

Table S1: Childhood cancers whose risk associates with birthweight in both USA and UK datasets: analysis by birthweight category

Cancer	Dataset ^a	Cases	Controls	Birthweight category (kg) ^b					
				0.50-1.99	2.00-2.49	2.50-2.99	3.00-3.49	3.50-3.99	≥4.00
Total childhood cancer	USA	16554	53716	1.06 (0.90-1.25)	1.01 (0.90-1.12)	0.98 (0.93-1.04)	1	1.11 (1.06-1.17)	1.20 (1.13-1.28)
	UK	23772	33206	0.91 (0.77-1.09)	1.04 (0.91-1.18)	0.95 (0.89-1.01)	1	1.10 (1.04-1.15)	1.16 (1.08-1.26)
Leukemias, myeloproliferative and myelodysplastic diseases									
Total	USA	5561	53716	0.84 (0.64-1.11)	0.91 (0.77-1.09)	0.92 (0.84-1.01)	1	1.11 (1.03-1.19)	1.20 (1.10-1.32)
	UK	7826	10785	1.07 (0.77-1.50)	1.15 (0.92-1.42)	0.95 (0.84-1.06)	1	1.08 (0.99-1.18)	1.10 (0.96-1.26)
Diagnosed < age 1	USA	386	53716	0.44 (0.15-1.30)	0.75 (0.39-1.45)	0.71 (0.50-1.00)	1	0.94 (0.74-1.20)	1.01 (0.73-1.39)
	UK	593	788	1.69 (0.52-5.55)	1.62 (0.80-3.27)	1.01 (0.66-1.53)	1	1.50 (1.07-2.09)	0.76 (0.44-1.32)
Diagnosed at age 1-14	USA	5175	53716	0.87 (0.65-1.17)	0.93 (0.77-1.11)	0.93 (0.85-1.03)	1	1.12 (1.04-1.20)	1.21 (1.11-1.33)
	UK	7233	9997	1.03 (0.73-1.46)	1.11 (0.88-1.39)	0.94 (0.84-1.06)	1	1.06 (0.96-1.16)	1.12 (0.98-1.29)
Lymphoid leukemias	USA	4476	53716	0.76 (0.55-1.05)	0.91 (0.75-1.10)	0.90 (0.82-1.00)	1	1.10 (1.02-1.19)	1.20 (1.08-1.32)
	UK	6284	8683	1.03 (0.70-1.52)	1.09 (0.85-1.38)	0.92 (0.81-1.04)	1	1.08 (0.98-1.19)	1.06 (0.91-1.23)
Acute myeloid leukemias	USA	804	53716	1.18 (0.63-2.22)	1.01 (0.66-1.53)	0.99 (0.79-1.24)	1	1.09 (0.92-1.30)	1.18 (0.94-1.48)
	UK	1144	1579	1.72 (0.79-3.77)	1.75 (0.97-3.15)	1.17 (0.87-1.57)	1	1.18 (0.93-1.49)	1.33 (0.90-1.98)
Chronic myeloproliferative diseases	USA	101	53716	2.98 (0.73-12.25)	0.72 (0.16-3.20)	1.20 (0.61-2.33)	1	1.57 (0.95-2.60)	2.09 (1.15-3.80)
	UK	123	169	n/d	0.17 (0.02-1.53)	1.17 (0.44-3.09)	1	0.80 (0.43-1.50)	1.58 (0.47-5.39)
Myelodysplastic syndrome and other myeloproliferative diseases	USA	22	53716	n/d	n/d	0.59 (0.13-2.75)	1	1.08 (0.43-1.75)	0.59 (0.13-2.75)
	UK	187	240	n/d	1.41 (0.48-4.18)	0.60 (0.25-1.45)	1	1.02 (0.57-1.82)	1.05 (0.48-2.29)
