

## Publications Stemming From

### The Progeria Research Foundation Cell and Tissue Bank

The Progeria Research Foundation Cell and Tissue Bank has contributed to the following medical publications, categorized by cell line for researcher convenience:

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#### **HGADFN001**

[Age-dependent loss of MMP-3 in Hutchinson-Gilford progeria syndrome.](#)

Harten IA, Zahr RS, Lemire JM, Machan JT, Moses MA, Doiron RJ, Curatolo AS, Rothman FG, Wight TN, Toole BP, Gordon LB. *J Gerontol A Biol Sci Med Sci.* 2011 Nov;66(11):1201-7.

[The mutant form of lamin A that causes Hutchinson-Gilford progeria is a biomarker of cellular aging in human skin.](#)

McClintock D, Ratner D, Lokuge M, Owens DM, Gordon LB, Collins FS, Djabali K. *PLoS One.* 2007 Dec 5;2(12):e1269.

[Hutchinson-Gilford progeria mutant lamin A primarily targets human vascular cells as detected by an anti-Lamin A G608G antibody.](#)

McClintock D, Gordon LB, Djabali K. *Proc Natl Acad Sci U S A.* 2006 Feb 14;103(7):2154-9.

[Aggrecan expression is substantially and abnormally upregulated in Hutchinson-Gilford Progeria Syndrome dermal fibroblasts.](#)

Lemire JM, Patis C, Gordon LB, Sandy JD, Toole BP, Weiss AS. *Mech Ageing Dev.* 2006 Aug;127(8):660-9.

[Rescue of heterochromatin organization in Hutchinson-Gilford progeria by drug treatment.](#)

Columbaro M, Capanni C, Mattioli E, Novelli G, Parnaik VK, Squarzoni S, Maraldi NM, Lattanzi G. *Cell Mol Life Sci.* 2005 Nov;62(22):2669-78.

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature.* 2003 May 15;423(6937):293-8.

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#### **HGADFN003**

[Nuclear Pore Complexes Cluster in Dysmorphic Nuclei of Normal and Progeria Cells during Replicative Senescence.](#)

Röhrl JM, Arnold R, Djabali K. *Cells.* 2021 Jan 14;10(1):153. doi: 10.3390/cells10010153. PMID: 33466669; PMCID: PMC7828780.

[Self-assembly of multi-component mitochondrial nucleoids via phase separation.](#)

Feric M, Demarest TG, Tian J, Croteau DL, Bohr VA, Misteli T. *EMBO J.* 2021 Mar 15;40(6):e107165. doi: 10.15252/embj.2020107165. Epub 2021 Feb 23. PMID: 33619770; PMCID: PMC7957436.

[Inhibition of JAK-STAT Signaling With Baricitinib Reduces Inflammation and Improves Cellular Homeostasis in Progeria Cells](#)

Liu C, Arnold R, Henriques G, Djabali K. *Cells* 2019;8(10):1276. Published 2019 Oct 18. doi:10.3390/cells8101276

[Analysis of Somatic Mutations Identifies Signs of Selection During in Vitro Aging of Primary Dermal Fibroblasts](#)

Narisu N, Rothwell R, Vrtačnik P, et al. *Aging Cell* 2019;18(6):e13010. doi:10.1111/accel.13010

[Transient Introduction of Human Telomerase mRNA Improves Hallmarks of Progeria Cells](#)

Li Y, Zhou G, Bruno IG, et al. *Aging Cell.* 2019;18(4):e12979. doi:10.1111/accel.12979

[Autophagic Removal of Farnesylated Carboxy-Terminal Lamin Peptides](#)

Lu X, Djabali K. *Cells* 2018;7(4):33. Published 2018 Apr 23. doi:10.3390/cells7040033

[Targeting the Phospholipase A2 Receptor Ameliorates Premature Aging Phenotypes](#)

Griveau A, Wiel C, Le Calvé B, et al. *Aging Cell* 2018;17(6):e12835. doi:10.1111/accel.12835

[A Cell-Intrinsic Interferon-like Response Links Replication Stress to Cellular Aging Caused by Progerin.](#)

Kreienkamp R, Graziano S, Coll-Bonfill N, Bedia-Diaz G, Cybulla E, Vindigni A, Dorsett D, Kubben N, Batista LFZ, Gonzalo S. *Cell Rep.* 2018 Feb 20;22(8):2006-2015.

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging (Albany NY).* 2018;10(7):1758-1775. doi:10.18632/aging.101508

[Nucleoplasmic lamins define growth-regulating functions of lamina-associated polypeptide 2 \$\alpha\$  in progeria cells.](#)

Vidak S, Georgiou K, Fichtinger P, Naetar N, Dechat T, Foisner R. *J Cell Sci.* 2017 Dec 28. pii: jcs.208462. doi: 10.1242/jcs.208462. [Epub ahead of print]

[Intermittent treatment with farnesyltransferase inhibitor and sulforaphane improves cellular homeostasis in Hutchinson-Gilford progeria fibroblasts.](#)

Gabriel D, Shafry DD, Gordon LB, Djabali K. *Oncotarget*. 2017 Jul 18;8(39):64809-64826. doi: 10.18632/oncotarget.19363. eCollection 2017 Sep 12.

[Temsirolimus Partially Rescues the Hutchinson-Gilford Progeria Cellular Phenotype.](#)

Gabriel D, Gordon LB, Djabali K. *PLoS One* 2016;11(12):e0168988. Published 2016 Dec 29. doi:10.1371/journal.pone.0168988

[Progerin Impairs Chromosome Maintenance by Depleting CENP-F From Metaphase Kinetochores in Hutchinson-Gilford Progeria Fibroblasts](#)

Eisch V, Lu X, Gabriel D, Djabali K. *Oncotarget* 2016;7(17):24700-24718. doi:10.18632/oncotarget.8267

[Permanent farnesylation of lamin A mutants linked to progeria impairs its phosphorylation at serine 22 during interphase.](#)

Moiseeva O, Lopes-Paciencia S, Huot G, Lessard F, Ferbeyre G. *Aging* 2016 Feb;8(2):366-81.

[Vitamin D Receptor Signaling Improves Hutchinson-Gilford Progeria Syndrome Cellular Phenotypes](#)

Kreienkamp R, Croke M, Neumann MA, et al. *Oncotarget* 2016;7(21):30018-30031. doi:10.18632/oncotarget.9065

[Lamin A Is an Endogenous SIRT6 Activator and Promotes SIRT6-Mediated DNA Repair.](#)

Ghosh S, Liu B, Wang Y, Hao Q, Zhou Z. *Cell Rep*. 2015 Nov 17;13(7):1396-1406. doi: 10.1016/j.celrep.2015.10.006. Epub 2015 Nov 5. PMID:26549451

[Proliferation of progeria cells is enhanced by lamina-associated polypeptide 2 \$\alpha\$  \(LAP2 \$\alpha\$ \) through expression of extracellular matrix proteins.](#)

Vidak S, Kubben N, Dechat T, Foisner R. *Genes & Development*. 2015 Oct 1;29(19):2022-36.

