



### Supplementary Figure S3: MCF-7 cell clustering occurs independently of microtubules cytoskeleton disruption

**a** Immunostaining of  $\alpha$ -tubulin in untreated MCF-7 cells (Control) and cells incubated with 10  $\mu$ M nocodazole for 2 hours. For both conditions, each row corresponds to two different fields of view. Inserts show the higher magnification of the region outlined with dotted lines in the corresponding image. \*: mitotic cells in control and nocodazole conditions. Scale bar: 10  $\mu$ m. **b** Schematic representation of the experiment. To test the impact of microtubule depolymerization on aggregation dynamics, MCF-7 cells were pre-treated with 10  $\mu$ M nocodazole for 1 h, then they were seeded in 96-well low-attachment plates in the presence of 10  $\mu$ M nocodazole, and monitored by videomicroscopy for 5 hours (clustering assay). **c** Percentage of compaction calculated from the normalized area at each time point (see Methods section) for control (untreated) cells and cells incubated with nocodazole, as described in **b**. For each time point, data correspond to the mean  $\pm$  SD of 32 aggregates/condition from 3 independent experiments.