Table 1S. GWAS on longevity and aging. PUBMED ID, name of the first author, year of publication, journal, type of trait analyzed, number of sample and population and platform is reported.

PUBMED ID	FIRST AUTHOR	DATE	JOURNAL	STUDY	DISEASE/ TRAIT	INITIAL SAMPLE SIZE	PLATFORM
NA	Yi Zeng	2018	JAMA	Sex Differences in Genetic Associations with Longevity	Longevity	Han Chinese 564/1,614 male/female centenarians and 773/1,526 80 male/female middle-aged controls.	5.6 million SNPs (900,015 genotyped SNPs and 4.8 million imputed SNPs) (Illumina HumanOmniZhongHua-8 BeadChips)
29227965	Pilling	2017	Aging US	Human longevity: 25 genetic loci associated in 389,166 UK biobank participants	Parental longevity [mother's age ≥90 years, father's ≥87 years),]	UK Biobank: 451,447 participants Health and Retirement Study (HRS): 15,708 Wisconsin Longitudinal Study (WLS): 9012	Illumina, Affymetrix, Imputation of 39,235,157 genetic variants
29030599	Joshi PK	2017	Nat Commun	Genome-wide meta-analysis associates HLA-DQA1/DRB1 and LPA and lifestyle factors with human longevity.	Parental lifespan	up to 586,626 European ancestry individuals, up to 19,433 African ancestry individuals	Affymetrix, Illumina [at least 13,643,373] (imputed)
28748955	Mc Daid	2017	Nat Commun	Bayesian association scan reveals loci associated with human lifespan and linked biomarkers	Parental lifespan	116,279 individuals in the UK Biobank	
27816938	Tanaka T	2017	J Gerontol A Biol Sci Med Sci	Genome-wide Association Study of Parental Life Span.	Parental longevity (at least one long-lived parent)	1,140 European American individuals with at least one long-lived parent, 3,894 European American individuals, 137 African American individuals with at least one long-lived parent, 545 African American individuals	Illumina [~ 2,500,000]
27029810	Joshi PK	2016	Nat Commun	Variants near CHRNA3/5 and APOE have age- and sex-related effects on human lifespan.	Parental Lifespan	138,536 British ancestry mothers, 133,545 British ancestry fathers	Affymetrix [73,355,667] (imputed)
27015805	Pilling LC	2016	Aging (Albany NY)	Human longevity is influenced by many genetic variants: evidence from 75,000 UK Biobank participants.	Parental longevity (mother's age at death)	52,776 middle-aged British individuals	Affymetrix [9,658,292] (imputed)
26912274	Zeng Y	2016	Sci Rep	Novel loci and pathways significantly associated with longevity.	Longevity (100 years and older)	2,178 Han Chinese ancestry centenarian cases, 2,299 Han Chinese ancestry middle-age controls	Illumina [5,595,657] (imputed)

26677855	Fortney C	2015	Plos Gen	Genome-Wide Scan Informed by Age-Related Diseases Identifies Loci for Exceptional Human Longevity	Longevity	Discovery: New England Centenarians study (801 centenarians) and 914 controls and 90PLUS (7330 individuals 90 or older and 16121 young controls (age 65 or less)	Illumina [243,980]
25918517	Yashin A	2015	Front Genet	Genetics of aging, health, and survival: dynamic regulation of human longevity related traits.	Lifespan	After applying the QC procedure 1111individuals	Affymetrix [429,783]
25199915	Broer L	2014	J Gerontol A Biol Sci Med Sci	GWAS of Longevity in CHARGE Consortium Confirms APOE and FOXO3 Candidacy.	Longevity (90 years and older)	6,036 European ancestry cases, 3,757 European ancestry controls	Affymetrix, Illumina [2,500,000] (imputed)
24688116	Deelen J	2014	Hum Mol Genet	Genome-wide association meta-analysis of human longevity identifies a novel locus conferring survival beyond 90 years of age.	Longevity (90 years and older)	5,406 European ancestry cases, 15,112 European ancestry controls	Illumina [2,470,825] (imputed)
23286790	Beekman M	2013	Aging Cell	Genome-wide linkage analysis for human longevity: Genetics of Healthy Aging Study	Longevity (90 years and older)	2118 nonagenarian Caucasian sibling pairs	Illumina HumanLinkage-12 Genotyping BeadChip [6,090]
22279548	Sebastiani P	2012	Plos One	Genetic Signatures of Exceptional Longevity in Humans		Discovery 801 subjects enrolled in the New England Centenarian Study (NECS) 95 to 119 years (median age 104 years and 914 genetically matched controls.	
21782286	Walter S	2011	Neurobiol Aging	A genome-wide association study of aging.	Aging (time to death)	25,007 European ancestry individuals	Affymetrix, Illumina [~ 2,500,000] (imputed)
21740922	Nebel A	2011	Mech Ageing Dev	A genome-wide association study confirms APOE as the major gene influencing survival in long-lived individuals.	Longevity	763 European ancestry individuals (mean age=99,7), 1,058 European ancestry individuals (mean age 60,2 years)	Affymetrix [664,472]
21612516	Malovini A	2011	Rejuvenation Res	Association study on long-living individuals from Southern Italy identifies rs10491334 in the CAMKIV gene that regulates	Longevity	Southern Italy 582 individuals (age range 90–109 years) and 784 young control individuals (age range 18–45 years)	Illumina [298,715]

				survival proteins.			
20834067	Yashin AI	2010	Aging (Albany NY)	Joint influence of small-effect genetic variants on human longevity.	Longevity	1,173 individuals (Framingham Heart Study)	NR [~ 550,000]
20304771	Newman AB	2010	J Gerontol A Biol Sci Med Sci	A meta-analysis of four genome-wide association studies of survival to age 90 years or older: the Cohorts for Heart and Aging Research in Genomic Epidemiology Consortium.	Longevity	1,836 European ancestry long-lived individuals (survival to age 90 years or older), 1,955 European ancestry controls (range 55-80 years)	Affymetrix, Illumina [2,287,520] (imputed)
17903295	Lunetta KL	2007	BMC Med Genet	Genetic correlates of longevity and selected age-related phenotypes: a genome-wide association study in the Framingham Study.	Aging (age at death)	1,345 individuals from 330 families (Framingham Heart Study)	Affymetrix [70,897]