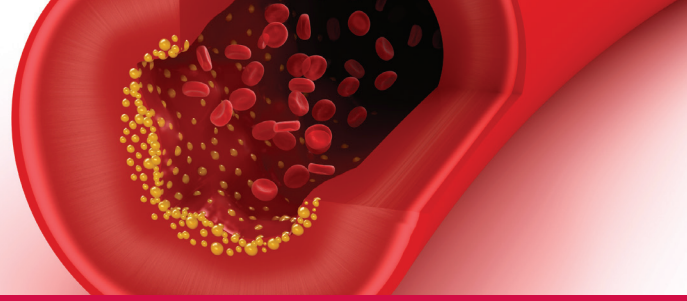


# Fructosamine



## Monitoring of glycaemic control Item Number 66557

### INTRODUCTION

Fructosamine has not been as widely accepted as HbA1c because the association between chronically elevated HbA1c level and an increased risk for certain diabetic complications is well established. HbA1c is the standard measure by which to monitor long-term (2-3 months) glucose control in people with diabetes and is now used for diagnosis of diabetes. However, HbA1c testing has limitations in patients with conditions affecting haemoglobin and the life-span of red blood cells. Fructosamine and glycated albumin are markers of short-term (2-4 weeks) glycaemic control that might add complementary prognostic information to HbA1c<sup>1</sup>. The ARIC study shows that chronically elevated fructosamine is strongly associated with prevalent retinopathy and has an elevated risk of developing Chronic Kidney Disease (CKD) among persons with diagnosed diabetes<sup>1</sup>. Its prognostic value is comparable to HbA1c<sup>1</sup>.

### ABOUT THE TEST

Fructosamine testing measures the proportion of blood and tissue proteins that have undergone glycation. Since albumin is the most abundant protein in the blood, fructosamine levels typically reflect albumin glycation.

### TEST INDICATIONS

Fructosamine may be used to complement, or substitute for the HbA1c when a HbA1c may not be reliable. It also allows the effectiveness of the therapy adjustments to be evaluated after a few weeks.

### TEST LIMITATIONS

A falsely low fructosamine result will be seen in patients with a rapid albumin turnover, for example in patients with cirrhosis or nephrotic syndrome.

### HOW TO ORDER

Request 'Fructosamine'.

### TURNAROUND TIME

Test is performed daily with results available the next day.

### MEDICARE BILLING CRITERIA

This test is bulk-billed subject to Medicare guidelines and criteria being met. If Medicare guidelines and criteria aren't met, an out-of-pocket fee may apply.

Medicare subsidises this test up to four times in a 12 month period if the patient has established diabetes.

### FURTHER INFORMATION

For further information please contact your Medical Liaison Officer.

1. Selvin E, Rawlings AM, Grams M, Klein R, Sharrett AR, Steffes M, Coresh J. Fructosamine and glycated albumin for risk stratification and prediction of incident diabetes and microvascular complications: a prospective cohort analysis of the Atherosclerosis Risk in Communities (ARIC) study. *Lancet Diabetes Endocrinol.* 2014 Apr;2(4):279-88
2. <https://www.rcpa.edu.au/Library/Practising-Pathology/RCPA-Manual/Items/Pathology-Tests/F/Fructosamine>. Accessed 15th September 2016

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