**Supplementary Material**

a)

b)

c)

d)

e)

f)

g)

*Figure i. All the genes that were tested in the dose response study for lithium, valproate, quetiapine and lamotrigine in GT1-7 cells.*

Table i. Demographics of the control subjects (Controls) and subjects with bipolar disorders from whom tissue was used in the post-mortem microarray study (gm = gram, hr = hour, PMI = post-mortem interval, yr = years).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Diagnoses | Controls | | BD | | p |
| Mean | SEM | Mean | SEM |
| Age (yr) | 60 | 3.6 | 58 | 3.5 | 0.67 |
| CNS pH | 6.31 | 0.06 | 6.27 | 0.05 | 0.66 |
| PMI (hr) | 45 | 4.1 | 39 | 3.9 | 0.32 |
| Brain Weight (gm) | 1335 | 33 | 1205 | 134 | 0.32 |
| Duration of illness (yr) | - | - | 19 | 3.2 | - |
|  | Ratio | | | |  |
| Sex (male/female) | 7 / 8 | | 8 / 7 | | > 0.99 |