Drug/Drug Family	Primary Indication	Mechanism of Action	Potential Applications for Aging
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.
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.
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.
Everolimus	Cancer, organ transplant rejection prevention	It is an mTOR inhibitor which can block a protein called mTOR, used by cells to regulate growth and division.	By inhibiting mTOR, it could potentially slow cellular aging processes, which might impact healthspan and lifespan.
Clonidine	Hypertension, ADHD	It stimulates certain receptors in the brain that result in reduced sympathetic outflow from the central nervous system, leading to a reduction in blood pressure.	Its effects on blood pressure regulation could potentially contribute to cardiovascular health and possibly impact healthspan and lifespan.
<u>Rilmenidine</u>	Hypertension	It is an alpha-2 adrenergic agonist that works by relaxing and widening blood vessels so the heart doesn't have to pump as hard.	It may have potential in managing blood pressure and cardiovascular health, which could contribute to extended healthspan and lifespan.
Fenofibrate	High cholesterol and triglycerides levels	It is a PPAR alpha agonist which reduces levels of triglycerides and "bad" LDL cholesterol in the blood, while increasing levels of "good" HDL cholesterol.	Improved lipid metabolism and reduction in cardiovascular risk factors could potentially impact healthspan and lifespan.
Losartan	Hypertension, diabetic kidney disease	It is an angiotensin II receptor antagonist that blocks the action of angiotensin II, a hormone that causes blood vessels to constrict. It is also known to enhance the expression of the Klotho gene.	Improved cardiovascular health and potential enhancement of Klotho could impact healthspan and lifespan.
Bosentan	Pulmonary arterial hypertension	It is an endothelin receptor antagonist that blocks the action of endothelin, a potent vasoconstrictor, thereby reducing blood pressure and improving blood flow.	Improved cardiovascular health and reduced age-related vascular dysfunction could potentially impact healthspan and lifespan.
Vorinostat	Cutaneous T cell lymphoma	It is a histone deacetylase (HDAC) inhibitor that increases the acetylation of histone proteins, leading to changes in gene expression.	Modulation of gene expression, with potential effects on cellular senescence, inflammation, and other age-related processes, could impact healthspan and lifespan.
<u>CH223191</u>	Research stage, no primary clinical indication	It is an aryl hydrocarbon receptor (AhR) antagonist that inhibits the activity of the AhR, a transcription factor involved in xenobiotic metabolism, immune function, and cellular homeostasis.	Potential influence on immune function and cellular homeostasis could impact healthspan and lifespan.

Cutamesine (SA4503)	Research stage, potential application in depression and neuroprotection	It is a sigma-1 receptor agonist, which is involved in cellular processes like calcium signaling, cell survival, and synaptic plasticity.	Improved neurological function, reduced neuroinflammation, and potential extension of healthspan and lifespan.
Metoprolol	Hypertension, angina, heart failure	It is a beta blocker that works by blocking the effects of the hormone adrenaline, also known as epinephrine. This action decreases heart rate and blood pressure, reducing the workload on the heart.	Potential benefits in cardiovascular health could contribute to extended healthspan and lifespan.
Octreotide	Acromegaly, certain types of tumors (like carcinoid tumors, vasoactive intestinal peptide secreting adenomas)	Octreotide is a somatostatin analogue, which means it mimics the action of somatostatin, a hormone that inhibits the release of several other hormones, including growth hormone, insulin, and glucagon.	Its broad impact on hormone regulation might have potential implications for metabolic health and cellular function, potentially contributing to extended healthspan and lifespan.
Prednisone	Inflammatory diseases (like rheumatoid arthritis, lupus, and severe allergies), certain types of cancer	Prednisone is a corticosteroid that works by decreasing the body's immune response to reduce symptoms such as swelling and allergic-type reactions.	Its ability to modulate immune responses could potentially be useful in conditions associated with aging where inflammation plays a key role. This could potentially have benefits for healthspan and lifespan, particularly in conditions where modulating the immune response might be beneficial.