

Table S1. Hazard ratios for any cancer risk by blood Se level irrespective on age(quartiles).

			Univariate COX Regression			Multivariate COX Regression *		
Blood Se level μg/L	Cases	Unaffected	HR	95% CI	p-value	HR	95% CI	p-value
Q1 <93.96	65(9.3%)	631(90.7%)	1.53	1.046- 2.26	0.028	1.55	1.059- 2.29	0.024
Q2 ref 93.96-102.81	43(6.2%)	652(93.8%)						
Q3 102.81-112.40	49(7.0%)	646(93%)	1.17	0.78- 1.77	0.43	1.14	0.75- 1.72	0.52
Q4 >112.40	53(7.6%)	643(92.4%)	1.29	0.86- 1.93	0.20	1.19	0.80- 1.79	0.37

*Adjusted to (age, smoking, 1st degree relatives, adnexectomy, oral contraception, hormone replacement therapy)

Table S2. Hazard ratios for any cancer risk by blood Se level irrespective on age with *HRG* nonTT genotype (quartiles).

			Univariate COX Regression			Multivariate COX Regression *		
Blood Se level μg/L	Cases	Unaffected	HR	95% CI	<i>p</i> -value	HR	95% CI	<i>p</i> -value
Q1 <93.96	11(6.7%)	152(93.3%)	1.14	0.47-2.76	0.76	1.25	0.51-3.05	0.61
Q2 93.96-102.81	16(8.6%)	169(91.4%)	1.57	0.69-3.57	0.27	1.58	0.69-3.61	0.27
Q3 ref 102.81-112.40	9(5.7%)	148(94.3%)						
Q4 >112.40	12(7.2%)	154(92.8%)	1.26	0.53-2.99	0.59	1.14	0.47-2.74	0.76

*Adjusted to (age, smoking, 1st degree relatives, adnexectomy, oral contraception, hormone replacement therapy)

Table S3. Hazard ratios for risk of death by blood Se level irrespective on age with *HRG* TT genotype (quartiles).

Blood Se level μg/L	Dead	Alive	Univariate COX Regression			Multivariate COX Regression *		
			HR	95% CI	<i>p</i> -value	HR	95% CI	<i>p</i> -value
Q1 <93.96	22(4.1%)	511(95.9%)	2.06	0.97- 4.36	0.05	2.18	1.025- 4.63	0.042
Q2 93.96-102.81	17(3.3%)	493(96.7%)	1.49	0.68- 3.26	0.31	1.57	0.71- 3.46	0.25
Q3 102.81-112.40	20(3.7%)	518(96.3%)	1.91	0.89- 4.08	0.095	1.89	0.88- 4.06	0.10
Q4 ref >112.40	10(1.9%)	520(98.1%)						

*Adjusted to (age, smoking , 1stdegree relatives, adnexectomy, oral contraception, hormone replacement therapy)

Table S4. Hazard ratios for any cancer risk by blood Se level above 50 years of age (quartiles).

Blood Se level μg/L	Cases	Unaffected	Univariate COX Regression			Multivariate COX Regression *		
			HR	95% CI	<i>p</i> -value	HR	95% CI	<i>p</i> -value
Q1 <93.96	42(9.3%)	328(90.7%)	1.38	0.87- 2.19	0.16	1.38	0.87- 2.19	0.16
Q2 ref 93.96-102.81	32(6.2%)	327(93.8%)						
Q3 102.81-112.40	39(7.0%)	367(93%)	1.15	0.72- 1.83	0.55	1.13	0.71- 1.82	0.58
Q4 >112.40	42(7.6%)	419(92.4%)	1.13	0.71- 1.79	0.60	1.10	0.69- 1.75	0.66

*Adjusted to (smoking , 1stdegree relatives, adnexectomy, oral contraception, hormone replacement therapy)

Table S5. Hazard ratios for any cancer risk by blood Se level above 50 years of age with *HRG* TT genotype (quartiles).

Blood Se level µg/L	Cases	Unaffected	Univariate COX Regression			Multivariate COX Regression *		
			HR	95% CI	<i>p</i> -value	HR	95% CI	<i>p</i> -value
Q1 <93.96	33(11.3%)	257(88.7%)	1.55	0.90- 2.66	0.11	1.56	0.91- 2.69	0.10
Q2 ref 93.96-102.81	22(8.2%)	245(91.8%)						
Q3 102.81-112.40	32(10%)	287(90%)	1.33	0.77- 2.29	0.30	1.28	0.74- 2.22	0.37
Q4 >112.40	32(9.3%)	311(90.7%)	1.29	0.75- 2.23	0.34	1.26	0.73- 2.17	0.40

*Adjusted to (smoking , 1stdegree relatives, adnexectomy, oral contraception, hormone replacement therapy)

Table S6. Hazard ratios for any cancer risk by blood Se level above 50 years of age with *HRG* nonTT genotype (quartiles).

Blood Se level µg/L	Cases	Unaffected	Univariate COX Regression			Multivariate COX Regression *		
			HR	95% CI	<i>p</i> -value	HR	95% CI	<i>p</i> -value
Q1 <93.96	9(11.2%)	71(88.8%)	1.41	0.52- 3.80	0.49	1.53	0.56- 4.16	0.40
Q2 93.96-102.81	10(10.8%)	82(89.2%)	1.37	0.52- 3.62	0.51	1.41	0.53- 3.77	0.48
Q3 ref 102.81-112.40	7(8%)	80(92%)						
Q4 >112.40	10(8.5%)	108(91.5%)	1.061	0.40- 2.79	0.90	1.11	0.41- 2.96	0.83

*Adjusted to (smoking , 1stdegree relatives, adnexectomy, oral contraception, hormone replacement therapy)

Table S7. Hazard ratios for risk of death by blood Se level above 50 years of age with *HRG* TT genotype (quartiles).

