

SECOND JOINT MEETING OF THE ITALIAN AND DUTCH PHARMACOLOGICAL SOCIETIES

LUNTEREN, FEBRUARY 12-14, 2003

Wednesday February 12

13:00-14:00 **Lunch**

14:00-15:30 **Business Meeting of the Dutch Pharmacological Society**

15:35 **Opening of the Joint Meeting**

V. Cuomo, P. Saxena

15:45-17:35 **I. Pulmonary pharmacology (P. Geppetti, Firenze; J. Zaagsma, Groningen)**

Plenary symposium in remembrance of S. Nicosia

H. Meurs, Groningen

G.E. Rovati, Milano

NO in allergic asthma: excess or shortness?

Leukotrienes in asthma pathophysiology

Oral abstract presentations

A.R. Kranenburg et al., Rotterdam

Enhanced bronchial expression of vascular endothelial growth factor and receptors (FLK-1 and FLT-1) in patients with chronic obstructive pulmonary disease

S. Marzocco et al., Salerno

Anti-inflammatory activity of methylguanidine on carrageenan induced rat pleurisy

M. Kool et al., Utrecht

Role for the neurokinin-1 receptor in the early phase of non-IgE mediated pulmonary hypersensitivity reactions

H. Maarsingh et al., Groningen

Role of arginase in neuronal nitric oxide production and airway smooth muscle relaxation induced by inhibitory nonadrenergic noncholinergic (iNANC) nerve stimulation

17:35-17:50 **Break**

17:50-19:40 **II. Pharmacology of migraine (L.A. Pini, Modena; P. Saxena, Rotterdam)**

H. Doods, Biberach

G. Geppetti, Firenze

CGRP and migraine

Trigeminal neurons and migraine

Oral abstract presentations

U. Arulmani et al., Rotterdam

Effects of BIBN4096BS on capsaicin-induced haemodynamic changes in a porcine experimental model for migraine

L.A. Pini et al., Modena

Serotonergic and opiate modifications induced by paracetamol as a model for daily chronic headache with analgesic overuse

S. Gupta et al., Rotterdam

Differential potency of BIBN4096BS in blocking CGRP relaxations in human distal and proximal coronary arteries

A. Ottani et al., Modena

Different effect of sumatriptan in models of thermal, chemical or cephalalgic pain in rats

17:50-19:40

III. CNS effects of steroids

(G. Biggio, Cagliari; A. Rijnders, Oss)

A. Ederveen, Oss

The use of in vivo models in drug development to elucidate tissue selectivity of partial estrogen receptor agonists

M.L. Barbaccia, Roma

Neurosteroids and the mechanism of action of antipsychotic drugs

Oral abstract presentations

F. di Michele et al., Roma

Neuroactive steroids in Parkinson's disease

M. Serra, Cagliari

Social isolation-induced increase in the sensitivity of rats to the steroidogenic effect of ethanol

19:40-20:30

Reception/posters

20:30

Dinner

Thursday February 13

07:45-09:00 *Breakfast*

09:00-12:00 **IV. Neuropeptides (A. Bertolini, Modena; B. Olivier, Utrecht)**

G. van Dijk, Groningen
A. Bertolini, Modena
B. Olivier, Utrecht
F. Drago, Catania

Involvement of the brain melanocortin system in regulation of energy balance
Melanocortins in shock and in other conditions of tissue hypoxia
The CRH-overexpressing mouse: model for depression?
Neurotransmitter interactions in the amnesic effects induced by beta-amyloid related peptides

10:40-11:00 *Break*

Oral abstract presentations

J. Hillebrand, Utrecht
A.V. Vergoni et al., Modena

K. de Vries et al., Groningen
M. Massi et al., Camerino

The melanocortin system and eating disorders
Chronic intracerebroventricular infusion either of a melanocortin agonist and of a melanocortin antagonist at low doses profoundly modifies energy balance without any other behavioral effect in rats
The central melanocortin system and metabolism
Inhibition of CRF-induced anorexia by NOP receptor activation