[Sulforaphane enhances progerin clearance in Hutchinson-Gilford progeria fibroblasts.](#)

Gabriel D, Roedl D, Gordon LB, Djabali K. *Aging Cell*. 2014 Dec 16: 1-14.

[Depleting the methyltransferase Suv39h1 improves DNA repair and extends lifespan in a progeria mouse model.](#)

Liu B, Wang Z, Zhang L, Ghosh S, Zheng H, Zhou Z. *Nat Commun*. 2013;4:1868.

[Naïve adult stem cells from patients with Hutchinson-Gilford progeria syndrome express low levels of progerin in vivo.](#)

Wenzel V, Roedl D, Gabriel D, Gordon LB, Herlyn M, Schneider R, Ring J, Djabali K. *Biol Open*. 2012 Jun 15;1(6):516-26. Epub 2012 Apr 16.

[Age-dependent loss of MMP-3 in Hutchinson-Gilford progeria syndrome.](#)

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[Progerin and telomere dysfunction collaborate to trigger cellular senescence in normal human fibroblasts.](#)

Cao K, Blair CD, Faddah DA, Kieckhafer JE, Olive M, Erdos MR, Nabel EG, Collins FS. *J Clin Invest.* 2011 Jul 1;121(7):2833-44

[Defective lamin A-Rb signaling in Hutchinson-Gilford Progeria Syndrome and reversal by farnesyltransferase inhibition.](#)

Marji J, O'Donoghue SI, McClintock D, Satagopam VP, Schneider R, Ratner D, Worman HJ, Gordon LB, Djabali K. *PLoS One.* 2010 Jun 15;5(6):e11132.

[Effect of progerin on the accumulation of oxidized proteins in fibroblasts from Hutchinson Gilford progeria patients.](#)

Viteri G, Chung YW, Stadtman ER. *Mech Ageing Dev.* 2010 Jan;131(1):2-8.

[Ageing-related chromatin defects through loss of the NURD complex.](#)

Pegoraro G, Kubben N, Wickert U, Göhler H, Hoffmann K, Misteli T. *Nat Cell Biol.* 2009 Oct;11(10):1261-7.

[Lamin A-dependent misregulation of adult stem cells associated with accelerated ageing.](#)

Scaffidi P, Misteli T. *Nat Cell Biol.* 2008 Apr;10(4):452-9.

[Perturbation of wild-type lamin A metabolism results in a progeroid phenotype.](#)

Candelario J, Sudhakar S, Navarro S, Reddy S, Comai L. *Aging Cell.* 2008 Jun;7(3):355-67

[Alterations in mitosis and cell cycle progression caused by a mutant lamin A known to accelerate human aging.](#)

Dechat T, Shimi T, Adam SA, Rusinol AE, Andres DA, Spielmann HP, Sinensky MS, Goldman RD. *Proc Natl Acad Sci USA.* 2007 Mar 20;104(12):4955-60.

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[Genomic instability in laminopathy-based premature aging.](#)

Liu B, Wang J, Chan KM, Tjia WM, Deng W, Guan X, Huang JD, Li KM, Chau PY, Chen DJ, Pei D, Pendas AM, Cadiñanos J, López-Otín C, Tse HF, Hutchison C, Chen J, Cao Y, Cheah KS, Tryggvason K, Zhou Z. *Nat Med.* 2005 Jul;11(7):780-5.

[Incomplete processing of mutant lamin A in Hutchinson-Gilford progeria leads to nuclear abnormalities, which are reversed by farnesyltransferase inhibition.](#)

Glynn MW, Glover TW. *Hum Mol Genet.* 2005 Oct 15;14(20):2959-69.

[Accumulation of mutant lamin A causes progressive changes in nuclear architecture in Hutchinson-Gilford progeria syndrome.](#)

Goldman RD, Shumaker DK, Erdos MR, Eriksson M, Goldman AE, Gordon LB, Gruenbaum Y, Khuon S, Mendez M, Varga R, Collins FS. *Proc Natl Acad Sci U S A.* 2004 Jun 15;101(24):8963-8.

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature.* 2003 May 15;423(6937):293-8.

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**HGADFN004**

[Incomplete processing of mutant lamin A in Hutchinson-Gilford progeria leads to nuclear abnormalities, which are reversed by farnesyltransferase inhibition.](#)

Glynn MW, Glover TW. *Hum Mol Genet.* 2005 Oct 15;14(20):2959-69.

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**HGADFN005**

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature.* 2003 May 15;423(6937):293-8.

## **HGADFN008**

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8.

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## **HGADFN014**

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8.

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## **HGMDFN090**

[Self-assembly of multi-component mitochondrial nucleoids via phase separation.](#)

Feric M, Demarest TG, Tian J, Croteau DL, Bohr VA, Misteli T. *EMBO J*. 2021 Mar 15;40(6):e107165. doi: 10.15252/embj.2020107165. Epub 2021 Feb 23. PMID: 33619770; PMCID: PMC7957436.

[Epigenetic Deregulation of Lamina-Associated Domains in Hutchinson-Gilford Progeria Syndrome](#)

Köhler F, Bormann F, Raddatz G, et al. *Genome Med* 2020;12(1):46. Published 2020 May 25. doi:10.1186/s13073-020-00749-y

[Chromatin and Cytoskeletal Tethering Determine Nuclear Morphology in Progerin-Expressing Cells](#)

Lionetti MC, Bonfanti S, Fumagalli MR, Budrikis Z, Font-Clos F, Costantini G, Chepizhko O, Zapperi S, La Porta CAM. *Biophysical Journal* 2020 May 5;118(9):2319-2332.

[Transient Introduction of Human Telomerase mRNA Improves Hallmarks of Progeria Cells](#)

Li Y, Zhou G, Bruno IG, et al. *Aging Cell* 2019;18(4):e12979. doi:10.1111/accel.12979

[A Cell-Intrinsic Interferon-like Response Links Replication Stress to Cellular Aging Caused by Progerin.](#)

Kreienkamp R, Graziano S, Coll-Bonfill N, Bedia-Diaz G, Cybulla E, Vindigni A, Dorsett D, Kubben N, Batista LFZ, Gonzalo S. *Cell Rep*. 2018 Feb 20;22(8):2006-2015.

