J.V. Melo · J.M. Goldman

Hematologic Malignancies: Myeloproliferative Disorders

With 69 Figures and 52 Tables

Springer

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Preface

"*…To put together such apparently dissimilar diseases as chronic granulocytic leukemia, polycythemia, myeloid metaplasia and diGuglielmos's syndrome may conceivably be without foundation, but for the moment at least, this may prove useful and even productive. What more can one ask of a theory?*"

So ended the editorial entitled "Some Speculations on the Myeloproliferative Syndomes" published in Blood in 1951 by the journal editor, William Dameshek. He speculated that these various conditions, which he had termed "myeloproliferative," were all somewhat variable manifestations of proliferative activity of the bone marrow cells, perhaps due to "a hitherto undiscovered stimulus." More than half a century later, Dameshek would probably have been pleased to learn that much has been learned about the cellular defects that cause these various disorders and that the term he coined has survived more or less intact. True, research focuses today as much on genetic abnormalities intrinsic in the clonal populations as on the dysregulation of cytokines or other stimulatory factors that contribute to features of these different diseases. However, in general his grouping of seemingly disparate diseases has stood the test of time. Chronic granulocytic leukemia has been renamed chronic myeloid leukemia or chronic myelogenous leukemia, and myeloid metaplasia is now idiopathic myelofibrosis – semantics only. On the other hand, erythroleukemia (diGuglielmos's syndrome) is now more usually classified as a form of acute leukemia, and the remaining myeloproliferative disorders are often referred to as the *chronic* myeloproliferative disorders, perhaps to distinguish them from the acute myeloid leukemias. One problem remains: Is chronic myeloid leukemia correctly included in this category of disease? For the purposes of this book we have elected to say that it is, though others might disagree.

We believe that recent advances in understanding the molecular and cellular biology of these disorders, taken in conjunction with the remarkable progress in treatment makes, this book especially timely. It would not be appropriate to attempt to summarize here all these advances, but clearly the gradual unraveling of the molecular basis of CML which led to the development and eventual clinical use of imatinib, all documented by various authors in this book, will come to be recognized as one of the great landmarks in the history of malignant disease. Many hope, not without good reason, that it may prove to be the model on which progress in understanding and treating other malignant hematological disorders and indeed solid tumors can be based. The major redirection of research efforts, both academic and pharmaceutical, bears eloquent testimony to this not unreasonable belief.

We do not regard this book as targeted to any particular audience. We believe it should be of interest to medical students who find the specialty of hematology truly fascinating, as we ourselves did some years ago and still do. We hope it will also attract the interest of established basic researchers and accredited hematologists, because we have stressed to our authors the need to up-date their stories to 2006, and this they have done. To many people who are no longer students but not yet established clinicians or scientists, this book should also appeal and, hopefully, be an inspiration for joining the

teams of doctors and scientists who strive to understand the origins of the myeloproliferative disorders and to exploit the opportunities for improving therapy still further.

Finally, we are especially grateful to our authors who contributed excellent chapters – mostly on time – and who serenely accepted our detailed requests in some cases for further expansion or clarification of their manuscripts. We thank also our publishers for what in the end turned out to be an amazingly painless transition from manuscript to book.

London, July 2006

Junia V. Melo
John M. Goldman

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