

# **Papers based on oral presentations at the Symposium: Applications of Recombinant Human Erythropoietin in Cancer Patients**

**Florence, Italy, October 29, 1991**

## **Introduction**

CANCER IS a prevalent cause of morbidity and mortality. Anaemia in cancer patients often becomes a major problem, one that requires substantially more effective intervention than presently exists. The anaemia of cancer presents a difficult problem in part because it may arise from one or more of many factors that include direct invasion of the bone marrow, toxicity from chemo- and radiotherapies, and nutritional deficiencies.

Blood transfusion, which has been the standard method for treating anaemia in these patients, is not a satisfactory solution. Donors are becoming increasingly scarce. As for recipients, the fear of contracting a serious infectious disease, especially AIDS, from transfused blood has made this therapy unacceptable to a substantial and continually growing proportion of patients. There is also increasing evidence that allogeneic blood transfusion can cause recurrence and metastasis of the malignancy.

Recombinant human erythropoietin (r-HuEPO) has already proven to be of great value in the treatment of anaemia due to renal failure. In theory it would also appear to hold promise in treating the often multifactorial anaemia of cancer. Its efficacy, along with identification of factors that maximize it, are currently being studied.

This symposium is intended to share the results of recent exploratory studies—some still in progress—that are expected to shed light on the value of r-HuEPO in treating the anaemia of cancer, and help determine whether this biological agent is of equal efficacy in all such patients or whether there are qualifying characteristics that make it more effective in some patients than in others. These studies assess efficacy in cancer patients relative to different types of treatment regimens and to different haematological cancers and solid tumours, and they explore the potential value of r-HuEPO in preventing or reducing the risks of infection and haemorrhage following autologous bone marrow transplantation.

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