

Supplementary

Tumor spheroids accelerate persistently invading cancer cells

Melanie Audoin^{1,*}, Maria Tangen Sogaard^{1,2,*}, and Liselotte Jauffred^{1,*}

¹The Niels Bohr Institute, University of Copenhagen, Blegdamsvej 17, DK-2100 Copenhagen O, Denmark

²Present address: DTU Health Tech, Denmark's Technical University, Ørsted Pl. 344, 108, 2800 Kgs. Lyngby, Denmark

*jauffred@nbi.dk

†these authors contributed equally to this work

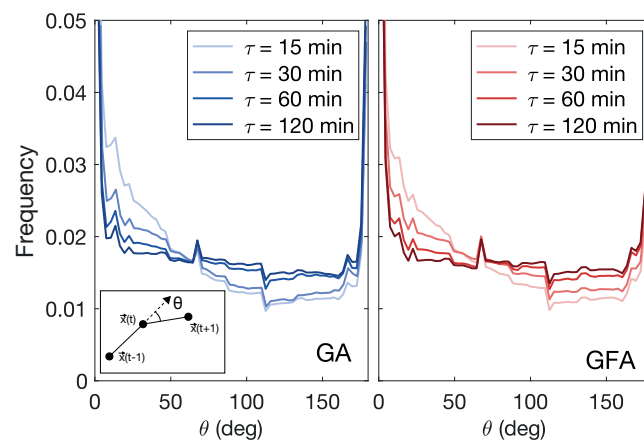


Fig. S1 Normalized and smoothed distribution of turning angles, θ , for GA ($N=177$) and GFA ($N=305$). The insert is a sketch of θ as defined in the main article. In both the GA and GFA cases, the distribution has local maximum at $\theta = 0$ and $\theta = 180^\circ$ and flattens for larger delays, τ .

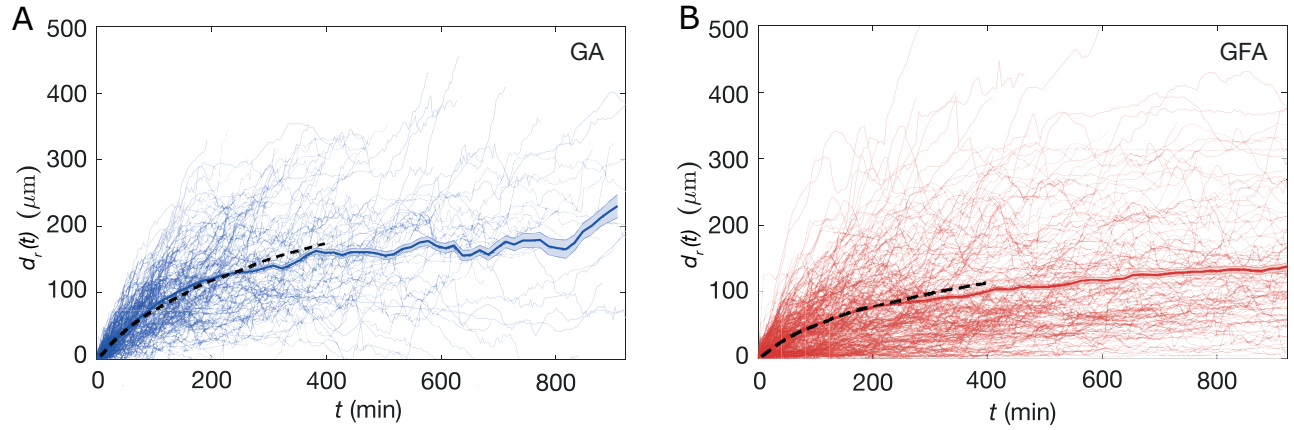


Fig. S2 Time evolution of the average migration displacement, $d(t)$, versus time. **(A)** The thin lines represents individual trajectories ($N=177$) and the full line is the average distance and shaded area is one SEM. The dotted black line corresponds to the average simulated trajectories using the BPRW model. **(B)** The thin lines represents all tracked trajectories ($N=305$) and the full line is the average distance and shaded area is one SEM. The dotted black line corresponds to the average simulated trajectories using the PRW model.

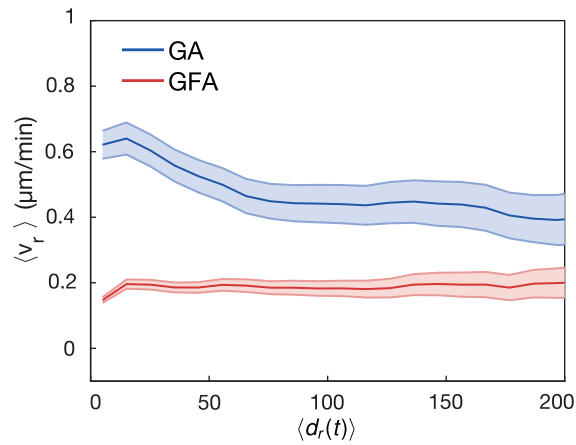


Fig. S3 Evolution of the ensemble-averaged radial velocity, $\langle v_r \rangle$, (mean \pm SEM) against radial distance, $d_r(t)$ for both GA (blue) and GFA (red). v_r is binned on 15 μm with a moving average of 10 points.