

Editorial



Dear Reader

Welcome to our latest issue of GenoNews – the newsletter from GENOSENSE Diagnostics. Our Newsletter is our special link with you, bringing you the latest information about all our products and services. In this issue, we choose a theme, which is often thought of as controversial: Hormone replacement therapy and breast cancer risk!

Everybody knows the mass of data and studies that have been investigated in this field – both for and against hormone replacement therapy. We at GENOSENSE Diagnostics are very much aware of our responsibility as one of our main products is the FemSensor 40plus. The FemSensor 40plus can determine if a genetic predisposition exists, that might increase the risk of developing breast cancer whilst undergoing hormone replacement therapy – a very relevant and important issue in preventive medicine. This interesting, and controversial subject is the main topic of our special interview with Prof. DDr. Johannes Huber. He gives us his opinion as to the relevance of certain polymorphisms in assessing the potential interactions between “hormones and breast cancer”.

Finally don't miss the section on upcoming conferences, workshops and congresses – you will find them as usual on the last page of this newsletter.

I wish you an interesting time reading our Newsletter!

Yours Dr. Felix Stonek

## Polymorphism- diagnostic for women

Medicine is a fast growing and even faster changing science. In former times, gynaecologists were mostly interested to diagnose and treat gynaecological diseases (such as radical operations). This working field changed to a preventive medical approach (e.g. cervical PAP – smear).

Nowadays gynaecologists are “lifestyle consultants” for women, who work with practitioners and specialist many different fields to develop special strategies for disease prevention.

An example for this interdisciplinary workout is “the treatment of the climacteric disease”.

Hormone reduction caused by the age of the patient affects the whole female body, e.g. osteoporosis, vasomotoric effects (sweating, flushes) or psychological disorders (depression).

Although hormones can be replaced either through synthetically manufactured or natural biological substances – questions are still remaining: Does hormone replacement therapy increase breast cancer risk?

Are phytohormones an alternative? Is there an elevated risk of thrombosis or osteoporosis?

GENOSENSE Diagnostics has developed the FemSensor 40plus to provide answers for



these central “core-themes of gynaecology” (HRT, Breast cancer risk, and risk for thrombosis under HRT). Moreover, FemSensor 40plus covers themes for genetic lifestyle treatment (Osteoporosis, Artherosclerosis, Detoxification).

Summarizing, this Sensor is a product, that is made for gynaecologist and practitioners, who are interested in the field of “preventive medicine for women”! ●

## Healthy aging is everybody's dream. How can the diagnosis of genetic polymorphisms be of use?

Preventive medicine is a new challenge in scientific research and clinical application, we should not wait till cancer or other diseases arrive, we should do what we can now to prevent these problems. Preventive urology, preventive neurology and preventive oncology will be established in the next few years and for this reason diagnostics of specific polymorphism will become very relevant and useful.

## Particularly older adults in the second half of their lives wish to do something more pro-active about their health. What would you recommend to the 40+ generation?

The first recommendations are simple: reducing body weight, taking exercise, and eating functional foods are all easy to perform. They are not expensive and are a very effective way to prolong active life. My personal suggestion for simple aging-preventive strategies is restriction of calories, especially dinner cancelling. It stimulates SIRT 1 synthesis, reduces free radicals and further induces atropine synthesis.

## Individualized medicine has become a catchword in the medical environment. Is it possible to use the diagnosis of genetic polymorphisms to assist and help individualize Hormone Replacement Therapy (HRT)?

Functional genetic polymorphisms are important in our effort to individualize hormone replacement therapies. The problems of the never-ending story are not the hormones – the products from Mother Nature – the main problem is the unprofessional and un-indi-

## Interview with Prof. DDr. Johannes Huber



Prof. DDr. Johannes Huber, MD, PhD  
Head of the Department for Gynaecological Endocrinology and Reproductive Medicine, Medical University Vienna; chairman of the Austrian Bioethics Commission; author of more than 200 articles in peer-reviewed journals.

**The problems of the never-ending story are not the hormones – the main problem is the unprofessional and un-individualized prescribing of hormones.**

vidualized prescribing of hormones. It is morally and intellectually unacceptable to prescribe the same estrogen dosage to hundreds and thousands of female patients. This is not the case in the replacement of other hormones such as thyroid hormones or insulin and must be respected also in the replacement of sexual steroids. Functional genetic polymorphisms in hormone-metabolising and -synthesizing enzymes are a wonderful tool for the individualized hormone replacement therapy.

**Intake of hormones and breast cancer risk - the never ending story. Can the knowledge of genet-**

## ic polymorphism help to create clarity?

Yes, it can. Polymorphisms in the Androgen Receptor gene, the Vitamine D Receptor gene, the Progesterone Receptor gene or the TGFBR1 gene for example become more and more important for advising female patients. Knowledge of these polymorphism helps us physicians in evaluating individual breast cancer risks.

## Finally, what about the future: What significance will the diagnosis of genetic polymorphisms have in the near or distant future?

The diagnosis of polymorphisms will certainly change our clinical gynaecological practice by allowing real individualized hormone replacement therapies, individualized drug prescriptions and individualized onco-preventive strategies. It too will help us to improve the female aging process in general. Early individualized preventive strategies and measures will be possible.

