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Malignant Mesothelioma



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Editor

Prof. Andrea Tannapfel
Institut für Pathologie
Ruhr-Universität Bochum
BG Kliniken Bergmannsheil
Bürke-de-la-Camp Platz 1
44789 Bochum, Germany
andrea.tannapfel@ruhr-uni-bochum.de

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Preface

Malignant mesothelioma is a rare and aggressive tumor arising from the mesothelium. Pleural, peritoneal, and pericardial mesothelioma are possible entities according to the site of origin.

Diffuse malignant mesothelioma is strongly associated with exposure to asbestos and was first referred by Selikoff in 1965 as a “signal tumor” because of its close association with occupational and environmental exposure to asbestos.

There is a clear positive correlation between historical asbestos exposure and deaths caused by mesothelioma. Approximately, 2500 patients in the United States of America and 1000 patients in Germany annually are diagnosed with malignant mesothelioma. The incidence peak of mesothelioma will be reached in the next 10–20 years due to the extended latency period of about 30–40 years or more after exposure.

This issue of “Recent Results in Cancer Research” – Malignant Mesothelioma – is a comprehensive compilation of all topics related to asbestos and mesothelioma, written by well-known experts in their fields.

We intend to provide a broad overview of mineralogy of asbestos, analysis for lung tissue fiber content, and epidemiology of this disease.

The book also refers to all new diagnostic pathways like imaging, pathohistological as well as molecular approaches, genetic and molecular biological characteristics, and potential use of biomarkers for screening of mesothelioma.

Recent developments and novel approaches in surgery, chemotherapy, and radiotherapy of malignant mesothelioma are outlined by experts in this field.

The chapter about mineralogy of asbestos emphasizes the pivotal role of different physicochemical and biological features of chrysotile and amphibole asbestos for understanding the different hazards of exposure.

An outstanding team of international leading experts have contributed to this book. It is addressed to oncologists, radiologists, thoracic surgeons, pathologists, and pulmonologists with the intention to provide a scientific-based up-to-date view on mesothelioma research, diagnosis, and therapy strategies. A comprehensive understanding of all aspects of this disease will be the foundation to perform successful future laboratory research and clinical studies.

Andrea Tannapfel
Volker Neumann

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