

## **Fifth Symposium on Glycosaminoglycans**

### **Antithrombins: From basic research to clinical application**

September 16th-18th, 1996

Villa Vigoni, Lovenno (Como) / Italy

#### Organizers:

Job Harenberg  
1st Department of Medicine  
Faculty of Clinical Medicine  
University of Heidelberg  
Theodor-Kutzer-Ufer  
68167 Mannheim

Benito Casu  
Istituto Scientifico di Chimica  
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Via G. Colombo, 81  
20133 Milano

## **Welcome to Villa Vigoni !**

It is the fifth time that the staff of Villa Vigoni hosts our symposium on the action of polysaccharides in molecular biology, pharmacology, vascular endothelium and the relation to arteriosclerosis. Since the knowledge in this field is expanding, the Italian and German colleagues of this research area decided to include a clinical session on the status and perspectives of the clinical application of antithrombins during the meeting.

At the end of each session we have organized round table discussions on selected topics, as outlined in the program. We would like to invite all participants to discuss and comment on these topics. Manuscripts of the presentations may be published in Seminars in Thrombosis and Hemostasis in a separate volume.

Please do not hesitate to contact the organizers of the symposium in the case of difficulties concerning transportation, accommodation or other problems with regard to the symposium.

We thank Professor Lill and his collaborators for enabling this symposium.

**Benito Casu**

**Job Harenberg**

**Monday, September 16th, 1996**

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**13.00 - 14.00** *Lunch in Villa Vigoni*

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**Session I:** Perspectives of thrombin inhibitors, Part I

**Chairmen:** **E. Wenzel, Homburg**

**16.00** **J. Harenberg, Mannheim**

Welcome address

Results of the Italian-German collaboration

**16.30** **B. Casu, Milano**

Glycosaminoglycans as "structural diversity" workshops. Making use of complexity

**17.00** Discussion

**Monday, September 16th, 1996**

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**Session I:** Perspectives of thrombin inhibitors, Part II

**Chairmen:** **K.H. Breddin, Frankfurt**

**17.15** **H. Baumann, Aachen**

Which glycosaminoglycans are suitable for antithrombogenic or athrombogenic coatings of biomaterials

**17.45** **A. Stemberger, Munich**

Antithrombotic surface coating of vascular prosthesis - Basic concepts and results of animal experiments

**18.15** Discussion

**19.30** *Dinner at Villa Vigoni*

**Tuesday September 17th, 1996**

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**Session II:** Analytical methods for thrombin inhibitors,  
Part I

**Chairmen:** **B. Casu, Milano**

**9.00** **P. Bianchini, Modena**

Natural occurrence, species and organ-specific structural characteristics of heparins and their biological role

**9.15** **G. Mascellani, Modena**

Analysis of heparin origin by enzymatic digestion and HPLC quantitation of disaccharide components

**9.30** **L. Silvestro, Harpstedt**

Application of mass spectrometry to identify the chemical structure of sulfated oligosaccharides

**9.45** **G. Torri, Milano**

Sulfation patterns of beef and pig mucosal heparin - NMR studies

**10.00** **A. Naggi**

Systematically-modified glycosaminoglycans for structure-activity studies.

**10.15** **Discussion**

**10.40**

*Break*

**Tuesday September 17th, 1996**

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**Session II:** Analytical methods for thrombin inhibitors,  
Part II

**Chairmen:** **P. Bianchini, Modena**

**11.00** **M. Guerrini, Milano**

Synthesis and structural characterization of deuterium and tyramine-labeled heparins and dermatansulfates

**11.15** **R. Malsch, Mannheim**

Biochemical and biological activities of tyramine and FITC-labeled heparins and dermatansulfates

