

## Non-invasive cardiovascular risk assessment

The AGE Reader provides an immediate prediction for the cardiovascular risk of your patient. The non-invasive and extensively validated AGE Reader is and ideal tool for point of care testing. The measurement result is available in 12 seconds and can be exported directly.

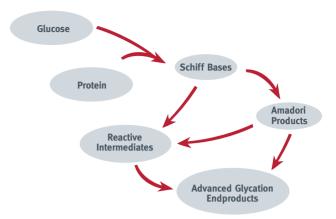


A perfect tool for diabetologists and family doctors.

# About AGEs

### (Advanced Glycation Endproducts)

AGEs are the result of a chain of chemical reactions (the Maillard reaction) after 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. AGEs also accumulate rapidly under circumstances of oxidative stress. These 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 cardiovascular events and (pre)diabetes.



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 the art device provides a simple non-invasive solution, which allows clinicians to determine the AGE level within 12 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<sup>1</sup>.

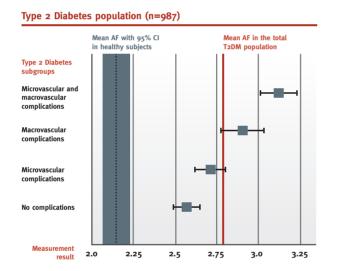


# AGE Reader

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 1000 clinics worldwide. Since the introduction of the AGE Reader more than 200 peer reviewed papers have been published. These papers give an overview of clinical studies in diabetes<sup>2</sup>, cardiovascular disease<sup>3</sup> and renal disease<sup>4</sup>.





# **Clinical validation**

Key conclusions of the clinical validation studies using the AGE Reader:

- Reflects vascular damage in the diabetes patients<sup>2</sup>.
- Identifies diabetic patients at risk of developing (cardiovascular and microvascular) complications<sup>5,6,7</sup>.
- Predicts the risk of having or developing diabetes and the metabolic syndrome<sup>8,9</sup>.
- Strong predictor of major cardiovascular events in peripheral artery disease<sup>10</sup>.

# Clinical use

Clinical professionals have been successfully using the AGE Reader in their clinics for over 10 years. The AGE Reader is the answer to the need to quickly, reliably and non-invasively measure the cardiovascular risk of your patient.

The AGE Reader assists clinical professionals in identifying patients with an increased cardiovascular risk. This helps clinicians to decide whether a change in treatment is needed. This non-invasive and convenient measurement can be performed by any clinical professional and is completed within 12 seconds.

### The AGE Reader App

Export the measurement directly to the AGE Reader App using the Bluetooth connection and add other cardiovascular risk factors to generate a comprehensive Cardiovascular Risk Report. For each patient all visits can be documented and consulted in the easy to use App. The Cardiovascular Risk Report can simply be **printed, saved** and **shared**.

## Download the AGE Reader App free of charge on www.diagnoptics.com. Available for:

	$\times$
Windows	OS X



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### **Explain & Motivate patients**

The graphical display allows you to combine the AGE Reader result with desired other cardiovascular risk factors and explain the results to patients. A hardcopy of the report can be handed to the patient, which will make it easier to understand the measurement result and the associated cardiovascular risk.

#### References

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Please visit www.diagnoptics.com/age-reader for a complete overview of all AGE Reader publications.

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