groups of genes in response to cell growth signalling. Rtg2, a substrate of TORC1, is a known regulator of the mitochondrial retrograde response[19], associated with ageing, and a subunit of the SLIK complex[19]. Another important subunit of both SAGA and SLIK complexes is Spt7, which is processed by Ubp8 in the context of the SLIK complex only[17,20]. The activity of the SAGA complex is controlled separately by Spt8[15].

Down regulation of TORC1 signalling by an alternative method of caloric restriction has been known to increase longevity in yeast and other organisms via major changes in gene expression[9,10]. However, the mechanisms of such regulation have not been understood and are currently under investigation.

In yeast, mutation of the S6 kinase (Sch9) results in prolonged chronological and replicative lifespan. When the analogous gene is knocked out in mice or *C. elegans* an extension in lifespan is also observed.

In the current invention, the inventors have identified a further factor involved in the control of cellular lifespan and have shown that this has effects on both CLS and RLS.

The inventors have identified that Ydr026c in yeast is essential for sustaining high-order structure in chromatin. This high order structure has been implicated in playing an important role in ageing due to its role in the control of gene expression through epigenetics. This epigenetic control of genes is affected in ageing.

Summary

~~According to a first aspect of t~~The present disclosure~~invention there is~~ provide~~d~~s the use of fujimycin in the manufacture of a medicament for the treatment of an age related disorder.

Preferably, said age related disorder is selected from the group comprising a metabolic disorder; for example, disorders of carbohydrate metabolism (e.g. glycogen storage disease); disorders of amino acid metabolism (e.g. phenylketonuria, glutaric acidemia. etc.); disorders of organic acid metabolism (organic acidurias, e.g. alcaptonuria); disorders of fatty acid oxidation and mitochondrial metabolism (e.g. glutaric acidemia, type 2); disorders of purine and

pyrimidine metabolism (e.g. Lesch-Nyhan syndrome); disorders of mitochondrial function (e.g. Kearns-Sayre syndrome); disorders of peroximal function (e.g. Zellweger syndrome) an inflammatory disorder, cardiovascular disease, diabetes type 1, diabetes type 2, artherosclerosis, Alzheimer's disease, dementia, clinical depression, adipose disorders, including obesity, fat related metabolic disorders, muscular dystrophy, sarcopenia, cachexia and osteoporosis.

In a first aspect of the present disclosure, there is provided a use of fujimycin in the manufacture of a medicament for the treatment of sarcopenia and/or cachexia.

In a second aspect of the present disclosure, there is provided an *ex vivo* method of increasing the chronological and or replicative lifespan of a cell comprising treating said cell with fujimycin.

~~According to a second aspect of t~~The present disclosure also~~invention there is~~ provide~~d~~s a method for increasing the replicative life span of a cell, said method comprising disrupting the function of a gene encoding a polypeptide comprising SEQ ID No: 1, 3 or 5, or a polypeptide having at least 70%, 80%, 90%, 95%, 97%, 98% or 99% identity thereto or a homologue thereof, or a polypeptide differing from SEQ ID NO: 1, 3 or 5 by one or several amino acid additions, deletions or substitutions.

~~According to a third aspect of t~~The present disclosure further~~invention there is~~ provide~~d~~s a method of increasing the chronological lifespan of a cell, said method comprising disrupting the function of a gene encoding a polypeptide comprising SEQ ID No:1 or 3, or a polypeptide having at least 70%, 80%, 90%, 95%, 97%, 98% or 99% identity thereto or a homologue thereof, or a polypeptide differing from SEQ ID NO: 1, 3, or 5 by one or several amino acid additions, deletions or substitutions.

~~According to a fourth aspect of t~~The present disclosure also~~invention there is~~ provide~~d~~s a method of increasing the chronological and/or replicative lifespan of a cell comprising treating said cell with fujimycin.

~~According to a fifth aspect of t~~The present disclosure further~~invention there is~~ provide~~d~~s fujimycin for use in the treatment of an age related disorder.

In one embidoment, preferably, said disorder is related to the chronological and/or replicative life-span of a cell~~,~~.

In a further embodiment, said disorder is selected from the group comprising a metabolic disorder, for example, disorders of carbohydrate metabolism (e.g. glycogen storage disease); disorders of amino acid metabolism (e.g. phenylketonuria, glutaric acidemia. etc.); disorders of organic acid metabolism (organic acidurias, e.g. alcaptonuria); disorders of fatty acid oxidation and mitochondrial metabolism (e.g. glutaric acidemia, type 2); disorders of purine and