

Preface

The skin is one of the largest organs of our body and is continuously exposed to a variety of external stimuli, such as bacteria, viruses, fungi, ultraviolet light, chemicals, dryness, haptens, and protein antigens. Thus, the skin is an important barrier between the living organism and its environment to maintain our homeostasis. Defending physically against external stimuli, the skin is also an immunological defense.

The immune capacity of the skin involves several cell types: Langerhans cells, dermal dendritic cells, T cells, endothelial cells, keratinocytes, mast cells, basophils, and other cells, all of which participate under certain circumstances in a harmonious manner. Thus, the concept of skin-associated lymphoid tissue (SALT) was proposed in the early 1980s. As a result of immune responses to external stimuli, several inflammatory skin diseases are induced. Therefore, understanding the skin immune responses is essential not only to basic scientists including immunologists but also to clinicians, such as allergologists and dermatologists.

For this book, I prepared two major parts: I. Components of Skin Immune Cells, and II. Immune Systems in the Skin. This thematic division will make the book easily understood by readers. In addition, I have tried to cover each topic in full detail, which will lead to a better, comprehensive understanding of the skin and skin diseases.

To provide a readable and informative presentation, I chose world-renowned authors in each field. I am very glad that they agreed to write their chapters despite their crowded schedules. I hope that this book will be useful to understand the subject of immunology of the skin.

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