09:00-12:00 **V. Immunopharmacology (C. Riccardi, Perugia; F. Nijkamp, Utrecht)**

F. Redegeld/A. Kraneveld, Utrecht

C. Riccardi, Perugia
M. Smit, Amsterdam
S. Cuzzocrea, Messina

Free light chain elicits immediate hypersensitivity-like responses: possible implication for asthma
Glucocorticoid hormones and regulation of T lymphocytes activation and death
Virally encoded G Protein-coupled receptors: new targets for drug therapy
Ligands of the peroxisome proliferator-activated receptor- γ (PPAR- γ) reduce acute and chronic inflammation

10:40-11:00 *Break*

Oral abstract presentations

M.W. Zuurman et al., Groningen
R. d'Emmanuele di Villa Bianca et al., Napoli

A. Rijnerse et al., Utrecht
S. Ronchetti et al., Perugia

L-CCR: a novel functional C-C chemokine receptor expressed in murine glial cells
Role of endothelium derived hyperpolarizing factor (EDHF) in glucocorticoids induced hypertension
Validation of a murine model for colonic hypersensitivity
Signals through the TNFR superfamily (TNFRSF) member GITR are costimulatory to T lymphocytes

12:00-14:00 *Lunch/posters*

- 14:00-15:00** **Plenary lectures (J. Smits, Maastricht; A. Mugelli, Firenze)**
E. Cattaneo, Milano
R. Leurs, Amsterdam
Huntington: a “model” disease
Do receptors need ligands?
- 15:00-15:30** **Break**
- 15:30-16:30** **Plenary lectures (J. Smits, Maastricht; F. Drago, Catania)**
F. Nicoletti, Roma
R. Masereeuw, Nijmegen
Cell cycle activation and neuronal death
Endothelin-regulated drug transport in the kidney
- 16:30-17:00** **Break**
- 17:00-18:00** **Ariëns lecture (P. Saxena)**
Ariëns lecturer: H. Timmerman, Amsterdam
- 19:00** **Banquet**

Friday February 14

07:45-08:30 **Breakfast**

08:30-11:30 **VI. Cardiovascular Pharmacology: Heart Failure (L. Berrino, Napoli; P. van Zwieten, Amsterdam)**

W. van Gilst, Groningen

E. Cerbai, Firenze

M. Blankesteyn, Maastricht

M. Ziche, Siena

New concepts on the treatment of heart failure with RAS inhibitors

Electrophysiologic remodeling in heart failure

The myofibroblast as a therapeutic target to prevent heart failure development after myocardial infarction

Coronary dysfunction and angiogenesis

10:10-10:30 **Break**

Oral abstract presentations

A. Nap et al., Amsterdam

G. Lonardo et al., Firenze

B. Tom et al., Rotterdam

L. Raimondi et al., Firenze

Different AT₁-receptor subtypes at prejunctional and postjunctional sites: AT_{1A} versus AT_{1B}-receptors

ANP increases the pacemaker current (I_F): A potentially new link between stretch and arrhythmogenesis?

No role for oxygen-derived free radicals in angiotensin-II-mediated vasoconstriction of human coronary arteries

Chronic treatment with ω -3 PUFA decreases plasma concentration of asymmetric dimethylarginine (ADMA) in aging SHR rats

08:30-11:30 **VII. Pharmacology of Drug Abuse (W. Fratta, Cagliari; J. van Ree, Utrecht)**

T. Schoffelmeer, Amsterdam

L. Fattore, Cagliari

A. Cools, Nijmegen

P. Nencini, Roma

Towards a pharmacotherapy of relapse behavior

Opioid-cannabinoid interactions in release mechanisms to drug-seeking

Individual differences in vulnerability to drugs of abuse: role of genetic background, early postnatal factors, and stress

What makes heroin different: the case of morphine glucuronidation

10:10-10:30 **Break**

Oral abstract presentations

J.R. Homberg, Amsterdam

P. Fadda et al., Cagliari

E.D. Schmidt, Amsterdam

M.R. Carratù et al., Bari

Neuropharmacological assessment of enhanced motivation of rats to self-administer cocaine

