

10th Symposium on Glycosaminoglycans

September 19th-21st, 2002

Organizers:

Job Harenberg

**4th Department of Medicine
Faculty of Clinical Medicine Mannheim**

Benito Casu

**„G. Ronzoni“ Institute for Chemical and Biochemical
Research, Milan**

Jürgen Jacob

**Baxter Deutschland, GmbH, Hyland Immuno Division
Heidelberg**

Welcome to Villa Vigoni!

It is the tenth time that the staff of Villa Vigoni hosts our symposium on glycosaminoglycan-protein binding, biological implications, unresolved issues in venous and arterial thromboembolism and standardization of methods for measurement of direct thrombin inhibitors - others than glycosaminoglycans. Since the knowledge in this field is expanding, the Italian and German colleagues of this research decided to include the topics mentioned below. Professor Aldo Venturelli, the general secretary of the Villa Vigoni, has kindly accepted the application of the organizers to hold this symposium as an **anniversary symposium**. Professor E. Mammen offered us the possibility to present during the symposium a special issue of Seminars in Thrombosis and Hemostasis with manuscripts of participants.

The organizers of the symposium will be happy to welcome you at the Villa Vigoni.

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 would like to thank Professor Venturelli and his collaborators for their kind assistance.

Job Harenberg

Benito Casu

Jürgen Jacob

Scientific topics

Anticoagulants

Argatroban, dermatansulfate, glycosaminoglycans, heparins, hirudins, low-molecular-weight heparins, new antithrombotic drugs, pentasaccharide, thrombin inhibitors

Characterization of Glycosaminoglycans

Anticoagulant assays, nuclear magnetic resonance, new biological assays, standardization and harmonization of methods

Structure-function relationship

Drug interactions of anticoagulants, glycosaminoglycans and platelet factor 4, glycosaminoglycans and growth factors, glycosaminoglycans and inflammation, heparin-induced thrombocytopenia, protein-glycosaminoglycan interactions

Polysaccharides and biomaterials

Coating of stents, coating of biological materials

Clinical studies

Deep venous thrombosis and pulmonary embolism, glycosaminoglycans, ischemic stroke, myocardial infarction, new indications, prolonged prophylaxis of venous thromboembolism, pentasaccharides, thrombin inhibitors

Scientific board

Breddin HK, Casu B, Harenberg J, Mammen E, Palumbo M

Faculty

Alban S, Baici A, Baumann H, Eldor A, Fareed J, Kirchmaier C, Markwardt F, Naggi A, Nowak G, Petitou M, Presta M, Stemberger A, Wenzel E

Thursday, September 19th, 2002

Session I	Glycosaminoglycans : methods of analysis
15.00-15.10	Moderators: Harenberg J. and Casu B. Welcome and Introduction
15.10-15.30	Torri G, Milan New tools for structural analysis of glycosaminoglycans.
15.30-15.50	Venkataraman G, Boston Isolation and sequencing of protein-binding GAG oligosaccharides by surface noncovalent affinity mass spectrometry (SNA-MS)
15.50-16.10	Petitou M, Toulouse Identification of minimal glycosaminoglycan sequences binding to anticoagulant and non-anticoagulant proteins
16.10-16.30	Discussion
16.30-16.50	Coffee, Tee
Session II	Cell interactions of Glycosaminoglycans
	Chairmen: Fareed J. and Alban S.
16.50-17.10	Mascellani G, Modena Structure of heparin fragments from radical-catalyzed depolymerisation of heparin
17.10-17.30	Sissi C, Padova Variously sulfated low-molecular-weight heparin differential effects on protein-GAG interactions
17.30-17.50	Hricovini M, Bratislava Molecular dynamics of heparin and heparin derivatives
17.50-18.10	Discussion
19.00	Dinner at Villa Vigoni

