WOODLEY
LABORATORY DIAGNOSTICS

The Innovative InSight™ Diagnostic System

Combining three of the world's most valued dry reagent diagnostic systems for haematology, biochemistry and infectious diseases.

The InSight™ Diagnostic System is designed to enable diagnostic testing for biochemistry, haematology and infectious diseases to be performed at the Point Of Care in virtually any environment or setting. Revolutionise the diagnostic capabilities of remote health clinics at the Point Of Care.

Woodley Laboratory Diagnostics are pleased to announce the partnership of three of the world's most respected Point Of Care diagnostic devices to create the InSight™ Diagnostic System. The 3-component system combines the SpotChem™ EZ clinical chemistry analyser, the QBC Autoread™ Plus haematology analyser and the QBC ParaLens™ Advance fluorescence microscopy system, and is designed for use in remote health clinics. When combined, the three analysers become a critical diagnostic testing package capable of providing a complete health screen to patients who have not previously had access to these types of diagnostic tests. The individual components of the system are respected worldwide for their reliability, functionality and ease of use. Now for the first time, they are available as a complete system from Woodley Lab Diagnostics. The system is the world's only health screening package based around dry reagent technology, eliminating many of the issues faced by clinicians in some of the world's harshest environments. Traditional haematology and biochemistry analysers use liquid reagents to test the patients sample; none of the analysers in the InSight™ Diagnostic System use liquid reagents, therefore eliminating issues relating to storage space, biohazardous waste and spillages. Conventional liquid reagent systems require regular servicing, daily maintenance, have to run lengthy start-up and shut-down cycles and have many issues regarding break-down time; these problems are of vital consideration in remote health care clinics. The InSight™ Diagnostic System eliminates all these issues; it does not require regular servicing or maintenance, is ready to use within 5 minutes and is based around tried and tested dry reagent technology. The whole InSight™ Diagnostic System can be operated using a capillary blood sample, making it especially useful in paediatric diagnostics. These key features make the InSight™ Diagnostic System ideal for remote health care clinics that are unable to maintain a

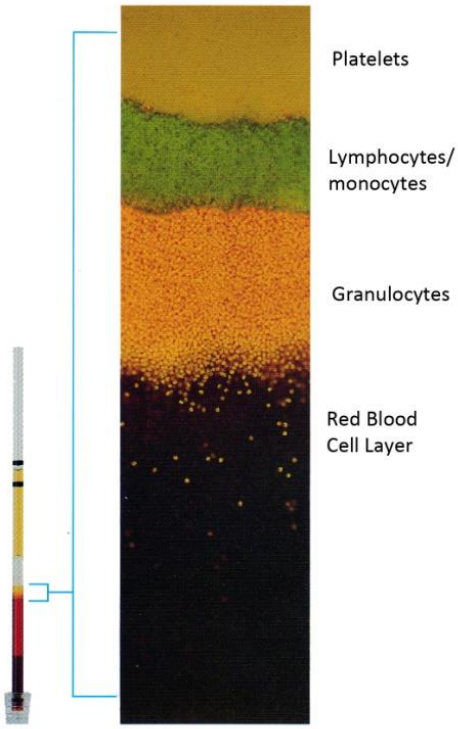
liquid reagent system such as outreach clinics in Africa, military medical tents, oil and gas rig medical clinics, cruise ships and research facilities in the remotest parts of the world. By reducing the difficulties associated with liquid reagent diagnostic systems, it will enable life-saving diagnostic tests to be performed instantly at the Point Of Care for immediate diagnosis and treatment.

Biochemistry

The first component of the new InSight™ Diagnostic System is the SpotChem™ EZ dry reagent clinical chemistry analyser. The SpotChem™ EZ clinical chemistry analyser is easy to use and provides the capability to test a total of 22 biochemistry parameters using capillary blood. Using one of the 6-parameter panel profiles, plus up to 3 individual parameter strips, the SpotChem™ EZ allows testing of up to 9 parameters simultaneously using capillary blood. This analyser can also use serum or plasma, making the system is extremely flexible. It is highly reliable and requires no regular maintenance or servicing; essential for remote health care centres where access for a service engineer is extremely difficult and costly. The analyser eliminates the need for an additional, external centrifuge as the 250 µL of capillary blood is placed in the unique centrifuge bucket and then spun in the analysers built-in centrifuge. The SpotChem™ EZ will analyse up to 9 parameters and print results using the internal thermal printer in under 10 minutes. Individual parameters such as Glucose, Creatinine, Urea, Amylase, Albumin, Uric Acid, Total Cholesterol, Total Protein and Total Bilirubin are available. Biochemistry screening is essential to evaluate a variety of chemicals and enzymes in the blood to provide general information about the status of organ health and function, especially the liver, kidneys, and pancreas.

