

Title Page

The biology and systemic treatments influence survival in advanced gastro-intestinal cancers while the controlled trial of pulmonary metastasectomy in colorectal cancer (PulMiCC) found that surgical resection could only have a small if any effect.

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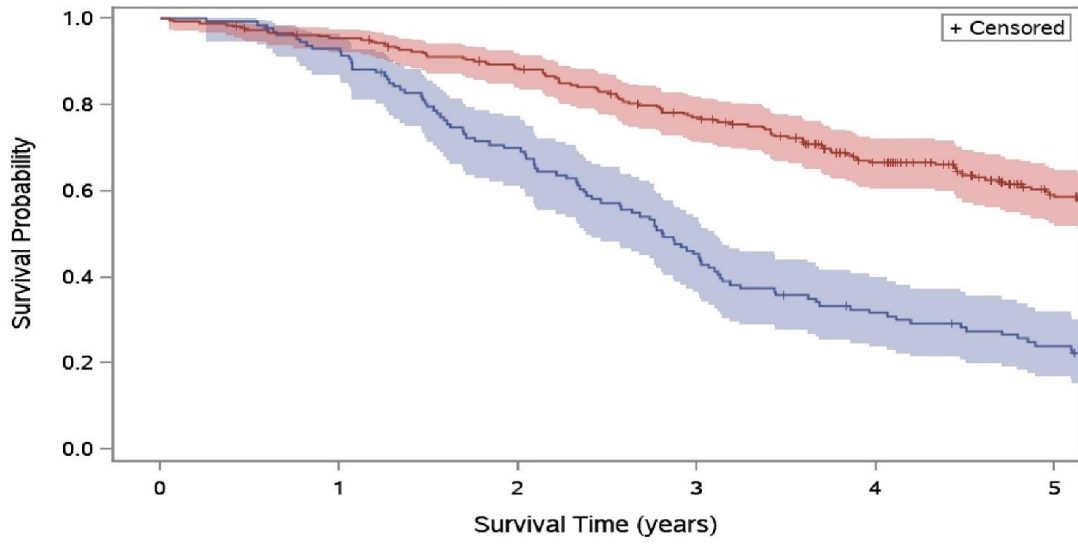
The retrospective institutional study by Burns et al(1) of patients with pulmonary metastases from gastro-intestinal cancers gives some interesting insights into the natural history of this condition. It shows that overall the prognosis of these patients is surprisingly good with prolonged survival following both systemic and localised treatment. It also reveals the very variable growth rate of such metastases and interestingly showed that solitary metastases may grow more slowly than multiple ones. All this points to the importance of underlying tumour biology in determining overall survival of these patients and, citing the meta-analysis by Ratnayake et al,(2) they suggest that this raises “further questions regarding the necessity and indications for metastasectomy in this patient population.”

They state that “Lung metastasectomy has been demonstrated in multiple studies to be associated with encouraging long-term outcomes in individuals with.... colorectal cancers” and cite our Pulmonary Metastasectomy in Colorectal Cancer (PulMiCC) trial publications. PulMiCC does not show such an association. A small randomised trial (RCT) with 93 patients(3) was nested inside a careful prospective study of contemporary patients for whom the clinical teams had decided that entry into the RCT was not appropriate and patients should either undergo pulmonary metastasectomy or not be operated on(4).

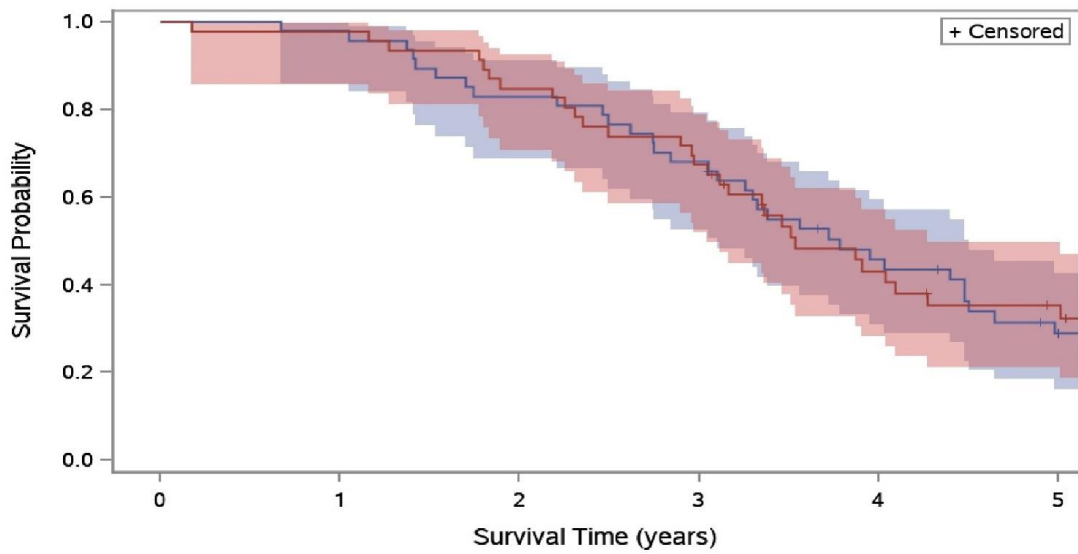
As shown in Figure 1 the electively operated patients had better survival than those not, but this could largely be accounted for by significant differences in well described prognostic factors including the number of metastases, CEA level, disease-free interval and performance status. The 93 randomised patients were well balanced for these factors and had survival intermediate between the two other groups. But there was no significant difference in survival between those randomised to have or not have metastasectomy. Although the RCT closed early because of slow recruitment and did not have enough power to demonstrate non-inferiority, the whole study does point to the importance of the biological and patient factors used to select patients in determining survival. It also rules out there being any major survival benefit from metastasectomy.

Our findings together with those of Burns et al(1) should make everyone involved reflect on the uncertain evidence supporting the use of pulmonary metastasectomy and explain that uncertainty to any patients being considered for the procedure.

Product-Limit Survival Estimates
With Number of Subjects at Risk and 95% Confidence Limits



	Metastasectomy					
	no	yes	no	yes	no	yes
no	128	118	88	57	38	28
yes	263	248	227	194	147	98



	Group					
	group 1	group 2	group 1	group 2	group 1	group 2
group 1	47	46	39	32	20	11
group 2	46	45	39	31	17	12

References

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