# PREVENTIVE GENETIC DIAGNOSTICS

by GENOSENSE Diagnostics

Preventive Medicine tailored to the Genetic Profiles of Your Patients!

## About GENOSENSE Diagnostics

GENOSENSE Diagnostics GmbH was founded as an academic offspring in July 2001 by an highly experienced group of professionals from the fields of Gynaecology and Obstetrics, Endocrinology, Preventive Medicine, Molecular Biology and Biochemistry with the intent to establish individual and patient-orientated preventive genetic testing services.

GENOSENSE Diagnostics offers now a unique line of **Preventive Genetic Diagnostic** products.

Each product focuses on a carefully selected set of genetic variants (polymorphisms) associated with particular diseases and physiologic imbalances.

#### **GENOSENSE Diagnostics GmbH**

Donau-City-Str. 1
A-1220 Vienna, AUSTRIA



Headquarter of GENOSENSE

#### **Contact Information:**

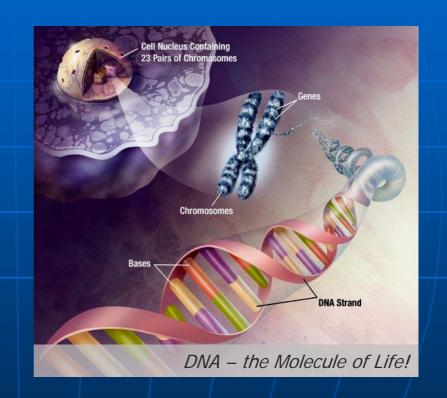
Tel. +43-12530253-190 Fax +43-1-2530253-191 info@genosense.com www.genosense.com

## What does Preventive Genetic Diagnostics stand for ?

Our genes, located in the nucleus of the cell contain the construction plans for our proteins. Even though all humans basically carry the same genetic information every person is unique. This individuality is guaranteed by marginal differences in our genes.

Yet these individual variations make us more susceptible to some diseases and more resistant to others.

Supplied with GENOSENSE expertise regarding the individual genetic predisposition, medical practitioners can more readily make use of their knowledge when treating patients and succeed in the prevention of illnesses!



## People behind GENOSENSE



from left to right:

Prof. Manfred W. Mueller, PhD President, Board of Directors

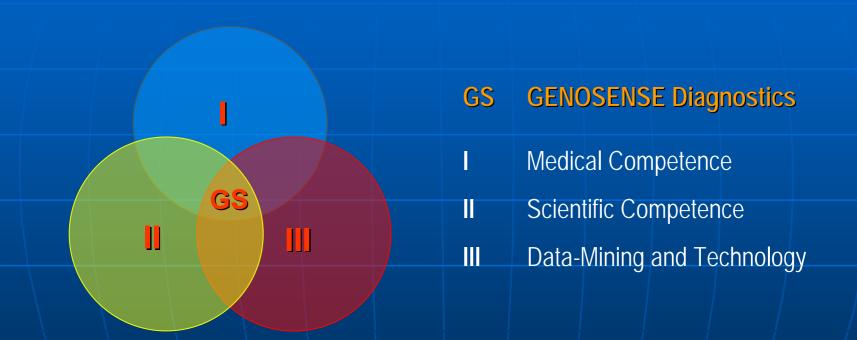
Dirk Hoppe, PhD
Sales & Business Development
(International Market)

Prof. Christian
Schneeberger, PhD
Chief Executive Officer

Erika J.M. Buerk, MSC Sales & Business Development (Austria, Germany, Switzerland Benelux-Countries)

See more GENOSENSE people at <a href="http://www.genosense.com/EN/Contact.html">http://www.genosense.com/EN/Contact.html</a>

## **CORE COMPETENCE of GENOSENSE**



## Scientific Competence

#### In-House competence



Prof. Manfred W. Mueller, PhD

Internationally acknowledged specialist in the fields of Biochemistry and Genetics; CEO of VBC-Genomics Bioscience Research GmbH; Member of the Scientific Board of the European Society of Anti-Aging Medicine (ESAAM); several patents; author of many scientific publications in journals such as Nature, Cell and Science.



Prof. Christian Schneeberger, PhD

Specialist in the fields of Biochemistry and Molecular Biology; CEO of GENOSENSE Diagnostics GmbH; Head of the Research Laboratory for Gynaecological Endocrinology at the Medical University Vienna; Member of the Scientific Board of the European Society of Anti-Aging Medicine (ESAAM); author of more than 60 publications in scientific journals.

