**Reviewer 1**

This manuscript presents the idea that senolytic drug research should begin to focus on cancer treatment and prevention, and healthy aging of cancer survivors. This is a topic of high interest to Aging Pathobiology and Therapeutics. However, it is being submitted as a review but is not written as a reivew. Instead, this manuscript would be more appropriate, and of high interest, as an Editorial or Letter to the Editor. The format would not need to be changed but this would be a categorical change.

With this in mind, there are several areas of the manucript that need attention.

1. The title is too long and cumbersome. In addtion, using the pronoun “the” for “new direction” implies that current senolytic drug research has not been productive. Suggest using the pronoun “A”. A suggested title would be: “A new direction of senolytic drug research should focus on cancer treatment, prevention, and healthy aging of cancer survivors”.

2. Cellular senescence is defined by in vitro observations. How does this relate to what the authors are emphasizing in regards to in vivo cancer?

3. The subheading titles could be more descriptive

4. The last paragraph in the Senolytics section is difficult to read. It could be broken up into several paragraphs. Also, a table listing each senolytic drug and its characteristics should be added.

**Reviewer 2**

The authors present here a mini-review regarding the use of senolytic drugs for cancer prevention and post cancer treatment.

1. This is an interesting and timely topic, but unfortunately the manuscript has severe shortcomings. It basically consists of a single page describing cellular senescence and another page describing senolytic drugs. Instead of describing the original key publications they concentrate on two overview papers (15 & 16), which provides only a limited insight into the field.
2. The section about senolytics consists mainly of a simple listing of the most popular substances (dasatinib, quercetin, fisetin, navitoclax) and ends quite abruptly. Finally, the conclusion (consisting of four lines) simply states that senolytic drugs will be important for the field of oncological research.
3. There are also several minor points where unclear or descriptions are given. At the top of page four, for instance, the authors state that “anti-apoptotic mechanisms are required to overcome the resistance of aging cells to apoptotic stimuli” where they probably meant “anti-apoptotic mechanisms are involved in the resistance of aging cells to apoptotic stimuli”. In the second paragraph they say “a senolytic drug that has a clear positive effect on this process has not yet been defined”, which is strange since several drugs have extended the lifespan of mice by 20-30%.

In summary this manuscript does not provide any new idea or insight that has not already been described in a much better way in the many excellent reviews of cellular senescence and senolytic drugs that already exist.