AGE READER SU

Know their risk.

Non-invasive assessment of cardiovascular risk

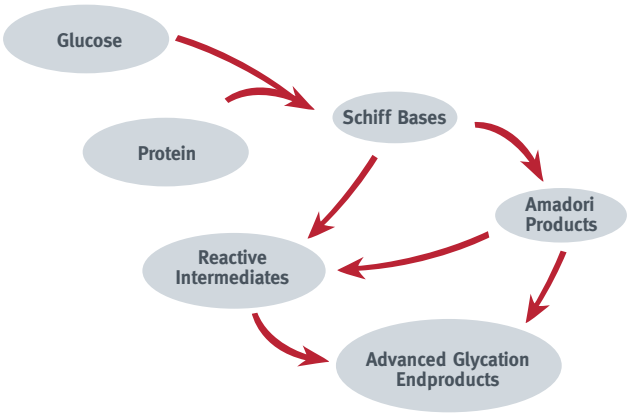
The AGE Reader provides an immediate cardiovascular risk prediction. The AGE Reader non-invasively measures tissue accumulation of Advanced Glycation Endproducts by means of skin autofluorescence. The measurement is reliable, real time and non-invasive.

A perfect tool for your clinical research.

About AGEs

(Advanced Glycation Endproducts)

AGEs are the result of a chain of chemical reactions (the Maillard reaction) including an initial glycation. AGEs normally accumulate slowly over a person's lifetime in tissues with slow turnover. But this process occurs more rapidly in patients with conditions such as diabetes mellitus, renal failure and cardiovascular disease. Accumulated AGEs play a key role in the development of diabetes and its complications. The level of AGEs in tissue reflects the glycometabolic memory and is a valuable predictor of (pre)diabetes and cardiovascular complications.

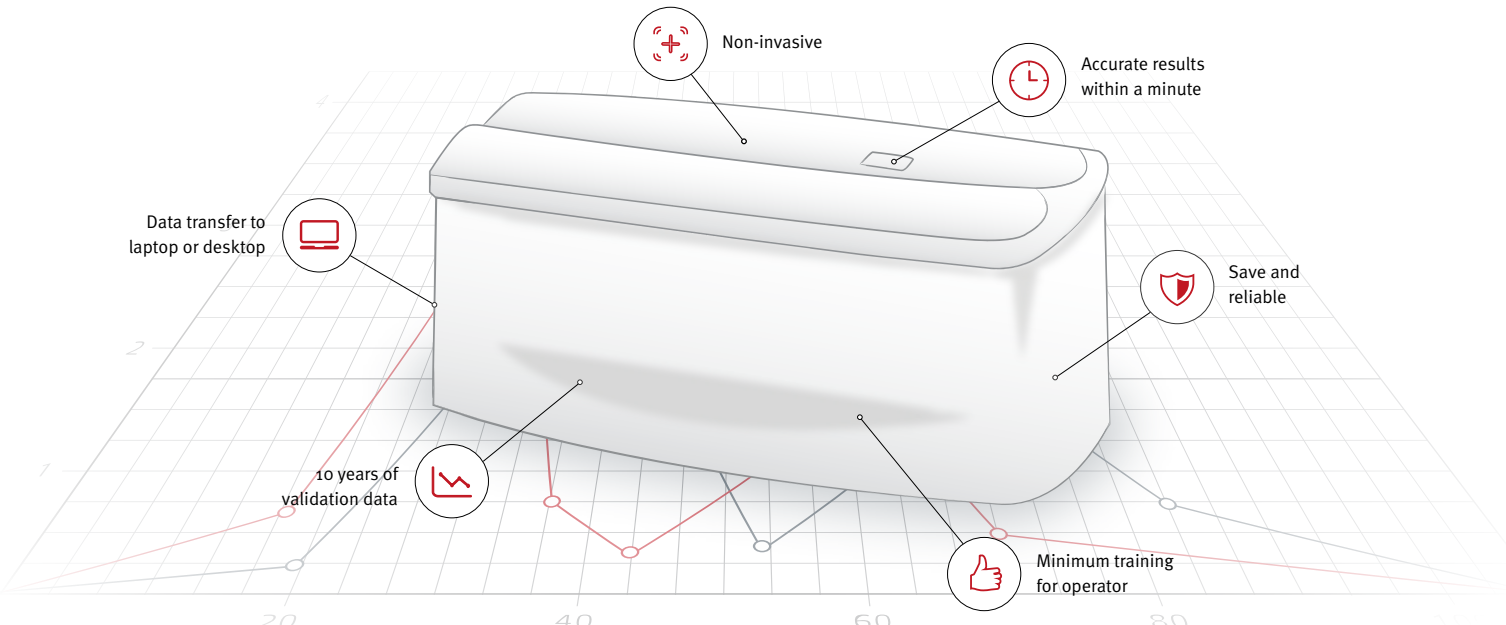


AGEs play a key role in the pathogenesis of many age-related diseases, such as diabetes, cardiovascular disease and renal failure.

Measuring AGEs

With any other measurement it has been complicated to measure tissue AGEs in patients because they are expensive, time consuming, lack specificity, are poorly reproducible and/or are invasive. The AGE Reader is the answer to the need for measuring AGEs without the disadvantages of the existing methods. This state of art device provides a simple non-invasive solution, which allows clinicians to determine the AGE level within 10 seconds.

