



Foreword

New hope for patients with non-small-cell lung cancer:
gefitinib ('Iressa', ZD1839) and other innovative therapies

Glenwood Goss

Ottawa Regional Cancer Centre, University of Ottawa, Ottawa, Canada

Recent advances in our understanding of the biological processes underlying tumour growth and progression have revolutionised the whole field of cancer research. Identification of new targets has led to the development of novel biological agents including those that target the epidermal growth factor receptor (EGFR), tumour vasculature, angiogenesis or signal transduction pathways. Clinical studies with a number of these agents have confirmed that the preclinical potential of biologically targeted therapies can translate into clinical benefit.

In the first of the reviews in this supplement, *Catherine Wheeler* describes a number of novel agents that are currently under development by AstraZeneca. These agents demonstrate the range of different approaches that are being assessed as anticancer therapy including the use of anti-angiogenic agents and vascular-targeting agents to target the blood supply of the tumour, inhibitors of the signal transduction modulator Src kinase, farnesyl transferase inhibitors that have antiproliferative effects, and cyclin-dependent-kinase inhibitors that induce cell cycle arrest and tumour cell apoptosis.

The other reviews in this supplement focus on the EGFR as a target for cancer therapy and, in particular, the role of the EGFR tyrosine kinase inhibitor gefitinib ('Iressa', ZD1839) in the treatment of non-small-cell lung cancer (NSCLC), a debilitating disease that has seen only minimal treatment advances in recent years.

In the first of these EGFR-focused reviews, *Roy Herbst* investigates factors that might predict the response to agents such as gefitinib, including biological markers such as EGFR expression, disease characteristics and potential surrogate markers such as skin toxicity. *Thomas Lynch*

reviews the clinical data from two large phase II trials in pretreated patients with advanced NSCLC and also discusses the potential for using gefitinib in combination with chemotherapy. He touches on the wealth of clinical data that is available from the Expanded Access Programme (EAP), which allows gefitinib to be given on a compassionate-use basis to patients with no other treatment options. *Peter Harper* examines the role of gefitinib in improving symptoms and quality of life (QoL) in patients with advanced NSCLC, and discusses how symptom improvement correlates with other meaningful treatment outcomes such as objective tumour response, performance status and median survival. Finally, we present a number of case studies from the EAP to demonstrate the antitumour activity and improvement in disease-related symptoms and QoL that gefitinib can have in individual patients with a range of clinical characteristics, including brain and bone metastases, poor performance status, advanced age and different prior exposure to chemotherapy.

In conclusion, the data presented here demonstrate the clinical benefits of gefitinib in the treatment of NSCLC and the great potential of novel biologically targeted agents as anticancer therapy. Clinical trials are now warranted to determine in what clinical settings these agents will provide the optimum benefit. These should be designed to assess novel combinations and schedules, determine whether these agents can play a role in early stage disease or even in chemoprevention and characterise the best responders so that treatments can be tailored to individual patients.