## Prof Huber, thank you for the interview.



## News from the GENOSENSE Partner Family



Dr Russell Cooper is the medical director of Anubha Mountain Health Retreat, the principal wholistic medical centre on the island of Tasmania. The Retreat is situated on a hill overlooking the southern ocean, forested ravines and the majestic Mt Wellington. Anubha is visited by patients across Tasmania and Australia. Patients are provided with an opportunity of understanding comprehensively the dysfunctional pathways that have been responsible for their illnesses and the extraordinary potential for healing through the insightful information gained through genetic diagnostics



on genetic diagnostics through the outstanding presentations by Dr Michael Klentze of Munich a world renowned Gynaecologist and Anti-Aging Specialist and expert in the clinical application of genetic testing.

The ability to harness the genetic secrets of individual patients, provides a platform for the unique treatment of patients rather than disease states of which a patient happens to have symptoms. It is the disease states that we are usually treating, and expect the patient will get better.



Russel Cooper, ANUBHA Medical Director

He has been practicing nutritional and environmental medicine for the last 18 years and Anti-Ageing Rejuvenation Medicine since 1998. I have received fellowships in Anti-Aging, Nutritional and Environmental Medicine, Herbal Medicine and Acupuncture.

He lectures extensively around Australia, New Zealand, Hong Kong and internationally on Anti-Ageing Medicine with a special focus on bio-identical hormone replacement therapy. Further he is the principal lecturer on growth hormone in adult growth hormone deficiency in Australia and run training courses for doctors in the safe and appropriate use of growth hormone.

Genetic diagnostic testing he has already been using for the last 4 years, after being introduced to it at an Anti-Aging conference. The tests being offered at the time were interesting but isolated and difficult to apply clinically.

Dr. Cooper first came across Genosense Diagnostics through lectures

The clarity of information provided by genetic diagnostics, has given many patients new understanding of why some treatments have been harmful for them and which modalities are most suited to them. For example research on fish oil supplements abound with articles addressing its many benefits and indeed adequate EPA/DHA intake is considered advantageous in cardiovascular disease. However large intake of fish oil in patients with APO A1 non-variant allele wild-type genome, can worsen cholesterol levels by lowering HDL.

Prescribing Progesterone to women with PGR homozygous variant allele polymorphisms, can profoundly worsen their symptoms if they are already displaying signs of oestrogen dominance.

Giving patients ACE inhibitors for blood pressure when they do not ACE or AGT polymorphisms and rather

ADRB1 is obviously inappropriate with knowledge of the patients genetic polymorphisms. But without genetic diagnostics we all make mistakes in treatment and patients suffer. It is his opinion that genetic diagnostics will sweep across medicine and revolutionise medical diagnostics and treatment in a similar way that technology has given us an instant world library at our fingertips.

The information provided for hypertension, obesity, cardiovascular, osteoporosis, hormone management and choosing appropriate pharmaceuticals through pharmacogenetics is an exponential improvement on the model of treatment which we have applied with limited success, which in reality is experimenting with various treatments and seeing if they work!

Since applying the Genosense genetic diagnostic information to patient treatment plans there has been an enhanced recovery and patient satisfaction over non-genetic management.

Genetic diagnostics is in its infancy and yet Genosense is clearly a leader in the field of scientifically validated, concisely and comprehensively reported genetic polymorphisms that can be pragmatically applied to improving the health status of patients.

**"I am proud to be associated with this organisation and the wonderful staff, both medical and administrative. I wish Genosense every success with their endeavours to bring genetic diagnostics to the world."** ●



**July 2006:**

**14th Annual international Congress on Anti Aging Medicine**

14.07 - 16.07.2006, Chicago, USA  
www.worldhealth.net

One of the four A4M meetings in this year with over 60 international speakers, lots of exhibitions and interesting workshops

**September 2006:**

**3rd Annual Anti-Ageing Conference London**

15th – 17th September 2006, The Royal Society of Medicine, London, United Kingdom  
www.antiageingconference.com

The Anti Aging Conference London (AACL) 2006 provides an opportunity to update delegates with academic, scientific and clinical knowledge as well as facilitating networking with other members of the medical and scientific community worldwide, while providing continuing medical accreditation.

**October 2006:**

**1st European Congress on Anti-Aging and Preventive Medicine**

(1st Congress of the European Society for Anti-Aging and Preventive Medicine, ESAAM) 18.- 21. October 2006, Hofburg Congress-Center, Vienna, Austria

We would like to pull your attention to the 1st Congress of the European Society for Anti Aging and Preventive Medicine (ESAAM) - one of the high-

**FemSensor 40plus**

FemSensor 40plus examines carefully selected polymorphisms which lead to structural changes in proteins that:

- Regulate the metabolism of female sexual hormones
- Influence bone-metabolism
- Accelerate or slow down the decrease of environmental toxic substances
- Account for the homeostasis of blood clotting
- Effect lipid metabolism

The awareness of your individual genetic profile enables your medical consultant to:

- Apply therapeutic measures to minimize a possible predisposition to illness and thus to increase your quality of life
- Choose a customized hormone substitution, which results in desired effects only or else focuses on an appropriate alternative treatment
- Advise you on the changes of your life-style habits, which might grant an essential contribution to your health-maintenance in your specific case



lights in the international congress world in the field of Anti-Aging and Preventive Medicine: This outstanding congress will take place at the Vienna Hofburg Congress Center from the 18th – 21st, October, 2006. All speakers have carefully been selected by ESAAM experts and by the local organizing committee. The program will therefore guarantee Anti Aging and Preventive Medicine at the highest level.

GENOSENSE Diagnostics would be pleased to see you at the conference.

**Outlook**



Next Issue Topic:  
**Preventive Andrology**  
...and lots of conferences, workshops and seminars, Interviews...  
The next GenoNews Newsletter will appear in September 2006

**Impressum**

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