

Title of the Thematic Issue: Molecular Pathology and Molecular Therapy of Major Chronic Disease

Guest Editors: Gregory T. MacLennan

• **Scope of the Thematic Issue:**

Major chronic diseases are the most cause of killers in the modern era. For example, cancer and cardiovascular disease pose the highest clinical, social, and economic burden in terms of cause-specific Disability-Adjusted Life Years among all human diseases. Although some achievements have been made in the molecular pathology and treatment of chronic diseases, new pathological mechanisms and treatment methods should be further explored and studied in order to find new breakthroughs in the prevention and treatment of chronic diseases so as to effectively reduce the incidence and mortality rate, and find the effective treatment measures for chronic disease. The Research Topic will focus on the Molecular pathology and molecular therapy of cancer and cardiovascular disease.

The major characteristics of chronic diseases such as cancer and cardiovascular disease include insidious onset, long duration, and hardship of cure, which are almost derived from the molecular complexity and heterogeneity in their pathogenesis. The Research Topic is devoted to the systematic study of the function and underlying mechanisms of potential diagnosis and therapy targets that could be applied in the early diagnosis and rational treatment. As there is a new breakthrough both in theory and technique, the aim of the Research Topic is also to promote the new emerged therapies such as molecular pathology, immunotherapy, photothermal therapy based on nanoparticle platform, gene therapy, etc., which may overcome the long duration and relapse of major chronic diseases. Furthermore, prevention is an effective and economical way to control chronic diseases. The Research Topic will also encourage the discussion of prevention strategies and elucidation of the underlying mechanisms. The Research Topic promotes the exchange of ideas, concepts, and findings in any area of cancer and cardiovascular diseases from a molecular point of view.

Keywords: Molecular pathology, molecular therapy, major chronic diseases, cancer, cardiovascular biology, cardiovascular diseases, immunotherapy

Sub-topics:

- Cancer and cardiovascular biology;
- Animal models;
- Immunotherapy in carcinoma and cardiovascular diseases;
- The function of stem cells in carcinoma and cardiovascular diseases;
- Apoptosis, autophagy, and ferroptosis in carcinoma and cardiovascular diseases;
- Molecular epidemiology of carcinoma and cardiovascular diseases etc.

Tentative titles of the articles

01- Molecular Pathology of Hepatic Neoplasms: Classification and Clinical Significance

02- Molecular Abnormalities Underlying Bone Fragility in Chronic Kidney Disease
Masafumi Fukagawa

03- The Molecular Pathology and Clinical Impact of HBV Genetic Variability

04- Effects of Long-Term Statin Therapy in Coronary Artery Disease Patients with or without Chronic Kidney Disease

05- Pulmonary Rehabilitation: The Reference Therapy for Undernourished Patients with Chronic Obstructive Pulmonary Disease

06- Outpatient Antibiotic Therapy and Short Term Mortality in Elderly Patients with Chronic Obstructive Pulmonary Disease

07- Current Knowledge and Recent Advances of Right Ventricular Molecular Biology and Metabolism from Congenital Heart Disease to Chronic Pulmonary Hypertension

Schedule:

✧ Thematic issue submission deadline: 2023/7/31

Contacts:

Guest Editor Name: Gregory T. MacLennan

Affiliation: School of Medicine, Case Western Reserve University, Cleveland OH 44106, USA

Email: gregory-maclennan@case.edu