

Special Issue

Advances in Estrogen Therapy for CNS Diseases

Message from the Guest Editor

The beneficial effects of estrogens in central nervous system (CNS) diseases include, among others, their antioxidant and DNA repair promoting activities, promoting the expression of growth factors, stimulating neurogenesis and synaptic plasticity, and modulating cerebral perfusion. These mechanisms are vital for maintaining neuronal survival and counteract the increased risk of cognitive decline and neurodegenerative disorders associated with aging. Many studies show the beneficial effects of estrogen in Alzheimer's disease, Parkinson's disease, and brain ischemia and stroke. In general, estrogens support maintaining good quality of life. This Special Issue will provide an update on our knowledge of estrogen's impact on CNS health and disease, focusing on:

- Brain-selective estrogen(s) and their use in CNS-related neurodegenerative diseases;
- The role of nuclear and/vs membrane estrogen receptors in CNS health and disease;
- The mechanism of estrogen receptor activation without estrogen;
- The mechanism of estrogen receptors in metabolic diseases;
- The post-translational and epigenetic regulation of estrogen signaling;
- The optimal timing of estrogen therapy during menopause.

Guest Editor

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