

MEETING ABSTRACT

Open Access

# NBS1 Mutation and prognosis of Prostate Cancer

Dominika Wokołorczyk\*, Wojciech Kluźniak, Cezary Cybulski, Jan Lubiński

From Annual Conference on Hereditary Cancers 2012  
Szczecin, Poland. 30-31 August 2012

Inherited factors contribute to the burden of prostate cancer, however the identification of susceptibility genes for prostate cancer has been challenging. To establish the contribution of eight founder alleles in three DNA damage repair genes (BRCA1, CHEK2 and NBS1) to prostate cancer in Poland, and to measure the impact of these variants on survival among patients, 3750 men with prostate cancer and 3956 cancer-free controls were genotyped for 3 founder alleles in BRCA1 (5382insC, 4153delA, C61G), 4 alleles in CHEK2 (1100delC, IVS2 +1G>A, del5395, I157T), and 1 allele in NBS1 (657del5). Strong associations were seen for both CHEK2 and NBS1. BRCA1 was not associated with the risk of prostate cancer, NBS1 mutation was associated with poor survival - mortality was significantly worse for carriers of a NBS1 mutation than for non-carriers (HR = 1.85;  $p = 0.008$ ). We conclude that a founder mutation in NBS1 predisposes to aggressive prostate cancer.

Published: 10 December 2012

doi:10.1186/1897-4287-10-S4-A29

Cite this article as: Wokołorczyk et al.: NBS1 Mutation and prognosis of Prostate Cancer. *Hereditary Cancer in Clinical Practice* 2012 **10**(Suppl 4):A29.

Submit your next manuscript to BioMed Central  
and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at  
[www.biomedcentral.com/submit](http://www.biomedcentral.com/submit)



Department of Genetics and Pathomorphology of the Pomeranian Medical University, Szczecin, Poland



© 2012 Wokołorczyk et al; licensee BioMed Central Ltd. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/2.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.