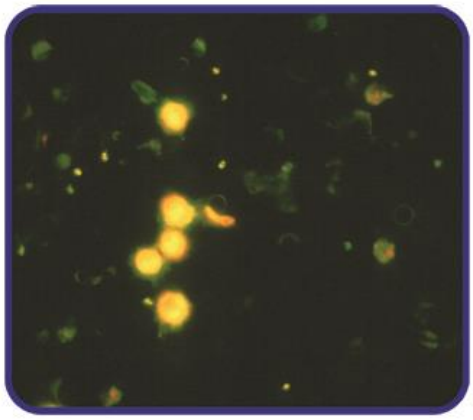
Haematology

The QBC Autoread™ Plus dry reagent haematology system is the second component of the InSight™ Diagnostic System. Using the specially designed QBC capillary tube, it can measure 9 clinically significant haematology parameters including Haematocrit, Haemoglobin, MCHC, Platelet Count, White Blood Cell Count, Granulocyte count and percentage and Lymphocyte/Monocyte count and percentage. The test takes just 7 minutes. The unique QBC capillary tube, which is lined with the fluorochrome Acridine Orange, uses just 60 µL of capillary blood; when centrifuged the blood components of the sample separate into bands



based on density. This dry reagent haematology system is an extremely durable, highly portable, cost-effective and simple solution for conducting essential haematology testing in virtually any setting. Haematology screening is essential to assist in the diagnosis of conditions such as anaemia, leukaemia, dengue, autoimmune conditions, general infections, vitamin/mineral deficiencies, inflammation and thalassemia. It is also essential to analyse the severity of blood loss, to monitor responses to drug treatments, to evaluate symptoms such as fatigue, weakness, fever, bruising or weight loss and for routine screening procedures.

Infectious Diseases



Once the haematology stage is completed, the same QBC capillary tube containing the patient sample can be immediately examined for infectious disease parasites using the QBC ParaLens™ Advance. The QBC ParaLens™ Advance fluorescence microscopy attachment is the third component of the InSight™ Diagnostic System. This bright, LED light source is designed to attach to any standard light microscope using RMS threading and upgrade it to LED fluorescence. A number of studies have been undertaken regarding the use of LED fluorescence microscopy for the detection of infectious disease parasites, in particular Malaria. The QBC ParaLens™ Advance is a low-cost alternative to a traditional fluorescent microscope; it does not contain hazardous materials, has a long life time, allows the clinician to use their existing microscope and has multiple power options including a solar panel, 12V battery adapter and USB adapter. The Acridine Orange in the QBC capillary tube stains any parasites in the sample. These parasites then fluoresce brightly against a dark background when excited by the blue light (~460nm) of the QBC ParaLens™ Advance. As the QBC capillary tube has been centrifuged, the parasites in the sample concentrate in a distinct layer making them easy to detect; it is this concentration effect that has proved so sensitive and specific in the diagnosis of malaria. Scientific studies have been undertaken to identify parasites in addition to malaria such as Trypanosomes, Filariasis, Babesiasis, Borrelia and others within the QBC capillary tube. The African region alone accounted for 174 million of the 216 million estimated malaria cases in the world and 596,000 deaths in 2010 (W.H.O., 2011). Using the QBC capillary tube to detect malaria is 5.5 – 7% more sensitive than Giemsa stain; it will detect as little as 1 parasites per µL of blood and establish diagnosis earlier than thick film in 47% of low parasitemia (<10 parasites per µL) cases. The InSight™ Diagnostic System is a highly efficient diagnostic technique which utilises one QBC capillary tube for both the haematology screen and for examining infectious disease parasites, essentially saving time and money.

The innovative InSight™ Diagnostic System will allow critical, life-saving diagnostic tests to be performed in virtually any setting. It would be impossible for remote health clinics to run traditional biochemistry and haematology liquid reagent analysers because they are too problematic to maintain; they require costly, routine maintenance, have high down-time rates, are highly technical, use bulky liquid reagents and produce liquid biohazardous waste. Because of this, most remote health clinics do not currently have the ability to perform life-saving haematology, biochemistry or infectious disease diagnostic tests - the InSight™ Diagnostic System will make this possible. It combines three systems that are easy to use, require no regular maintenance or servicing, feature no liquid reagents and do not produce any hazardous waste. All three systems can be operated with minimal training and take up very little bench top and reagent storage space. The InSight™ Diagnostic System is a cost effective solution for health screening at the Point Of Care and can contribute towards improving the diagnostic capabilities of the most remote health clinics, especially in African regions and in the military.

Parameters

Biochemistry:
SpotChem™ EZ
Albumin
Aklaline Phosphate
Amylase
Calcium
CPK
Creatinine
Fructosamine
Gamma GT
Glucose
GOT/AST
GPT/ALT
Haemoglobin
HDL-C
Inorganic Phosphorous
LDH
Magnesium
Total Bilirubin
Total Cholesterol
Total Protein
Triglycerides
Urea
Uric Acid

Haematology:
QBC Autoread™ Plus
Haematrocrit
Haemoglobin
MCHC
Platelet Count
White Blood Cell Count
Granulocyte Count
Granulocyte %
Lymphocyte/Monocyte Count
Lymphocyte/Monocyte %

Infectious Diseases:
QBC ParaLens™ Advance
Malaria
Filariasis
Babesiosis
Trypanosomiasis
Blastocystis
Relapsing Fever
Lyme Disease
Leptospirosis
Trichomonas Vaginalis
Girardiasis
Cryptosporidiosis
Visceral Leishmaniasis

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