## International Workshop on Anthracycline Cardiotoxicity: Molecular Mechanisms and Clinical Correlates

Como (Italy), October 20th - 21st, 2006

#### Organized by DEPARTMENT OF DRUG SCIENCES AND CENTER OF EXCELLENCE ON AGING G. D'ANNUNZIO UNIVERSITY SCHOOL OF MEDICINE CHIETI (ITALY)

### FONDAZIONE INTERNAZIONALE MENARINI

Centro di Cultura Scientifica "ALESSANDRO VOLTA" Villa Olmo

# Friday, October 20th, 2006 - Morning Villa Olmo (Como)

09.00	<i>Foreword:</i> <b>G. Minotti</b> (Chieti, I) The anthracyclines: when good things go bad
Session I - Clir	nical Aspects
Chairmen:	L. Gianni (Milan, I) T.M. Suter (Bern, CH)
09.10	<b>H. Cortes-Funes</b> (Madrid, E) Anthracyclines in the era of targeted therapy
09.30	<b>T.M. Suter</b> (Bern, CH) Drug induced cardiomyopathy: pathophysiology and diagnosis
09.50	<b>P. Valagussa</b> (Milan, I) Anthracycline cardiotoxicity in breast cancer patients: prospective and retrospective analysis of risk factors
10.10	<b>L. Wojnowski</b> (Mainz, D) Genotyping the risk of doxorubicin cardiotoxicity
10.30	Coffee break
10.50	<b>L. Gianni</b> (Milan, I) Anthracycline cardiotoxicity in breast cancer patients: synergism with taxanes and trastuzumab
11.10	<b>G. Batist</b> (Montreal, CDN) Cardiac safety of liposomal anthracyclines
11.30	C. Sessa (Bellinzona, CH)

	Ongoing Phase I and II studies of novel anthracyclines
11.50	Discussion Leaders
	G. Batist (Montreal, CDN)
	P. Valagussa (Milan, I)
	Is cardiotoxicity still a clinical problem?
12.20	Lunch

# Friday, October 20th, 2006 - Afternoon Villa Olmo (Como)

#### **Session II - Molecolar Mechanisms**

Chairmen:	<b>G. Minotti</b> (Chieti, I) <b>N. Sarvazyan</b> (Washington, USA)
14.30	<i>Keynote lecture:</i> <b>K.R. Chien</b> (Boston, USA) Stress and Heart Failure
15.00	<b>J. Robert</b> (Bordeaux-Cedex, F) Experimental models of acute and chronic cardiotoxicity
15.20	<b>B. Kalyanaraman</b> (Milwaukee, USA) Iron signalling and oxidant damage
15.40	<b>K. Wallace</b> (Duluth, USA) Anthracycline mitochondrionpathy
16.00	Coffee break
16.20	<b>J.Y. Kang</b> (Louisville, USA) Antioxidant defenses: lessons from transgenic animals and proteomics
16.40	<b>U. Walker</b> (Freiburg, D) Anthracyclines and mtDNA lesions
17.00	<b>D.B. Sawyer</b> (Boston, USA) Anthracyclines and the cytoskeleton
17.20	Discussion Leaders G. Cairo (Milan, I) J.Y. Kang (Louisville, USA) Controversies and facts on anthracycline cardiotoxicity

## Saturday, October 21st, 2006 - Morning Villa Olmo (Como)

## **Session III - Cardioprotection**

09.00

Chairmen:	B. Hasinoff (Winnipeg, CDN)
	<b>E. Herman</b> (Silver Spring, USA)

B. Hasinoff (Winnipeg, CDN)

	Bisdiketopiperazines: how it works in cardiac and tumor cells
09.20	<b>M. Sehested</b> (Copenahgen, DK) New analogs and applications of dexrazoxane
09.40	<b>S. Lipshultz</b> (Miami, USA) Iron chelation and cardiac protection: clinical experience
10.00	<b>H. Kaiserova</b> (Hradec Kralove, CZ) New iron chelators in doxorubicin-induced cardiotoxicity
10.20	Coffee break
10.40	<b>A. Bast</b> (Maastricht, NL) Flavonoids, from chemistry to clinical trials
11.00	<b>K. Hideg</b> (Pecs, H) Novel antioxidants in anthracycline cardiotoxicity
11.20	Discussion Leaders A. Bast (Maastricht, NL) S. Lipshultz (Miami, USA) Risk: benefit ratio of cardioprotectants
11.50	N. Sarvazyan (Washington, USA) Closing of the Meeting
12.10	Lunch

The anthracyclines enjoy a longer than 40 years record of longevity and still play an undisputed key role in the treatment of breast cancer and many other tumors. Unfortunately however, anthracyclines will also induce cardiomyopathy and congestive heart failure often refractory to common medications, and combining anthracyclines with new generation chemotherapeutics or targeted therapies may further aggravate cardiotoxicity. The molecular and clinical aspects of anthracycline cardiotoxicity therefore pose a number of questions that only in part have been answered: why is the heart so vulnerable and what can be done to protect it while leaving the tumors exposed to anthracyclines? What can be done to identify patients carrying an increased risk to develop cardiotoxicity? What kind of synergism links the old anthracyclines to the new anticancer agents? And finally, do we have a better anthracycline?

The Menarini Foundation wishes to contribute to this debate by hosting an "International Workshop on Anthracycline Cardiotoxicity: Molecular Mechanisms and Clinical Correlates", organized by Prof. Giorgio Minotti (University of Chieti, Italy) and co-chaired by Dr. Narine Sarvazyan (The George Washington University, Washington DC). This Workshop is aimed at fostering interactions between preclinical and clinical investigators with interest in the molecular mechanisms, pathophysiology and clinical readouts of cardiotoxicity induced by anthracyclines, whether administered as single agents or in combination with other chemotherapeutics. The Scientific Program is structured as a full circle from Clinical Aspects (session I) to Molecular Mechanisms (session II) and Cardioprotection (session III). Each session will be followed by a plenary Forum that will serve an opportunity to exchange ideas and challenge concepts and research directions. Hopefully, this approach will form the basis to incorporate the viewpoints of clinicians and preclinical investigators in a comprehensive and productive framework. The Workshop will take place October 20th - 21st, 2006, at Villa Olmo, a beautiful neoclassic venue on the Lake of Como. Villa Olmo is home of a scientific center dedicated to Alessandro Volta (1745-1827), a pioneer in the field of electricity and inventor of the battery. We trust that the spiritual patronage of Alessandro Volta will "electrify" all attendees and will offer resuscitating "voltages" to improve the molecular understanding and clinical handling of anthracycline

cardiotoxicity. We have the pleasure to announce the organization of this Workshop and warmly invite you to attend it in a scenical and historical environment.

Giorgio Minotti and Narine Sarvazyan Co-Chairs

#### President of the Workshop Giorgio Minotti

Professor of Pharmacology G. d'Annunzio University School of Medicine Chieti (Italy)

## Co-Chair

Narine Sarvazyan Associate Professor Department of Pharmacology and Physiology The George Washington University Washington (USA)

#### Scientific Secretaries Emanuela Salvatorelli and Pierantonio Menna

Department of Drug Sciences and Center of Excellence on Aging G. d'Annunzio University School of Medicine Chieti (Italy) E-mail: <u>esalvatorelli@unich.it</u> <u>pmenna@unich.it</u>

### Segreteria Organizzativa

Fondazione Internazionale Menarini Piazza del Carmine, 4 I-20121 Milan (Italy) Phone: +39 02 874932 / 866715 Fax: +39 02 804739 E-mail: milan@fondazione-menarini.it florence@fondazione-menarini.it