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Vidak S, Georgiou K, Fichtinger P, Naetar N, Dechat T, Foisner R.  
*J Cell Sci.* 2017 Dec 28. pii: jcs.208462. doi: 10.1242/jcs.208462. [Epub ahead of print]

[Progerin sequestration of PCNA promotes replication fork collapse and mislocalization of XPA in laminopathy-related progeroid syndromes](#)

Hilton BA, Liu J, Cartwright BM, et al. *FASEB J* 2017;31(9):3882-3893.  
doi:10.1096/fj.201700014R

[Vitamin D Receptor Signaling Improves Hutchinson-Gilford Progeria Syndrome Cellular Phenotypes](#)

Kreienkamp R, Croke M, Neumann MA, et al. *Oncotarget* 2016;7(21):30018-30031.  
doi:10.18632/oncotarget.9065

[Methylene blue alleviates nuclear and mitochondrial abnormalities in progeria.](#)

Xiong ZM, Choi JY, Wang K, Zhang H, Tariq Z, Wu D, Ko E, LaDana C, Sesaki H, Cao K.  
*Aging Cell.* 2015 Dec 14. [Epub ahead of print]

[Proliferation of progeria cells is enhanced by lamina-associated polypeptide 2 \$\alpha\$  \(LAP2 \$\alpha\$ \) through expression of extracellular matrix proteins.](#)

Vidak S, Kubben N, Dechat T, Foisner R. *Genes & Development.* 2015 Oct 1;29(19):2022-36.

[Higher-order unfolding of satellite heterochromatin is a consistent and early event in cell senescence.](#)

Swanson EC, Manning B, Zhang H, Lawrence JB. *J Cell Biol.* 2013 Dec 23;203(6):929-42.

[Correlated alterations in genome organization, histone methylation, and DNA-lamin A/C interactions in Hutchinson-Gilford progeria syndrome.](#)

McCord RP, Nazario-Toole A, Zhang H, Chines PS, Zhan Y, Erdos MR, Collins FS, Dekker J, Cao K. *Genome Res.* 2013 Feb;23(2):260-9. Epub 2012 Nov 14.

[Comparison of constitutional and replication stress-induced genome structural variation by SNP array and mate-pair sequencing.](#)

Arlt MF, Ozdemir AC, Birkeland SR, Lyons RH Jr, Glover TW, Wilson TE. *Genetics.* 2011 Mar;187(3):675-83.

[Hydroxyurea induces de novo copy number variants in human cells.](#)

Arlt MF, Ozdemir AC, Birkeland SR, Wilson TE, Glover TW. *Proc Natl Acad Sci USA.* 2011 Oct 18;108(42):17360-5

[Progerin and telomere dysfunction collaborate to trigger cellular senescence in normal human fibroblasts.](#)

Cao K, Blair CD, Faddah DA, Kieckhaefer JE, Olive M, Erdos MR, Nabel EG, Collins FS. *J Clin Invest*. 2011 Jul 1;121(7):2833-44

[CTP:phosphocholine cytidyltransferase  \$\alpha\$  \(CCT \$\alpha\$ \) and lamins alter nuclear membrane structure without affecting phosphatidylcholine synthesis.](#)

Gehrig K, Ridgway ND. *Biochim Biophys Acta*. 2011 Jun;1811(6):377-85.

[Effect of progerin on the accumulation of oxidized proteins in fibroblasts from Hutchinson Gilford progeria patients.](#)

Viteri G, Chung YW, Stadtman ER. *Mech Ageing Dev*. 2010 Jan;131(1):2-8.

[Replication stress induces genome-wide copy number changes in human cells that resemble polymorphic and pathogenic variants.](#)

Arlt MF, Mülle JG, Schaibley VM, Ragland RL, Durkin SG, Warren ST, Glover TW. *Am J Hum Genet*. 2009 Mar;84(3):339-50.

[A lamin A protein isoform overexpressed in Hutchinson-Gilford progeria syndrome interferes with mitosis in progeria and normal cells.](#)

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Glynn MW, Glover TW. *Hum Mol Genet*. 2005 Oct 15;14(20):2959-69.

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## **HGADFN122**

[Direct reprogramming of human smooth muscle and vascular endothelial cells reveals defects associated with aging and Hutchinson-Gilford progeria syndrome](#)

Bersini S, Schulte R, Huang L, Tsai H, Hetzer MW. *Elife*. 2020 Sep 8;9:e54383. doi:10.7554/eLife.54383. PMID: 32896271; PMCID: PMC7478891.

[Epigenetic Deregulation of Lamina-Associated Domains in Hutchinson-Gilford Progeria Syndrome](#)

Köhler F, Bormann F, Raddatz G, et al. *Genome Med*. 2020;12(1):46. Published 2020 May 25. doi:10.1186/s13073-020-00749-y

[PML2-mediated Thread-Like Nuclear Bodies Mark Late Senescence in Hutchinson-Gilford Progeria Syndrome](#)

Wang M, Wang L, Qian M, et al. [published online ahead of print, 2020 Apr 29]. *Aging Cell*  
**Correction acknowledging PRF for cell lines is pending**

[Transient Introduction of Human Telomerase mRNA Improves Hallmarks of Progeria Cells](#)

Li Y, Zhou G, Bruno IG, et al. *Aging Cell* 2019;18(4):e12979. doi:10.1111/acel.12979



[Predicting Age From the Transcriptome of Human Dermal Fibroblasts](#)

Fleischer JG, Schulte R, Tsai HH, et al. *Genome Biol* 2018;19(1):221. Published 2018 Dec 20. doi:10.1186/s13059-018-1599-6

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging (Albany NY)*. 2018;10(7):1758-1775. doi:10.18632/aging.101508

[Metformin Alleviates Aging Cellular Phenotypes in Hutchinson-Gilford Progeria Syndrome Dermal Fibroblasts.](#)

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[Insights into the role of immunosenescence during varicella zoster virus infection \(shingles\) in the aging cell model.](#)

Kim JA, Park SK, Kumar M, Lee CH, Shin OS. *Oncotarget*. 2015 Oct 14. [Epub ahead of print]

[Depleting the methyltransferase Suv39h1 improves DNA repair and extends lifespan in a progeria mouse model.](#)

Liu B, Wang Z, Zhang L, Ghosh S, Zheng H, Zhou Z. *Nat Commun*. 2013;4:1868.

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## **HGADFN127**

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[Self-assembly of multi-component mitochondrial nucleoids via phase separation.](#)

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[A proteomic study of Hutchinson-Gilford progeria syndrome: Application of 2D-chromotography in a premature aging disease.](#)

Wang L, Yang W, Ju W, Wang P, Zhao X, Jenkins EC, Brown WT, Zhong N. *Biochem Biophys Res Commun.* 2012 Jan 27;417(4):1119-26. Epub 2011 Dec 24.

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[Increased mechanosensitivity and nuclear stiffness in Hutchinson-Gilford progeria cells: effects of farnesyltransferase inhibitors.](#)

Verstraeten VL, Ji JY, Cummings KS, Lee RT, Lammerding J. *Aging Cell.* 2008 Jun;7(3):383-93.

