According to the most updated epidemiological studies, cardiovascular disease remains a leading cause of death; in fact, despite substantial advances in the care of patients, the incidence of cardiovascular disorders continues to increase. Therefore, the search for novel mechanisms and therapeutics is desperately needed, and translational studies represent the best strategy to uncover novel therapeutic targets, reduce mortality, and improve the quality of life. This book gathers original articles and systematic reviews that have both a strong basic research background and clear translational potential. All the studies have been peer reviewed by at least two experts in the field. These contributions provide an updated systematic overview that examines, in detail, the mechanisms of the main cardiovascular and metabolic disorders, including ischemic and non-ischemic heart failure, hypertension, thromboembolism, atherosclerosis, stroke, diabetes mellitus, dyslipidemia, metabolic syndrome, valvulopathies, peripheral artery disease. In the final chapter, the functional role of the endothelium in the systemic manifestations of COVID-19 is described.
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