

We look forward with great pleasure to this "translational" meeting within the center of the exciting city of Berlin.

With our best regards

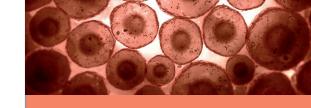
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Heinz-Peter Schultheiss

Carsten Tschoepe

Wolfgang Poller





	Friday, September 26, 2014
Session I	Immune Pathomechanisms in Chronic Heart Failure – Prognostic & Therapeutic Implications
Session II	Recent Studies on Cardiotropic Viruses and Virus-Host Interactions
Session III	Searching for Clinical Prognostic Parameters in Cardiomyopathy (Part I)
Session IV	Searching for Clinical Prognostic Parameters in Cardiomyopathies (Part II)
Session V	Diastolic Dysfunction in Cardiomyopathies
Clinical Symposium I	Symptomatic Therapy of Heart Failure with Reduced Ejection Fraction

New Treatment Options in

Advanced Heart Failure

Clinical Symposium II Saturday, September 27, 2014

Novel Cell-Based and Pharmacological Therapeutic **Approaches in Cardiomyopathies**

New Device-Based Therapeutic Clinical Symposium III **Approaches in Cardiomyopathies**

Session VI

Clinical

Session VII

Session VIII

Cardiac Ischemia and Symposium IV Microcirculation – Clinical **Diagnostics and Therapy**

> **Novel Molecular Therapeutic Strategies Targeting Heart-Immune System Interactions**

Outlook to the Future of Cardiomyopathy Research



Friday, September 26

08:30

08:45 - 09:02

09:02 - 09:05

09:05 - 09:22

09:22 - 09:25

09:25 - 09:42

09:42 - 09:45

09:45 - 10:02

10:02 - 10:05

Welcome Address

Heinz-Peter Schultheiss (Berlin, GERMANY)

Session I

Immune Pathomechanisms in Chronic Heart Failure – Prognostic and Therapeutic Implications

10:30 – 10:47
10:47 – 10:50
10:50 – 11:07
11:07 – 11:10
11:10 – 11:37
44.27. 44.40
11:37 – 11:40
11:40 – 11:57
11 57 12 00
11:57 – 12:00
12:00 – 13:30



Friday, September 26

Session II

Recent Studies on Cardiotropic Viruses and Virus-Host Interactions

Chairpersons Alida Caforio (Padova, ITALY) Claus-Thomas Bock (Berlin, GERMANY)

Pathogenic Role and Therapeutic Potential of Innate Immunity in Viral Heart Disease Peter P. Liu (Toronto, CANADA)

Discussion

Virus-Host Interactions and Cardiac Inflammation in Heart Diseases Bruce McManus (Vancouver, CA)

Discussion

Cardiotropic Viruses in Cardiac Transplant Patients – Prognostic and Therapeutic Implications

Jeffrey Towbin (Cincinnati, USA)

Discussion

Pathomechanisms and Clinical Implications of Cardiotropic B19 Virus Infections

7

Carsten Tschoepe (Berlin, GERMANY)

Discussion

Lunch Break

10:05 – 10:30 **Coffee Break**

Discussion



Friday, September 26

Session III

Searching for Clinical Prognostic Parameters in Cardiomyopathies (Part I)

Chairpersons Stephane Heymans (Maastricht, NETHERLANDS Steffen Behrens (Berlin, GERMANY)

13:30 – 13:47	Late Gadolinium Enhancement as a Prognostic Parameter in Cardiomyopathies James Moon (London, UK)	14:50 – 15:07
13:47 – 13:50	Discussion	15:07 – 15:10
13:50 – 14:07	Role of Echo and MRT in the Diagnosis of Myocarditis and Inflammatory Cardiomyopathy Andrea Frustaci (Rome, ITALY)	15:10 – 15:27
14:07 – 14:10	Discussion	15:27 – 15:30
14:10 – 14:27	Prognostic Impact of Autoantibodies in Cardiomyopathies Alida Caforio (Padova, ITALY)	15:30 – 15:47
14:27 – 14:30	Discussion	15:47 – 15:50
14:30 – 14:47	Role of Endomyocardial Biopsy in the Prognostic Assessment of Cardiomyopathies Uwe Kühl (Berlin, GERMANY)	15:50 – 16:30
14:47 – 14:50	Discussion	

Session IV

Searching for Clinical Prognostic Parameters in Cardiomyopathies (Part II)

Chairpersons Andre Keren (Jerusalem, ISRAEL) Jeffrey Towbin (Cincinnati, USA)

