EDITORIAL

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Cancer and systemic inflammation: stage the tumour and stage the host

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In vol. 109, issue 01 of the *BJC*, Fox *et al* (2013) examined the prognostic value of a range of markers of the systemic inflammatory response in patients with advanced renal cancer–in particular, whether such markers (albumin and neutrophil, lymphocyte and platelet counts or their combinations) had prognostic value in addition to an established scoring system (MSCKCC). There was an improvement in overall risk stratification (net reclassification of 26%) in patients when neutrophils, platelets and the neutrophil lymphocyte ratio were included in the scoring system. If confirmed in a similar clinical scenario, this will be a useful clinical tool to improve treatment allocation.

The study by Fox *et al* (2013) is consistent with a large volume of observational studies reporting that markers of the systemic inflammatory response have independent prognostic value in patients with a variety of cancers, including renal cancer (Roxburgh and McMillan, 2010; Guthrie *et al*, 2013). Indeed, this literature, whose lineage predates the genomic era, is compelling through its consistency across tumour sites and clinical scenarios.

The importance of the present work is that it was carried out within the context of a substantial randomised controlled trial and well-defined entry criteria. Other markers of the systemic inflammatory response or combinations such as C-reactive protein and the GPS would have been of considerable interest (Roxburgh and McMillan, 2010; McMillan, 2013). Nevertheless, as Fox *et al* (2013) point out, the use of the simple components of a differential white cell count to improve risk stratification in randomised trials is of considerable interest, as these (at the least a white cell and neutrophil count, Proctor *et al*, 2012) are routinely recorded in almost all oncology trials. Therefore, there is a wealth of randomised trial data available for *post-hoc* analysis to confirm the clinical utility of such an approach.

The work of Fox *et al* (2013) should encourage further *post-hoc* analysis of the systemic inflammatory response and outcome not only in randomised trials of renal cancer but also in all oncology trials. Such work will be key to our better understanding of the relationship between cancer, inflammation and outcome in patients with cancer.

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