

Berenson Oncology

Berenson Oncology
West Hollywood, California

ONCOLOGY PRACTICE COULDN'T WAIT
TO GET THE CAPILLARYS 2

In-house electrophoresis from Sebia helps ensure superior patient care



Overheard at an outdoor café: "...They said they won't get the lab results back until next week. I'm really worried. I can't focus on anything else...I'm a nervous wreck."

That was part of a real-life conversation between two women having lunch in Atlanta. Unfortunately, there was nothing unusual about it. Thousands of patients endure the same frightening scenario every year: They have alarming symptoms and numerous suspicions about the cause, but the lab results needed to confirm a diagnosis — and begin proper treatment — are a long time coming.

Dr. James Berenson wanted better for his patients. A multiple myeloma specialist and the founder of Berenson Oncology in West Hollywood, California, Dr.

Berenson brought electrophoresis in house to provide more control and faster turnaround. The practice uses the CAPILLARYS™ 2, Sebia's fully automated instrument for serum protein

electrophoresis (SPE), urine protein electrophoresis (UPE) and an automated alternative to immunofixation electrophoresis — Immunotyping.

With the CAPILLARYS 2, Berenson can provide test results to patients in 24 hours — a fraction of the time it would take to get the same results from an outside lab.

"We're able to give our patients peace of mind, because they find out the status of their monoclonal protein (M-protein) levels quickly," explains Dr. Berenson. "More importantly, we can determine whether they are responding to their treatment or not, and then either continue the same treatment or know that we need to change their therapy sooner."

Zeroing in on the M-protein

Multiple myeloma — a cancer of the plasma cells — is the second most prevalent blood cancer and is largely found in older patients. It can lead to bone fractures, kidney failure, pneumonia and other life-threatening conditions. Symptoms of multiple myeloma may be vague and indistinct from other illnesses — for instance, patients may complain of back pain or extreme fatigue. Because the disease is characterized by an elevation of monoclonal immunoglobulin (the so-called M-protein) in blood and/or urine, physicians rely on electrophoresis to confirm the diagnosis. The M-protein manifests as a large peak on the electrophoresis graph.

Some patients have abnormal levels of M-protein without showing any sign of multiple myeloma. This condition, called monoclonal gammopathy of undetermined significance (MGUS), is often stumbled upon as a result of other routine blood work. MGUS is present in greater than 3 percent of the general population age 50 and older, and may progress to serious disorders, including multiple myeloma, so these patients must be monitored for life. Patients with MGUS are also at high risk for bone loss and fractures.

Watchful waiting is a common approach to managing early-stage multiple myeloma and MGUS. Patients are regularly tested, and ultimately the course of treatment depends on how the condition progresses. For this reason, practices like Berenson Oncology demand accuracy and clarity from electrophoresis instrumentation.

"...I can ask Wagih to run a test immediately if I need the results right away to make a decision regarding the patient's status."
— Regina Swift, RN

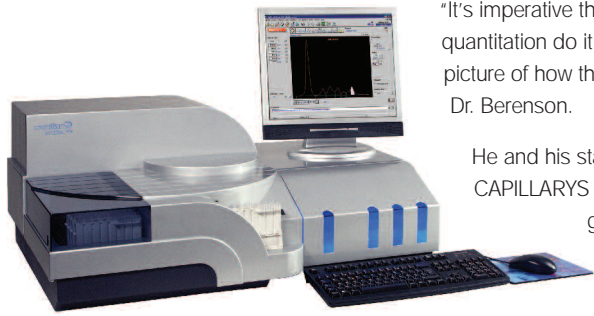


Pictured left to right: Wagih Kilani, Regina Swift, James Berenson

Our patients trust us with their health - and ultimately their future. They deserve to have information as quickly as we can get it."
— Regina Swift, RN



Customer Focus



CAPILLARYS 2: fully automated capillary electrophoresis

"It's imperative that whoever performs the electrophoresis and monoclonal quantitation do it the same way every time, so we can get the most accurate picture of how the proteins have changed since the last test," explains Dr. Berenson.

He and his staff have been very happy with the results delivered by the CAPILLARYS 2. Laboratory Supervisor, Wagih Kilani, MS, CLS, (ASCP), says he's getting unprecedented clarity with this instrument. "It's better than the solution we had previously. The graphs are sharper and it is much easier to see what is going on with the patient."

In addition to clarity, Kilani can also be assured of utmost consistency when using the CAPILLARYS 2. The system's fully automated design eliminates

the subtle discrepancies that can occur with human intervention; there's no applying of reagents or staining by hand, so less variability.

The CAPILLARYS 2 provides complete "walkaway" automation, from bar-coded primary sample tube to final result: positive sample ID. Kilani simply loads up a batch, starts the system — and focuses on other work while the samples are processing.

Here's a brief look at how it works: The technologist loads bar-coded primary sample tubes in the CAPILLARYS sample rack. A very small amount of sample is required. The instrument reads the barcodes and generates a work list for sample tracking. The sample and buffer are introduced into eight capillaries contained on the instrument, each of which is in contact with an anodic and cathodic buffer reservoir. High voltage is applied. Protein migration and separation inside the capillary are achieved via electro-osmotic flow (EOF), which is a stronger force than electrophoretic migration. This causes samples to migrate from the anode towards the cathode, where detection occurs at a specific wavelength (200 nm for protein). The technologist sees the results as an electrophoretic peak along with quantitative values.

"The (CAPILLARYS') graphs are sharper and it is much easier to see what is going on with the patient."
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"We're able to give our patients peace of mind... We can determine whether they are responding to their treatment or not..."
— James Berenson, MD

The CAPILLARYS software also automatically delimits curves and identifies fractions, alleviating the need for operator editing in most cases. Another helpful feature: the technologist can zoom in on a portion of the curve to scrutinize any subtleties, and even overlay a normal curve over a questionable result for

further analysis. Quantitative protein results can also be imported or entered by the operator—along with user-defined or free text comments—into one comprehensive chartable report.

Berenson Oncology is grateful to have such rich electrophoresis capabilities available in-house. "Sending these tests out is not a good option," notes Regina Swift, R.N. and senior nurse at the practice. "We usually need to assess the patient on a monthly basis, but getting electrophoresis results from a lab could take several days — and maybe more to get a complete written report. Many times different technicians are reading sequential results so that the levels of M-protein are not consistently assessed. Having our own machine with the ability to have consistent readings done internally and the ability to access the electrophoretic tracing on-site allows for greater accuracy in following our patients' M-protein levels. Since we have the CAPILLARYS in our practice's on site clinical laboratory, I can ask Wagih to run a test immediately if I need the results right away to make a decision regarding the patient's status.

"Our patients trust us with their health — and ultimately their future," she adds. "They deserve to have information as quickly as we can get it."

ABOUT BERENSON ONCOLOGY

Located in West Hollywood, California, Berenson Oncology specializes in the treatment of patients with myeloma and metastatic bone disease. The private practice was founded in 2004 by James R. Berenson, M.D., who is internationally renowned for his research and work in advancing major breakthroughs in the treatment of patients with monoclonal gammopathies including multiple myeloma and MGUS. He is also the founder, president and medical and scientific director of the non-profit Institute for Myeloma and Bone Cancer Research, and president of Oncotherapeutics, a corporation that conducts clinical trials related to myeloma and metastatic bone disease as well as other cancers throughout the United States.

