Cancer Control
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Ten Best Readings Relating to Targeted Cancer Treatment

Chris Garrett, MD

From the Gastrointestinal Tumor Program at the H. Lee Moffitt Cancer Center & Research Institute, Tampa, Florida.

Slamon DJ. The future of ErbB-1 and ErbB-2 pathway inhibition in breast cancer: targeting multiple receptors. *Oncologist*. 2004;9(suppl 3):1-3.

This review examines two receptors of the Erb family and argues that future anticancer strategies will have to be developed targeting multiple growth factor pathways.

Mendelsohn J, Baselga J. The EGF receptor family as targets for cancer therapy. *Oncogene*. 2000;19:6550-6565.

The cell surface epidermal growth factor receptor is frequently overexpressed in cancer tissues. The authors describe the basic biology of these receptors and the fact that they can be exploited for therapeutic benefit.

Ferrara N. Vascular endothelial growth factor: basic science and clinical progress. *Endocr Rev*. 2004;25: 581-611.

The biological and clinical implications of one of the most important mediators of tumor angiogenesis, the vascular endothelial growth factor (VEGF), are reviewed by a leader in the field of VEGF research.

Duensing A, Medeiros F, McConarty B, et al. Mechanisms of oncogenic KIT signal transduction in primary gastrointestinal stromal tumors (GISTs). *Oncogene*. 2004;23:3999-4006.

The mechanism whereby the kit receptor leads to cellular proliferation explains the remarkable efficacy of kit receptor tyrosine kinase inhibitors in these rare solid tumors and may provide a better understanding of how mechanisms of resistance develop.

Richardson PG, Hideshima T, Mitsiades C, et al. Proteasome inhibition in hematologic malignancies. *Ann Med*. 2004;36:304-314.

Inhibition of subcellular organelles such as proteasomes has led to a therapeutic breakthrough in multiple myeloma. This article reviews the potential this therapy has for hematologic malignancies.

Smith MR. Rituximab (monoclonal anti-CD20 antibody): mechanisms of action and resistance. *Oncogene*. 2003;22:7359-7368.

The mechanism whereby the monoclonal antibody rituximab exerts its therapeutic effect in the treatment of lymphomas is not fully understood.

Rowinsky EK. Targeting the molecular target of rapamycin (mTOR). *Curr Opin Oncol*. 2004;16:564-575.

Potential targets, such as the mammalian target of rapamycin (mTOR), may prove to be effective anticancer strategies.

Druker BJ. Imatinib as a paradigm of targeted therapies. *Adv Cancer Res*. 2004;91:1-30.

The remarkable efficacy of imatinib mesylate in chronic leukemias and in solid tumors (gastrointestinal stromal tumors) serves as a model for strategies for future anticancer research.

Verweij J. KIT and PDGF as targets. *Cancer Treat Res*. 2004;120:117-27.

This article reviews the potential for both KIT and platelet-derived growth factor as targets for novel anticancer therapies.

Hernandez MC, Knox SJ. Radiobiology of radioimmunotherapy: targeting CD20 B-cell antigen in non-Hodgkin's lymphoma. *Int J Radiat Oncol Biol Phys*. 2004;59:1274-1287.

Radioimmunotherapy allows for the more precise delivery of radiotherapy and has widespread potential applications in the field of solid tumor research. The current state of knowledge, and its effectiveness in non-Hodgkin's lymphoma are reviewed in this comprehensive article.