

ABO, RH, KELL and MN systems within Uterine Cancer

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Objectives: The blood group antigens are found in several human cell types. There is a variable expression of histo-blood groups antigens within normal endometrium, which are also involved in hormonal regulation of glycosyltransferase activity. We aimed to investigate ABO, RH-hR, Kel and MN systems in women with Uterine cancer (UCa) in Adjara (Georgia) population.

Methods: Internationally recognized immunoserology methods were used to reveal the erythrocyte group antigens. The obtained results were statistically processed by using appropriate formulas.

Results: From ABO system alleles, r and q alleles frequencies were higher within the patients with UCa compared with control group of patients. From Rh-Hr system, the distribution frequencies of D, c and e alleles, Cc, Ee and EE genotypes, cDe, cDE haplotypes are increased in UCa. From Kell q(k) and p (K) alleles, p(k) allele tends towards to UCa in the tumor. Notably, MN system p (M) and q(N) alleles, revealed q(N) allele increased frequency in UCa compared to control group.

Conclusions: Based on our study, ABO, RH-hR, Kell and MN systems antigens may be useful for UCa predisposition and development.

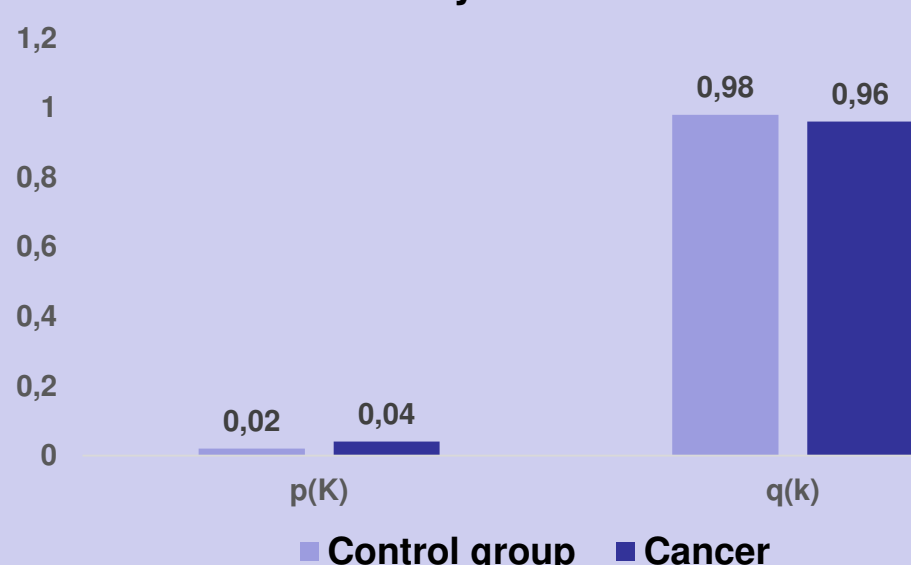
Table 1. RH system Alleles in Uterine cancer

Rh-Hr System Alleles	Control group (n=130)	Uterine Cancer (n=115)
D	0.6	0.67
C	0.42	0.27
c	0.72	0.82
E	0.22	0.17
e	0.7	0.8

Table 2. RH system Genotypes in Uterine cancer

Rh-Hr system genetics variants	Control group (n=130)	Uterine Cancer (n=115)
CC	9.23±2.5%	3.47±1.7%
Cc	46.15±4.3%	37.39±4.51%
cc	44.61±4.3%	53.9±4.46%
EE	0.76±0.7%	4.34±1.9%
Ee	17.69±3.3%	20.86±3.78%
ee	81.54±3.4%	74.78±4.04%

Kell system alleles



MN system alleles

