

Use of 8-Galactoside nanoparticles to target senescent cells-A means of senolytics

Syed Urwah-Tul-Wusqa, Qurat-ul-Ain, Shafie Jan, Rayees Ahmad Bhat and Mohammad Iqbal Rather Department of Biochemistry Govt Degree College Kulgam

Abstract:

Senescent cells, responsible for unhealthy ageing and age associated diseases, express high levels of beta-galactosidase. Use of nanoparticles made of a beta-Galactoside loaded with cellular toxin could be used to specifically target senescent cells and hence a regimen for the healthy aging.

Experimental Model:



Model: the picture depicts a senolytics model using a nanoparticle made of β -Galactoside.

Expected Outcome:

Since senescent cells express high levels of Beta-Galactosidase, it is likely that Betathe Galactoside nanoparticle will be broken down in these cells, releasing the toxin and hence causing death of senescent cells specifically.

Conclusion:

"Getting rid of senescent cells is key to healthy ageing. Using this senolytics strategy we expect to develop a therapeutic intervention to different age associated diseases including cancer"!!

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