Mineralocorticoid receptor gene variants : implications for stress, blood pressure and personality

Leeuwen, N. van

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Publications and Presentations

Publications

Functional Mineralocorticoid Receptor (MR) gene variation influences the cortisol awakening response after dexamethasone ***N. van Leeuwen****, R. Kumsta, S. Entringer, E.R. de Kloet, F.G. Zitman, R.H. DeRijk, & S. Wüst* Psychoneuroendocrinology 2010, 339-349

The functional -2 C variant of the Mineralocorticoid receptor modulates basal and salt-dependent rennin and aldosterone levels and associates with lower blood pressure ***N van Leeuwen*,*** *M Caprio*, C Blaya, F Fumeron, P Sartorato, G Giacchetti, F Mantero, FL Fernandes-Rosa, C Simian, S Peyrard, FG Zitman, R de Kloet, M Azizi, X Jeunemaitre, RH DeRijk & MC Zennaro* Hypertension, epub 20 September 2010

Corticosteroid receptor- gene variants: Modulators of the stress-response and implications for mental health. *R.H. deRijk,* ***N. van Leeuwen****, M.D. Klok, F.G. Zitman* European Journal of pharmacology 2008, 492-50

Human Mineralocorticoid Receptor (MR) gene haplotypes modulate MR expression and transactivation: implication for the stress response. ***N. van Leeuwen*****, S. Bellingrath*, E.R. de Kloet, F.G. Zitman, R.H. DeRijk, B.M. Kudielka & S. Wüst* Psychoneuroendocrinology (*in press*)

Mineralocorticoid Receptor gene-variants as determinants of HPA axis regulation and behavior. *R.H. DeRijk, E.R.de Kloet, F. G. Zitman and* ***N. van Leeuwen*** Endocrine book series, 2010 (*in press*)

Presentations

MR gene variants *in vitro* and *in vivo.* Marius Tausk Masterclass 2009 Oegstgeest

An *in vitro* functional mineralocorticoid receptor (MR) gene variant is associated with the cortisol response to psychosocial stress. Spring School the ABC of Stress 2009 Dresden Germany

An *In vitro* functional SNP in the human Mineralocorticoid Receptor (MR) is associated with the cortisol awakening response (CAR) after 0.25mg dexamethasone. ISPNE 2008 Dresden, Germany

Mineralocorticoid receptor (MR) gene variants modulate the CAR. Dutch EndoNeuroPsycho meeting meeting 2008 Doorwerth

Stress: de invloed van genetische variatie in de mineralocorticoid receptor (MR). NVVP 2008 Amsterdam

Functionele polymorfismen in de mineralocorticoid receptor in stress respons en psychopathologie. NVVP 2007 Maastricht

The role of single nucleotide polymorphisms (SNPs) in the Mineralocorticoid Receptor (MR) in stress response and psychopathology. First prize poster competition Dutch EndoNeuroPsycho meeting meeting 2007 Doorwerth

Functional analysis of human mineralocorticoid receptor variants associated with stress responsiveness. Dutch EndoNeuroPsycho meeting meeting 2006 Doorwerth

Curriculum vitae

Nienke van Leeuwen werd op 22 december 1975 geboren in Haarlem. In 1993 behaalde zij haar HAVO diploma aan het Linnaeus college te Haarlem. In 1993 begon zij aan de HBO opleiding medische biologie aan de Hogeschool van Amsterdam waar zij in 1997 het diploma behaalde. Haar afstudeer stage heeft zij uitgevoerd bij TNO, afdeling preventie en gezondheid onder leiding van Dr. I. Meulenbelt en Prof. dr. P.E. Slagboom. Vervolgens is zij in 1997 met de studie biologie begonnen aan de Vrije Universiteit in Amsterdam waar zij in 1998 haar bachelor en in 1999 haar doctoraal diploma behaalde in de afstudeer richting medische biologie. Haar afstudeer stage van deze studie heeft zij uitgevoerd op de Vrije Universiteit, afdeling oncologie onder leiding van Dr. V.W. van Beusechem en Prof. dr. W.R. Gerritsen. Voor zij in 2005 begon met het in dit proefschrift beschreven promotie onderzoek bij de afdeling Medische Farmacologie van het Leiden/ Amsterdam Center for Drug Research (LACDR) en het Leids Universitair Medisch Centrum (LUMC) onder leiding van Prof. dr. E.R. de Kloet, Prof. Dr. F.G. Zitman en Dr. R.H. de Rijk is zij werkzaam geweest bij Crucell en psychiatrisch ziekenhuis Rivierduinen. Na haar promotie onderzoek is zij twee maanden blijven werken bij de afdeling Medische Farmacologie waar zij onder leiding van Dr. E. Vreugdenhil microRNA technieken opgezet heeft. Sinds december 2010 werkt zij bij de afdeling Moleculaire Celbiologie van het LUMC onder leiding van Dr. L.H. ’t Hart. Hier doet zij onderzoek naar de gentica van type 2 diabetes. Met behulp van *in vitro* technieken probeert zij het moleculaire mechanisme van recent geïdentificeerde diabetes genen te achterhalen. Bovendien voert zij in een groot cohort met diabetes patiënten farmacogenetisch onderzoek uit om na te gaan of het succes van de behandeling voorspeld kan worden op basis van het genotype van een patiënt.

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