Clinical and Genetic Prognosis Assessment in Dilated Cardiomyopathy

Eloisa Arbustini (Padova, ITALY)

Discussion

Clinical and Genetic Prognostic Parameters in Hypertrophic Cardiomyopathy

Perry Elliott (London, UK)

Discussion

Clinical and Genetic Prognostic Parameters in Arrhythmogenic Right Ventricular Dysplasia Cristina Basso (Padua, IT)

Discussion

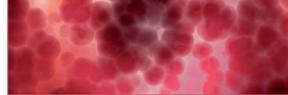
Pro and Contra Session: Molecular Genetic Testing in Cardiomyopathies

PRO: L. Monserrat Iglesias (La Coruna, Spain) CONTRA: Morten Olesen (Copenhagen, DK)

Coffee Break

16:30 - 17:00





Friday, September 26

Session V

Diastolic Dysfunction in Cardiomyopathies

Chairnersons

	Ulf Landmesser (Zurich, SWITZERLAND) Matthias Pauschinger (Nürnberg, GERMANY)	
17:00 – 17:17	New Paradigms in Heart Failure with Preserved Ejection Fraction Walter Paulus (Amsterdam, NETHERLANDS)	
17:17 – 17:20	Discussion	18:30 – 18:47
17:20 – 17:37	Microvascular Dysfunction: Causative in Heart Failure with Preserved Ejection Fraction (HFPEF)? Ornella Rimoldi (Milano, ITALY)	18:47 – 18:50
17:37 – 17:40	Discussion	18:50 – 19:07
17:40 – 17:57	New Imaging Modalities for the Assessment of HFPEF in Cardiomyopathies Burkert Pieske (Graz, AUSTRIA)	19:07 – 19:10
17:57 – 18:00	Discussion	19:10 – 19:27
18:00 – 18:17	Treatment Options in Cardiomyopathies and HFPEF Stefan Anker (Berlin, GERMANY)	19:27 – 19:30
18:17 – 18:20	Discussion	19:30 – 19:47

Clinical Evening Symposium I

Friday evening in parallel with Clinical Symposium II • Time 18:30 – 19:50

Symptomatic Therapy of **Heart Failure with Reduced Ejection Fraction**

Chairpersons Johann Bauersachs (Hannover, GERMANY) Erland Erdmann (Köln, GERMANY)

Update Guidelines: What is established, where are the gaps? Georg Ertl (Würzburg, GERMANY)

Discussion

Role of Heart Rate in Chronic Heart Failure -**Betablockade or Channel Inhibition?** Karl Werdan (Halle, GERMANY)

Discussion

The Role of Mineralocorticoid Receptor **Antagonists**

Johann Bauersachs (Hannover, GERMANY)

Discussion

Targeting the Autonomous Nervous System in Heart Failure

Ulrich Laufs (Homburg, GERMANY)

Discussion

19:47 - 19:50





Clinical Evening Symposium II

Fridau evening in parallel with Clinical Symposium I • Time 18:30 – 19:50

New Treatment Options in Advanced Heart Failure

Chairpersons Martin Paul (Maastricht. NETHERLANDS) Dieter Horstkotte (Bad Oeynhausen, GERMANY)

Dilated Cardiomyopathy and Mitral Valve

Insufficiency: Treatment Options Michael Gross (Berlin, GERMANY) Discussion Therapeutic Options in Acute Heart Failure Ruth Strasser (Dresden, GERMANY) Discussion Algisul for the Reduction of Cardiac Wall Stress Norbert Frey (Kiel, GERMANY)

Pleiotropic Effects of Antithrombotic Drugs -Implications for Micro- and Macrovascular **Dusfunction**

Rainer Schulz (Giessen, GE)

Discussion

19:47 - 19:50 Discussion

18:30 - 18:47

18:47 - 18:50

18:50 - 19:07

19:07 - 19:10

19:10 - 19:27

19:27 - 19:30

19:30 - 19:47

Session VI

Novel Cell-Based and **Pharmacological Therapeutic Approaches in Cardiomyopathies**

Chairpersons Walter Paulus (Amsterdam, NETHERLANDS) Bernhard Maisch (Marburg, GERMANY)

Mesenchymal Stem Cell-Based Strategies in Acute Myocarditis – Experimental Data Sophie van Linthout (Berlin, GERMANY)

Discussion

Forkhead Transcription Factors - Novel Therapeutic Targets in Cardiomyopathies? Carsten Skurk (Berlin, GERMANY)

Discussion

Immunomodulatory Therapy in Inflammatory Heart Disease - Discrepancies **Between Experimental Models and Patients** Urs Eriksson (Zurich, SWITZERLAND)

