Preface

On April 25, 1953, 58 years ago, JD Watson and FHC Crick published their article entitled "A Structure for Deoxyribose Nucleic Acid" in the journal *Nature*. This article has been cited for its brevity, only 1 page and 1 diagram. The impact of this article cannot be fully measured, but it is safe to suggest that recombinant DNA biopharmaceuticals, such as recombinant human granulocyte colony-stimulating factor (rmet-HuG-CSF), would not be available today without the basic knowledge of DNA structure.

A quick search of PubMed suggests that no articles had been published on the topic of rmet-HuG-CSF or even G-CSF as of 1953. Forward to April 2011 and a quick search of PubMed cites 31,965 articles tagged to "G-CSF," 1,753 tagged to "filgrastim," 350 tagged to "pegfilgrastim," 295 tagged to "lenograstim," and 13 tagged to "biosimilar filgrastim."

We have come a long way in 58 years since the publication of the proposed structure of DNA and further since the first approval of filgrastim by the US Food and Drug Administration in 1991 for the treatment of patients with chemotherapy-induced neutropenia. In the intervening 20 years since this first marketing approval, countless patients worldwide have been treated with a recombinant form of G-CSF for the treatment of chemotherapy-induced neutropenia; severe chronic neutropenia; neutropenia due to disease; to mobilize peripheral blood stem cells for transplantation, either autologous or allogenic; and for bone marrow recovery after bone marrow or stem cell transplantation, to name a few. rmet-HuG-CSF has been tried in the treatment of infections, diabetic foot ulcers, neonatal sepsis, and community-acquired pneumonia.

In almost all settings, it can be said that rmet-HuG-CSF ameliorated neutropenia, increased neutrophil counts, reduced the need for intravenous antibiotics, and/or reduced the need or duration for hospitalization. Thus, it is appropriate to celebrate 20 years of research and therapy with rmet-HuG-CSF.

The authors of several chapters are some of the early clinical investigators of rmet-HuG-CSF and staff of Amgen, which manufactures filgrastim and pegfilgrastim. The editors have allowed information in chapters to provide various

perspectives on topics. We are hopeful that readers will find the presentations varied but balanced.

The editors have tried to obtain the necessary permissions and authorizations before publication, and great care has been exercised in the preparation of this volume. Nevertheless, errors cannot always be avoided. The editors, their employers or companies, and the publisher cannot accept responsibility for any errors or omissions that inadvertently occurred. The views and opinions expressed in the book are those of the participating individuals and do not reflect the views of the editors, the publisher, Amgen Inc., or any other manufacturer of pharmaceutical products named herein. The current package insert should be consulted before any pharmaceutical product is administered.

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