



CEUS Liver and Kidney Tests Produce Big Savings in Testing Time and Cost

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CHICAGO--([BUSINESS WIRE](#))--Contrast-enhanced ultrasound (CEUS) can speed up the diagnosis of patients with liver and kidney diseases, reduce the need for more expensive downstream MR and CT imaging, and reduce overall imaging costs, according to a new study described today at the 31st annual Advances in Ultrasound conference in Chicago.

“Coupled with the significant cost savings, CEUS offers an enormous improvement in patient management and care”

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According to Dr. Edward Grant, a professor of medicine at the University of Southern California Keck School of Medicine, patients with liver and kidney masses identified on routine ultrasound scans were examined with CEUS at Los Angeles County General Hospital. He and his colleagues determined that the hospital could anticipate a reduction of 339 CT and 53 MRIs annually by using contrast ultrasound tests first - a potential \$132,000 cost reduction each year.

CEUS "is comparable to CT and MRI exams in its capacity to characterize liver and kidney lesions, such as hepatocellular carcinoma and hemangiomas," Dr. Grant said. "But what is remarkable is that CEUS results were usually added to the patient chart the same day, with over 72% done within 24 hours."

By comparison, the mean time to diagnosis and study completion was up to 52 days for CT exams and up to 123 days for an MRI, Dr. Grant added.

The study also found that CEUS reduced the need for CT and MRI follow up exams in the liver and kidney. Dr. Grant noted that "66.7 percent of the CEUS exams were deemed of sufficient quality to not require further evaluation with CT or MRI."

"Ultrasound contrast agents are safe, low cost, and completely radiation-free imaging tools that can improve the clarity and reliability of front-line ultrasound scans of the heart and enhance the ability of routine CEUS scans to characterize tumors in the liver and kidneys. They avoid unnecessary downstream testing, save lives and lower overall health care costs," according to Dr. Steven Feinstein, Co-President of the International Contrast Ultrasound Society (ICUS), who is an expert in cardiac CEUS and professor of medicine at Rush University Medical Center in Chicago.

He noted that previous studies in cardiac patients showed that CEUS could also cut costs and help avoid downstream testing in those populations.

"This is an outstanding example of patient-centered care, since CEUS provided same day diagnoses and avoided lengthy diagnostic delays associated with CT or MRI," according to Dr. Stephanie Wilson, Co-President of ICUS. Dr. Wilson is an expert in abdominal CEUS and a professor of medicine at the University of Calgary in Canada.

"Coupled with the significant cost savings, CEUS offers an enormous improvement in patient management and care," she added.

Three ultrasound contrast agents, Definity (Lantheus Medical Imaging), Optison (GE Healthcare), and Lumason (Bracco Diagnostics) are available in the United States. Definity and Optison are approved by the Food and Drug Administration for cardiac imaging only, while Lumason is approved for both cardiac and liver imaging.

ABOUT ICUS:

ICUS is an international, multi-disciplinary, not-for-profit medical society that is exclusively dedicated to advancing the use of contrast enhanced ultrasound diagnostic imaging to improve patient care worldwide. Founded in September 2008, ICUS brings together physicians, scientists, and other ultrasound imaging professionals from over 55 countries. ICUS members represent diverse specialties such as cardiology, radiology, vascular imaging, gastro-intestinal imaging, oncology, OB-GYN, and hepatology. For more information about ICUS, please visit www.icus-society.org.

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