Antagonism by baclofen of nicotine rewarding effects: behavioral and neurochemical studies

Drug-specific hot spots in rat brain associated with relapse to heroin-seeking behavior

An experimental model simulating gestational carbon monoxide exposure in human cigarette smokers: subtle myelin alterations in rat offspring

11:30-13:00 Lunch

13:00-16:00 VIII. Endocrine Pharmacology: Diabetes (M. Carruba, Milan; P. Smits, Nijmegen)

P. Smits, Nijmegen
L. Berrino, Napoli
E. Blaak, Maastricht
E. Nisoli, Milano

Oral blood glucose lowering drugs: new aspects
Hyperglycemia and cardiovascular damage
Disturbances in fatty acid metabolism in type 2 diabetes mellitus
Role of nitric oxide in adipose cell biology

14:40-15:00 Break

Oral abstract presentations

G.A. Rongen, Nijmegen

L. Raimondi et al., Firenze

P. Pickkers et al., Nijmegen

S. Grande et al., Milan (pres. Visioli)

Tc-99m-HYNIC-Annexin V scintigraphy: detection of ischemic preconditioning in humans in vivo
Glucose disposition and electrophysiological features in diabetic cardiomyocytes: the effect of angiotensin II blockade
Activation of the ATP-dependent potassium channel attenuates noradrenalin-induced vasoconstriction in the human forearm
Mediterranean wild plant extracts ameliorate endothelial function: an in vitro study

13:00-16:00 IX. Receptor Pharmacology (P.A. Borea, Ferrara; R. Leurs, Amsterdam)

A. IJzerman, Leiden
P. Borea, Ferrara
C. van Koppen, Oss
M.A. Riva, Milano

Allosteric modulation of G protein-coupled receptors
Adenosine receptors and cancer: new pharmacological targets?
Molecular pharmacology of low molecular weight agonists for the lutropin receptor
Dopaminergic system and modulation of neurotrophic factor expression in the rat brain

14:40-15:00 Break

Oral abstract presentations

M.C. Hendriks-Balk et al., Weesp

E. Giannini et al, Roma

M.C. Wittendorp et al., Groningen

G. De Sarro et al., Catanzaro (pres. Gallelli)

The role of RGS4 in ligand-directed signaling of the dopamine D2-receptor
Prokineticins and their receptors participate in the peripheral transmission of inflammatory pain
CL-IB-MECA induced release of CCL2 by astrocytes: possible role for the adenosine A3 receptor?
Tetrahydroisoquinoline derivatives: a new class of non-competitive AMPA receptor antagonists with potential anticonvulsant activity.