## **Scientific Competence**

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#### **Medical University Vienna**

Due to the history of GENOSENSE as an academic offspring of the Medical University Vienna and to people like Prof. J. Huber, Prof. C. Tempfer and Prof. Ch. Schneeberger, GENOSENSE has a very close connection to this famous university. This ensures fruitful contacts to many medical, genetical and biochemical experts as well as access to different research facilities, projects and studies.

www.meduniwien.ac.at

#### **VBC-GENOMICS Bioscience Research GmbH**

Our mother company VBC-GENOMICS is – due to the high scientific as well as technical expertise – the ideal partner for GENOSENSE. Their state-of-the-art equipped lab facilities and their highly skilled and educated research team form a great source for further developments for GENOSENSE's future product portfolio.

As an example one should mention the worldwide only licensed diagnostic Protein Biochip, called ISAC® (Immuno Solid-phase Allergen Chip). Developed, patented and produced by VBC-GENOMICS this biochip has a great potential for GENOSENSE too.

In addition, GENOSENSE benefits greatly from the close relationship between VBC-GENOMICS and the biggest Austrian Research Holding (Austrian Research Center; ARC).

www.vbc-genomics.com

## Medical Competence

#### In-House competence



Prof. DDr. Johannes Huber, MD, PhD, Austria

Internationally highly admitted medical specialist and scientist; head of the Department for Gynaecological Endocrinology and Reproductive Medicine, Medical University Vienna; expert and opinion leader in the field of gynaecological endocrinology and preventive anti-aging medicine; chairman of the Austrian Bioethics Commission; author of more than 200 articles in peer-reviewed journals; vigorous presence in the press within the German-speaking region; active lecturing for GENOSENSE



Prof. Dr. Clemens Tempfer, MD, Austria

Prof. Clemens Tempfer is a US trained specialist in gynaecology, obstetrics and oncology. He is assistant medical director of the Department for Gynecological Endocrinology and Reproductive Medicine, Medical University Vienna and author of more than 150 publications in peer-reviewed scientific journals; active lecturing for GENOSENSE

## Our Medical Advisory Network

GENOSENSE has established and is constantly expanding an International Network of medical specialists in the field of Gynaecology, Obstetrics, Internal/Cardiovascular Medicine, preventive Anti-Aging Medicine, Andrology/Urology and Nutrition. Members of this network do not only generate medical interpretations but also act as promoters of preventive genetic diagnostics in their medical field and in their region. They support the internationalisation of GENOSENSE to a large extent.



Dr. Felix Stonek, MD, Austria

Dr. Felix Stonek is a trained chemist and a medical specialist for Obstetrics. He works at the Dept. for Obstetrics & Gynecology of the SMZ Ost (Donauspital - Sozialmedizinisches Zentrum Wien Ost), the 2nd biggest hospital of Vienna.



#### Dr. Wilhelm Kaltenbrunner, MD, Austria

Dr. Wilhelm Kaltenbrunner is Canadian trained (University Hospital Montreal) specialist in cardiology. He is an expert in clinical cardiology, electrophysiology and preventive cardiovascular medicine and works as cardiologist at the Wilhelminenspital in Vienna.

## Our Medical Advisory Network

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Dr. Michael Klentze, MD, Germany

Dr. Klentze is certified in psychiatry, gynecology and preventive anti-aging medicine. He is medical director of the Klentze Institute of Anti-Aging Medicine in Munich (Germany), Secretary General of the European Society of Anti-Aging Medicine (ESAAM) and member of the American Academy of Anti-Aging Medicine (A4M) Advisory Board. He is the author of several scientific articles on aging-related topics including androgens in women, neurosteroids and the aging brain as well as vitamins and antioxidants.



Dr. Johannes Wessoly, MD, Germany

Dr. Johannes Wessolly is a specialist in nutrition and preventive medicine. He is medical head of the "l.e.a.n. for life Institute" (Ludwigsburg, Germany) and works as well in the Schlosspark Klinik Ludwigsburg (Germany).



DDr. Karoly Nagy, MD, PhD, Hungary

DDr. Karoly Nagy is a US-trained specialist for Internal Medicine. He is an expert for diabetes and related metabolic disorders. He works at the Diagnostic Units Hungary, a company involved in conducting clinical pharmacological studies, where he is mainly responsible for cardiovascular and metabolic studies.