[Alterations in mitosis and cell cycle progression caused by a mutant lamin A known to accelerate human aging.](#)

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Cao K, Capell BC, Erdos MR, Djabali K, Collins FS. *Proc Natl Acad Sci USA*. 2007 Mar 20;104(12):4949-54.

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[Self-assembly of multi-component mitochondrial nucleoids via phase separation.](#)

Feric M, Demarest TG, Tian J, Croteau DL, Bohr VA, Misteli T. *EMBO J*. 2021 Mar 15;40(6):e107165. doi: 10.15252/embj.2020107165. Epub 2021 Feb 23. PMID: 33619770; PMCID: PMC7957436.

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Erdos MR, Cabral WA, Tavarez UL, Cao K, Gvozdenovic-Jeremic J, Narisu N, Zerfas PM, Crumley S, Boku Y, Hanson G, Mourich DV, Kole R, Eckhaus MA, Gordon LB, Collins FS. *Nat Med*. 2021 Mar;27(3):536-545. doi: 10.1038/s41591-021-01274-0. Epub 2021 Mar 11. PMID: 33707773.

[Epigenetic Dereglulation of Lamina-Associated Domains in Hutchinson-Gilford Progeria Syndrome](#)

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[Peroxisomal Abnormalities and Catalase Deficiency in Hutchinson-Gilford Progeria Syndrome](#)

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[iPSC-Derived Endothelial Cells Affect Vascular Function in a Tissue-Engineered Blood Vessel Model of Hutchinson-Gilford Progeria Syndrome](#)

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[Imbalanced Nucleocytoskeletal Connections Create Common Polarity Defects in Progeria and Physiological Aging](#)

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[Nucleoplasmic lamins define growth-regulating functions of lamina-associated polypeptide 2α in progeria cells.](#)

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Cao K, Capell BC, Erdos MR, Djabali K, Collins FS. *Proc Natl Acad Sci USA.* 2007 Mar 20;104(12):4949-54.

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## **HGADFN169**

[SAMMY-seq reveals early alteration of heterochromatin and deregulation of bivalent genes in Hutchinson-Gilford Progeria Syndrome](#)

Sebestyén E, Marullo F, Lucini F, Petrini C, Bianchi A, Valsoni S, Olivieri I, Antonelli L, Gregoret F, Oliva G, Ferrari F, Lanzaolo C. *Commun.* 2020 Dec 8;11(1):6274. doi: 10.1038/s41467-020-20048-9. PMID: 33293552; PMCID: PMC7722762.

[Direct reprogramming of human smooth muscle and vascular endothelial cells reveals defects associated with aging and Hutchinson-Gilford progeria syndrome](#)

Bersini S, Schulte R, Huang L, Tsai H, Hetzer MW. *Elife.* 2020 Sep 8;9:e54383. doi: 10.7554/eLife.54383. PMID: 32896271; PMCID: PMC7478891.

[Epigenetic Deregulation of Lamina-Associated Domains in Hutchinson-Gilford Progeria Syndrome](#)

Köhler F, Bormann F, Raddatz G, et al. *Genome Med.* 2020;12(1):46. Published 2020 May 25. doi:10.1186/s13073-020-00749-y

[PML2-mediated Thread-Like Nuclear Bodies Mark Late Senescence in Hutchinson-Gilford Progeria Syndrome](#)

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[Transient Introduction of Human Telomerase mRNA Improves Hallmarks of Progeria Cells](#)

Li Y, Zhou G, Bruno IG, et al. *Aging Cell* 2019;18(4):e12979. doi:10.1111/acel.12979

[Predicting Age From the Transcriptome of Human Dermal Fibroblasts](#)

Fleischer JG, Schulte R, Tsai HH, et al. *Genome Biol* 2018;19(1):221. Published 2018 Dec 20. doi:10.1186/s13059-018-1599-6

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging (Albany NY).* 2018;10(7):1758-1775.

doi:10.18632/aging.101508

[Methylene blue alleviates nuclear and mitochondrial abnormalities in progeria.](#)

Xiong ZM, Choi JY, Wang K, Zhang H, Tariq Z, Wu D, Ko E, LaDana C, Sesaki H, Cao K. *Aging Cell*. 2015 Dec 14. [Epub ahead of print]

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[Correlated alterations in genome organization, histone methylation, and DNA-lamin A/C interactions in Hutchinson-Gilford progeria syndrome.](#)

McCord RP, Nazario-Toole A, Zhang H, Chines PS, Zhan Y, Erdos MR, Collins FS, Dekker J, Cao K. *Genome Res*. 2013 Feb;23(2):260-9. Epub 2012 Nov 14.

[Depleting the methyltransferase Suv39h1 improves DNA repair and extends lifespan in a progeria mouse model.](#)

Liu B, Wang Z, Zhang L, Ghosh S, Zheng H, Zhou Z. *Nat Commun*. 2013;4:1868.

[Rapamycin reverses cellular phenotypes and enhances mutant protein clearance in Hutchinson-Gilford progeria syndrome cells.](#)

Cao K, Graziotto JJ, Blair CD, Mazzulli JR, Erdos MR, Krainc D, Collins FS. *Sci Transl Med*. 2011 Jun 29;3(89):89ra58.

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## **HGADFN178**

[Nuclear Pore Complexes Cluster in Dysmorphic Nuclei of Normal and Progeria Cells during Replicative Senescence.](#)

Röhl JM, Arnold R, Djabali K. *Cells*. 2021 Jan 14;10(1):153. doi: 10.3390/cells10010153. PMID: 33466669; PMCID: PMC7828780.

[Self-assembly of multi-component mitochondrial nucleoids via phase separation.](#)

Feric M, Demarest TG, Tian J, Croteau DL, Bohr VA, Misteli T. *EMBO J*. 2021 Mar 15;40(6):e107165. doi: 10.15252/embj.2020107165. Epub 2021 Feb 23. PMID: 33619770; PMCID: PMC7957436.

[Direct reprogramming of human smooth muscle and vascular endothelial cells reveals defects associated with aging and Hutchinson-Gilford progeria syndrome](#)

Bersini S, Schulte R, Huang L, Tsai H, Hetzer MW. *Elife*. 2020 Sep 8;9:e54383. doi: 10.7554/eLife.54383. PMID: 32896271; PMCID: PMC7478891.

