Cumulative loss vs. Final total weight

Total weight: $W^t \doteq \sum_{i=1}^{N} w_i^t$

$$\frac{W^{t+1}}{W^t} = \frac{\sum_{i=1}^{N} w_i^t e^{\log p_i^t(c^t)}}{\sum_{i=1}^{N} w_i^t}$$