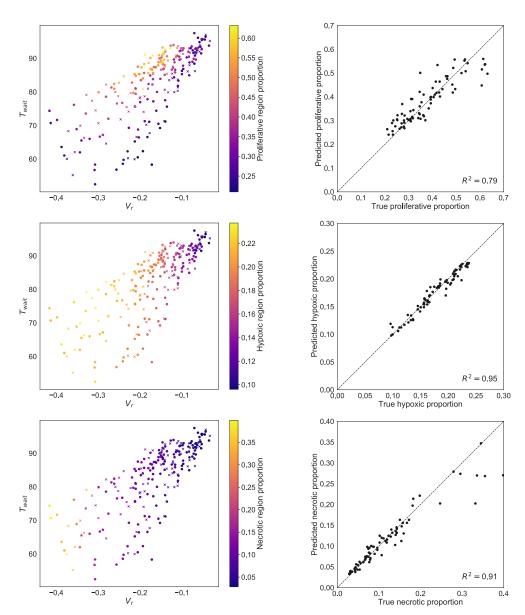
## Supporting information

For: Mathematical modelling reveals cellular dynamics within tumour spheroids

by Joshua A. Bull, Franziska Mech, Tom Quaiser, Sarah L. Waters, Helen M. Byrne

## S6 Appendix: Predicting spheroid composition from microbead

**observations** In Fig 6 we demonstrated that nearest-neighbours classification allows the quiescent proportion of the tumour spheroid radius to be estimated accurately. Fig F shows that the proliferative, hypoxic and necrotic proportions of the spheroid radius can be inferred by observing  $T_{\rm wait}$  and  $V_r$  in the same way.



**Fig F.** Extension of Fig 6 to predict the proportion of the spheroid radius occupied by the proliferative, hypoxic and necrotic compartments.