Table S1. Characteristics of cases of chronic lymphocytic leukaemia (CLL) and controls from the MCC-Spain study excluded from the analysis*. *N* = **597**

	Controls N=482	Cases N=115
Recruitment area, *n* (%)		
Barcelona	207 (43.0)	102 (88.7)
Asturias	66 (13.7)	10 (8.70)
Cantabria	209 (43.4)	3 (2.61)
Age (years), mean (SD)		
<55, *n* (%)	154 (32.0)	18 (15.7)
55-64, *n* (%)	107 (22.2)	37 (32.2)
65-69, *n* (%)	80 (16.6)	24 (20.9)
70-74, *n* (%)	51 (10.6)	12 (10.4)
≥75, *n* (%)	90 (18.7)	24 (20.9)
Females, *n* (%)	223 (46.3)	42 (36.5)
Educational level, *n* (%)		
Primary school or lower	263 (54.6)	66 (57.4)
Secondary school	137 (28.4)	26 (22.6)
University	82 (17.0)	23 (20.0)
Family history of hematologic malignancy, *n* (%)	56 (11.6)	21 (18.3)
Body Mass Index (kg/m^2), mean (SD)	26.9 (4.6)	27.0 (3.9)
Smoking, *n* (%)		
Never	229 (47.5)	53 (46.1)
Former	167 (34.7)	43 (37.4)
Current smoker	86 (17.8)	19 (16.5)
Physical activity, *n* (%)		
Inactive	161 (33.4)	27 (23.5)
Low	141 (29.3)	46 (40.0)
Moderate	74 (15.4)	14 (12.2)
Very active	106 (22.0)	28 (23.4)
Ever worked in farming or agriculture, *n* (%)	129 (26.8)	40 (34.8)
Alcohol consumption, *n* (%)		
Never	86 (17.8)	11 (9.6)
Former	36 (7.47)	13 (11.3)
Current moderate consumption (≤ 20 g/day men; ≤ 10 g/day women)	257 (53.3)	76 (66.1)
Current high consumption (> 20 g/day men; > 10 g/day women)	103 (21.4)	15 (13.0)
Rai stage, *n* (%)		
0	─	73 (63.5)
I-IV	─	39 (33.9)
Unknown		3 (2.61)
Average lifetime residential tap water, mean (SD)		
Nitrate (mg/L)	8.1 (3.4)	10.1 (3.5)
Total trihalomethanes (μg/L)	50.4 (36.9)	89.2 (42.6)
Brominated trihalomethanes (μg/L)	35.6 (32.9)	72.9 (40.6)
Chloroform (μg/L)	14.8 (8.2)	16.3 (7.7)
Average lifetime waterborne ingestion, mean (SD)		
Nitrate (mg/d)	10.1 (8.1)	13.4 (8.4)
Total trihalomethanes (μg/d)	33.8 (56.0)	45.4 (78.0)
Brominated trihalomethanes (μg/d)	22.2 (40.9)	37.4 (67.4)
Chloroform (μg/d)	11.65 (18.6)	7.97 (12.1)

* Participants excluded because their interview was unreliable, or were from municipalities without at least one case and one control, or because nitrate and THMs exposures covered < 70% of the total exposure period or because no reported data on water intake (n=597 out of 1842).

Brominated THMs includes bromodichloromethane, dibromochloromethane, and bromoform. Total THMs (TTHMs) includes chloroform, bromodichloromethane, dibromochloromethane, and bromoform.

Table S2. Association of trihalomethanes (THMs) waterborne ingestion with chronic lymphocytic leukaemia (CLL). Odds ratios (ORs) and 95% confidence intervals (CIs).

Exposure	Controls	Cases	OR (95% CI) Multivariable adjusted[1]	OR (95% CI) Multivariable adjusted[2]	OR (95% CI) Multivariable adjusted[3]
Total THMs waterborne ingestion (μg/day), N=1,244					
Tertile 1 (<10.8)	371	39	Ref. 1	Ref. 1	Ref. 1
Tertile 2 (10.8-46.3)	371	43	1.09 (0.68, 1.73)	1.10 (0.69, 1.75)	1.06 (0.66, 1.70)
Tertile 3 (>46.3)	371	49	1.01 (0.63, 1.60)	1.02 (0.64, 1.63)	1.11 (0.66, 186)
P-trend	1,113	131	0.93	0.98	0.71
Per 10 μg /day	1,113	131	1.01 (0.98-1.05)	1.01 (0.98-1.05)	1.04 (0.99-1.08)
Brominated THMs waterborne ingestion (μg/ day), N=1,244					
Tertile 1 (<5.9)	371	43	Ref. 1	Ref. 1	Ref. 1
Tertile 2 (5.9-29.2)	371	37	0.85 (0.53, 1.36)	0.86 (0.54, 1.38)	0.69 (0.35, 1.36)
Tertile 3 (>29.2)	371	51	0.95 (0.60, 1.51)	0.97 (0.61, 1.54)	0.84 (0.35, 2.02)
P-trend	1,113	131	0.99	0.95	0.66
Per 10 μg/day	1,113	131	1.03 (0.99, 1.08)	1.03 (0.99, 1.08)	1.14 (1.07, 1.22)
Chloroform waterborne ingestion (μg/day), N=1,244					
Tertile 1 (<3.7)	371	41	Ref. 1	Ref. 1	Ref. 1
Tertile 2 (3.7-14.9)	371	47	1.20 (0.76, 1.88)	1.22 (0.77, 1.91)	1.47 (0.74, 2.94)
Tertile 3 (>14.9)	371	43	0.92 (0.58, 1.46)	0.93 (0.58, 1.47)	1.19 (0.52, 2.76)
P-trend	1,113	131	0.59	0.60	1.00
Per 10 μg/day	1,113	131	0.87 (0.75, 1.02)	0.88 (0.75, 1.02)	0.66 (0.52, 0.84)

Odds ratios (OR) and 95% confidence intervals (CI) were calculated using mixed models with residential area (Barcelona, Asturias, Cantabria) as random effect.

Brominated THMs includes bromodichloromethane, dibromochloromethane, and bromoform

Total THMs includes chloroform, bromodichloromethane, dibromochloromethane, and bromoform.

1 Model adjusted for age, sex, and educational level

2 Model further adjusted for family history of hematologic malignancy, body mass index, smoking, physical activity, ever worked in farming or agriculture and alcohol consumption.

3 Model further mutually adjusted for the other corresponding components, i.e., nitrate (THMs model), chloroform and nitrate (brominated THMs model), brominated THMs and nitrate (chloroform model).