[Epigenetic Deregulation of Lamina-Associated Domains in Hutchinson-Gilford Progeria Syndrome](#)

Köhler F, Bormann F, Raddatz G, et al. *Genome Med.* 2020;12(1):46. Published 2020 May 25. doi:10.1186/s13073-020-00749-y

[Transient Introduction of Human Telomerase mRNA Improves Hallmarks of Progeria Cells](#)

Li Y, Zhou G, Bruno IG, et al. *Aging Cell* 2019;18(4):e12979. doi:10.1111/ace1.12979

[Predicting Age From the Transcriptome of Human Dermal Fibroblasts](#)

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[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging (Albany NY)*. 2018;10(7):1758-1775. doi:10.18632/aging.101508

[Progerin sequestration of PCNA promotes replication fork collapse and mislocalization of XPA in laminopathy-related progeroid syndromes](#)

Hilton BA, Liu J, Cartwright BM, et al. *FASEB J* 2017;31(9):3882-3893. doi:10.1096/fj.201700014R

[Naïve adult stem cells from patients with Hutchinson-Gilford progeria syndrome express low levels of progerin in vivo.](#)

Wenzel V, Roedel D, Gabriel D, Gordon LB, Herlyn M, Schneider R, Ring J, Djabali K. *Biol Open*. 2012 Jun 15;1(6):516-26. Epub 2012 Apr 16.

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## **HGADFN188**

[Nuclear Pore Complexes Cluster in Dysmorphic Nuclei of Normal and Progeria Cells during Replicative Senescence.](#)

Röhrl JM, Arnold R, Djabali K. *Cells*. 2021 Jan 14;10(1):153. doi: 10.3390/cells10010153. PMID: 33466669; PMCID: PMC7828780.

[In vivo base editing rescues Hutchinson-Gilford progeria syndrome in mice.](#)

Koblan LW, Erdos MR, Wilson C, Cabral WA, Levy JM, Xiong ZM, Tavarez UL, Davison LM, Gete YG, Mao X, Newby GA, Doherty SP, Narisu N, Sheng Q, Krilow C, Lin CY, Gordon LB, Cao K, Collins FS, Brown JD, Liu DR. *Nature*. 2021 Jan;589(7843):608-614. doi: 10.1038/s41586-020-03086-7. Epub 2021 Jan 6. PMID: 33408413; PMCID: PMC7872200.

[SAMMY-seq reveals early alteration of heterochromatin and deregulation of bivalent genes in Hutchinson-Gilford Progeria Syndrome](#)

Sebestyén E, Marullo F, Lucini F, Petrini C, Bianchi A, Valsoni S, Olivieri I, Antonelli L, Gregoret F, Oliva G, Ferrari F, Lanzaolo C. *Commun.* 2020 Dec 8;11(1):6274. doi: 10.1038/s41467-020-20048-9. PMID: 33293552; PMCID: PMC7722762.

[Direct reprogramming of human smooth muscle and vascular endothelial cells reveals defects associated with aging and Hutchinson-Gilford progeria syndrome](#)

Bersini S, Schulte R, Huang L, Tsai H, Hetzer MW. *Elife*. 2020 Sep 8;9:e54383. doi: 10.7554/eLife.54383. PMID: 32896271; PMCID: PMC7478891.

[Epigenetic Deregulation of Lamina-Associated Domains in Hutchinson-Gilford Progeria Syndrome](#)

Köhler F, Bormann F, Raddatz G, et al. *Genome Med* 2020;12(1):46. Published 2020 May 25. doi:10.1186/s13073-020-00749-y

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Liu C, Arnold R, Henriques G, Djabali K. *Cells* 2019;8(10):1276. Published 2019 Oct 18. doi:10.3390/cells8101276

[Analysis of Somatic Mutations Identifies Signs of Selection During in Vitro Aging of Primary Dermal Fibroblasts](#)

Narisu N, Rothwell R, Vrtačnik P, et al. *Aging Cell* 2019;18(6):e13010. doi:10.1111/accel.13010

[Predicting Age From the Transcriptome of Human Dermal Fibroblasts](#)

Fleischer JG, Schulte R, Tsai HH, et al. *Genome Biol* 2018;19(1):221. Published 2018 Dec 20. doi:10.1186/s13059-018-1599-6

[p53 isoforms regulate premature aging in human cells.](#)

von Muhlinen N, Horikawa I, Alam F, Isogaya K, Lissa D, Vojtesek B, Lane DP, Harris CC. *Oncogene*. 2018 Feb 12. doi: 10.1038/s41388-017-0101-3. [Epub ahead of print]

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775. doi:10.18632/aging.101508

[Temsirolimus Partially Rescues the Hutchinson-Gilford Progeria Cellular Phenotype.](#)

Gabriel D, Gordon LB, Djabali K. *PLoS One* 2016;11(12):e0168988. Published 2016 Dec 29. doi:10.1371/journal.pone.0168988

[Progerin Impairs Chromosome Maintenance by Depleting CENP-F From Metaphase Kinetochores in Hutchinson-Gilford Progeria Fibroblasts](#)

Eisch V, Lu X, Gabriel D, Djabali K. *Oncotarget* 2016;7(17):24700-24718. doi:10.18632/oncotarget.8267

[Sulforaphane enhances progerin clearance in Hutchinson-Gilford progeria fibroblasts.](#)

Gabriel D, Roedel D, Gordon LB, Djabali K. *Aging Cell*. 2014 Dec 16: 1-14.

[Depleting the methyltransferase Suv39h1 improves DNA repair and extends lifespan in a progeria mouse model.](#)

Liu B, Wang Z, Zhang L, Ghosh S, Zheng H, Zhou Z. *Nat Commun.* 2013;4:1868.

[Naïve adult stem cells from patients with Hutchinson-Gilford progeria syndrome express low levels of progerin in vivo.](#)

Wenzel V, Roedel D, Gabriel D, Gordon LB, Herlyn M, Schneider R, Ring J, Djabali K. *Biol Open.* 2012 Jun 15;1(6):516-26. Epub 2012 Apr 16.

[Defective lamin A-Rb signaling in Hutchinson-Gilford Progeria Syndrome and reversal by farnesyltransferase inhibition.](#)

Marji J, O'Donoghue SI, McClintock D, Satagopam VP, Schneider R, Ratner D, Worman HJ, Gordon LB, Djabali K. *PLoS One.* 2010 Jun 15;5(6):e11132.

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### **HGADFN271**

[SAMMY-seq reveals early alteration of heterochromatin and deregulation of bivalent genes in Hutchinson-Gilford Progeria Syndrome](#)

Sebestyén E, Marullo F, Lucini F, Petrini C, Bianchi A, Valsoni S, Olivieri I, Antonelli L, Gregoret F, Oliva G, Ferrari F, Lanzuolo C. *Commun.* 2020 Dec 8;11(1):6274. doi: 10.1038/s41467-020-20048-9. PMID: 33293552; PMCID: PMC7722762.

