18th World Congress on **Structural Biology** September 28, 2022 | Webinar

Volume: 15

Melatonin and its mechanism of action in the female reproductive system and related malignancies

Maryam Ezzati

Maryam Ezzati

Melatonin (N-acetyl-5-methoxytryptamine), the main product of pineal gland in vertebrates, is well known for its multifunctional role which has great influences on the reproductive system. Recent studies documented that melatonin is a powerful free radical scavenger that affects the reproductive system function and female infertility by MT1 and MT2 receptors. Furthermore, cancer researches indicate the influence of melatonin on the modulation of tumor cell signaling pathways resulting in growth inhibitor of the both in vivo/in vitro models. Cancer adjuvant therapy can also benefit from melatonin through therapeutic impact and decreasing the side effects of radiation and chemotherapy. This article reviews the scientific evidence about the influence of melatonin and its mechanism of action on the fertility potential, physiological alteration, and anticancer efficacy, during experimental and clinical studies.

Biography

Maryam Ezzati is a research medical member working in the department of anatomical sciences, and she is a faculty of medicine at Tabriz University of medical sciences in Iran.

5

Maryamezzati744@gmail.com