

**Supplementary Table 3 Detailed information of selected studies for the analyses of phenotype and cancer risk**

Author Name	Year	Blood Sample	Assay methods	Category	IGF1			IGFBP3			IGF molar ratio		
					OR	lower	upper	OR	lower	upper	OR	lower	upper
<b>prostate cancer</b>													
Wolk	1998	SS	IMRA	Q4,Q4,NA	1.43	0.88	2.33	-	-	-	-	-	-
Chan	1998	PS	ELISA	Q4,Q4,NA	4.32	1.76	10.6	0.41	0.17	1.03	-	-	-
Finne	2000	SS	ELISA	Q4,NA,NA	0.57	0.28	1.16	-	-	-	-	-	-
Harman	2000	SS	RIA	Q3,Q3,NA	3.11	1.11	8.74	0.76	0.3	1.94	-	-	-
Stattin	2000	PS	ELISA	Q4,Q4,NA	1.32	0.73	2.39	1.19	0.66	2.15	-	-	-
Chokkalingam	2001	PS	ELISA	Q4,Q4,Q4	3.92	1.58	9.7	0.47	0.21	1.05	3.58	1.74	7.35
Lacey	2001	SS	ELISA	Q4,Q4,NA	0.6	0.1	2.9	1.1	0.3	3.8	-	-	-
Li	2003	SS	ELISA	Q4,Q4,Q4	1.04	0.64	1.68	1.1	0.67	1.79	1.62	1.02	2.57
Woodson	2003	SS	ELISA	Q4,Q4,Q4	0.52	0.23	1.16	1.93	0.83	4.49	0.54	0.29	1.01
Nam	2003	SS	ELISA	Q4,Q4,NA	0.67	0.5	0.9	1.27	0.9	1.2	-	-	-
Oliver	2004	SS	ELISA	Q3,Q3,Q3	3	1.5	6.01	0.58	0.29	1.15	1.62	0.87	2.99
Stattin	2004	PS	IMRA	Q4,Q4,NA	1.47	0.81	2.64	1.04	0.63	1.74	-	-	-
Meyer	2005	SS	CLIA	Q4,Q4,NA	1.8	0.76	4.27	0.4	0.1	1.6	-	-	-
Chen	2005	SS and PS	IMRA	Q4,Q4,Q4	0.77	0.33	1.84	0.63	0.29	1.37	0.75	0.41	1.36
Platz	2005	PS	ELISA	Q4,Q4,Q4	1.17	0.69	1.99	1.4	0.8	2.44	1.02	0.68	1.51
Severi	2006	PS	ELISA	Q4,Q4,Q4	1.07	0.79	1.46	1.49	1.11	1.2	0.82	0.61	1.11
Hernandez	2007	SS	ICMA	Q4,Q4,NA	0.67	0.29	1.5	0.83	0.37	1.88	-	-	-
Allen	2007	SS	ELISA	Q3,Q3,NA	1.39	1.02	1.89	1.01	0.74	1.37	-	-	-
Weiss	2007	SS	ELISA	Q4,Q4,Q4	1.12	0.79	1.6	1.1	0.76	1.59	1.13	0.86	1.49
Borugian_black	2008	SS	ELISA	Q4,Q4,Q4	1.09	0.34	3.49	1.01	0.15	6.59	1.12	0.39	3.63
Borugian_white	2008	SS	ELISA	Q4,Q4,Q4	1.16	0.35	3.83	1.7	0.57	5.07	1.41	0.55	3.61
Borugian_Asian	2008	SS	ELISA	Q4,Q4,Q4	1.65	0.58	4.71	0.69	0.18	2.63	2.67	0.83	8.6

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**premenopausal breast cancer**

