

**Supplementary Table SI** Baseline characteristics of Lifelines controls and Eurocat cases, Northern Netherlands, 1997–2013.

Occupational exposure	Controls		Urinary anomalies		Hypospadias	
	n	(%)	n	(%)	n	(%)
N (total)	5602		537 <sup>g</sup>		371 <sup>g</sup>	
Child biological sex <sup>e</sup>						
Boy	2731	(48.8)	377	(70.2)	371	(100)
Girl	2871	(51.2)	160	(29.8)	0	(0)
Birth year <sup>e,f</sup>						
1997–2000	1240	(22.1)	103	(19.2)	76	(20.4)
2001–2004	1660	(29.6)	108	(20.1)	85	(22.8)
2005–2008	1293	(23.1)	131	(24.4)	114	(30.6)
2009–2013	1409	(25.2)	195	(36.3)	96	(25.7)
Maternal age at delivery <sup>e,f</sup>						
15–19 years <sup>a</sup>	3	(0.1)	1	(0.2)	1	(0.3)
20–24	191	(3.6)	40	(7.5)	28	(7.5)
25–29	1492	(28.2)	167	(31.5)	128	(34.5)
30–34	2470	(46.7)	225	(42.4)	155	(41.8)
35–39	1058	(20.0)	90	(16.9)	57	(15.4)
>40	73	(1.4)	8	(1.5)	2	(0.5)
Unknown	315		6		0	
BMI (kg/m <sup>2</sup> ) <sup>b,e,f</sup>						
Underweight (<18.5)	56	(1.0)	10	(1.9)	4	(1.1)
Normal (18.5–25)	2871	(53.6)	340	(65.6)	245	(66.8)
Overweight (25–30)	1610	(30.1)	112	(21.6)	82	(22.3)
Obese (>30)	818	(15.3)	56	(10.8)	36	(9.8)
Unknown	247		19		4	
Education level						
Low	649	(12.3)	56	(10.7)	38	(10.3)
Middle	2396	(45.4)	260	(49.7)	185	(50.3)
High	2236	(42.3)	207	(39.6)	145	(39.4)
Unknown	321		14		3	
Smoking during pregnancy <sup>c,e,f</sup>						
No	5036	(90.2)	415	(78.3)	300	(81.1)
Yes	549	(9.8)	115	(21.7)	70	(18.9)
Unknown	17		7		1	
Alcohol during pregnancy <sup>c,e,f</sup>						
No	5045	(90.3)	406	(76.7)	281	(76.2)
Yes	544	(9.7)	123	(23.3)	88	(23.8)
Unknown	13		8		2	
Folic acid use <sup>e</sup>						
No	847	(16.5)	139	(26.3)	71	(19.2)
Yes	4272	(83.5)	389	(73.7)	299	(80.8)
Unknown	483		9		1	

(continued)

### Supplementary Table SI Continued

Occupational exposure	Controls		Urinary anomalies		Hypospadias	
	n	(%)	n	(%)	n	(%)
Fertility problems <sup>e</sup>						
No	5230	(93.9)	481	(90.9)	352	(95.1)
Yes	339	(6.1)	48	(9.1)	18	(4.9)
Unknown	33		8		1	

<sup>a</sup>Lifelines includes participants from 18 years old.

<sup>b</sup>BMI of Eurocat cases is based on self-reported weight and length at early pregnancy, whereas weight and length of Lifelines participants are measured at baseline visit at the study clinic.

<sup>c</sup>Eurocat reported smoking/alcohol use during pregnancy, whereas Lifelines reported this specifically for the first trimester.

<sup>d</sup>Only boys were selected as controls for hypospadias.

<sup>e</sup>Significant difference between urinary cases and controls ( $P$ -value  $<0.05$ ) using  $\chi^2$  tests.

<sup>f</sup>Significant difference between hypospadias cases and controls ( $P$ -value  $<0.05$ ) using  $\chi^2$  tests.

<sup>g</sup>Seven cases with both urinary tract anomalies and hypospadias were counted in both groups.

EUROCAT, European Concerted Action on Congenital Anomalies and Twins.