Surgery, selection or biology in lung metastasectomy for colorectal question? PulMiCC may not provide all the answers but it does narrow down the question.

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Dear Editor

We congratulate Sponholz and colleagues on their study showing the favourable impact of left colon primary site on survival following lung metastasectomy for colorectal cancer (CRC). The survival rate for these patients is truly impressive. The difference attributable to primary site of CRC confirms the recently published study from the MD Anderson Cancer Centre and emphasises the influence of inherent biological factors on survival[1]

The authors kindly mentioned the randomised controlled trial (RCT) Pulmonary Metastasectomy in Colorectal Cancer (PulMiCC) citing a preliminary analysis.[2] There was no difference in quality of life or health utility.[3] The full randomised trial (N=93) has since been published.[4] It is not a fair representation of events to say PulMiCC “was stopped because of poor recruitment”. The study recruited well, reaching a cohort of 512 patient. The difficulty was confined to randomisation due to the widespread assumption that survival without operation would be zero and its corollary, that all five-year survival is attributable to metastasectomy.[5] PulMiCC was closed in an orderly fashion so that it could be analysed to inform practice.

The intervention and control arms in the PulMiCC RCT were well matched for age, sex, carcinoembryonic antigen, prior liver metastases, primary cancer stage, interval since primary resection and the number of metastases. There was no demonstrable difference in survival at any time point up to five years. The revelation from PulMiCC was the magnitude of control survival which was 47.1% (95% CI: 31.9%–62.6%) at four years. The median survival was in fact longer in the control arm (46 versus 42 months).[4] We cannot exclude an eventual survival benefit from metastasectomy but it must be much smaller than the widely believed 40%. The findings of the cohort study, soon to be published, provide insights into the effects of biological factors on survival.