Unspecified and other specified leukemias	USA	158	53716	0.58 (0.11-3.01)	0.79 (0.30-2.07)	0.94 (0.58-1.53)	1	1.02 (0.70-1.50)	0.96 (0.56-1.64)
	UK	88	114	0.75 (0.11-4.90)	3.00 (0.31-28.84)	0.81 (0.30-2.20)	1	0.63 (0.23-1.70)	1.25 (0.34-4.58)
CNS and miscellaneous intracranial and intraspinal neoplasms									
Total	USA	3561	53716	1.17 (0.85-1.61)	1.11 (0.91-1.36)	0.98 (0.87-1.09)	1	1.08 (0.99-1.18)	1.18 (1.06-1.32)
	UK	5702	8106	0.84 (0.59-1.20)	0.95 (0.73-1.25)	0.93 (0.82-1.06)	1	1.06 (0.96-1.17)	1.14 (0.98-1.34)
Ependymomas and choroid plexus tumour	USA	370	53716	1.07 (0.40-2.82)	0.47 (0.20-1.11)	1.06 (0.77-1.46)	1	1.00 (0.76-1.29)	1.23 (0.89-1.70)
	UK	625	886	1.88 (0.69-5.11)	0.65 (0.29-1.46)	0.82 (0.56-1.21)	1	1.12 (0.82-1.53)	0.85 (0.54-1.35)
Astrocytomas	USA	1559	53716	0.83 (0.48-1.45)	1.20 (0.90-1.61)	0.99 (0.84-1.17)	1	1.13 (1.00-1.28)	1.25 (1.06-1.47)
	UK	2368	3357	0.86 (0.46-1.61)	1.07 (0.71-1.61)	0.96 (0.78-1.18)	1	1.10 (0.94-1.28)	1.31 (1.01-1.68)
Intracranial and intraspinal embryonal tumours	USA	858	53716	0.79 (0.39-1.61)	1.43 (1.00-2.04)	0.95 (0.76-1.19)	1	1.03 (0.87-1.21)	1.22 (0.98-1.50)
	USA ^c	894	57569	0.76 (0.42-1.36)	1.35 (0.97-1.86)	0.96 (0.78-1.19)	1	1.07 (0.91-1.26)	1.29 (1.05-1.59)
	UK	1150	1593	1.06 (0.53-2.12)	1.15 (0.61-2.15)	0.95 (0.70-1.28)	1	1.13 (0.90-1.41)	1.27 (0.90-1.80)
Other gliomas	USA	467	53716	3.27 (1.81-5.90)	0.88 (0.50-1.55)	0.91 (0.67-1.23)	1	1.12 (0.90-1.40)	0.98 (0.72-1.35)
	UK	609	864	0.39 (0.10-1.57)	0.55 (0.22-1.34)	1.12 (0.77-1.62)	1	0.82 (0.61-1.11)	0.89 (0.56-1.43)
Other specified intracranial and intraspinal neoplasms	USA	194	53716	1.29 (0.36-4.60)	0.53 (0.18-1.52)	1.00 (0.65-1.55)	1	0.90 (0.64-1.27)	0.92 (0.57-1.47)
	UK	618	918	0.24 (0.07-0.82)	1.16 (0.51-2.63)	0.58 (0.38-0.88)	1	1.01 (0.74-1.38)	0.74 (0.46-1.20)
Unspecified intracranial	USA	113	53716	0.55 (0.11-2.79)	1.08 (0.44-2.67)	0.95 (0.54-1.69)	1	1.15 (0.73-1.83)	1.10 (0.57-2.13)
	UK	332	488	1.50 (0.31-7.25)	0.89 (0.29-2.76)	1.34 (0.79-2.28)	1	1.04 (0.67-1.61)	2.10 (1.10-4.02)