Hankinson	1998	PS	ELISA	Q3,NA,NA	2.88	1.21	6.85	-	-	-	-	-	-
Del Giudice	1998	PS	RIA	Q5,Q5,NA	1.47	0.66	3.27	2.05	0.93	2.53	-	-	-
Toniolo	2000	SS	RIA	Q4,Q4,NA	1.6	0.91	2.81	1.18	0.66	2.08	-	-	-
Muti	2002	SS	IMRA	Q4, Q4,NA	3.12	1.13	8.6	2.31	0.97	5.53	-	-	-
Yu	2002	PS	RIA,IRMA	Q3,Q3,NA	1.92	0.88	4.2	2.69	1.12	6.47	-	-	-
Krajcik	2002	SS	ELISA	Q4,Q4,NA	2.01	0.33	12.4	5.28	1.13	24.7	-	-	-
Sanderson	2004	PS	ELISA	Q3,Q3,NA	1.7	0.9	3.2	1.6	0.9	2.9	-	-	-
Allen	2005	SS	ELISA	Q3,Q3,NA	1.71	0.74	3.95	0.49	0.21	1.12	-	-	-
Rinaldi	2005	SS	ELISA	Q4,Q4,Q4	1.56	0.68	3.59	1.49	0.69	3.23	1.17	0.59	2.33
Rollison	2006	SS and PS	ELISA	Q3,Q3,NA	1.6	0.85	3.02	0.69	0.36	1.34	-	-	-
Schernhammer	2006	PS	ELISA	Q4, Q4,NA	0.92	0.61	1.41	1.23	0.83	1.82	-	-	-

**postmenopausal breast cancer**

Hankinson	1998	PS	ELISA	Q5,NA,NA	0.89	0.51	1.55	-	-	-	-	-	-
Toniolo	2000	SS	RIA	Q4,Q4,NA	0.95	0.49	1.86	1.08	0.54	2.16	-	-	-
Krajcik	2002	SS	RIA,IRMA	Q4,Q4,NA	1.22	0.21	6.78	0.32	0.07	1.41	-	-	-
Muti	2002	SS	IRMA	Q4, Q4,NA	0.58	0.24	1.36	0.73	0.3	1.74	-	-	-
Yu	2002	PS	ELISA	Q3,Q3,NA	1.56	0.68	3.57	2.11	0.76	5.87	-	-	-
Schairer	2004	SS	ELISA	Q4,Q4,Q4	0.9	0.4	2	1.2	0.6	2.8	0.9	0.5	1.9
Sanderson	2004	PS	ELISA	Q3,Q3,NA	2.2	0.8	5.8	8.1	2.5	26	-	-	-
Allen	2005	SS	ELISA	Q3,Q3,NA	0.73	0.29	1.84	1.14	0.4	3.23	-	-	-
Rollison	2006	SS and PS	ELISA	Q3,Q3,NA	1.55	0.61	3.94	1.17	0.48	2.84	-	-	-

**colorectal cancer**

Ma	1999	PS	ELISA	Q5,Q5,NA	2.51	1.15	5.46	0.28	0.12	0.66	-	-	-
Giovannucci	2000	PS	ELISA	Q3,Q3,NA	2.18	0.94	5.08	0.28	0.1	0.83	-	-	-
Kaaks	2000	SS	IRMA	Q5,Q5,NA	1.23	0.47	3.32	1.23	0.51	2.95	-	-	-