## Our Medical Advisory Network

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Dr. Javier Guell, MD, Spain

Dr. Javier Guell is a British trained (University of Glasgow) specialist in cardiology. He is an expert for clinical cardiology, preventive cardiology, electrocardiography, echocardiography and magnetic resonance imaging of the heart. He is a consultant cardiologist at Centro Medico Teknon in Barcelona, a member of the Spanish Society of Cardiology and the co-founder of GENOSENSE-Iberica.



Dr. Russel Cooper, MD, Australia

MBBCh, FACNEM, FAMAC, FACOHM, ABAAM, DipESAAM AUSTRALIA

Dr. Cooper has received fellowships in nutritional and environmental medicine, acupuncture& herbal medicine. He is board certified with the American Academy of Anti-Aging and holds a diploma in Preventive and Anti-Aging Medicine. He is recognized across Australia as a leading and innovative anti-aging practitioner and lectures extensively across Australasia and world-wide on growth hormone, bio-identical hormone replacement therapy and genetic diagnostics.



Elaine Chin, MD, MBA, Canada

Dr. Chin is a leading specialist in Longevity Medicine. She is a pioneer in multi-disciplinary approaches to total health management, disease prevention and antiaging. As Assistant Professor at the University of Toronto, she teaches disease prevention in the Faculty of Medicine. As Medical Director of Scienta Health (Toronto), Dr. Chin has applied her successful practice models to rapidly establish Scienta Health as a leader and of one the most progressive preventive healthcare practices in North America.

## The Scientific Leading Team of GENOSENSE is actively involved into Genomic Research.



Until July 2006, members of the scientific leading team of GENOSENSE

Prof. Johannes C. Huber, MD, PhD Prof. Manfred W. Mueller, PhD Prof. Christian Schneeberger, PhD Prof. Clemens Tempfer, MD

have published **70** polymorphism-specific publications with a total impact factor volume >**160** in peer-reviewed journals since the foundation of GENOSENSE in spring 2001.

## **GENOSENSE** is actively involved into Workshops and Seminars

GENOSENSE organizes on a regular basis workshops and seminars with the aim to train and educate physicians in the field of Preventive Genetic Diagnostics.

Ask us – we tell you more about these training activities.



### **Our Products and Services**

GENOSENSE Diagnostics offers a unique line of Preventive Genetic Diagnostic products. Each product focuses on a carefully selected set of genetic variants (polymorphisms) associated with particular diseases and/or physiologic imbalances. The company also provides academic institutions and pharmaceutical companies with turnkey solutions for research-based projects.



Our products should not be considered as fixed unchangeable systems. It is our assignment to steadily evaluate and adjust our products in accordance with up-to-date scientific results.

GENOSENSE does not only supply the genetic test results: Our analysis report is a combination of the genetic test result, a scientific interpretation and the clinical interpretation by our experts.

Therefore, the assigning physician need not be a genetic expert to interpret the results and initiate a successful diagnosis for his patient.

### **Our Products and Services**

#### **QUALITY ASSURANCE**

For us quality is not only a phrase. It is the solid basis and requirement for the reliability of our test results and the satisfaction of our customers and their patients. The long-term experience of our specialists in the overall field of molecular biology, our most modern laboratory equipment and the consequent realization of our quality management guarantee the high quality of our test results.



GENOSENSE Diagnostics is certified in accordance with the latest quality standard EN ISO 9001.

## Our Products and Services BASIC Prevention



**ANDROLOGY** 

#### AndroSensor 40plus

Evaluation of the genetic associated risk of prostate cancer, thrombosis, osteoporosis, metabolic imbalance of detoxification and chronic inflammation.



**GYNECOLOGY** 

#### FemSensor 40plus

Evaluation of long-term exposure to estrogens, bone metabolism (osteoporosis), risk of thrombosis and cardiovascular problems when taking HRT and possible breast cancer risk due to the individual genetic profile.



**OBSTETRICS** 

#### FemSensor PREGNANCY

Evaluation of the risk of complications in pregnancy such as gestosis, thrombosis and recurrent abortion.

## Our Products and Services BASIC Prevention



**PHARMACOLOGY** 

#### **PharmacoSensor**

Identification of genetic variations which influence metabolism, efficiency and adverse effects of drugs.



