

# Preface

The field of HIV-associated cancer has undergone a number of changes and advances in the past several years, and this book was conceived to fill the need for a resource that summarizes this new information. The 28 chapters describe the current state of knowledge in this area. These chapters were written by some of the most renowned experts in this field, and they cover a wide array of topics, including epidemiology, pathogenesis, clinical manifestations, and treatment.

From the earliest days of the AIDS epidemic, it was evident that cancer was a major part of this new disease—many of the patients had Kaposi sarcoma or aggressive lymphomas, which along with cervical cancer were called “AIDS-defining.” For reasons that were not well understood, only certain tumors seemed associated with AIDS, and most developed in patients who were profoundly immunosuppressed. Since that time, our understanding of HIV-associated cancers has increased dramatically. With the discovery of Kaposi sarcoma-associated herpesvirus and its identification as the cause of Kaposi sarcoma, it became apparent that many AIDS-associated cancers are caused by other viruses. In addition, we have seen dramatic changes in the AIDS epidemic itself. The development of highly active antiretroviral therapy (HAART), also called combination antiretroviral therapy (cART), around 1996 profoundly changed AIDS from a death sentence to a treatable disease. Patients had dramatic improvements in their immune function, and the incidence of AIDS-associated tumors decreased. In fact, there was a sense that HIV-associated cancer was no longer a major problem. Nothing could be further from the truth. With the introduction of HAART, people with AIDS started living longer. Along with this, the number of persons living with AIDS has increased, and this population in general has gotten older. With these changes in the epidemic, the scope of HIV-associated tumors has changed. In addition to the more classic AIDS-defining tumors, patients with HIV infection are now developing more HIV-associated tumors, such as lung cancer, anal cancer, Hodgkin disease, and liver cancer. The factors causing the increase in these tumors vary, and each cancer is its own unique story. Also, as HIV-infected patients are less likely to die of AIDS-associated opportunistic infections or AIDS, cancer is now becoming a leading cause of death in this population. The story of HIV-associated cancers is somewhat different in the

developing world, and especially in sub-Saharan Africa. Many of the cancers associated with AIDS, such as Kaposi sarcoma, were common in sub-Saharan Africa even before the AIDS epidemic, and fueled by HIV, several of these cancers are among the most common in this region and pose substantial public health challenges. Also, patients in this region are susceptible to a number of uncommon HIV-associated cancers not often seen in the USA or other more developed countries.

Along with this evolution of the epidemic and increased awareness of HIV-associated cancers in sub-Saharan Africa, there has been a dramatic increase in our knowledge about and understanding of these tumors. Even so, a number of challenges remain, and better means to prevent, diagnose, and treat these tumors are urgently needed. With this backdrop, it is timely to present a book summarizing the current state of information about HIV-associated tumors. This project grew out the *Springer Encyclopedia of AIDS*, in which I edited the section on Opportunistic Malignancies. As I organized this section, it soon became apparent that a separate book covering this material would be of value and that the authors who contributed to the Encyclopedia were the best to pull this effort together. The space in the *Encyclopedia* was limited, and for the book, each contributor was given the opportunity to expand and update their contribution and to increase the number of references as they saw fit. This book is the result of that effort.

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