Blood Se level µg/L	Dead	Alive	Univariate COX Regression			Multivariate COX Regression *		
			HR	95% CI	<i>p</i> -value	HR	95% CI	<i>p</i> -value
Q1 <93.96	20(6.9%)	270(93.1%)	2.51	1.14- 5.53	0.021	2.40	1.09- 5.31	0.029
Q2 93.96-102.81	14(5.2%)	253(94.8%)	1.56	0.67- 3.62	0.29	1.52	0.65- 3.53	0.33
Q3 102.81-112.40	16(5%)	303(95%)	1.80	0.79- 4.08	0.15	1.74	0.76- 3.97	0.18
Q4 ref >112.40	9(2.6%)	334(97.4%)	—	—	—	—	—	—

*Adjusted to (smoking , 1stdegree relatives, adnexectomy, oral contraception, hormone replacement therapy)

Table S8. Hazard ratios for any cancer risk by blood Se level below 50 years of age (quartiles).

Blood Se level µg/L	Cases	Unaffected	Univariate COX Regression			Multivariate COX Regression *		
			HR	95% CI	<i>p</i> -value	HR	95% CI	<i>p</i> -value
Q1 <93.96	23(7%)	303(93%)	2.017	0.98- 4.14	0.05	2.00	0.97- 4.12	0.058
Q2 ref 93.96-102.81	11(3.2%)	325(96.8%)						
Q3 102.81-112.40	10(3.4%)	279(96.6%)	1.07	0.45- 2.52	0.87	1.07	0.45- 2.53	0.86
Q4 >112.40	11(4.6%)	224(95.4%)	1.50	0.65- 3.46	0.34	1.51	0.65- 3.50	0.33

*Adjusted to (smoking , 1stdegree relatives, adnexectomy, oral contraception, hormone replacement therapy)

Table S9. Hazard ratios for any cancer risk by blood Se level below 50 years of age with *HRG* nonTT genotype (quartiles).

Blood Se level µg/L	Cases	Unaffected	Univariate COX Regression			Multivariate COX Regression *		
			HR	95% CI	<i>p</i> -value	HR	95% CI	<i>p</i> -value
Q1 ref <93.96	2(2.4%)	81(97.6%)						
Q2 93.96-102.81	6(6.4%)	87(93.6%)	2.95	0.59- 14.66	0.18	2.85	0.57- 14.30	0.20
Q3 102.81-112.40	2(2.8%)	68(97.2%)	1.24	0.17- 8.85	0.82	1.30	0.18- 9.35	0.79
Q4 >112.40	2(4.1%)	46(95.9%)	2.00	0.28- 14.27	0.48	1.88	0.26- 13.58	0.53

*Adjusted to (smoking , 1stdegree relatives, adnexectomy, oral contraception, hormone replacement therapy)

Table S10. Hazard ratios for risk of death by blood Se level below 50 years of age (quartiles).

Blood Se level µg/L	Dead	Alive	Univariate COX Regression			Multivariate COX Regression *		
			HR	95% CI	<i>p</i> -value	HR	95% CI	<i>p</i> -value
Q1 <93.96	2(0.8%)	324(99.2%)	1.30	0.11- 14.45	0.82	1.08	0.09- 12.16	0.94
Q2 93.96-102.81	3(0.8%)	333(99.4%)	2.01	0.20- 19.37	0.54	1.80	0.18- 17.49	0.61
Q3 102.81-112.40	4(1.3%)	285(98.7%)	3.13	0.35- 28.06	0.30	2.88	0.32- 25.95	0.34
Q4 ref >112.40	1(0.4%)	234(99.6%)						

*Adjusted to (smoking , 1stdegree relatives, adnexectomy, oral contraception, hormone replacement therapy)

Table S11. Hazard ratios for risk of death by blood Se level below 50 years of age with *HRG* TT genotype (quartiles).

Blood Se level µg/L	Dead	Alive	Univariate COX Regression			Multivariate COX Regression *		
			HR	95% CI	<i>p</i> -value	HR	95% CI	<i>p</i> -value
Q1 <93.96	2(0.8%)	241(99.2%)	1.42	0.12- 15.74	0.77	1.13	0.10- 12.84	0.92
Q2 93.96-102.81	3(1.2%)	240(98.8%)	2.20	0.23- 21.26	0.49	1.95	0.20- 19.03	0.56
Q3 102.81-112.40	4(1.8%)	215(98.2%)	3.40	0.38- 30.44	0.27	3.13	0.34- 28.32	0.31
Q4 ref >112.40	1(0.5%)	186(99.5%)						

*Adjusted to (smoking , 1stdegree relatives, adnexectomy, oral contraception, hormone replacement therapy)

Table S12. Hazard ratios for risk of death by blood Se level below 50 years of age with *HRG* nonTT genotype (quartiles).

Blood Se level µg/L	Dead	Alive	Univariate COX Regression			Multivariate COX Regression *		
			HR	95% CI	<i>p</i> -value	HR	95% CI	<i>p</i> -value
Q1 <93.96	0	83						
Q2 93.96-102.81	0	93						
Q3 102.81-112.40	0	70						
Q4 >112.40	0	48						

*Adjusted to (smoking , 1stdegree relatives, adnexectomy, oral contraception, hormone replacement therapy)