The growth and spread of cancer cells to other organs is a complex, multistage process that requires cell proliferation, disaggregation of tumour cells and formation of new capillary vessels for continued growth as well as for detached tumour cells to enter the circulatory system to settle and grow in distant sites. Tumour growth and metastases are influenced by growth factors and cytokines, and a thorough understanding of their normal physiological roles as well as their actions in cancer cell behaviour should therefore underpin attempts to develop new treatments for cancer.

This book is a compilation of reviews by experts providing comprehensive coverage of the growth factors, cytokines and their receptors that are relevant to cancer. The range of topics is broad, and includes chapters on growth factors such as leukemia inhibitory factor, insulin-like growth factor I, TGFβ, fibroblast growth factor, hepatic growth, platelet-derived growth factor and their respective cognate receptors. The cytokines interleukins 2 and 11 as well angiogenic factors interleukin 8 and VEGF are also included. Gene therapy of prostate cancer with interleukin 12 is discussed as well as treatment of tumour invasion with the hepatic growth factor antagonist, NK4.

Each review focuses on the normal physiological roles of a particular factor, its receptor and their relevance to cancer growth, tumour invasion and metastases. The chapters are well-written, easy-to-read, current and extremely well-referenced. They enable the reader to access original articles and pursue in depth any particular topic or aspect of a molecule's function. The basic concepts are clearly explained, providing a rapid, yet comprehensive introduction to each subject.

I found the chapters on leukemia inhibitory factor, interleukin 2, interleukin 12, IGF-1 and TGFβ particularly useful, and this collection of reviews is rounded up nicely by the excellent last chapter on growth factors, receptors and cell adhesion complexes in cytoskeletal assembly.

This book should be compulsory reading for any investigator, undergraduate or postgraduate seeking knowledge about, or pursuing research into, cancer. The breadth and depth of each topic is outstanding.

K Ng
Dept of Medicine, St Vincent’s Hospital
Fitzroy, Vic