16:00 Adjournment

POSTERS

- V.K.T. Allagappan et al. Insulin-like growth factors stimulate proliferation of cultured human airway epithelial but not smooth muscle cells
R.A. Bakker et al. Inverse agonists reveal conditional synergy between $G_{\alpha i}$ - and $G_{\alpha q}$ -coupled receptors
W.W. Batenburg et al. AT_2 receptor-mediated vasodilation in human and rat coronary arteries. Role of nitric oxide
F. Borelli et al. Green tea and gastrointestinal cancer risk
M. Bruysters et al. A mutagenic and *in silico* approach to characterise the histamine H1-receptor binding-pocket
M. Bucci et al. Involvement of heat shock protein 90 (Hsp-90) in testosterone-induced vasorelaxation in vitro
W.M. Blankesteyn et al. Time course of gene expression in infarcted and non-infarcted areas of the left ventricle after MI, analyzed by microarray
P. Casarosa et al. Differential constitutive signaling properties of the human and rat cytomegalovirus- encoded receptors UL33 and R33
S. Casini et al. Functional characterization of a novel Brugada syndrome mutation in the cardiac Na^+ channel
W.X. Chai et al. Role of calcitonin gene-related peptide in ischaemic preconditioning in rat isolated heart
S. Cuzzocrea et al. Role of the inducible nitric oxide synthase in experimental model of acute pancreatitis
A.A. de Groot et al. Involvement of the beta(3) adrenoceptor in nebivolol-induced vasorelaxation in the rat aorta
I.M. Dijkstra et al. Expression and functional activity of the chemokine receptor CXCR3 in microglia and its role in neurodegeneration
M. Festa et al. Petrosaspongionide M reduces morphine withdrawal *in vitro*
M. Fornai et al. Gastrin/CCK-2 receptors mediate relaxant effects of gastrin and cck-8s on the motility of the distal colon
M.N. Ghayur et al. Pharmacological basis for the cardiodepressant and sialagogue effects of betel nut
R. Gosens et al. Role of PKC and p42/p44 MAP kinase in synergism of airway smooth muscle proliferation induced by G-protein coupled receptor agonists and growth factors
R. Gosens et al. Cholinergic synergism of mitogenesis in airway smooth muscle is mediated by muscarinic M_3 -, not M_2 -receptors
E. Lipsic et al. Erythropoietin activates MAP kinase in isolated rat hearts
S. Marzocco et al. Inhibition of nitric oxide synthase expression by yuccanol c isolated from *Yucca schidigera* roezl
M. Massi et al. Effect of nociceptin-orphanin FQ on ethanol self-administration and ethanol seeking behaviour in rats
S. Notenboom et al. Short-term gentamicin exposure to renal proximal tubule has long-term intracellular signaling consequences
P. Ochodnický et al. Variability in renal damaging effects of doxorubicin explained by variability in prevailing renal blood flow
J. Oostendorp et al. Localization and regulation of expression of the orphan chemokine receptor L-CCR in the lung in a murine model of ovalbumin-induced airway inflammation
J.B.G. Paquay et al. Contractile properties of myocardial scar tissue
A. Popolo et al. Role of calcium flux on vascular hyporeactivity induced by endothelial mechanical injury in rat carotid arteries
C. Sand et al. The contribution of endogenously produced reactive oxygen species to the inotropic and chronotropic effects of adrenoceptor- and et-receptor stimulation
M.W. Sanders et al. Effects of prenatal stress on renal function and blood pressure in adult rats
M. Sandovici et al. Differential regulation of glomerular and interstitial endothelial nitric oxide synthase expression in the kidney of the hibernating ground squirrel
J.J. Saris et al. (Pro)renin receptor-dependent responses in cardiomyocytes: do they occur?
M.P. Schuijt et al. Superoxide: a direct or an indirect vasoconstrictor?
I. Serraino et al. Pyrrolidine dithiocarbamate modulates the severity of cerulein induced murine acute pancreatitis
P.H.E. Smeets et al. ATP-dependent transport of *para*-aminohippurate and fluorescein by multidrug resistance proteins 2 and 4 (MRP2/ABCC2 and MRP4/ABCC4)
J.O. Streefkerk et al. Facilitating effect of vasopressin on sympathetic nervous system in the human plethysmography model
D.L. Valstar et al. Depletion on lung function and airway inflammation in a rat model for tma-induced occupational asthma
H.P.M. van der Kleij et al. Functional expression of neurokinin-1 receptors on mast cells induced by IL-4 and SCF

E.C.A.M. van Esch et al. Role for IL-10 in allergen immunotherapy in a mouse model of allergic asthma
T.J.A. van Eijl et al. Use of ex-vivo perfusion to assess lung function changes in a murine model of elastase-induced emphysema
J. van Golde et al. Mechanisms of sympathetic hyperinnervation in chick embryo exposed to chronic moderate hypoxia
A.H. van Houwelingen et al. F991, a new therapeutical compound for contact dermatitis
C.E. van Meijeren et al. Use of different pharmacological tools in search for an alternative *in vitro* method for the histamine sensitization test in mice
J.L.M. Vissers et al. Stimulation of IL-10 production by allergen-loaded macrophages enhances the immunosuppressive effects in a mouse model of allergic asthma
J.P.M. Wesselman et al. Role of the rho/rho kinase pathway in flow-related remodeling of rat resistance arteries in vivo