



SOMAGEN™
Inspired.



In This Issue

Have you seen your MIC lately?

Tosoh Bioscience AIA®
Reproductive Hormone Testing

Changing the way we
look at a bug's life...

See You There!

In Memoriam



SOMAGEN QUARTERLY WINTER 2008

Have you seen your MIC lately?

Let Vizion™ show you what you have been missing!

The Sensititre® System from TREK Diagnostic Systems is the recognized leader in antimicrobial resistance detection and monitoring worldwide, and is the product of choice for global surveillance programs. Sensititre® offers the most FDA cleared antimicrobials with the least limitations of any susceptibility system on the market today, providing the earliest availability and widest choice of antimicrobials for both standard and user-defined custom plates. Plates are precision dosed and vacuum dried for greater antimicrobial stability than frozen plates. Because plates are dosed with antimicrobials only, each laboratory can choose the appropriate Sensititre® broth for testing, allowing the same plate design to be used for multiple protocols. The Sensititre® Microbiology System is designed to provide flexible instrumentation options for the diagnostic laboratory.



Somagen is excited to announce TREK's newest addition to the Sensititre® susceptibility platform, the Vizion™ System. With Vizion™, TREK has incorporated current technology into a cost effective platform for every laboratory. The Vizion™ is a digital imaging device for Sensititre® susceptibility plates that provides laboratories with an easy, standardized method for reading and interpreting their offline testing. An image of the sensitivity plate is projected on a touch screen monitor with the complete drug format overlaid on it. Touching or clicking on the MIC well gives the technologists instant feedback. The image can then be permanently stored to aid in teaching, training, tracking and decision making processes.

Vizion™ features customizable and reproducible lighting options, therefore even the most fastidious organisms can be examined such as *Viridans Streptococcus* group, Beta Hemolytic *Streptococcus*, *Streptococcus pneumoniae*, *Haemophilus* spp., *Mycobacteria* spp., *Candida* spp., anaerobes as well as any standard gram positive and gram negative organism. It also provides full MIC formularies for non-fermenting gram negative isolates such as *Pseudomonas* spp., *Acinetobacter* spp., *Alcaligenes* spp., and other mucoid slow growing non-fermenting gram negative bacilli.

Easy to read, large digital images and color-coded interpretations eliminates reading errors. Interfacing capability eliminates manual data entry and

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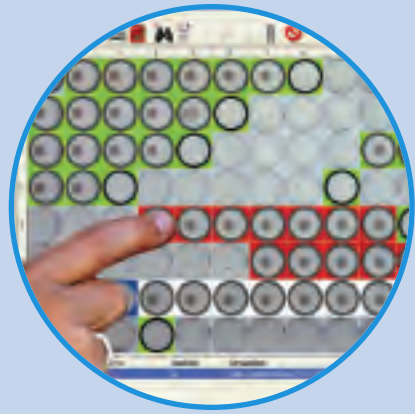


Have you seen your MIC lately? [continued from page 1](#)

transcription errors while providing a complete stored record of patient results. Sensititre® also offers a comprehensive epidemiology package that can be used with the Vizion™ System. The Vizion™ System utilizes the powerful SWIN® Windows®-based software. By utilizing SWIN® software, all results are assigned and display the appropriate CLSI interpretations in real time. SWIN® gives the user access to the most advanced and customizable expert system available.

Consolidate your offline susceptibility test methods with Vizion™ and Sensititre® Susceptibility plates by using a single, user-friendly instrument. Valuable laboratory time will be saved while maintaining stored digital images for further decision making processes. True MIC results improve the quality of information provided to physicians, enhancing overall patient care.

For more information please contact Somagen Diagnostics.



Tosoh Bioscience AIA® Reproductive Hormone Testing

Faster Turn-Around Times and Improved Precision Impact Patient Outcomes

Despite a continual rise in infertility rates there remains a common misconception that conceiving a child is a simple task. In reality, getting pregnant can be a long and difficult road. There are a variety of treatment options available to couples today, however one of the most integral processes in each of these treatments is cycle monitoring. Cycle monitoring involves measuring hormone levels as a means of assessing a patient's response to cycle stimulating injections. Even slight variations in hormone levels can impact a patient's treatment outcome, therefore it is crucial that testing results provided to physicians are dependable and provided as quickly as possible.

Tosoh Bioscience Automated Immunoassay reproductive hormone testing combines instrument reliability with exclusive AIA®-Pack test cups providing the highest standard of quality, precision and accuracy in clinical diagnostics. This gives clinicians confidence that changes seen in hormone levels are truly attributed to a cycle response and not an inherent side-effect of poor instrument precision and accuracy due to high coefficients of variation.

Tosoh AIA® testing uses universal test-cup technology with pre-measured, pre-packaged test cups. As no preparation is required by the user, this provides enhanced processing and

reporting consistency. The dry reagent format minimizes wastage. Results can be provided in as little as 18 minutes for Total Beta HCG, HCG intact, E2, FSH, LH, Prolactin, Progesterone and Testosterone. Tosoh features dual clot detection and two calibration curves can be stored per analyte with 30–90 day stability.

Somagen has recently partnered with Tosoh Bioscience to provide Automated Immunoassay Reproductive Hormone testing to Canadian Fertility Clinics. For more information on the benefits this technology can provide to your patients, please call 1-800-661-9993.

Changing the way we look at a bug's life...

