

NEW!

StatStrip® Hb/Hct

Point of Care Testing for
Haemoglobin and Haematocrit



**The Only Point of Care Meter in Australia to
Measure, Not Calculate Both Hb and Hct**

For more information on the StatStrip Hb/Hct Meter, please contact us on
1300 845 762 or at poc@amsl.com.au

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The Only Point of Care Meter to *Measure*, Not Calculate Both Hb and Hct



Point of care testing for haemoglobin (Hb) and haematocrit (Hct)

The StatStrip® haemoglobin and haematocrit meter system is the only point of care (POC) system to provide anaemia screening and monitoring with measured, not calculated Hb and Hct (red cell volume) tests. This important breakthrough is possible because of new, patented electrochemical technologies developed by Nova Biomedical. Along with tiny fingerprick capillary samples (1.6 µL) and results in 40 seconds, StatStrip Hb/Hct improves clinical decision making at the point of care.

Accurate assessment of anaemia

Accurate anaemia evaluation requires both measured Hct and measured Hb. However, current POC meters only provide a calculated estimate of Hct.

Calculated Hct assumes a normal Hct-to-Hb relationship [$\text{Hct \%} = 3 \times \text{Hb (g/L)}$] and is therefore inaccurate whenever Hct is abnormal.

This is particularly evident in red cell structural abnormalities, haemoglobinopathies and haemolytic conditions caused by infection, autoimmune disease, toxins, drugs and chemicals. These conditions make measuring Hct a necessity, as calculated results can negatively impact treatment.

Small sample

StatStrip Hb/Hct uses a 1.6 µL fingerprick capillary blood sample, making routine Hb and Hct testing and anaemia screening virtually painless for the patient. It also enables frequent monitoring of blood loss in acute patients.



Blood Sample Size Comparison

StatStrip Hb/Hct	Other POC Systems	
		
Hb and Hct	Hb only	Hb only
1.6 µL	10 µL	10 µL

Economical Hb and Hct testing

Fingerprick capillary sampling eliminates costly blood drawing supplies, venous phlebotomy and lab testing. Combined with a single-use, low cost biosensor, StatStrip Hb/Hct offers economical POC Hb/Hct testing in many healthcare settings, including:

- Blood banks
- Dialysis centres
- Primary care clinics
- Hospital departments
- Oncology clinics

Easy, Simple Point of Care Anaemia Testing



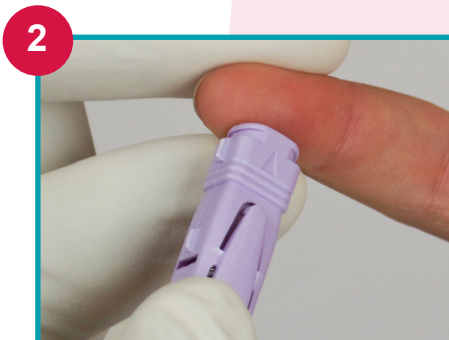
Simple testing

Similar to glucose self-testing, the StatStrip Hb/Hct meter's single-use biosensors do not require calibration or coding. A biosensor ejector allows for touch-free disposal and eliminates a potential biohazard.

Testing takes three simple steps:



Insert biosensor into meter.



Lance finger to obtain blood drop.



Touch biosensor to blood drop.

Complete data connectivity

StatStrip Hb/Hct offers both hardwired and wireless bi-directional connectivity for data integration with patient records. Features include:

- Rapid identification of data exceptions with dashboard indicators
- Data consolidation and transfer from meter to other data sites
- Complete data security and encryption

Compact and lightweight

The StatStrip Hb/Hct meter's compact and lightweight design is less than half the size and weight of other POC systems that measure only Hb. Its bright colour screen is larger and easier to read than the monochrome displays of other systems.

Analyser Size Comparison

StatStrip Hb/Hct



Measures Hb and Hct

147 mm x 79 mm x 30 mm (5.8 in x 3.1 in x 1.18 in)

220 g, 348.4 cc volume

Other POC Systems



Measures Hb only

140 mm x 160 mm x 70 mm (5.51 in x 6.29 in x 2.78 in)

500 g, 1568 cc volume



Measures Hb only

170 mm x 93 mm x 50 mm (6.70 in x 3.66 in x 1.97 in)

250 g, 790.5 cc volume

Clinical Applications of StatStrip Hb/Hct



Blood banks

StatStrip Hb/Hct provides the accuracy needed to safely and effectively screen blood donors to avoid false deferrals.

- Accurate, sensitive and specific over the entire Hb measurement range of 65 - 220 g/L
- Improved screening in cases of red blood cell structural abnormalities and haemolytic anaemias
- Portable use in mobile or temporary blood collection locations

Oncology

Chemotherapy-induced anaemia (CIA) affects approximately 83% of cancer patients. However, it is often underestimated by providers and left untreated. CIA exacerbates a cancer patient's symptoms, including fatigue, weakness, fluid retention, dyspnoea, sustained elevated heart rate and depression, all of which can become severe and impact both quality of life and prognosis. Proper Hb management helps to mitigate these symptoms and direct chemotherapy treatment.¹

StatStrip Hb/Hct provides the real-time Hb status needed to proactively identify high-risk patients for CIA and provide rapid treatment.