Friday, September 20th, 2002

Session III	Special session
	Moderator: Casu B. and Wenzel E.
9.15-9.35	Venturelli A, Lovenò History of Villa Vigoni
9.35-9.55	Harenberg J, Mannheim Results of the German-Italian collaboration on the synthesis of fluorescent labeled glycosaminoglycans
9.55-10.15	Fareed J, Chicago Heparinase neutralization of heparin related oligosaccharides, pharmacological and clinical implications
10.15-10.30	Discussion
10.30-10.50	Coffee, Tee
Session IV	Biological actions of glycosaminoglycans
	Moderators: Markwardt F. and Pisano C.
10.50-11.10	Naggi A, Milan Heparin as carrier for NO-releasing groups
11.10-11.30	Cornelli U, Milan/Chicago The heparin-derived oligosaccharide C3 and its activity on senile dementia
11.30-11.50	Alban S, Regensburg Influence of heparin and other sulfated polysaccharides on the selectin-mediated cell adhesion
11.50-12.15	Discussion
12.30-14.00	Lunch at Villa Vigoni

Friday, September 20th, 2002

Session V

Glycosaminoglycans and Surfaces

	Moderators: Kemkes-Matthes B. and Torri G.
14.30-14.50	Nowak G, Erfurt New insights into the new interaction between glycosaminoglycans and platelets
14.50-15.10	Stemberger A, Munich Binding of glycosaminoglycans to surfaces
15.10-15.30	Baumann H, Aachen Coating of biological materials with modified glycosaminoglycans
15.30-15.50	Hoppensteadt D, Chicago Tissue factors pathway inhibitor release by heparins and related polyelectrolyte drugs. Contributions to the control of thrombogenesis
15.50-16.10	Kirchmaier C, Wiesbaden Inhibition of thrombin formation by recombinant factor VIIa inhibitor
16.10-16.30	Discussion
16.30-16.50	Coffee, Tee

Session VI

Glycosaminoglycans and protein interactions

	Moderators: Petitou M. and Palumbo M.
16.50-17.10	Casu B, Milan Targeting heparin-binding proteins as a strategy to develop novel antithrombotic and anticancer drugs
17.10-17.30	Pisano C, Pomezia Antiangiogenic and antitumor activity of novel heparin derivatives devoid of anticoagulant effects
17.30-17.50	Sasisekharan R, Boston Tumor cell surface heparan sulfate sequences as cryptic promoters or inhibitors of tumor growth and metastasis
17.50-18.10	Rusnati M, Brescia Interaction of TAT-complexes with cellular heparan sulfate proteoglycans as a target for the development of anti-HIV drugs
18.10-18.30	Discussion
19.00	Dinner at Villa Vigoni

Saturday, September 21st, 2001

Session VII	Thrombin inhibitors
	Moderators: Fareed J. and Nowak G.
9.15-9.35	Markwardt F, Erfurt Hirudin as diagnostic agent
9.35-9.55	Fenyvesi T, Mannheim Interaction of thrombin inhibitors and coumarins on coagulation parameters
9.55-10.15	Kemkes-Matthes B, Gießen Anticoagulation with argatroban in patients with intolerance towards heparins and hirudin.
10.15-10.30	Discussion
10.30-10.50	Coffee, Tee
Session VIII	Clinical features of Glycosaminoglycans
	Moderators: Wenzel E. and Casu B.
10.50-11.10	Piazolo L, Mannheim Pharmacokinetic studies of natural and fluorescent-labeled glycosaminoglycans - insight into significance of leukocytes for the pharmacokinetic of heparins
11.10-11.30	Fareed J, Chicago Effect of anticoagulant drugs on thrombin activated fibrinolysis inhibitors (TAFI). Clinical implications
11.30-11.50	Prandoni P, Padova Heparins and venous thromboembolism: current status and future perspectives
11.50-12.10	Discussion Closing remarks
12.30	Lunch at Villa Vigoni

Sponsors:

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Pharmacia GmbH, Erlangen
Sigma-Tau, Pomezia

General Information

Social Program

Thursday, September 19, 2002

13.00 -14.00: *Lunch in Villa Vigoni*
19.00: *Dinner in Villa Vigoni*

Friday, September 20, 2002

8.00-9.00: *Breakfast*
13.00 -14.00: *Lunch in Villa Vigoni*
19.00: *Dinner in Villa Vigoni*

Saturday, September 21, 2002

8.00-9.00: *Breakfast*
12.30-13.30: *Lunch in Villa Vigoni*
Departure: *after lunch*

Location of the Symposium:

"Villa Vigoni e.V."

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