This compact volume of short reviews is divided into themes of receptors, intracellular pathways and transcription factors, with two short final chapters covering cell death pathways. The timeframe required to publish books such as this means that most chapters do not include references beyond 2001, although a couple do include 2002 manuscripts. Perhaps acknowledging the rapid pace of change of this field, the book’s cost has not been burdened by expensive colour plates and the large number of cartoon diagrams of signalling pathways are all black and white.

The chapters of the book, written by experts and by younger researchers in the field, are not interlinked, therefore the short index where major tumour types and signalling molecules can be cross-referenced is a useful addition. As readers such as the reviewer are likely to be familiar with only a proportion of the subject areas, the number of typographical errors that affect the accuracy of the text is important. In screening the chapter on the steroid hormone receptors, by Shinta Cheng and Steven Balk (Harvard Medical School), several errors where ERβ was written as ERα or ER_ were noted. The number of errors identified in this and in other chapters should serve as a caution to students or researchers using the textbook as a principle source for lectures or research.

Although it is not possible to provide critiques on all chapters of the book, it is worth highlighting the different approaches by authors of each of the chapters, which make the book an interesting read. The role of the Rb tumor suppressor in cancer by Lili Yamasaki, begins with a short history of the discovery of the Rb gene, then summarises the basic structure of pRb family members and the upstream regulators and downstream effectors of Rb. A most useful part of the chapter as a resource for scientific learning, is the summary of mutant mouse phenotypes that either involve or have shed light on the function of this pathway.

In contrast, the chapter on the steroid hormone receptors summarises the oestrogen receptor (ER) in breast cancers and the androgen receptor (AR) in prostate cancers as illustrations of the subject area. The chapter briefly covers ER and AR expression in normal and malignant breast and prostate (respectively), receptor structure, transcriptional modulators (activators and repressors) of the receptors and other proteins and pathways that can regulate steroid hormone receptor activation. This in particular ties in well with other chapters of the book that describe these pathways. The chapter ends with short summaries of mutations in ERα and AR in breast and prostate cancers.

While the chapters in this book are necessarily brief, all are extensively referenced and most authors have included historical as well as more recent references. Thus this book is an excellent summary of important signalling pathways in cancer that will be useful for students and researchers. It will serve as a resource for general and specialised knowledge regarding these pathways as well as a platform for more detailed research.

J Bentel
Royal Perth Hospital
Perth, WA