Discussion

Cardiac Fibroblasts as Inflammatory **Supporter Cells Trigger Cardiac Inflammation** in Heart Failure

Dirk Westermann (Hamburg, GERMANY)

Discussion

Cardiac Extracellular Matrix – Immune System **Interactions and Therapeutic Potential**

Stephane Heymans (Maastricht, NETHERLANDS)

Discussion

Coffee Break

10:37 - 10:40

09:00 - 09:17

09:17 - 09:20

09:20 - 09:37

09:37 - 09:40

09:40 - 09:57

09:57 - 10:00

10:00 - 10:17

10:17 - 10:20

10:20 - 10:37

10:40 - 11:30





Clinical Symposium III

Saturday lunch time in parallel with Clinical Symposium IV

New Device-Based Therapeutic Approaches in Cardiomyopathies

Chairpersons Perry Elliott (London, UK) Corinna Brunckhorst (Zurich, SWITZERLAND)

11:30 - 11:47 Cardiac Assist Devices in Acute and Chronic **Heart Failure** Paul Mohasci (Bern, SWITZERLAND) 11:47 - 11:50 Discussion Cardiac Resynchronization Therapy (CRT) 11:50 - 12:07 Frank Ruschitzka (Zurich, SWITZERLAND) 12:07 - 12:10 Discussion **Cardiac Contractility Modulation (CCM)** 12:10 - 12:27 Mattias Roser (Berlin, GERMANY) 12:27 - 12:30 Discussion Immunoadsorption Therapu 12:30 - 12:47

Discussion

12:47 - 12:50

14

Stephan Felix (Greifswald, GERMANY)

Clinical Symposium IV

Saturday lunch time in parallel with Clinical Symposium III

Microcirculation and Cardiac Ischemia - Clinical Diagnostics and Therapy

Chairpersons Walter Paulus (Amsterdam, NETHERLANDS) Ornella Rimoldi (Milano, ITALY)

Mechanisms of Endothelial Dysfunction Ulf Landmesser (Zürich, SWITZERLAND)

Discussion

Diagnostics of Microvascular Dysfunction Bernhard Schieffer (Marburg, GERMANY)

Discussion

Microvascular Dysfunction in Cardiomyopathies - New Therapeutic Options N.N.

Discussion 12:27 - 12:30

11:30 - 11:47

11:47 - 11:50

11:50 - 12:07

12:07 - 12:10

12:10 - 12:27

12:30 - 12:47

New Oral Anticoagulants in Heart Failure with or without Sinus Rhuthm

15

Hanno Riess (Berlin, GE)

Discussion 12:47 - 12:50

Lunch Break 12:50 - 14:20





Session VII

Novel Molecular Therapeutic Strategies Targeting Heart-Immune System Interactions

Chairpersons Hugo Katus (Heidelberg, GERMANY) Andreas Zeiher (Frankfurt, GERMANY) 16:10 - 16:27 14:20 - 14:37microRNA-based Therapeutic Strategies -**Status of Clinical Translation** Stefanie Dimmeler (Frankfurt, GERMANY) 16:27 - 16:30 14:37 - 14:40Discussion 16:30 - 16:47 14:40 - 14:57 Diagnostic and Therapeutic Exploration of the **Noncoding Genome in Viral Heart Disease** Wolfgang Poller (Berlin, GERMANY) 16:47 - 16:50 14:57 - 15:00 Discussion 16:50 - 17:07 15:00 - 15:17 **Modulation of Cardiac Inflammation using Monocyte-Targeted Nanoparticles** Florian Leuschner (Heidelberg, GERMANY) 17:07 - 17:10 15:17 - 15:20 Discussion 17:10 - 17:2715:20 - 15:37 **Role of Protease-Activated Receptors for Innate** Immunity of the Heart - Focus on Myocarditis Ursula Rauch-Kroehnert (Berlin, GERMANY) 17:27 - 17:30 15:37 - 15:40 Discussion 17:30 - 17:47 Coffee Break 15:40 - 16:10 17:47 - 17:50

Session VIII

Outlook to the Future of Cardiomyopathy Research

Chairpersons Bruce McManus (Vancouver, CA) Peter P. Liu (Toronto, CANADA)

Classification of Cardiomyopathies – Past and Future

Gaetano Thiene (Padova, ITALY)

Discussion

CMR Diagnostics in Myocarditis and Cardiomyopathies – Future has just begun Stefan Neubauer (Oxford, UK)