**CARDIOLOGY** 

#### **CardioSensor PREMIUM**

Cardiovascular PREMIUM-System for extended genetic risk evaluation of arteriosclerosis, obesity, disordered lipid metabolism, high blood pressure, CAD and stroke.



**NUTRIGENETICS** 

#### **NutritionSensor**

Our NutritionSensor identifies genetic variants which influence the processing of food in the human body. The result allows generating an individual diet plan.

## Our Products and Services PREMIUM Prevention



#### PREMIUM female

Comprises

FemSensor 40plus, CardioSensor PREMIUM and PharmacoSensor

Evaluation of genetic risks as regards: long-term exposure to estrogens, thrombosis while taking HRT, osteoporosis, breast cancer, hypertension, arteriosclerosis, CAD and stroke.

#### **PREMIUM** male

Comprises

AndroSensor 40plus, CardioSensor PREMIUM and PharmacoSensor

Evaluation of genetic risks as regards: prostate cancer, thrombosis, osteoporosis, disorders in the process of detoxification, inflammation, arteriosclerosis, hypertension, CAD and stroke.

In addition, both systems examine genetic risk markers, which influence the metabolism of drugs and may therefore effect medication.

#### Our products contain not only the bare laboratory result!

Product Components			
Lab Performance		Reports	
DNA Extraction	Genotyping	Scientific Report	Medical Report
Cutting-edge Technology		Generated by Inhouse- Natural Scientists	Generated by associated Medical Specialist

In the case of Workflow-1 (see next pages for details) they consist of a Genotype Report, a Scientific Report and a Medical Report.

Therefore, the assigning physician needs not be a genetic expert to interpret the results and initiate a successful diagnosis for his patient.

In the case of **Workflow-2** (see next pages for details) they consist of a **Genotype Report** and a **Scientific Report**. The **Medical Report** is done by the assigning partner-physician

## How to cooperate with GENOSENSE

## **WORKFLOW-1**

- 1. The assigning physician collects epithelial cells from her/his patient using buccal swabs (provided by GENOSENSE) and sends them to GENOSENSE.
- 2. GENOSENSE isolates DNA out of these cells.
- 3. GENOSENSE analysis specific polymorphic mutations in the patient's DNA according to the ordered test format this process is called genotyping.
- 4. Specialised GENOSENSE-associated physicians use the patient's genotype and medical history data to generate a patient-specific Medical Report
- 5. GENOSENSE sends this final Report to the assigning physician

## How to cooperate with GENOSENSE

### WORKFLOW-2

- 1. The specialized and trained partner-physician collects epithelial cells from her/his patient using buccal swabs (provided by GENOSENSE) and sends them to GENOSENSE.
- 2. GENOSENSE isolates DNA out of these cells.
- 3. GENOSENSE analysis specific polymorphic mutations in the patient's DNA according to the ordered test format this process is called genotyping.
- 4. GENOSENSE sends the gentotype data to the **assigning partner- physician** specialist
- 5. The **assigning partner-physician** uses the patient's genotype and medical history data to generate a patient-specific Medical Report.

## **GENOSENSE** on tour

GENOSENSE is frequently present at national and international conferences, symposia and workshops. In addition, GENOSENSE organizes – in cooperation with the European Society of Anti-Aging Medicine (ESAAM) - constantly workshops and seminars about Preventive Genetic Diagnostics.

Find more information at <a href="http://www.genosense.com/EN/GenoTour.html">http://www.genosense.com/EN/GenoTour.html</a>

We are looking forward to welcome you at these occasions!

EXAMPLE – GENOSENSE at the Anti-Aging Medicine World Congress (March 2006, Paris)



A discussion among experts at our booth



Friends of GENOSENSE at our booth



An interested doctor at our booth



A press interview at our booth

## **GENOSENSE** in the News

Selected Media Releases

#### **GENOSENSE on CNN**

CNN International broadcasted recently a documentation on the cooperation of GENOSENSE Diagnostics and Scienta Health - a Toronto based health care institute.

















Watch a short trailer of this documentation at <a href="http://www.genosense.com/EN/GenoCNN.html">http://www.genosense.com/EN/GenoCNN.html</a>

### **GENOSENSE** in the News

#### **Selected Media Releases**

"THE GLOBE AND MAIL" CANADA, December 31, 2005



"FINANCIAL TIMES how to spend it" GREAT BRITAIN, August 2005



"GULF NEWS" DUBAI, March 2003

