

# Publication List

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## Key Publication



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## AGE Reader Key Publications

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- **Skin autofluorescence provides additional information to the UK Prospective Diabetes Study (UKPDS) risk score for the estimation of cardiovascular prognosis in type 2 diabetes mellitus.**  
Lutgers H. et al, Diabetologia, 2009; 52(5): 789-797
- **Skin autofluorescence and risk of micro- and macrovascular complications in patients with Type 2 diabetes mellitus-a multi-centre study.**  
Noordzij M.J. et al. Diabet Med. 2012 Dec;29(12):1556-61.
- **Skin Autofluorescence and the Association with Renal and Cardiovascular Risk Factors in Chronic Kidney Disease Stage 3.**  
McIntyre N. et al. Clin J Am Soc Nephrol. 2011 Sep 1. Epub
- **Skin-Autofluorescence Is an Independent Predictor of Graft Loss in Renal Transplant Recipients.**  
Hartog J. et al. Transplantation, Volume 87, Number 7, April 15, 2009
- **Simple non-invasive assessment of advanced glycation endproducts accumulation.**  
Meerwaldt R et al, Diabetologia, 2004; 47:1324-1330

## AGE Reader in diabetes

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1. **Skin autofluorescence is associated with past glycaemic control and complications in type 1 diabetes mellitus.**  
Genevieve M. et al. Diabetes Metab. 2013 May 2. [Epub ahead of print]
2. **Advanced Glycation End Products Assessed by Skin Autofluorescence-A New Marker of Diabetic Foot Ulceration.**  
Vouillarmet J. et al. Diabetes Technol Ther. 2013 Apr 30. [Epub ahead of print]
3. **Study design of DIACORE (DIAbetes COHoRtE) - a cohort study of patients with diabetes mellitus type 2.**  
Dörhöfer L, BMC Med Genet. 2013 Feb 14;14:25.
4. **Verification of Skin Autofluorescence Values by Mass Spectrometry in Adolescents with Type 1 Diabetes: Brief Report.** Mácsai E. et al. Diabetes Technol Ther. 2013 Jan 23.
5. **Advanced glycation end products in infant formulas do not contribute to insulin resistance associated with their consumption.** Klenovics KS. et al. PLoS One. 2013;8(1):e53056.
6. **Advanced Glycation End Products, Measured as Skin Autofluorescence, During Normal Pregnancy and Pregnancy Complicated by Diabetes Mellitus.**  
de Ranitz-Greven WL. et al. Diabetes Technol Ther. 2012 Oct 31. (Epub)
7. **Skin autofluorescence measurement in diabetological and nephrological clinical practice.**  
Mácsai E. et al. Orv Hetil. 2012 Oct 21;153(42):1651-7.
8. **Skin autofluorescence and risk of micro- and macrovascular complications in patients with Type 2 diabetes mellitus-a multi-centre study.**  
Noordzij M.J. et al. Diabet Med. 2012 Aug 31. doi: 10.1111/dme.12005.
9. **Advanced glycation end products measured by skin autofluorescence in a population with central obesity.**  
den Engelsen C. et al. Dermatoendocrinol. 2012 Jan 1;4(1):33-8.
10. **Elevated skin autofluorescence is strongly associated with foot ulcers in patients with diabetes: a cross-sectional, observational study of Chinese subjects.**  
Hu H. et al. J Zhejiang Univ Sci B. 2012 May;13(5):372-7.
11. **Advanced Glycation Endproducts and Diabetic Cardiovascular Disease.**  
Prasad A. et al. Cardiol Rev. 2012 Feb 6. Epub