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Ma	2001	PS	ELISA	NA,NA,Q3	-	-	-	-	-	-	1.84	1.12	3.01
Probst-Hensch	2001	SS	RIA,IRMA	Q5,Q5,Q5	1.18	0.55	2.53	1.78	0.86	3.7	0.96	0.48	1.89
Palmqvist	2002	PS	IRMA	Q4,Q4,NA	1.27	0.65	2.47	1.23	0.68	2.22	-	-	-
Nomura	2003	SS	ELISA	Q4, Q4,NA	1.5	0.8	2.8	0.8	0.4	1.6	-	-	-
Wei	2005	PS	ELISA	Q4,Q4,Q4	2.17	0.96	4.88	0.81	0.38	1.75	2.82	1.35	5.88
Otani_women	2007	PS	IRMA,IRMA	Q4,Q4,NA	0.83	0.38	1.8	1.1	0.53	2.3	-	-	-
Otani_men	2007	PS	IRMA	Q4,Q4,NA	0.83	0.4	1.7	1.4	0.65	2.8	-	-	-
Gunter	2008	SS	ELISA	Q4, Q4,NA	1.04	0.74	1.46	0.98	0.7	1.37	-	-	-
<b>ovarian cancer</b>													
Lukanova_before55	2002	SS and PS	ELISA	Q3,Q3,NA	4.98	1.21	20.6	0.87	0.23	3.25	-	-	-
Lukanova_after55	2002	SS and PS	ELISA	Q3,Q3,NA	0.94	0.41	2.18	1.09	0.46	2.62	-	-	-
Dal Maso	2004	PS	ELISA	Q3,Q3,NA	0.44	0.13	1.46	0.15	0.04	0.55	-	-	-
Tworoger	2007	PS	ELISA	Q4,Q4,Q4	0.51	0.26	1.01	1.07	0.57	2.03	-	-	-
Peeters	2007	SS	ELISA	Q3,Q3,NA	1.1	0.7	1.7	1.1	0.7	1.8	-	-	-
<b>endometrial cancer</b>													
Petridou	2003	PS	ELISA	Q3,Q3,NA	0.46	0.26	0.79	1.52	0.87	2.65	-	-	-
Oh	2004	PS	ELISA	Q4,Q4,NA	0.42	0.14	1.25	0.23	0.09	0.6	-	-	-
Lacey Jr	2004	SS	ELISA	Q3,Q3,NA	0.63	0.3	1.32	0.4	0.21	0.77	-	-	-
Augustin	2004	PS	ELISA	Q3,Q3,NA	1.9	0.6	5.9	0.6	0.2	1.8	-	-	-
Lukanova	2004	SS	IRMA	Q5,Q5,NA	0.9	0.44	1.82	2.41	1.07	5.45	-	-	-
<b>lung cancer</b>													
Yu	1999	PS	ELISA	Q4,Q4,NA	2.75	1.37	5.53	0.48	0.25	0.92	-	-	-
London	2001	SS	RIA, IMRA	Q4,Q4,NA	0.86	0.47	1.57	0.5	0.25	1.02	-	-	-
Lukanova	2001	SS	IRMA	Q4,Q4,NA	0.54	0.14	2.07	0.9	0.28	2.85	-	-	-
Spitz	2002	SS	ELISA	Q4,Q4,Q4	0.64	0.31	1.33	2.35	1.13	4.92	0.86	0.49	1.5
Ahn	2006	SS	ELISA	Q4,Q4,Q4	0.76	0.39	1.49	0.71	0.35	1.47	0.8	0.47	1.36

<b>pancreatic Cancer</b>													
Stolzenberg-Solomon	2004	SS and PS	ELISA	Q3,Q3,Q3	0.83	0.4	1.73	0.78	0.41	1.47	0.85	0.5	1.46
Lin	2004	SS	IMRA	Q4,Q4,NA	1.74	0.46	6.52	2.03	0.68	6.07	-	-	-
Wolpin	2007	PS	ELISA	Q5,Q5,Q5	0.78	0.44	1.38	1.38	0.76	2.51	0.84	0.54	1.31
<b>other cancer site</b>													
Zhao	2003	PS	ELISA	Q4,Q4,Q4	3.88	1.74	8.65	0.3	0.14	2.63	4.3	1.99	9.28
Morris	2006	SS	ELISA	Q4,Q4,NA	1.03	0.84	1.27	0.91	0.71	1.15	-	-	-
Serrano	2006	SS	ELISA	Q4,Q4,Q4	0.3	0.08	1.05	1.52	0.43	5.4	0.26	0.08	0.89
Pham	2007	SS	IMRA	Q4,Q4,Q4	0.91	0.49	1.68	0.85	0.51	1.52	1.38	0.74	2.59
Schaffer	2007	PS	ELISA	Q4,Q4,NA	0.4	0.19	0.87	1.15	0.57	2.31	-	-	-

Abbreviation: IGF1 =insulin-like growth factor. IGFBP=insulin-like growth factor binding protein. SS=serum samples, PS=plasma samples, SS and PS=serum and plasma sample, IRMA=immunoradiometric assay. RIA=radioimmunassay. ELISA=enzyme-linked immunosorbent assay. CLIA: Chemiluminescent Immunoassay.

Category : in the order of IGF1, IGFBP3 and IGF molar ratio. Q5: quintiles; Q4: quartiles; Q3: tertiles; NA=not available. OR=odds ratio. Lower=OR lower, Upper=OR upper.