[Epigenetic Deregulation of Lamina-Associated Domains in Hutchinson-Gilford Progeria Syndrome](#)

Köhler F, Bormann F, Raddatz G, et al. *Genome Med.* 2020;12(1):46. Published 2020 May 25. doi:10.1186/s13073-020-00749-y

[Transient Introduction of Human Telomerase mRNA Improves Hallmarks of Progeria Cells](#)

Li Y, Zhou G, Bruno IG, et al. *Aging Cell* 2019;18(4):e12979. doi:10.1111/ace1.12979

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging (Albany NY).* 2018;10(7):1758-1775. doi:10.18632/aging.101508

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### **HGADFN367**

[A targeted antisense therapeutic approach for Hutchinson-Gilford progeria syndrome](#)

Erdos MR, Cabral WA, Tavarez UL, Cao K, Gvozdenovic-Jeremic J, Narisu N, Zerfas PM, Crumley S, Boku Y, Hanson G, Mourich DV, Kole R, Eckhaus MA, Gordon LB, Collins FS. *Nat Med.* 2021 Mar;27(3):536-545. doi: 10.1038/s41591-021-01274-0. Epub 2021 Mar 11. PMID: 33707773.

[Direct reprogramming of human smooth muscle and vascular endothelial cells reveals defects associated with aging and Hutchinson-Gilford progeria syndrome](#)

Bersini S, Schulte R, Huang L, Tsai H, Hetzer MW. *Elife*. 2020 Sep 8;9:e54383. doi: 10.7554/eLife.54383. PMID: 32896271; PMCID: PMC7478891.

[Transient Introduction of Human Telomerase mRNA Improves Hallmarks of Progeria Cells](#)

Li Y, Zhou G, Bruno IG, et al. *Aging Cell* 2019;18(4):e12979. doi:10.1111/accel.12979

[Predicting Age From the Transcriptome of Human Dermal Fibroblasts](#)

Fleischer JG, Schulte R, Tsai HH, et al. *Genome Biol* 2018;19(1):221. Published 2018 Dec 20. doi:10.1186/s13059-018-1599-6

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775. doi:10.18632/aging.101508

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**HGMDFN368**

[A targeted antisense therapeutic approach for Hutchinson-Gilford progeria syndrome](#)

Erdos MR, Cabral WA, Tavares UL, Cao K, Gvozdenovic-Jeremic J, Narisu N, Zerfas PM, Crumley S, Boku Y, Hanson G, Mourich DV, Kole R, Eckhaus MA, Gordon LB, Collins FS. *Nat Med*. 2021 Mar;27(3):536-545. doi: 10.1038/s41591-021-01274-0. Epub 2021 Mar 11. PMID: 33707773.

[Direct reprogramming of human smooth muscle and vascular endothelial cells reveals defects associated with aging and Hutchinson-Gilford progeria syndrome](#)

Bersini S, Schulte R, Huang L, Tsai H, Hetzer MW. *Elife*. 2020 Sep 8;9:e54383. doi: 10.7554/eLife.54383. PMID: 32896271; PMCID: PMC7478891.

[Transient Introduction of Human Telomerase mRNA Improves Hallmarks of Progeria Cells](#)

Li Y, Zhou G, Bruno IG, et al. *Aging Cell* 2019;18(4):e12979. doi:10.1111/accel.12979

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775. doi:10.18632/aging.101508

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**HGFDFN369**

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775.

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**HGADFN370**

[Imbalanced Nucleocytoskeletal Connections Create Common Polarity Defects in Progeria and Physiological Aging](#)

Chang W, Wang Y, Luxton GWG, Östlund C, Worman HJ, Gundersen GG. *Proc Natl Acad Sci U S A*. 2019;116(9):3578-3583. doi:10.1073/pnas.1809683116

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**HGMDFN371**

[Imbalanced Nucleocytoskeletal Connections Create Common Polarity Defects in Progeria and Physiological Aging](#)

Chang W, Wang Y, Luxton GWG, Östlund C, Worman HJ, Gundersen GG. *Proc Natl Acad Sci U S A*. 2019;116(9):3578-3583. doi:10.1073/pnas.1809683116

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**HGADFN496**

[A targeted antisense therapeutic approach for Hutchinson-Gilford progeria syndrome](#)

Erdos MR, Cabral WA, Tavarez UL, Cao K, Gvozdenovic-Jeremic J, Narisu N, Zerfas PM, Crumley S, Boku Y, Hanson G, Mourich DV, Kole R, Eckhaus MA, Gordon LB, Collins FS. *Nat Med*. 2021 Mar;27(3):536-545. doi: 10.1038/s41591-021-01274-0. Epub 2021 Mar 11. PMID: 33707773.

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**HGMDFN718**

[A targeted antisense therapeutic approach for Hutchinson-Gilford progeria syndrome](#)

Erdos MR, Cabral WA, Tavarez UL, Cao K, Gvozdenovic-Jeremic J, Narisu N, Zerfas PM, Crumley S, Boku Y, Hanson G, Mourich DV, Kole R, Eckhaus MA, Gordon LB, Collins FS. *Nat Med*. 2021 Mar;27(3):536-545. doi: 10.1038/s41591-021-01274-0. Epub 2021 Mar 11. PMID: 33707773.

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**PSADFN086**

**(formally HGADFN086)**

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775. doi:10.18632/aging.101508

[Increased progerin expression associated with unusual LMNA mutations causes severe progeroid syndromes.](#)

Moulson CL, Fong LG, Gardner JM, Farber EA, Go G, Passariello A, Grange DK, Young SG, Miner JH. *Hum Mutat.* 2007 Sep;28(9):882-9.

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### **PSADFN257**

[A Cell-Intrinsic Interferon-like Response Links Replication Stress to Cellular Aging Caused by Progerin.](#)

Kreienkamp R, Graziano S, Coll-Bonfill N, Bedia-Diaz G, Cybulla E, Vindigni A, Dorsett D, Kubben N, Batista LFZ, Gonzalo S. *Cell Rep.* 2018 Feb 20;22(8):2006-2015.

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775.  
doi:10.18632/aging.101508

[Vitamin D Receptor Signaling Improves Hutchinson-Gilford Progeria Syndrome Cellular Phenotypes](#)

Kreienkamp R, Croke M, Neumann MA, et al. *Oncotarget* 2016;7(21):30018-30031.  
doi:10.18632/oncotarget.9065

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### **PSADFN317**

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775.  
doi:10.18632/aging.101508

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### **PSADFN318**

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775.  
doi:10.18632/aging.101508

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### **PSDFN319**

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775.  
doi:10.18632/aging.101508



[Rapamycin reverses cellular phenotypes and enhances mutant protein clearance in Hutchinson-Gilford progeria syndrome cells.](#)

Cao K, Graziotto JJ, Blair CD, Mazzulli JR, Erdos MR, Krainc D, Collins FS. *Sci Transl Med*. 2011 Jun 29;3(89):89ra58.

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### **PSMDFN320**

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775.  
doi:10.18632/aging.101508

[Rapamycin reverses cellular phenotypes and enhances mutant protein clearance in Hutchinson-Gilford progeria syndrome cells.](#)

Cao K, Graziotto JJ, Blair CD, Mazzulli JR, Erdos MR, Krainc D, Collins FS. *Sci Transl Med*. 2011 Jun 29;3(89):89ra58.

