

Preface

The authors of the chapters in this book are from the UK, USA, Italy, Nigeria, Australia, USA by way of Russia and Israel, UK by way of India, Denmark, Germany, Greece, and Belgium. One would think our intention was to have a geographically diverse representation of authors so as to get a worldwide perspective similar to the United Nations. But that was purely an accident. We did want a diverse group of authors and perspectives, but the topic for diversity was scientific investigation not geographic location.

Let us explain. Our research has been by discovery rather than hypothesis. We were trying to understand the implications of anomalous clinical breast cancer data. We did not know where it was taking us, but we just followed our scientific instincts. With the aid of knowledge from various medical specialties, mathematical tools and other resources, we have gradually come to the conclusion that something dramatic happens at or about the time of primary surgery that precipitates most relapses in breast, lung and other cancers.

It also seems that this effect was known 2000 years ago but somehow got overlooked. Regardless of that, this topic must be considered a new field. Hopefully, this book will stimulate new thinking and the generation of new data.

We looked around. Who else is doing some work that may be related to what we have found about the perioperative window? It turned out that there are some. What scientific tools are used? All available tools! Actually, the diversity of tools and approaches attracted us since we promoted to the publisher that this book would be a jumping-off point for continued research as well as a reference for clinicians and scientists. We wanted to be inclusive with minimal overlap of research or clinical specialties. We have already crossed several medical boundaries so that is no longer a barrier.

There are a number of possible mechanisms that could account for this effect, but we do not know which are most involved or even if we know them all. We do know that systemic inflammation plays a key role and that this lasts for about 1 week after surgery. We think the metastatic initiation process is amplified by approximately 100-fold during the week post-surgery. Based on a retrospective study, a perioperative anti-inflammatory intervention properly timed to the surgery would probably

prevent early relapses and that these would not come back later. We strongly recommend that this needs to be verified, and if it works as we think, it could reduce the world's breast cancer problem by 25–50% at almost no cost or toxicity. Some egos will be bruised, and pocketbooks will be lighter, but that should not prevent this investigation from being pursued.

Sub-Saharan Africa would be an ideal place to conduct a clinical trial because of the high incidence of triple negative breast cancer (TNBC) since that category should respond best to a perioperative NSAID. Breast and lung cancers have been the most investigated, and there are a number of other malignancies for which this should also work, but evidence has not as yet been fully examined. This type of therapy would be ideal for developing countries where there is 70% of the cancer burden but only 5% of the resources.

It needs to be stated that even if this project works as well as possible, it will not solve the cancer problem. It will dramatically and inexpensively reduce the number of patients who relapse, but there will still be a need for treatments to prevent death from metastatic disease. We are not in competition with the excellent work underway to use immunotherapy to curtail tumour growth after relapse.

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