12. **Non-invasive measures of tissue autofluorescence are increased in Type 1 diabetes complications and correlate with a non-invasive measure of vascular dysfunction.**  
Januszewski A.S. et al. Diabet Med. 2011 Dec 28. doi: 10.1111/j.1464-5491.2011.03562.x.
13. **Skin autofluorescence is associated with severity of vascular complications in Japanese patients with Type 2 diabetes.** Tanaka K. et al. Diabet Med. 2011 Sep 14. Epub
14. **Skin autofluorescence is inversely related to HDL anti-oxidative capacity in type 2 diabetes mellitus.**  
Mulder D. et al. Atherosclerosis. 2011 May, Epub
15. **Advanced Glycation End Products, Measured as Skin Autofluorescence, at Diagnosis in Gestational Diabetes Mellitus Compared with Normal Pregnancy.**  
de Ranitz-Greven WL et al. Diabetes Technol Ther. 2011 Aug 29. Epub
16. **Increased accumulation of skin advanced glycation end products is associated with microvascular complications in type 1 diabetes.**  
Araszkiwicz A. et al. Diabetes Technol Ther. 2011 Aug;13(8):837-42.
17. **Assessment of skin autofluorescence as a marker of advanced glycation end product accumulation in type 1 diabetes.**  
Samborski P. et al. Pol Arch Med Wewn. 2011 Mar;121(3):67-72.
18. **Advanced glycation end products, measured as skin autofluorescence and diabetes complications: a systematic review.**  
Bos D.C. et al. Diabetes Technol Ther. 2011 Jul;13(7):773-9.
19. **Tissue advanced glycation end products are associated with diastolic function and aerobic exercise capacity in diabetic heart failure patients.**  
Willemsen S. et al. Eur J. Heart Fail 2010. doi:10.1093/eurjhf/hfq168
20. **Skin autofluorescence and glycemic variability.**  
Noordzij M. et al. Diabetes Technol Ther. 2010; 12(7): 581-585
21. **Advanced glycation end products assessed by skin autofluorescence in type 1 diabetics are associated with nephropathy, but not retinopathy.**  
Chabroux S. et al: Diabetes Metab, 2010 Apr;36(2):152-7.
22. **Skin autofluorescence provides additional information to the UK Prospective Diabetes Study (UKPDS) risk score for the estimation of cardiovascular prognosis in type 2 diabetes mellitus**  
Lutgers H. et al: Diabetologia, 2009; 52(5): 789-797
23. **Skin Autofluorescence: A tool to identify type 2 diabetic patients at risk for developing microvascular disease.**  
Gerrits E. et al. Diabetes Care. 2008; 31: 517-521
24. **Skin autofluorescence is a strong predictor of cardiac mortality in diabetes**  
Meerwaldt R, et al. Diabetes Care 2007, 30: 107-112
25. **Skin autofluorescence in type 2 diabetes: Beyond blood glucose**  
Monami M. et al. Diabetes Research & Clinical Practice July 2007. epub
26. **Non-invasive AGE-measurements by skin autofluorescence in patients with Type 2 Diabetes Mellitus. Tool for risk-assessment of diabetes complications?**  
Lutgers H, et al. Diabetes Care. 2006 Dec;29(12):2654-9
27. **Increased accumulation of skin advanced glycation end-products precedes and correlates with clinical manifestation of diabetic neuropathy**  
Meerwaldt R, et al. Diabetologia. 2005;48:1637-44.
28. **The clinical relevance of advanced glycation endproducts (AGE) and recent developments in pharmaceuticals to reduce AGE accumulation.**  
Smit AJ, Lutgers HL.Curr Med Chem. 2004 Oct;11(20):2767-84.

