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Preface

In the last decades, in vivo and in vitro studies have demonstrated the existence of a complex and bidirectional network between the immune, nervous, and endocrine systems. Thymus, brain, and the hypothalamic–pituitary system play a pivotal role in the processing, modulation, integration, and regulation of immune (both innate and acquired systems)-neuro-endocrine responses, which, in turn, influence immune tolerance, course of transmissible infections, inflammatory, and neoplastic diseases. More recently, dopamine agonists (D2) have been demonstrated to be efficacious in the treatment of some systemic autoimmune diseases associated with hyperprolactinemia, thus highlighting the importance of hormones in the regulation of the immune system function, in both health and disease.

This volume provides an authoritative and comprehensive update on the genetic and molecular mechanisms underlying the physiological interplay between neuroendocrine and immune systems, and some illustrative examples of altered immune function associated with infectious and neoplastic diseases. Therefore, it is primarily addressed to clinicians and basic scientists working in the field of endocrinology and immunology, but could be also useful for internists and general practitioners.

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