THE PULMICC TRIAL

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Do come to the lunch time session on the PulMiCC trial at 13:00 on Thursday 18th November 2021. I will create plenty of opportunity for discussion and to hear opinions in answer to the question “Quo Vadis?” which was posed in an Editorial in EJCTS [2017;51:408-10].

First, I will give a brief summary of the Pulmonary Metastasectomy in Colorectal Cancer (CRC) study which recruited 512 patients who had potentially curative primary resection but were found to have lung metastases. Of them 28 were excluded before treatment assignment because they did not in fact have CRC lung metastases. Their lung nodules were benign or due to another malignancy. Of the 484 still in contention — a much larger number than any in the Gonzalez meta-analysis [ASO 2013;20:572-9] — 93 were randomized. That left 391 in a prospective study — still larger than any in the meta-analysis — for whom an elective decision was made. We will look together at how expert selection resulted in 60% five-year survival [2021;23:1793-803]. But survival in those selected to not have metastasectomy was not anywhere close to zero, pace the STS assumption [ATS 2019;107:631-49].

I will take you back on a personal odyssey in the early 1980s when a general thoracic surgeon in the operating room next door was regularly taking out metastases [EJCTS 1989;3:105-9]. Meanwhile colleagues operating on CRC were running an RCT of the then novel carcinoembryonic antigen (CEA) for earlier detection of metastases. They detected recurrence 11 months sooner but it gave no survival advantage. They published a letter [JAMA 1994;272:31] but the “negative” result was not what they wanted. They shelved the data. Twenty years later we published the RCT. [BMJ Open 2014;4(5):e004385]. Sixteen subsequent RCTs of intensified surveillance gave the same result [BJS 2016;103:1259-68].

I had been invited in 2000 to return to my Alma Mater as academic lead. One of the first questions my superb and supportive colleagues asked was about mesothelioma, common among our patients, who had worked on the River Thames docks. I will remind my audience of the results of the MARS trial [Lancet Oncol. 2011;12:763-72].

The PulMiCC trial actually recruited well. Also, when allowed to do so, patients chose surgery or not, in about equal numbers. But — in the face of the ESTS claimed 60% and STS assumed 0% — the cancer teams found it hard to randomise. But taking the RCT results [Colorectal Dis. 2020;22:1314-24] in the context of the cohort of 484 within which it was nested, the perceived

survival advantage might all be attributable to expert case selection. Metastasectomy conferred no psychological benefit or enhanced quality of life [Trials 2019;20:718, Colorectal Dis. 2021;23(1):200-5] and did not spare patients chemotherapy [Colorectal Dis. 2021;23:200-5].

There have been 65 citations to the PulMiCC trial recognising that it is first and only controlled trial addressing the question. It has received favourable statistical reviews. Come along and let us have a lively discussion about the results and their meaning for patients who could be spared unavailing operations.