29. **Skin autofluorescence as proxy of tissue AGE accumulation is dissociated from SCORE cardiovascular risk score, and remains so after 3 years.**  
Tiessen AH. et al. Clin Chem Lab Med. 2013 Apr 2:1-7.
30. **Skin Autofluorescence as a Measure of Advanced Glycation End Product Deposition Is Elevated in Peripheral Artery Disease.**  
de Vos L.C. et al. Arterioscler Thromb Vasc Biol. 2012 Nov 8. (Epub)
31. **Relationship between tissue glycation measured by autofluorescence and pulse wave velocity in young and elderly non-diabetic populations.**  
Watfa G. et al. Diabetes Metab. 2012 Jun 13.
32. **Advanced glycation end product associated skin autofluorescence: A mirror of vascular function?**  
Hofmann B. et al. Exp Gerontol. 2012 May 12.
33. **Effects of alagebrium, an advanced glycation endproduct breaker, on exercise tolerance and cardiac function in patients with chronic heart failure.**  
Hartog J.W. et al. BENEFICIAL investigators. Eur J Heart Fail. 2011 Aug;13(8):899-908.
34. **Skin autofluorescence is increased in patients with carotid artery stenosis and peripheral artery disease.**  
Noordzij MJ. Int J Cardiovasc Imaging. 2011 Feb. Epub
35. **Carotid artery intima media thickness associates with skin autofluorescence in non-diabetic subjects without clinically manifest cardiovascular disease.**  
Lutgers H. et al. Eur J Clin Invest. 2010 ;40(9):812-7
36. **Advanced glycation end-products, anti-hypertensive treatment and diastolic function in patients with hypertension and diastolic dysfunction.**  
Hartog J. et al; Eur. Journal of Heart Failure, 2010 Apr;12(4):397-403
37. **Advanced glycation end products in patients with cerebral infarction.**  
Ohnuki Y. Intern Med. 2009;48(8):587-91.
38. **Advanced Glycation End Products and their receptor RAGE in systemic autoimmune diseases - an inflammation propagating factor contributing to accelerated atherosclerosis.**  
Nienhuis et al. Autoimmunity, 2009; 42(4): 302-304
39. **Skin autofluorescence is elevated in acute myocardial infarction and is associated with the one-year incidence of major adverse cardiac events**  
Mulder D. et al, Netherlands Heart Journal, Volume 17, Number 4, April 2009
40. **Relation between food and drinking habits, and skin autofluorescence and intima media thickness in subjects at high cardiovascular risk**  
Jochemsen M. et al: Journal of Food and Nutrition Research Vol. 48, 2009, No. 1, pp. 51–58
41. **Advanced Glycation Endproducts (AGE) in chronic heart failure**  
Smit A. et al. Annals of New York Academy of Science 2008; 1126:225-30
42. **Clinical relevance of Advanced Glycation Endproducts for vascular surgery**  
Meerwaldt R. et al. Eur J Vasc Endovasc Surg. 2008; 38,125-131
43. **Skin autofluorescence is elevated in patients with stable coronary artery disease and is associated with serum levels of neopterin and the soluble receptor for advanced glycation end products.**  
Mulder DJ. et al. Atherosclerosis. 2007;197:217-223
44. **Clinical and prognostic value of Advanced Glycation End-products (AGEs) in chronic heart failure.**  
Hartog J. et al Eur J Heart Failure 2007;9:1146-55
45. **Skin Autofluorescence is an independent marker for Acute Myocardial Infarction**  
Mulder DJ, et al. Circulation: 2005; 112:II-371.

46. **Advanced glycation end-products and skin autofluorescence in end-stage renal disease: a review.**  
Arsov S. et al. Clin Chem Lab Med. 2013 Apr 4:1-10.
47. **Accumulation of tissue advanced glycation end products correlated with glucose exposure dose and associated with cardiovascular morbidity in patients on peritoneal dialysis.**  
Jiang J. et al. Atherosclerosis. 2012 Sep;224(1):187-94.
48. **Skin autofluorescence as a marker of cardiovascular risk in children with chronic kidney disease.**  
Makulska I. et al. Pediatr Nephrol. 2012 Sep 15. (Epub)
49. **Factors influencing skin autofluorescence of patients with peritoneal dialysis.**  
Mácsai E. et al. Acta Physiol Hung. 2012 Jun;99(2):216-22.
50. **Decreased serum carnitine is independently correlated with increased tissue accumulation levels of advanced glycation end products in hemodialysis patients.**  
Adachi T. et al. Nephrology (Carlton). 2012 Jul 13. doi: 10.1111/j.1440-1797.2012.01642.x.
51. **Skin Autofluorescence: A Pronounced Marker of Mortality in Hemodialysis Patients.**  
Gerrits E. et al. Nephron Extra. 2012 Jan;2(1):184-191.
52. **Advanced oxidation protein products and advanced glycation end products in children and adolescents with chronic renal insufficiency.**  
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53. **Evaluation of advanced glycation end products accumulation, using skin autofluorescence, in CKD and dialysis patients.** Oleniuc M. et al. Int Urol Nephrol. 2011 Oct;44(5):1441-9.
54. **Skin autofluorescence and the association with renal and cardiovascular risk factors in chronic kidney disease stage 3.**  
McIntyre N.J. et al. Clin J Am Soc Nephrol. 2011 Oct;6(10):2356-63.
55. **Tissue level of advanced glycation end products is an independent determinant of high-sensitivity C-reactive protein levels in haemodialysis patients.**  
Nagano M. et al. Nephrology (Carlton). 2011 Mar;16(3):299-303
56. **Skin autofluorescence as a measure of advanced glycation endproduct deposition: a novel risk marker in chronic kidney disease.**  
Smit AJ. et al. Curr Opin Nephrol Hypertens, 2010; 19(6):527-33.
57. **Skin autofluorescence is associated with renal function and cardiovascular diseases in pre-dialysis chronic kidney disease patients.**  
Tanaka K. et al. Nephrol Dial Transplant. doi: 10.1093/ndt/gfq369
58. **Advanced glycation end products, carotid atherosclerosis, and circulating endothelial progenitor cells in patients with end-stage renal disease.**  
Ueno H et al. Metabolism, 2010, doi: 10.1016/j.metabol.2010.04.001
59. **Tissue-Advanced Glycation End Product Concentration in Dialysis Patients**  
McIntyre et al; CJASN, 2010; 5(1): 51-55
60. **Does hepatitis C increase the accumulation of advanced glycation end products in haemodialysis patients?**  
Arsov S. et al. Nephrol Dial Transplant 2009; 25(3): 885-891
61. **Skin-Autofluorescence Is an Independent Predictor of Graft Loss in Renal Transplant Recipients**  
Hartog J. et al, Transplantation • Volume 87, Number 7, April 15, 2009
62. **Advanced Glycation End Products in Renal Failure: An Overview**  
Noordzij M. et al, Journal of Renal Care 2008
63. **AGEs, autofluorescence and renal failure**  
Gerrits E. et al. Nephrology Dialysis and Transplantation November 25, 2008
64. **Skin autofluorescence, a marker for advanced glycation end product accumulation, is associated with arterial stiffness in patients with end-stage renal disease**  
Ueno H. et al: Metabolism Clinical and Experimental 57 (2008) 1452–1457

