



Supplemental FIGURE 1: (A) Quiescence exit critical volume. Mean cell volume at which daughter cells emit a bud upon quiescence exit, irrespectively of the time after refeeding on a YPD-containing microscope agarose pad ($n > 120$, $N = 2$). **(B)** Distribution of the percentage of mother cells accordingly to their replicative age (bud scars number). **(C)** Cell volume distribution in function of cell chronological age *i.e.* the time spend in liquid YPDA culture at 30°C ($n > 120$). P-values and means are indicated. **(D)** Trehalose influences quiescence exit efficiency. Wild type prototroph CEN-PK cells were grown in YP pH 5 containing 4% glucose or 2% glucose + 2% trehalose for the indicated time. Quiescence exit was triggered on a YPD-containing microscope agarose pad and cells were imaged every hour (for each time point $n > 100$ $N = 3$).