n/d = not determined as only 1 case.

^a Data was adjusted for sex, period and region of birth. USA data was further adjusted for gestational age, birth order, plurality, maternal age and race/ethnicity. This information was not available for UK data.^b Odds ratios (95% confidence intervals). Odds ratios whose 95% confidence intervals are above the null value (1) are bold, below the null value are bold italic.^c Data unadjusted except for matching variables (state, year of birth and sex).

Table S1 (continued): Childhood cancers whose risk associates with birthweight in both USA and UK datasets: analysis by birthweight category

Cancer	Dataset ^a	Cases	Controls	Birthweight category (kg) ^b					
				0.50-1.99	2.00-2.49	2.50-2.99	3.00-3.49	3.50-3.99	≥4.00
Renal tumours									
Total	USA	1151	53716	0.89 (0.52-1.53)	0.86 (0.61-1.23)	1.07 (0.89-1.29)	1	1.20 (1.04-1.40)	1.54 (1.28-1.85)
	UK	1546	2123	0.64 (0.33-1.25)	1.25 (0.76-2.07)	1.05 (0.81-1.38)	1	1.21 (1.00-1.48)	1.32 (0.99-1.78)
Wilms tumour and other nonepithelial renal tumours	USA	1129	53716	0.87 (0.50-1.51)	0.89 (0.63-1.28)	1.10 (0.91-1.33)	1	1.21 (1.04-1.40)	1.55 (1.29-1.87)
	UK	1515	2072	0.64 (0.33-1.25)	1.26 (0.76-2.10)	1.10 (0.84-1.44)	1	1.25 (1.02-1.53)	1.31 (0.98-1.77)
Renal carcinomas	USA	16	53716	n/d	n/d	n/d	1	1.15 (0.38-3.47)	0.98 (0.20-4.90)
	UK	16	24	n/d	n/d	n/d	1	0.33 (0.03-3.20)	1.00 (0.06-15.99)
Unspecified malignant renal tumours	USA	6	53716	n/d	n/d	n/d	1	0.83 (0.14-5.04)	n/d
	UK	15	27	n/d	n/d	n/d	1	0.45 (0.07-3.06)	n/d
Soft tissue and other extraosseous sarcomas									
Total	USA	1000	53716	0.78 (0.42-1.46)	0.83 (0.56-1.24)	1.12 (0.92-1.37)	1	1.35 (1.16-1.58)	1.34 (1.09-1.64)
	UK	1541	2081	0.42 (0.50-2.35)	1.44 (0.86-2.48)	0.96 (0.74-1.24)	1	1.20 (0.99-1.46)	1.14 (0.83-1.57)
Rhabdomyosarcomas ^c	USA	556	53716	0.82 (0.33-2.04)	0.79 (0.45-1.39)	1.16 (0.88-1.53)	1	1.55 (1.26-1.91)	1.38 (1.04-1.82)
	UK	878	1159	0.28 (0.09-0.81)	2.03 (0.98-4.23)	0.80 (0.56-1.14)	1	1.12 (0.86-1.45)	1.14 (0.76-1.71)
Embryonal	USA	347	53716	0.94 (0.31-2.89)	0.78 (0.38-1.62)	1.02 (0.71-1.48)	1	1.65 (1.27-2.14)	1.60 (1.14-2.25)
	UK	558	708	0.21 (0.05-0.84)	1.57 (0.63-3.89)	0.63 (0.40-0.97)	1	1.06 (0.76-1.48)	1.04 (0.64-1.70)
Alveolar	USA	81	53716	n/d	n/d	1.67 (0.91-3.04)	1	1.22 (0.72-2.08)	0.56 (0.22-1.46)
	UK	201	298	0.67 (0.11-3.99)	1.63 (0.36-7.29)	1.00 (0.47-2.14)	1	1.41 (0.83-2.41)	1.12 (0.44-2.83)
NOS	USA	128	53716	n/d	1.20 (0.44-3.29)	1.15 (0.65-2.04)	1	1.53 (1.00-2.35)	1.39 (0.78-2.48)
	UK	119	153	n/d	n/d	1.89 (0.68-5.21)	1	0.91 (0.45-1.86)	1.86 (0.59-5.83)
Fibrosarcomas, peripheral nerve sheath tumours and other fibrous neoplasms	USA	120	53716	1.19 (0.30-4.81)	1.55 (0.64-3.75)	0.86 (0.47-1.56)	1	1.07 (0.68-1.66)	1.15 (0.63-2.10)
	UK	122	160	n/d	0.86 (0.12-6.23)	4.73 (1.51-14.76)	1	1.08 (0.61-1.91)	0.86 (0.12-6.23)
Other specified soft tissue sarcomas	USA	246	53716	0.59(0.18-1.97)	0.46 (0.18-1.19)	1.13 (0.77-1.65)	1	1.11 (0.81-1.51)	1.21 (0.80-1.81)
	UK	450	641	1.50 (0.25-8.98)	0.97 (0.40-2.33)	0.93 (0.57-1.52)	1	1.32 (0.92-1.91)	1.09 (0.62-1.90)
Unspecified soft tissue sarcomas	USA	76	53716	n/d	1.48 (0.46-4.76)	1.30 (0.64-2.65)	1	1.33 (0.74-2.37)	1.94 (0.96-3.88)
	UK	91	121	n/d	1.40 (0.20-9.66)	0.69 (0.24-1.96)	1	1.86 (0.77-4.46)	2.17 (0.43-10.90)
Hepatic tumours									
Total	USA	301	53716	6.94 (3.70-13.0)	1.80 (0.99-3.29)	0.97 (0.65-1.45)	1	1.04 (0.77-1.40)	1.14 (0.77-1.70)
	UK	275	397	2.50 (0.92-6.82)	10.33 (1.38-77.27)	1.05 (0.56-1.99)	1	1.10 (0.69-1.76)	0.94 (0.46-1.91)
Hepatoblastoma	USA	261	53716	6.39 (3.28-12.5)	1.54 (0.79-3.02)	0.90 (0.58-1.40)	1	1.03 (0.75-1.43)	1.04 (0.67-1.61)
	UK	234	334	2.31 (0.84-6.39)	8.33 (1.10-63.09)	0.94 (0.47-1.88)	1	1.31 (0.79-2.17)	1.21 (0.54-2.67)
Hepatic carcinomas	USA	38	53716	9.78 (1.38-69.5)	4.15 (1.12-15.4)	1.48 (0.54-4.02)	1	1.07 (0.45-2.54)	1.64 (0.60-4.49)
	UK	37	55	n/d	n/d	4.00 (0.47-34.07)	1	0.30 (0.06-1.49)	0.50 (0.07-3.62)
Unspecified malignant hepatic tumours	USA	2	53716	n/d	n/d	n/d	1	n/d	n/d
	UK	4	8	n/d	n/d	n/d	1	n/d	n/d

n/d = not determined as only 1 case.

^a Data was adjusted for sex, period and region of birth. USA data was further adjusted for gestational age, birth order, plurality, maternal age and race/ethnicity. This information was not available for UK data.^b Odds ratios (95% confidence intervals). Odds ratios whose 95% confidence intervals are above the null value (1) are bold, below the null value are bold italic.^c Rhabdomyosarcomas: Embryonal typeicdo3 89023,89103,89123,89913; Alveolar typeicdo3 89203; NOS typeicdo3 89003,89013.