Supplemental Material: Childhood Hematologic Cancer and Residential Proximity to Oil and Gas Development in Rural Colorado

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S10 Table. Association between annual inverse distance weighted well count within 16.1-kilometer radius of residence at diagnosis averaged over exposure period and acute lymphocytic leukemia (ALL): Each year of cancer diagnosis treated separately

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Inverse Distance Weighted Well Count[a]	0 Wells within 16.1 Kilometers	Low[a]	Medium[a]	High[a]	P-value trend tests[b]
Total Study Population (0 to 24 years)					
Cases (N)	15 (9.2%)	21 (14%)	26 (18%)	25 (16%)	
Controls (N)	147	132	119	130	
Crude OR	1.0	1.6 (0.77, 3.1)	2.1 (1.1, 4.2)	1.9 (0.95, 3.7)	
Model 1 Adjusted OR (95% CI)[c]	1.0	2.3 (0.94, 5.5)	2.6 (1.1, 6.3)	1.9 (0.78, 4.8)	0.22
Model 2 Adjusted OR (95% CI)[d]	1.0	2.4 (0.97, 6.1)	2.9 (1.2, 7.1)	1.9 (0.76, 4.9)	0.23
5 to 24 Years					
Cases (N)	8 (5.9%)	9 (7.7%)	15 (13%)	16 (14%)	
Controls (N)	128	108	99	96	
Crude OR	1.0	1.3 (0.50, 3.6)	2.4 (0.99, 5.9)	2.7 (1.1, 6.5)	
Model 1 Adjusted OR (95% CI)[c]	1.0	2.9 (0.80, 11)	3.4 (0.99, 12)	4.3 (1.1, 16)	0.035
Model 2 Adjusted OR (95% CI)[d]	1.0	2.6 (0.67, 10)	3.6 (1.0, 13)	3.6 (0.93, 14)	0.056
0 to 4 Years					
Cases (N)	7 (26%)	12 (33%)	11 (35%)	9 (21%)	
Controls (N)	19	24	20	34	
Crude OR	1.0	1.4 (0.45, 4.1)	1.5 (0.48, 4.7)	0.72 (0.23, 2.2)	
Model 1Adjusted OR (95% CI)[e]	1.0	1.7 (0.44, 6.5)	2.3 (0.57, 9.4)	0.73 (0.18, 3.0)	0.50
Model 2 Adjusted OR (95% CI)[f]	1.0	1.7 (0.42, 7.2)	2.5 (0.56, 12)	0.5 (0.11, 2.3)	0.25

[a] All age groups: low = first tertile, < 4.9 wells per 1.6 kilometers, medium = second tertile, 4.9 to 33.6 wells per 1.6 kilometers, high = third tertile, more than 33.6 wells per 1.6 kilometers. [b] Trend tests performed by treating categorical inverse-distance well count as an ordinal. [c] Adjusted for age, race, gender, socioeconomic status, and elevation. [d] Adjusted for age, race, gender, socioeconomic status, elevation, and year of diagnosis. [e] Adjusted for race, gender, socioeconomic status, and elevation. [f] Adjusted for race, gender, socioeconomic status, elevation, and year of diagnosis.