

# [9. there is no current effective treatment](https://assignbuster.com/9-there-is-no-current-effective-treatment/)

9. Future Research 9. 1 p38 Inhibitor as a Treatment in Werner’s SyndromeAs thereis no current effective treatment to cure WS, many clinical trials andresearches are ongoing. (Bagley, et. al, 2010) stated that genome instability, increasedpro-oxidant state, and frequent replication fork stalling are likely to triggerintracellular stress in WS cells; these also shortened the replicative lifespanwith implicated p38 MAPK signalling.

Researchers have found out that by using p38MAPK inhibitor in collaboration with microwave heating techniques to treat WSfibroblasts revealed an unexpected reversal of the accelerated ageingphenotype. Thus, they have drawn a conclusion that by treating WS with p38inhibition is likely to provide new revelations into biological mechanismsoperating in cellular senescence and human again in the future. 9.

2 Vitamin C as a Treatmentin Werner’s SyndromeAnother future treatment was suggested by (Li, et. al, 2016). Theresearchers have indicated the premature aging in WS mainly affected tissuesderived from mesoderm and affected by WRN-deficient human mesenchymal stemcells (MSCs). They found out that Vitamin C restored in-vivo viability of MSCsin mouse model and reversed many features in premature ageing associated withWS including cell growth arrest, increased reactive oxygen species levels, telomere attrition, excessive secretion of inflammatory factors, as well as thedisorganisation of nuclear lamina and heterochromatin.

They explained thesefindings by RNA sequencing analysis that Vitamin C altered the expression of aseries of genes which involved in DNA replication, cell cycle regulation, chromatin condensation, and DNA repairing process.  Thus, they have drawn a conclusion that VitaminC holds the potential as a future treatment in WS as a rejuvenated factor of WRN-deficienthuman MSCs.