

S5 Table. Variances of filter posteriors: Early cancer model.

| | 90 IDs | 270 IDs | 810 IDs | 2430 IDs |
|------------------------------|--------|---------|---------|----------|
| $\text{Var}[\mu_{y_0}]$ | 0.086 | 0.036 | 0.02 | 0.017 |
| $\text{Var}[\sigma_{y_0}]$ | 0.012 | 0.0084 | 0.0046 | 0.0032 |
| $\text{Var}[\mu_\lambda]$ | 0.072 | 0.036 | 0.018 | 0.0014 |
| $\text{Var}[\sigma_\lambda]$ | 0.0082 | 0.00456 | 0.0033 | 0.0024 |
| $\text{Var}[\mu_\sigma]$ | 0.0089 | 0.1176 | 0.0082 | 0.0096 |