65. **Skin Autofluorescence, a measure of tissue advanced glycation endproducts (AGEs), is related to the diastolic function of dialysis patients**  
Hartog J. et al. Journal of Cardiac Failure. 2008; 14(7): 596-602
  66. **Risk factors for chronic transplant dysfunction and cardiovascular disease are related to accumulation of advanced glycation end-products in renal transplant recipients**  
Hartog JW, et al. Nephrol Dial Transpl 2006 Aug;21(8):2263-9
  67. **Skin autofluorescence, a measure of cumulative metabolic stress and advanced glycation endproducts, predicts mortality in hemodialysis patients**  
Meerwaldt R, et al. J Am Soc Nephrol 2005;16:3687-93.
  68. **Skin autofluorescence, a noninvasive measure of advanced glycation end product accumulation, is a predictor of mortality in hemodialysis patients**  
Meerwaldt R, et al. Ann N Y Acad Sci 2005;1043:911.
  69. **Accumulation of advanced glycation end products, measured as skin autofluorescence, in renal disease.**  
Hartog JW. et al. Ann N Y Acad Sci. 2005 Jun;1043:299-307.
  70. **Advanced glycation endproducts in kidney transplant patients: a putative role in the development of chronic renal transplant dysfunction**  
Hartog J. et al. Am J Kidn Dis 2004; 43:966-975
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## AGE Reader in other diseases

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71. **Plasma AGEs and skin autofluorescence are increased in COPD.**  
Gopal P. et al. Eur Respir J. 2013 May 3. [Epub ahead of print]
72. **Increased advanced glycation end-products (AGEs) assessed by skin autofluorescence in schizophrenia.**  
Kouidrat Y. et al. J Psychiatr Res. 2013 Apr 21.
73. **Local differences in skin autofluorescence may not reflect similar differences in oxidative stress exposure.**  
Hettema M. et al. J Rheumatol. 2013 Feb;40(2):206.
74. **Vascular Aspects of Fabry Disease in Relation to Clinical Manifestations and Elevations in Plasma Globotriaosylsphingosine.**  
Rombach S.M. et al. Hypertension. 2012 Aug 6. (Epub)
75. **Advanced Glycation Endproducts are increased in RA patients with controlled disease.**  
de Groot L. et al. Arthritis Res Ther. 2011 Dec 14;13(6):R205.
76. **Increased skin autofluorescence after colorectal operation reflects surgical stress and postoperative outcome.**  
Pol H.W. et al. Am J Surg. 2011 Nov;202(5):583-9.
77. **Skin autofluorescence, as marker of accumulation of advanced glycation endproducts and of cumulative metabolic stress, is not increased in patients with systemic sclerosis.**  
Hettema M.E.. et al. Int J Rheumatol. 2011. Epub
78. **Skin advanced glycation end-product accumulation is negatively associated with calcaneal osteo-sono assessment index among non-diabetic adult Japanese men.**  
Momma H. Osteoporos Int. 2011 Sep 8. Epub
79. **Skin autofluorescence is high in patients with cirrhosis - further arguing for the implication of Advanced Glycation End products.**  
Maury E. et al. J Hepatol. 2011 May;54(5):1079-80.
80. **Skin advanced glycation end product accumulation and muscle strength among adult men.**  
Momma H. et al; Eur J Appl Physiol. 2010 (Epub)