Antenatal

In pre-natal care, nearly 42% of pregnant women experience anaemia. Causes include deficiencies in iron, folic acid and vitamin B12 as well as blood loss, certain diseases and inherited blood disorders. If left untreated, anaemia can become severe, which increases risk of premature birth, low birth weight for the baby and postpartum depression.²⁻⁴

StatStrip helps clinicians:

- Prevent and monitor anaemia in pregnant women
- Adjust treatment including nutrition and supplements

Pre-hospital and emergency

StatStrip Hb/Hct provides real-time, accurate results when every second counts, for:

- Rapid evaluation of excessive blood loss or anaemia due to trauma, gastrointestinal bleeding or other sources
- Immediate identification of dehydration
- Faster initiation of treatment, including beginning fluids during transport
- Evaluation of abdominal pain for a blood disorder crisis such as sickle cell disease or internal injury such as spleen rupture
- Evaluation of chronic kidney disease (CKD) in which anaemia is usually present
- Easy, portable use in high-stress care situations



Dialysis

Anaemia is a common co-morbidity in patients undergoing dialysis. Maintaining individual and facility-level Hb guidelines is associated with increased survival rates and reduced hospitalisation in this population.⁵

More restrictive guidelines for using erythropoiesis stimulating agents (ESA) have also emerged. Weekly Hb monitoring and frequent ESA adjustment (once every 2 weeks) to the lowest effective dose has been shown to lower facility-level Hb variation and increase the number of patients in Hb target levels.⁶

StatStrip Hb/Hct provides important benefits for dialysis treatment:

- Real-time results during the patient visit
- Helps maintain patients in clinically appropriate ranges
- Characterises hypo-chromic (iron-deficient) anaemia more accurately
- Provides quantitative data for blood transfusion, ESA and iron therapy decisions

Hospital

Anaemia is common in hospitalised patients, especially among critically ill patients. With StatStrip Hb/Hct, departments can:

- Obtain real-time Hb and Hct status from a small fingerprick sample
- Obtain measured Hct, which is more accurate than calculated Hct, especially in haemoglobinopathies, red cell abnormalities and haemolytic conditions due to infection, autoimmune disease, toxins, drugs and chemicals
- Save costs and time needed for blood drawing and lab testing
- Make better informed, faster decisions related to using blood products and ESAs
- Direct chemotherapy and identify high-risk patients for CIA and provide rapid treatment
- Monitor at-risk groups for low Hb and Hct, including patients in critical care or requiring blood transfusion and patients with existing chronic illness, gastrointestinal conditions, infection, inflammation, renal damage or insufficiency and sepsis



Specifications



StatStrip Hb/Hct Biosensors

Tests Measured.....Haemoglobin and Haematocrit
Sample Volume.....1.6 µL
Test Methodology.....Electrochemistry

Sample Types:

Whole Blood.....Capillary, Venous

Measurement Ranges:

Haemoglobin.....65 - 220 g/L
Haematocrit.....20% - 65%

Operating Ranges:

Temperature.....15°C - 40°C
Altitude.....Up to 4,572 m
Humidity.....10% - 90% relative humidity

Reagents and Strips:

Strips.....25 strips per vial, 2 vials per package
QC.....2 levels (sold separately)
Linearity.....3 levels available

Test Strips and QC Use Life:

24 months from date of manufacture

Additional Features:

- Colour, large numeric display
- QC with target values assigned to target materials
- Auto sample detection and analysis start
- Auto sample counter with date/time stamp for data tracking
- Auto shut-off when not in use
- Biosensor ejector
- Optional carrying case

StatStrip Hb/Hct Meter

Tests Measured.....Haemoglobin and Haematocrit
Sample Volume.....1.6 µL
Test Time.....40 Seconds
Weight.....220 g
Meter Size.....147 mm x 79 mm x 30 mm

Operating Modes:

Capillary, Venous

Data Storage:

Patient Tests.....1,000
QC Tests.....200

Connectivity:

Meter Data Output.....RJ-45 Ethernet Port
Protocol.....TCP/IP Ethernet 10/100 Mbit
Standard.....POCT1-A Compliant

Battery Information:

Type.....3.7V Li-ion Rechargeable

Other AMSL Point of Care Products



StatProfile® Prime Plus
Blood Gas Analyser



StatStrip® Glucose/
Ketones Meter



StatStrip® Lactate Meter



StatSensor® Creatinine/
eGFR Meter

For more information or to arrange a demonstration to see the benefits for yourself, please contact us on **1300 845 762** or at **poc@amsl.com.au**

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References: **1.** Hwasoon R. Chemotherapy-induced anaemia in cancer patients. OncoLink: 17 Jan 2012. **2.** de Benoist B (Ed.) *Worldwide prevalence of anaemia 1993-2005: WHO global database on anaemia*. Switzerland: WHO Press, World Health Organization, 2008. **3.** Townsley DM. Hematologic complications of pregnancy. *Semin Hematol* 2013;50(3):222-231. **4.** Mayo Clinic. Iron deficiency anemia during pregnancy: Prevention tips. 15 Feb 2017. **5.** Jing Z et al. Haemoglobin targets for chronic kidney disease patients with anaemia: A systematic review and meta-analysis. *PLoS ONE* 2012;7:e43655. **6.** Hung S-C et al. Erythropoiesis-stimulating agents in chronic kidney disease: What have we learned in 25 years? *J Formos Med Assoc* 2014;113:3-10. ARTG 197482, ARTG 200682. PR-100-320 July 2019