Discussion

The Future of Molecular Genetic Diagnostics in Cardiomyopathies

Hugo Katus (Heidelberg, GERMANY)

Discussion

The Future of Cardiovascular Regenerative Therapies

Andreas Zeiher (Frankfurt, GERMANY)

Discussion

Towards Personalized Medicine in the Field of Inflammatory Cardiomyopathies

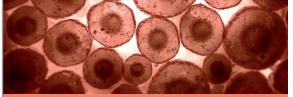
Heinz-Peter Schultheiss (Berlin, GERMANY)

Discussion

Concluding Remarks

Carsten Tschoepe (Berlin, GERMANY)

16 | 17



Invited Speakers and Chairpersons

Stefan Anker (Berlin, GERMANY)

Eloisa Arbustini (Pavia, ITALY)

Cristina Basso (Padua, ITALY)

Johann Bauersachs (Hannover, GERMANY)

Steffen Behrens (Berlin, GERMANY)

Claus-Thomas Bock (Berlin, GERMANY)

Corinna Brunckhorst (Zurich, SWITZERLAND)

Alida Caforio (Padova, ITALY)

Stefanie Dimmeler (Frankfurt, GERMANY)

Paul Elliott (London, UK)

Erland Erdmann (Cologne, GERMANY)

Urs Eriksson (Zurich, SWITZERLAND)

Georg Ertl (Würzburg, GERMANY)

David Fairweather (Rochester, USA)

Stephan Felix (Greifswald, GERMANY)

Stefan Frantz (Würzburg, GERMANY)

Norbert Frey (Kiel, GERMANY)

Andrea Frustaci (Rome, ITALY)

Michael Gross (Berlin, GERMANY)

Stephane Heymans (Maastricht, NETHERLANDS)

Dieter Horstkotte (Bad Oeynhausen, GERMANY)

Lorenza Monserrat Iglesias (LaCoruna, SPAIN)

Hugo Katus (Heidelberg, GERMANY)

Andre Keren (Jerusalem, ISRAEL)

Uwe Kühl (Berlin, GERMANY)

Ulf Landmesser (Zürich, SWITZERLAND)

Ulrich Laufs (Homburg, GERMANY)

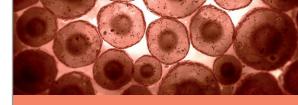
Florian Leuschner (Heidelberg, GERMANY)

Peter Liu (Toronto, CANADA)

Bernhard Maisch (Marburg, GERMANY)

Bruce McManus (Vancouver, CANADA)

Paul Mohacsi (Bern, SWITZERLAND)



James Moon (London, UK)

Stefan Neubauer (Oxford, UK)

Morten S. Olesen (Copenhagen, DENMARK)

Martin Paul (Maastricht, NETHERLANDS)

Walter Paulus (Amsterdam, NETHERLANDS)

Matthias Pauschinger (Nuremberg, GERMANY)

Jan J. Piek (Amsterdam, NETHERLANDS)

Burkert Pieske (Graz, AUSTRIA)

Wolfgang Poller (Berlin, GERMANY)

Sumanth Prabhu (Birmingham, USA)

Ursula Rauch-Kroehnert (Berlin, GERMANY)

Hanno Riess (Berlin, GERMANY)

Ornella Rimoldi (Milano, ITALY)

Mattias Roser (Berlin, GERMANY)

Frank Ruschitzka (Zurich, SWITZERLAND)

Bernhard Schieffer (Marburg, GERMANY)

Dr. Heinz-Peter Schultheiss (Berlin, GERMANY)

Rainer Schulz (Giessen, GERMANY)

Carsten Skurk (Berlin, GERMANY)

Ruth Strasser (Dresden, GERMANY)

Gaetano Thiene (Padova, ITALY)

Jeffrey Towbin (Cincinnati, USA)

Carsten Tschöpe (Berlin, GERMANY)

Sophie van Linthout (Berlin, GERMANY)

Hans-Dieter Volk (Berlin, GERMANY)

Karl Werdan (Halle, GERMANY)

Dirk Westermann (Hamburg, GERMANY)

Andreas Zeiher (Frankfurt, GERMANY)

18 | 19



This congress is supported by

Scientific Committee

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Congress Venue

Ellington Hotel Berlin

Nürnberger Straße 50-55, 10789 Berlin www.ellington-hotel.de



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- -> 1 station to go to Wittenbergplatz
- -> 5 minutes to walk
- -> turn left into Nürnberger Straße

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- -> 1 station to go to Wittenbergplatz
- -> 5 to walk
- -> turn left into the Nürnberger Straße

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