

Drug/Drug Family	Primary Indication	Mechanism of Action	Potential Applications for Aging
PPAR modulators	Metabolic disorders like type 2 diabetes and dyslipidemia	They regulate the expression of genes involved in lipid and glucose metabolism, inflammation, and cellular differentiation.	Improved metabolic health, inflammation, and cellular function could contribute to extended healthspan and lifespan.
Endothelin receptor antagonists	Pulmonary arterial hypertension	They block the action of endothelins, potent vasoconstrictors, thereby improving blood pressure and vascular tone.	Improved cardiovascular health and reduced age-related vascular dysfunction could extend healthspan and lifespan.
HDAC inhibitors	Cancer	They modulate gene expression by inhibiting the action of histone deacetylase enzymes, which remove acetyl groups from histone proteins.	Potential effects on cellular senescence, inflammation, and other age-related processes could impact healthspan and lifespan.
Klotho-enhancing agents	Age-related diseases	They increase the levels or activity of klotho, a protein linked to longevity and protection against age-related diseases.	Beneficial effects on healthspan and lifespan by potentially protecting against age-related diseases.
AhR modulators	Various conditions (research stage)	They modulate the activity of the aryl hydrocarbon receptor, a transcription factor involved in xenobiotic metabolism, immune function, and cellular homeostasis.	Influence on immune function and cellular homeostasis could potentially impact healthspan and lifespan.
Sigma-1 receptor agonists	Neurological disorders, depression	They activate sigma-1 receptors, which are involved in cellular processes like calcium signaling, cell survival, and synaptic plasticity.	Improved neurological function, reduced neuroinflammation, and potential extension of healthspan and lifespan.
Beta Blockers	Hypertension, heart conditions	They block the effects of the hormone adrenaline, leading to decreased heart rate and blood pressure.	Potential benefits in cardiovascular health could contribute to extended healthspan and lifespan.
Sildenafil	Erectile dysfunction, pulmonary arterial hypertension	It works by inhibiting an enzyme called phosphodiesterase-5 (PDE5), which results in the dilation of blood vessels.	Potential benefits for cardiovascular health and possibly for aging-related erectile dysfunction.
Urolithin A	None (research stage, supplement)	It is a metabolite produced by gut bacteria that is believed to stimulate mitophagy, the process of recycling damaged mitochondria.	Potential benefits on cellular health by improving mitochondrial function could impact healthspan and lifespan.

White Kidney Bean Extract	Weight loss supplement	It contains a compound that may inhibit the enzyme alpha-amylase, which is responsible for breaking down carbohydrates into sugar.	Potential benefits in weight management and glycemic control could impact healthspan and lifespan.
Zoledronate	Osteoporosis, Paget's disease of bone, bone metastases	It inhibits bone resorption by binding to hydroxyapatite and blocking the osteoclast-mediated bone resorption.	Potential benefits in bone health could contribute to extended healthspan and lifespan, especially considering the risk of age-related bone diseases like osteoporosis.
Deprenyl (Selegiline)	Parkinson's disease, major depressive disorder	It works as a selective monoamine oxidase-B inhibitor, increasing levels of dopamine in the brain to help manage symptoms of Parkinson's disease.	Potential benefits in neurological health and cognitive function could impact healthspan and lifespan, especially considering the risk of age-related neurodegenerative diseases.