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### **PSMDFN326**

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775.  
doi:10.18632/aging.101508

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### **PSFDFN327**

[A Cell-Intrinsic Interferon-like Response Links Replication Stress to Cellular Aging Caused by Progerin.](#)

Kreienkamp R, Graziano S, Coll-Bonfill N, Bedia-Diaz G, Cybulla E, Vindigni A, Dorsett D, Kubben N, Batista LFZ, Gonzalo S. *Cell Rep*. 2018 Feb 20;22(8):2006-2015.

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775.  
doi:10.18632/aging.101508

[Vitamin D Receptor Signaling Improves Hutchinson-Gilford Progeria Syndrome Cellular Phenotypes](#)

Kreienkamp R, Croke M, Neumann MA, et al. *Oncotarget* 2016;7(21):30018-30031.  
doi:10.18632/oncotarget.9065

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### **PSMDFN346**

[A Cell-Intrinsic Interferon-like Response Links Replication Stress to Cellular Aging Caused by](#)

### [Progerin.](#)

Kreienkamp R, Graziano S, Coll-Bonfill N, Bedia-Diaz G, Cybulla E, Vindigni A, Dorsett D, Kubben N, Batista LFZ, Gonzalo S. *Cell Rep.* 2018 Feb 20;22(8):2006-2015.

### [Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775.  
doi:10.18632/aging.101508

### [Vitamin D Receptor Signaling Improves Hutchinson-Gilford Progeria Syndrome Cellular Phenotypes](#)

Kreienkamp R, Croke M, Neumann MA, et al. *Oncotarget* 2016;7(21):30018-30031.  
doi:10.18632/oncotarget.9065

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## **PSADFN373**

### [Targeting RAS-converting enzyme 1 overcomes senescence and improves progeria-like phenotypes of ZMPSTE24 deficiency](#)

Yao H, Chen X, Kashif M, Wang T, Ibrahim MX, Tüksammel E, Revêchon G, Eriksson M, Wiel C, Bergo MO. *Aging Cell.* 2020 Aug;19(8):e13200. doi: 10.1111/ace1.13200. Epub 2020 Jul 24.  
PMID: 32910507; PMCID: PMC7431821.

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## **PSADFN392**

### [A Cell-Intrinsic Interferon-like Response Links Replication Stress to Cellular Aging Caused by Progerin.](#)

Kreienkamp R, Graziano S, Coll-Bonfill N, Bedia-Diaz G, Cybulla E, Vindigni A, Dorsett D, Kubben N, Batista LFZ, Gonzalo S. *Cell Rep.* 2018 Feb 20;22(8):2006-2015.

### [Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775.  
doi:10.18632/aging.101508

### [Vitamin D Receptor Signaling Improves Hutchinson-Gilford Progeria Syndrome Cellular Phenotypes](#)

Kreienkamp R, Croke M, Neumann MA, et al. *Oncotarget* 2016;7(21):30018-30031.  
doi:10.18632/oncotarget.9065

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## **PSMDFN393**

### [Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and](#)

[ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775.  
doi:10.18632/aging.101508

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### **PSDFN394**

[Epigenetic clock for skin and blood cells applied to Hutchinson Gilford Progeria Syndrome and ex vivo studies](#)

Horvath S, Oshima J, Martin GM, et al. *Aging* (Albany NY). 2018;10(7):1758-1775.  
doi:10.18632/aging.101508

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### **PSADFN414**

[Everolimus Rescues Multiple Cellular Defects in Laminopathy-Patient Fibroblasts](#)

DuBose AJ, Lichtenstein ST, Petrash NM, Erdos MR, Gordon LB, Collins FS [published correction appears in *Proc Natl Acad Sci U S A*. 2018 Apr 16;:]. *Proc Natl Acad Sci U S A*. 2018;115(16):4206-4211. doi:10.1073/pnas.1802811115

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### **PSADFN425**

[Everolimus Rescues Multiple Cellular Defects in Laminopathy-Patient Fibroblasts](#)

DuBose AJ, Lichtenstein ST, Petrash NM, Erdos MR, Gordon LB, Collins FS [published correction appears in *Proc Natl Acad Sci U S A*. 2018 Apr 16;:]. *Proc Natl Acad Sci U S A*. 2018;115(16):4206-4211. doi:10.1073/pnas.1802811115

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### **HGADFN003 iPS1B**

[iPSC-Derived Endothelial Cells Affect Vascular Function in a Tissue-Engineered Blood Vessel Model of Hutchinson-Gilford Progeria Syndrome](#)

Atchison L, Abutaleb NO, Snyder-Mounts E, et al. *Stem Cell Reports* 2020;14(2):325-337.  
doi:10.1016/j.stemcr.2020.01.005

[Progerin Phosphorylation in Interphase Is Lower and Less Mechanosensitive Than lamin-A,C in iPS-derived Mesenchymal Stem Cells](#)

Cho S, Abbas A, Irianto J, et al.. *Nucleus* 2018;9(1):230-245.  
doi:10.1080/19491034.2018.1460185

[Reprogramming Progeria Fibroblasts Re-Establishes a Normal Epigenetic Landscape](#)

Chen Z, Chang WY, Etheridge A, et al. *Aging Cell* 2017;16(4):870-887. doi:10.1111/accel.12621

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### **HGADFN003 iPS1C**

[iPSC-Derived Endothelial Cells Affect Vascular Function in a Tissue-Engineered Blood Vessel Model of Hutchinson-Gilford Progeria Syndrome](#)

Atchison L, Abutaleb NO, Snyder-Mounts E, et al. *Stem Cell Reports* 2020;14(2):325-337. doi:10.1016/j.stemcr.2020.01.005

[Reprogramming Progeria Fibroblasts Re-Establishes a Normal Epigenetic Landscape](#)

Chen Z, Chang WY, Etheridge A, et al. *Aging Cell*. 2017;16(4):870-887. doi:10.1111/accel.12621

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**HGADFN003 iPS1D**

[iPSC-Derived Endothelial Cells Affect Vascular Function in a Tissue-Engineered Blood Vessel Model of Hutchinson-Gilford Progeria Syndrome](#)

Atchison L, Abutaleb NO, Snyder-Mounts E, et al. *Stem Cell Reports* 2020;14(2):325-337. doi:10.1016/j.stemcr.2020.01.005

[Dysfunction of iPSC-derived Endothelial Cells in Human Hutchinson-Gilford Progeria Syndrome](#)

Matrone G, Thandavarayan RA, Walther BK, Meng S, Mojiri A, Cooke JP. *Cell Cycle* 2019;18(19):2495-2508. doi:10.1080/15384101.2019.1651587

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**HGMDFN090 iPS1B**

[Dysfunction of iPSC-derived Endothelial Cells in Human Hutchinson-Gilford Progeria Syndrome](#)

