
Preface

Among the truly great success stories of modern medicine are the striking improvements in survival and cure rates for children with acute leukemia during the past 4–5 decades. This is particularly, but no longer exclusively, true for acute lymphoblastic leukemia (ALL). Although improvements in supportive care have clearly contributed to this success in both ALL and acute myeloid leukemia (AML), the improvements have largely resulted from specific refinements in anti-leukemia therapy and enhanced biological insights into these diseases. Although definitive mechanisms of causation remain elusive, they are far less so. Genomic interrogation of the leukemias, both the leukemia cell and the affected host, has and will continue to yield much useful insight as to molecular etiology as the technology improves. Such findings have enormous potential for therapeutic exploitation and hopefully, through investigation of gene-environment relationships, provide important information for the generation of risk prevention strategies.

The final common pathway for translating scientific discovery to clinical application is through clinical research and the conduct of controlled clinical trials, ultimately resulting in continually improved standards of care. It has been an honor and immeasurable source of gratification to have played a small role in this success. Despite the success, we remain resolute in advancing science to fight this battle for as long as we are able and until such time that cure is a reality for every child with leukemia.

We are enormously indebted to our legendary teachers and mentors as well as to numerous wonderful colleagues in basic, clinical, statistical, and epidemiologic research, many of whom have contributed to this project. In addition to our scientific colleagues as collaborators, clinical research would be impossible without the effective and essential partnership of patients and families impacted by leukemia who are willing participants in clinical trials. Many have directly benefitted as a result of their participation, and many more have unselfishly contributed to knowledge which has only helped those who have followed them. It is to all of these children and families that we humbly and thankfully dedicate this book.

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