**11.30** **L. Piazzolo, Mannheim**

Pharmacokinetics of fluorescent labeled heparins

**11.45** **G.G. Nenci, Perugia**

Gastro-intestinal absorption of heparins

**12.00** Discussion

**12.30** *Lunch at Villa Vigoni*

**Tuesday September 17th, 1996**

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<b>Session III</b>	Biological actions of thrombin inhibitors, Part I
<b>Chairmen:</b>	<b>B. Casu, Milano</b>
<b>14.30</b>	<b>S. Alban, Regensburg</b>  Biological activities of sulfated glycans
<b>14.45</b>	<b>S. Johann, Ahrensfelde</b>  Glycosaminoglycans trigger respiratory burst in neutrophils and monocytes
<b>15.00</b>	<b>A. Baici, Zürich</b>  Interaction of human leukocyte elastase with glycosaminoglycans
<b>15.15</b>	<b>G. Huhle, Mannheim</b>  Application of the IgG1 heparin-antibody
<b>15.30</b>	<b>G. Gambaro, Padova</b> Glycosaminoglycans and growth factors in diabetic nephropathy
<b>15.45</b>	Discussion
<b>16.00</b>	<i>Break</i>
	<b>Tuesday September 17th, 1996</b>

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<b>Session III</b>	Biological actions of thrombin inhibitors, Part II
<b>Chairmen:</b>	<b>A. Baici, Zürich</b>
<b>16.30</b>	<b>D.H.J. Schamhart, Amsterdam</b> On the role of proteoglycans and (free) glycosaminoglycans on attachment and proliferation of prostate cancer cells: Implication for therapy
<b>16.45</b>	<b>G. Zoppetti, Milano</b> New data concerning the interaction of heparin like species with HIV
<b>17.00</b>	<b>E. Palazzini, Bologna</b> Preliminary data on clinical efficacy of Desmin in treatment of acute deep venous thrombosis
<b>17.15</b>	<b>A. Poggi, St. Maria Imbaro</b> Inhibitory effects of sulfaminoheparan-sulfate on B16B16 melanoma dissemination in mice
<b>17.30</b>	<b>G. Ghiselli, Nerviano</b> Inhibition of smooth muscle cells growth by heparinsulfate
<b>17.45</b>	Discussion
<b>19.00</b>	<i>Dinner at Villa Vigoni</i>

Wednesday September 18th, 1996

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- Session IV:** New clinical applications of heparins and hirudins, Part I
- Chairmen:** **G.G. Nenci, Perugia**
- 9.00** **J. Fareed, Chicago**  
Comparative pharmacology of new antithrombin agents
- 9.30** **S. Haas, Munich**  
Low molecular weight heparin as reference substance for prophylaxis in high risk patients?
- 9.50** **M. Spannagl, Munich**  
Clotting tests or chromogenic substrate assays for specific measurement of thrombin inhibitors?
- 10.05** **H. K. Breddin, Frankfurt**  
Results of the PEG-hirudin-aspirin interaction trial
- 10.25** Discussion
- 10.45** *Break*

Wednesday September 18th, 1996

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- Session IV:** New clinical applications of heparins and hirudins, Part II
- Chairmen:** **J. Fareed, Maywood**
- 11.00** **G. Agnelli, Perugia**  
Critical overview on clinical studies with thrombin inhibitors
- 11.15** **C. Kirchmeier, Frankfurt**  
Treatment of deep vein thrombosis with low molecular weight heparins
- 11.30** **G. F. Gensini, Florence**  
Recent evidence of the usefulness of antithrombins in IHD
- 11.45** **G. Belcaro, Pescara**  
Prophylaxis of DVT using high dose LMW heparin
- 12.00** **Discussion**
- 12.30** *Lunch at Villa Vigoni*

## General Information

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### Social Program

#### Monday, September 16th, 1996

13.00 - 14.00 *Lunch in Villa Vigoni*

19.30 - 22.00 *Dinner in Villa Vigoni*

#### Tuesday, September 17th, 1996

12.30 - 14.00 *Lunch in Villa Vigoni*

19.00 - 22.00 *Dinner in Villa Vigoni*

#### Wednesday, September 18th, 1996

12.30 - 14.00 *Lunch in Villa Vigoni*

### Location of the Symposium:

"Villa Vigoni e.V."  
Via Giulio Vigoni 1  
Lovenò di Menaggio  
I-22017 Menaggio (Como)  
Tel.: 0039-344/32155  
Fax: 0039-344/32966

**Registration:** Monday, September 16th, 1996

12.00 - 14.00  
Villa Vigoni

**Deadline for submission of manuscripts according to the guidelines of Seminars in Thrombosis and Hemostasis until October 10th or December 1st 1996**

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