Many advanced glycation endproducts (AGEs) have a characteristic fluorescence. Moreover, tissue fluorescence in (invasive) biopsies has an established association with chronic complications. The AGE Reader is able to easily, quickly and noninvasively measure AGEs by means of fluorescence techniques[1].



AGE Reader

The AGE Reader provides an immediate prediction for cardiovascular risk. The measurement is reliable, real time, non-invasive and easy to use.

Moreover, the AGE Reader has been validated in clinical studies around the world. The AGE Reader has been used in clinical practice and research since 2006 in over 500 clinics worldwide. Since the introduction of the AGE Reader more than 140 peer reviewed papers have been published. These papers give an overview of clinical studies in diabetes[2], cardiovascular disease[3] and renal disease[4].

The AGE Reader SU (Standard Unit) is a perfect tool for your clinical research. The AGE Reader SU is connected to your own pc or laptop and is operated by the AGE Reader software. It allows users to process and analyse the data immediately on the external computer. A printout of the measurement report can be made directly. It is particularly suitable for users who wish to do immediate analysis on their measurement results.

Clinical validation

AGE Reader in diabetes:

- Reflects vascular damage in the diabetes patient and identifies diabetic patients at risk of developing complications[2, 5, 6].
- Strong and independent predictor of cardiovascular events and mortality [7].

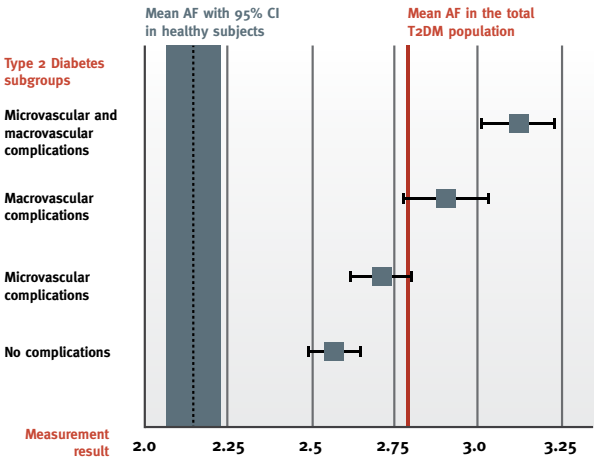
AGE Reader in renal disease:

- Independent predictor of cardiovascular disease associated mortality in hemodialysis[8] and chronic kidney disease patients[9].
- Strong and independent predictor of mortality and chronic graft loss in renal transplant recipients[10].

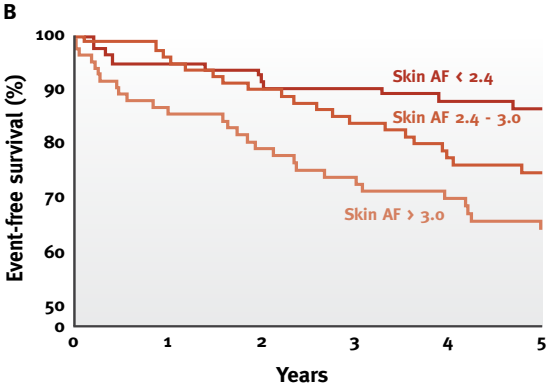
AGE Reader in cardiovascular disease:

- Independent marker for acute myocardial infarction[11].
- Predictor of mortality[12], coronary events[13] and amputation[14] in patients with peripheral artery disease.

Type 2 Diabetes population (n=987)



Fatal or Nonfatal major CV events



* References can be found on the back

Diagnoptics

The AGE Reader SU is part of the AGE Reader product line.
Please visit our website for more information about the other products.

Diagnoptics Technologies B.V.
www.diagnoptics.com
www.age-reader.com

Address:
Aarhusweg 4-9
9723JJ Groningen
The Netherlands

Contact details:
P +31 50 589 06 12
F +31 50 589 06 13
E info@diagnoptics.com

References

1. Meerwaldt R. et al. Diabetologia. 2004; 47(7): 1324-1330.
2. Lutgers H. et al. Diabetes Care. 2006; 29(12): 2654-2659.
3. Hofmann B. et al. Exp Gerontol. 2012 Epub May 12.
4. McIntyre N. et al. Clin J Am Soc Nephrol. 2011 Oct;6(10):2356-63.
5. Gerrits E. et al. Diabetes care. 2008; 31(3): 517-521.
6. Noordzij M. et. Diabet Med. 2012; 29(12): 1556-1561.
7. Lutgers H. et al. Diabetologia, 2009; 52(5): 789-797.
8. Meerwaldt R. et al. J Am Soc Nephrol. 2005; 16: 3687-3693.
9. McIntyre N. et al. Clin J Am Soc Nephrol. 2011; 6(10): 2356-63.
10. Hartog J. et al. Transplantation. 2009; 87: 1069-1077.
11. Mulder D. et al. Circulation. 2005; 112: II-371.
12. De Vos L. et al. Arterioscler Thromb Vasc Biol. 2013 Jan;33(1):131-8.
13. De Vos L. et al. Arterioscler Thromb Vasc Biol. 2014 Apr;34(4):933-8.
14. De Vos L. et al. Arterioscler Thromb Vasc Biol. 2015 Jun;35(6):1532-7.