EDITORIAL

To the Readers and Future Authors of *Critical Reviews in Oncogenesis*

We have with enthusiasm taken the challenge from Begell House, the publisher, to reintroduce *Critical Reviews in Oncogenesis* (CRO) to an audience of scientists, students, and health personnel. The last issue of CRO was published in 2000, and the following year, the first draft of the human genome sequence was published.[1,2] Those latter publications are among the most important ones following the identification of the DNA helix more than 50 years ago.[3] The biological breakthroughs, combined with the tremendous technological developments, state that modern biomedical research and advanced medicine are truly dependent on competences across sciences. With this in mind, we believe that the new CRO should attempt to grasp the interest of a broad range of readers, from those dedicated to cancer research to those with educational interests, or with the wish to be updated in the latest research and to obtain easily accessible overviews of cancer relevant themes. We will seek to cover basic research, translational, and clinical issues, as well as epidemiological studies, all of which are cornerstones in any comprehensive cancer center.

In this first issue, we present six review articles covering a broad range of aspects of cancer science. The article by Mesquita et al., beginning on page 3,[4] reviews the interesting topic of tissue transdifferentiation with focus on a naturally occurring process —gastric intestinal metaplasia. The authors challenge the conservative textbook definition and provide an update on the molecular regulation mechanisms of this phenomenon. This article reviews a topic of interest to a wide range of sciences, including stem cell research. The challenge of molecular mechanisms explaining complex morphological tissue patterns are also discussed by Torlacovic and Snover, beginning on page 27.[5] These authors present a useful overview of classification of colorectal polyps with emphasis on the spectrum of serrated polyps. The latter is an unfamiliar term to many and is often, and wrongly, included in the subgroup of hyperplastic polyps. The identification of the serrated pathway will not only aid in understanding the tumor etiology, but also have clinical consequences for the patients.

The group of Guldberg from the University of Copenhagen has long experience in mutational analyses in cancers, as well as in other diseases. Their article by Dahl et al., beginning on page 41,[6] provides an in-depth critical review of the benefits and limitations of some of the most used methods for detection of unknown mutations, as well as for diagnostic analyses of known mutations. Germline mutations that predispose individuals to a variable extent of risk to develop breast cancer are summarized in a review on familial breast cancer by Margolin and Lindblom beginning on page 75.[7] This article also covers the clinical implications of gene testing in breast cancer as well as strategies for prevention and treatment. Another clinical challenge for one of the major cancer diseases in the Western world, carcinomas in the large bowel, is dealt with in the article from

0278–940X/06/$35.00

Iacopetta, beginning on page 115.[8] This article focuses on predictive factors that may assist in targeting 5-Fluorouracil treatment to the most responsive colorectal cancer patient groups, of particular importance for early stage disease. Finally, the biology of RNAi, and the now widely used research tool of siRNA technology, are revisited in the article by Størvold and coworkers, beginning on page 127.[9] In this review, the use of siRNA for cancer target validation and as a potential strategy for future breast cancer therapy is also discussed.

In addition to critical review articles, CRO is also presenting new Ph.Ds. in the cancer research field. We encourage new Ph.Ds. and their supervisors to send us a short summary of the defended study, by filling out the Ph.D. form and preferably including a comment from a colleague or opponent. In this manner, you may expose your work to an international audience. Knowing that many Ph.D. dissertations are written as monographs, we provide an opportunity to present results not yet published as an article. In this first issue, we present six new candidates, all with dissertations in 2005 and 2006.

The editors and the editorial board members hope you will find the new CRO of interest to you and your institution, and we welcome your suggestions regarding future critical reviews in oncogenesis, submitted directly to the editors or through any board member.

Ragnhild A. Lothe, Rolf I. Skotheim, Olli Kallioniemi, and Manel Esteller
Editors of CRO

REFERENCES

1. Lander ES, Linton LM, Birren B, Nusbaum C, Zody MC, Baldwin J, Devon K, Dewar K, Doyle M, et al. Initial sequencing and analysis of the human genome. Nature. 2001;409(6822):860–921.
2. Venter JC, Adams MD, Myers EW, Li PW, Mural RJ, Sutton GG, Smith HO, Yandell M, Evans CA, et al. The sequence of the human genome. Science. 2001;291(5507):1304–51.
3. Watson JD and Crick FHC. Molecular structure of nucleic acids. Nature. 1953;171:737–8.
4. Mesquita P, Almeida R, Lunet N, Reis CA, Silva LFS, Serpa J, van Seuningen I, Barros H, and David L (2006). Metaplasia - A transdifferentiation process that facilitates cancer development. The model of gastric intestinal metaplasia. Crit Rev Oncogenesis. 12(1-2):3–26.
5. Torlakovic E and Snover DC (2006). Sessile serrated adenoma: a brief history and current status. Crit Rev Oncogenesis. 12(1-2):27–39
6. Dahl C, Ralfkiaer U, and Guldberg P (2006). Methods for detection of subtle mutations in cancer genomes. Crit Rev Oncogenesis. 12(1-2):41–74.
7. Margolin S and Lindblom A (2006). Familial breast cancer, underlying genes and clinical implications—a review. Crit Rev Oncogenesis. 12(1-2):75-113
8. Iacopetta B (2006). Methyl-group metabolism and the response of colorectal cancer to 5-Fluorouracil. Crit Rev Oncogenesis. 12(1-2):115–26.
9. Størvold GL, Andersen TI, Perou CM, and Frengen E (2006). siRNA, a potential tool for future breast cancer therapy? Crit Rev Oncogenesis. 12(1-2):127–51.