Combination Treatments for Powerful Anti-Aging Regimen

M Bala Subrahmnayam

Department of Disease-Biology and Molecular Medicine, SRM University, Chennai, India

EDITORIAL NOTE

Anti-aging medicine has emerged as a new specialization in medical practice at the beginning of 1990s. Over the past few years, it has become an increasingly discussed and debated topic also. The development of anti-aging regimens targeting aging related functional declines and pathological manifestations is now in spot light in geroscience. An exponential growth of research in the field of geriatric pharmacology, including the study of prospective anti-aging drugs, has been observed over the past 20 years. The first step in the process of drug development and discovery is to involve the selection where the drug targets. Anti-aging drugs which are approved by the FDA and other regulatory agencies for treatment of particular conditions, renin-angiotensin aldosterone system inhibitors, thiazolidinediones and anti-inflammatory medications. These classes of drugs are commonly used in the treatment of patients with various chronic medical conditions and their efficacy and safety have been proven in many clinical trials. They have also been shown to improve health, physiological functioning and well-being in middle to old age patients with chronic disorders. Such agents are presently not used in the treatment of age associated physiological dysfunctions in the absence of clinical manifestation of diseases. However, these medications might theoretically be redirected to treating or preventing conditions or syndromes typically associated with aging.

In modern pharmacy anti-aging is likely one of the most prospective markets because the target group can potentially act on another group too. Several supplements such as resveratrol are advertised in the pharmaceutical market as anti-aging pill. Based on this, rapamycin which is approved by FDA is an anti-biotic and immunosuppressant drug. Also, aging is associated with a certain amount of amyloid deposits a drug like melatonin that counter acts in multiple ways the initiation of inflammatory responses and finally may lead to additional anti-inflammatory properties etc. Marketing research demonstrates that most people are willing to pay for long-term pharmacological therapy to prevent or delay the aging related decline in physical and mental functions. Recent sociological surveys show a great desire for extended life and health worldwide. In most of the surveys that are being conducted until now, the life extension was a consequence of an erroneous equation of extended life with a prolonged period of age related functional decline and frailty. Despite the misconception that implementation of anti-aging medicine would increase the proportion of chronic patients in modern societies, would lead to reducing the ratio of unhealthy to healthy people population, since it would may result in delaying the onset of age related pathological conditions. In other words, it may lead to a decrease of biological age (which means old individuals will become biologically younger) and to an increase of the age of disability.

Another note is that any preventive approach to aging pathologies is an anti-aging treatment, whether the etiologies involved generate a broad or a narrow range of pathologies. For example, accidentally if a person had leg injury, went to hospital for treatment which is nothing but making it to normal in the sense is an anti-aging treatment.