- 81. Skin Autofluorescence as Marker of Tissue Advanced Glycation End-Products Accumulation in Formerly Preeclamptic Women.**  
Coffeng S.M. et al. Hypertens Pregnancy; 2010, Epub
  - 82. Accumulation of advanced glycation end (AGEs) products in intensive care patients: an observational, prospective study.**  
Greven W. et al. BMC Clinical Pathology; 2010: 10 (4)
  - 83. Increased accumulation of advanced glycation endproducts in patients with Wegener's granulomatosis.**  
Leeuw de K et al. Ann Rheum Dis. 2009; 69(3): 625-U191
  - 84. Skin autofluorescence is increased in systemic lupus erythematosus but not reflected by plasma levels advanced glycation endproducts**  
Nienhuis H. et al: Rheumatology. 2008; 47(10): 1554-1558
  - 85. Skin autofluorescence is increased in systemic lupus erythematosus but not reflected by plasma levels of advanced glycation endproducts**  
Nienhuis H. et al. Rheumatology; 2008; 47(10): 1554-1558
  - 86. Advanced glycation end products and the absence of premature atherosclerosis in glycogen storage disease Ia**  
den Hollander NC. et al. J Inherit Metab Dis. 2007. epub ahead of print
  - 87. Accumulation of advanced glycation endproducts in patients with systemic lupus erythematosus.**  
de Leeuw K. et al. Rheumatol 2007;45:1551-1556.
  - 88. Skin autofluorescence, a marker of advanced glycation end products and oxidative stress, is increased in recently preclamptic women**  
Blaauw J. et al. Am J Obstet Gynecol. 2006 Sep;195(3):717-22.
  - 89. Enhanced skin autofluorescence as a marker for oxidative stress in sepsis, a pilot study.**  
Mulder DJ, et al. Eur Soc Intensive Care Medicine 2004
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## **AGE Reader (technical) validation**

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- 90. Reference values for the Chinese population of skin autofluorescence as a marker of advanced glycation end products accumulated in tissue.**  
Yue X. et al. Diabet Med. 2011 Jul;28(7):818-23.
- 91. Dermal factors influencing measurement of skin autofluorescence.**  
Noordzij M.J. et al. Diabetes Technol Ther. 2011 Feb;13(2):165-70
- 92. Skin color independent assessment of aging using skin autofluorescence**  
Koetsier M. et al. Optics Express, 2010 ;18(14):14416-29
- 93. Reference Values of Skin Autofluorescence.**  
Koetsier M. et al. Diabetes Technology & Therapeutics 2010; 12(5):399-403
- 94. Skin autofluorescence for the risk assessment of chronic complications in diabetes: a broad excitation range is sufficient**  
Koetsier M. et al: Optics Express. 2009; 17(2): 509-519
- 95. Skin autofluorescence increases postprandially in human subjects**  
Stirban A. et al. Diabetes Technology & Therapeutics 2008: 10:200-5
- 96. The Effect of Aggressive Versus Conventional Lipid-lowering Therapy on Markers of Inflammatory and Oxidative Stress.**  
Mulder DJ. et al. Cardiovasc Drugs Ther. 2007 Apr;21(2):91-7.
- 97. Skin Autofluorescence, a Novel Marker for Glycation and Oxidative Stress derived Advanced Glycation Endproducts. An Overview of Current Clinical Studies, Evidence and Limitations**  
Mulder DJ, et al. Diabetes Technology and Therapeutics 2006; 8:523-535.

**98. Simple noninvasive measurement of skin autofluorescence**

Meerwaldt R, et al. Ann N Y Acad Sci. 2005;1043:290-298.

**99. Instrumentation for the measurement of Autofluorescence in the human skin**

Graaff R et al. Proc. of SPIE Vol. 5692 (SPIE, Bellingham, WA, 2005). pp. 111-118.

**100. Simple non-invasive assessment of advanced glycation endproducts accumulation**

Meerwaldt R et al. Diabetologia 2004; 47:1324-1330

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