Matrone G, Thandavarayan RA, Walther BK, Meng S, Mojiri A, Cooke JP. *Cell Cycle* 2019;18(19):2495-2508. doi:10.1080/15384101.2019.1651587

[Reprogramming Progeria Fibroblasts Re-Establishes a Normal Epigenetic Landscape](#)

Chen Z, Chang WY, Etheridge A, et al. *Aging Cell*. 2017;16(4):870-887. doi:10.1111/accel.12621

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**HGMDFN090 iPS1C**

[Reprogramming Progeria Fibroblasts Re-Establishes a Normal Epigenetic Landscape](#)

Chen Z, Chang WY, Etheridge A, et al. *Aging Cell*. 2017;16(4):870-887. doi:10.1111/accel.12621

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**HGADFN167 iPS1J**

[Reprogramming Progeria Fibroblasts Re-Establishes a Normal Epigenetic Landscape](#)

Chen Z, Chang WY, Etheridge A, et al. *Aging Cell*. 2017;16(4):870-887. doi:10.1111/accel.12621

[Mechanisms Controlling the Smooth Muscle Cell Death in Progeria via Down-Regulation of poly\(ADP-ribose\) Polymerase 1](#)

Zhang H, Xiong ZM, Cao K. *Proc Natl Acad Sci U S A*. 2014;111(22):E2261-E2270.

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### **HGADFN167 iPS1Q**

[Dysfunction of iPSC-derived Endothelial Cells in Human Hutchinson-Gilford Progeria Syndrome](#)

Matrone G, Thandavarayan RA, Walther BK, Meng S, Mojiri A, Cooke JP. *Cell Cycle* 2019;18(19):2495-2508. doi:10.1080/15384101.2019.1651587

[Reprogramming Progeria Fibroblasts Re-Establishes a Normal Epigenetic Landscape](#)

Chen Z, Chang WY, Etheridge A, et al. *Aging Cell* 2017;16(4):870-887. doi:10.1111/accel.12621

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### **HGFDFN168 iPS1D2**

[Reprogramming Progeria Fibroblasts Re-Establishes a Normal Epigenetic Landscape](#)

Chen Z, Chang WY, Etheridge A, et al. *Aging Cell*. 2017;16(4):870-887. doi:10.1111/accel.12621

[Mechanisms Controlling the Smooth Muscle Cell Death in Progeria via Down-Regulation of poly\(ADP-ribose\) Polymerase 1](#)

Zhang H, Xiong ZM, Cao K. *Proc Natl Acad Sci U S A* 2014;111(22):E2261-E2270. doi:10.1073/pnas.1320843111

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### **HGFDFN168 iPS1P**

[Dysfunction of iPSC-derived Endothelial Cells in Human Hutchinson-Gilford Progeria Syndrome](#)

Matrone G, Thandavarayan RA, Walther BK, Meng S, Mojiri A, Cooke JP. *Cell Cycle* 2019;18(19):2495-2508. doi:10.1080/15384101.2019.1651587

[Reprogramming Progeria Fibroblasts Re-Establishes a Normal Epigenetic Landscape](#)

Chen Z, Chang WY, Etheridge A, et al. *Aging Cell* 2017;16(4):870-887. doi:10.1111/accel.12621

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### **HGALBV009**

[Stem cell depletion in Hutchinson-Gilford progeria syndrome.](#)

Rosengardten Y, McKenna T, Grochová D, Eriksson M. *Aging Cell*. 2011 Dec;10(6):1011-20. Epub 2011 Oct 11.

[Low and high expressing alleles of the LMNA gene: implications for laminopathy disease development.](#)

Rodríguez S, Eriksson M. *PLoS One*. 2011;6(9):e25472. Epub 2011 Sep 29.

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins

FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.

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### **HGMLBV010**

[Stem cell depletion in Hutchinson-Gilford progeria syndrome.](#)

Rosengardten Y, McKenna T, Grochová D, Eriksson M. *Aging Cell*. 2011 Dec;10(6):1011-20. Epub 2011 Oct 11.

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.

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### **HGALBV011**

[Low and high expressing alleles of the LMNA gene: implications for laminopathy disease development.](#)

Rodríguez S, Eriksson M. *PLoS One*. 2011;6(9):e25472. Epub 2011 Sep 29.

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.

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### **HGMLBV013**

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.

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### **HGFLBV021**

[Stem cell depletion in Hutchinson-Gilford progeria syndrome.](#)

Rosengardten Y, McKenna T, Grochová D, Eriksson M. *Aging Cell*. 2011 Dec;10(6):1011-20. Epub 2011 Oct 11.

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.

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### **HGMLBV023**

[Stem cell depletion in Hutchinson-Gilford progeria syndrome.](#)

Rosengardten Y, McKenna T, Grochová D, Eriksson M. *Aging Cell*. 2011 Dec;10(6):1011-20. Epub 2011 Oct 11.

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.

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**HGFLBV031**

[Stem cell depletion in Hutchinson-Gilford progeria syndrome.](#)

Rosengardten Y, McKenna T, Grochová D, Eriksson M. *Aging Cell*. 2011 Dec;10(6):1011-20. Epub 2011 Oct 11.

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.

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**HGFLBV050**

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.

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**HGALBV057**

[Stem cell depletion in Hutchinson-Gilford progeria syndrome.](#)

Rosengardten Y, McKenna T, Grochová D, Eriksson M. *Aging Cell*. 2011 Dec;10(6):1011-20. Epub 2011 Oct 11.

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.

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**HGMLBV058**

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.

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### **HGSLBV059**

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.

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### **HGMLBV066**

[Stem cell depletion in Hutchinson-Gilford progeria syndrome.](#)

Rosengardten Y, McKenna T, Grochová D, Eriksson M. *Aging Cell*. 2011 Dec;10(6):1011-20. Epub 2011 Oct 11.

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.

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### **HGFLBV067**

[Stem cell depletion in Hutchinson-Gilford progeria syndrome.](#)

Rosengardten Y, McKenna T, Grochová D, Eriksson M. *Aging Cell*. 2011 Dec;10(6):1011-20. doi: 10.1111/j.1474-9726.2011.00743.x. Epub 2011 Oct 11.

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.

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### **HGALBV071**

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.

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### **HGMLBV081**

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.



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## **HGFLBV082**

[Recurrent de novo point mutations in lamin A cause Hutchinson-Gilford progeria syndrome.](#)

Eriksson M, Brown WT, Gordon LB, Glynn MW, Singer J, Scott L, Erdos MR, Robbins CM, Moses TY, Berglund P, Dutra A, Pak E, Durkin S, Csoka AB, Boehnke M, Glover TW, Collins FS. *Nature*. 2003 May 15;423(6937):293-8. Epub 2003 Apr 25.