

Childhood leukemia in small geographical areas and proximity to industrial sources of air pollutants in three Colombian cities

Supplementary material

S1. Results of scan tests for spatial and spatiotemporal clusters of acute childhood leukemia in proximity to industrial sources of air pollution in Bucaramanga (n= 122 cases)

| Cluster | Ratio (Km) | No. sectors included | P value | Relative Risk | Time |
|--|------------|----------------------|---------|---------------|-----------|
| Spatial localized clusters | | | | | |
| 1 | 0.81 | 5 | 0.001 | 2.88 | |
| Spatio-temporal localized clusters | | | | | |
| 1 | 0.1 | 1 | 0.001 | 34.43 | 2010-2011 |
| Spatial clusters around industrial conglomerates | | | | | |
| Bucaramanga 1 | 0.4 | 2 | 0.051 | 3.85 | |

S2. Results of scan tests for spatial and spatiotemporal clusters of acute childhood leukemia in proximity to industrial sources of air pollution for Medellin (n=309 cases)

| Cluster | Ratio (Km) | No. sectors included | P value | Relative Risk | Time |
|--|------------|----------------------|---------|---------------|-----------|
| Spatial localized clusters | | | | | |
| 1 | 3.67 | 89 | 0.001 | 1.87 | |
| 2 | 0.38 | 2 | 0.003 | 11.11 | |
| Spatio-temporal localized clusters | | | | | |
| 1 | 3.49 | 40 | 0.002 | 3.40 | 2002-2005 |
| Spatial clusters around industrial conglomerates | | | | | |
| Medellín 7 | 2.64 | 50 | <0.001 | 1.86 | |
| Medellín 8 | 3.2 | 80 | <0.001 | 1.66 | |
| Medellín 10 | 2.05 | 25 | 0.037 | 1.77 | |
| Medellín 11 | 3.98 | 98 | <0.001 | 1.60 | |
| Medellín 13 | 6.3 | 106 | <0.001 | 1.59 | |

*Km

S3. Results of scan tests for spatial and spatiotemporal clusters of acute childhood leukemia in proximity to industrial sources of air pollution for Cali (n=445 cases)

| Cluster | Ratio (Km) | No. sectors included | P value | Relative Risk | Time |
|--|------------|----------------------|---------|---------------|-----------|
| Spatial localized clusters | | | | | |
| 1 | 7.27 | 21 | <0.001 | 5.17 | |
| 2 | 0.96 | 12 | 0.001 | 15.82 | |
| Spatio-temporal localized clusters | | | | | |
| 1 | 1.42 | 35 | <0.001 | 6.42 | 2003-2006 |
| Spatial clusters around industrial conglomerates | | | | | |
| Cali 5 | 0.91 | 8 | <0.039 | 2.61 | |
| Cali 6 | 1.73 | 32 | <0.038 | 1.91 | |
| Cali 9 | 1.13 | 20 | <0.014 | 3.40 | |
| Cali 12 | 1.32 | 18 | <0.016 | 2.44 | |
| Cali 14 | 3.45 | 139 | <0.001 | 1.65 | |

| | | | | | |
|---------|------|-----|--------|------|--|
| Cali 17 | 3.07 | 102 | <0.035 | 1.51 | |
| Cali 18 | 3.21 | 129 | <0.002 | 1.53 | |
| Cali 19 | 1.61 | 39 | <0.001 | 2.95 | |
| Cali 20 | 2.37 | 66 | <0.001 | 1.56 | |
| Cali 23 | 3.92 | 107 | <0.001 | 1.75 | |
| Cali 24 | 5.79 | 123 | <0.001 | 1.63 | |
| Cali 25 | 5.62 | 105 | <0.001 | 1.65 | |
| Cali 26 | 7.20 | 129 | <0.001 | 1.71 | |