QuikiCult™ – Rapid UTI Detection System

Walk into any traditional microbiology laboratory and what do you see—stacks upon stacks of agar culture plates with numbers ranging from hundreds to thousands. One of the largest workload contributors is urine cultures, which is not surprising considering urinary tract infections remain one of the most common bacterial infections, ranking second only after respiratory infections. Although nearly 80% of urine cultures are negative, processing these specimens can be a daunting task as many of these samples are contaminated due to poor collection techniques. Growth on traditional agar culture plates can be difficult to interpret as culture represents end-point detection and there is no distinction between clinically significant bacteria and contaminants. The nature of urinary tract infections are defined by infectious organisms that invade the urinary tract system and multiply—leading to an infection. By this



definition an active infection involves bacteria that are both changing in cell mass (viable and metabolically active) and changing in cell numbers (growing or dividing exponentially). QuikiCult™ by IME, was recently introduced to the Canadian market as a Rapid UTI Detection System. QuikiCult™ utilizes the measurement principle of direct bacterial detection by monitoring changes throughout the bacterial growth curve providing enhanced diagnostic information regarding the clinical significance of bacterial growth present in the sample.

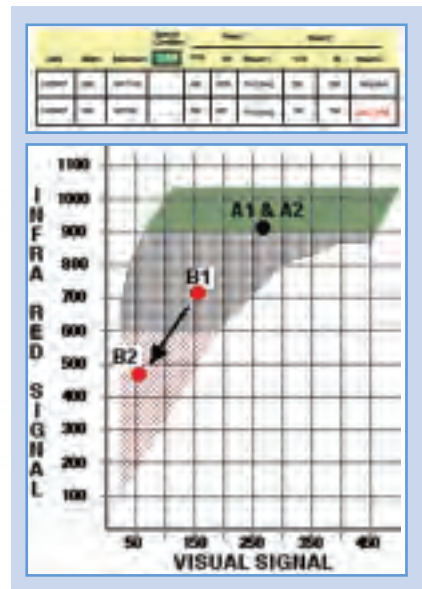
QuikiCult™ utilizes a unique broth culture method to actively track bacterial changes throughout the growth curve using simultaneous Visual and Infrared spectrophotometric measurements. QuikiCult™ can differentiate between urine samples that contain significant numbers of bacteria from those that do not. In addition, in those specimens that contain significant numbers of bacteria, the QuikiCult™ system can differentiate between clinically relevant bacteria (infectious bacteria in log phase microbial growth) and contaminants (non-infectious bacteria in lag phase microbial growth). Differentiation between positive and negative samples in 2 hours minimizes a significant number of samples requiring complete culture

work-up. The QuikiCult™ system thereby maximizes workflow with the elimination of 75–80% of samples that can immediately be reported as negative and do not need a complete culture work up. This also allows technologist and microbiologist time to be dedicated to clinically significant positive samples.

A true negative will contain no viable bacteria, therefore there will be no change in cell mass or cell number. If a non-infectious (lag) population of bacteria is present, the cells may be growing in volume or mass and display metabolic activity, however there is no apparent cell division occurring. This group of non-infectious bacteria represent contaminants and are reported as negative. If an infectious (log) population of bacteria is present, these cells will be metabolically active and display exponential growth. These cells divide at a constant rate as the QuikiCult™ system contains an optimized medium for growth and recovery. This group of infectious bacteria represent a true infection and are reported as positives.

QuikiCult™ measures direct bacterial detection. Screening techniques that utilize indirect indicators such as leukocyte esterase and the enzyme nitrate reductase are often not indicative of true bacterial infection. Pyuria may not be present in the urine until the bacterial count in the bladder reaches very high numbers. The enzyme nitrate reductase is present in coliforms but not other bacteria commonly associated with UTI such as Staphylococcus and Enterococcus species. QuikiCult™ monitors changes in bacteria throughout the growth curve which allows for differentiation between infectious (log phase) and non-infectious (lag phase) bacteria. Most detection methods are unable to distinguish between infectious microbes and contaminants. Some methods cannot distinguish between viable and non-viable bacteria. By tracking changes in cell mass and cell numbers, QuikiCult™ can rapidly screen out samples that are negative and can be immediately reported. Time to results is 2 hours as opposed to traditional culture techniques with turn-around-times of 24–48 hours for both positives and negatives.

For more information on the benefits of the QuikiCult™ Rapid UTI Detection System, please contact your local Somagen Diagnostics Representative at 1-800-661-9993.





SEE YOU THERE!

Watch for Somagen at these upcoming conferences:

AMMI/CACMID: Association of Medical Microbiology and Infectious Disease Canada / Canadian Association for Clinical Microbiology and Infectious Diseases

February 28 to March 2
Vancouver, BC

North York Emergency Meeting

May 1 to May 3
Toronto, ON



In Memoriam

Sandra Smith

1960-2007

The Staff at Somagen Diagnostics mourns the loss of Sandra Smith who passed away on September 20, 2007 after a brief illness.

Before starting her career with Somagen, Sandra trained as a medical laboratory technologist in Saskatchewan and worked for various laboratories in both Saskatoon and Calgary while raising her son and daughter with her husband, Greg. Sandra started her career in the In Vitro Diagnostics field with Somagen in 1997 as a Product Manager. Sandra started working part

time but soon became full time and was promoted through the ranks to Director of Sales and Marketing. Sandra's creativity was a unique influence in the industry and she developed many strong relationships throughout her career in laboratory medicine.

Sandra was dedicated to both her family and her career with boundless enthusiasm and energy, she had an inspiring influence on everyone she came into contact with. Sandra will be truly missed.

Past issues of the Somagen Quarterly are available on our website.

Visit our website at www.somagen.com



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