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## Human leukocyte antigen class II association with infectious events among Danish blood donors

Stilling, C; Moeller, B; Pedersen, O B; Sørensen, E; Nielsen, Kaspar Rene; Bruun, M T; Hjalgrim, H; Rostgaard, K; Petersen, M S; Soerensen, B; Erikstrup, L; Ullum, H; Erikstrup, C

*Published in:*

Kongres for Medicinsk Studenterforskning, 17.-20. marts 2016, Nyborg, Danmark

*Publication date:*  
2016

*Document Version*  
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

*Citation for published version (APA):*

Stilling, C., Moeller, B., Pedersen, O. B., Sørensen, E., Nielsen, K. R., Bruun, M. T., Hjalgrim, H., Rostgaard, K., Petersen, M. S., Soerensen, B., Erikstrup, L., Ullum, H., & Erikstrup, C. (2016). Human leukocyte antigen class II association with infectious events among Danish blood donors. In *Kongres for Medicinsk Studenterforskning, 17.-20. marts 2016, Nyborg, Danmark* (pp. 78). Selskab for Medicinsk Studenterforskning.

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ISBN 978-87-995206-2-6

Typografi: pdfL<sup>A</sup>T<sub>E</sub>X og memoir-klassen  
Sat med Kp-fonts, 9pt/11pt

p.6-10 **Christina Stilling** HUMAN LEUKOCYTE ANTIGEN CLASS II ASSOCIATION WITH INFECTIOUS EVENTS AMONG DANISH BLOOD DONORS

*C Stilling<sup>1</sup>, B Moeller<sup>1</sup>, OB Pedersen<sup>2</sup>, E Soerensen<sup>3</sup>, K Nielsen<sup>4</sup>, MT Bruun<sup>5</sup>, H Hjalgrim<sup>6</sup>, K Rostgaard<sup>6</sup>, MS Petersen<sup>1</sup>, B Soerensen<sup>1</sup>, L Erikstrup<sup>7</sup>, H Ullum<sup>3</sup>, C Erikstrup<sup>1</sup>*

<sup>1</sup>Dept. of Clinical Immunology, Aarhus University Hospital  
<sup>2</sup>Dept. of Clinical Immunology, Næstved Sygehus <sup>3</sup>Dept. of Clinical Immunology, Copenhagen University Hospital <sup>4</sup>Dept. of Clinical Immunology, Aalborg University Hospital <sup>5</sup>Dept. of Clinical Immunology, Odense University Hospital <sup>6</sup>Dept. of Epidemiology Research, Statens Serum Institut <sup>7</sup>Dept. of Clinical Microbiology, Aarhus University Hospital

*Speaker email: christina\_stilling@hotmail.com*

**BACKGROUND:** HLA Class II is expressed on antigen presenting cells and present phagocytosed, extracellular microorganisms which are recognised by specific CD4 positive T cells leading to initiation of an immunological response. During evolution, infectious diseases are assumed to be an important driver of selection for specific HLA types, as infectious diseases were by far the most frequent cause of death until recently. Promiscuous HLA molecules may have been more efficient in the binding of foreign antigen and in the presentation of these antigens to CD4+ cells.

**MATERIALS & METHODS:** A prospective cohort study. An estimated 15,800 Danish blood donors also included in the Danish stem cell registers are HLA class II typed. Using sequence feature variant type (SFVT) analysis HLA is divided into groups based on structural and functional characteristics. Donors will be identified through the Scandinavian Donations and Transfusions database and linked to national health registers: The Danish National Prescription Registry and The Danish National Patient Register, from where infections will be identified and classified. The main outcome is infectious events defined by filled prescriptions for all antimicrobial agents or diagnosis codes for hospital treated infections.

**RESULTS:** We expect to find an association between HLA class II types and infectious events among Danish blood donors.

**CONCLUSIONS:** Perspectives: Using the Danish health registers we have a unique possibility to perform this cohort study, which could provide new hypotheses on the probable HLA type specific protection against various infections.

p.6-11 **Line Buch Thøfner** RISK FACTORS CONTRIBUTING TO METABOLIC SYNDROME IN LIVER TRANSPLANT RECIPIENTS: A SYSTEMATIC REVIEW

*LB Thøfner<sup>1</sup>, AA Rostved<sup>1</sup>, HC Pommergaard<sup>2</sup>, A Rasmussen<sup>1</sup>*

<sup>1</sup>Gastroenterologisk Klinik, Rigshospitalet <sup>2</sup>Kirurgisk Klinik Hvidovre

*Speaker email: line.thoefner@gmail.com*