PRESS RELEASE

ASN Contact:
Christine Feheley (202) 640-4638 | cfeheley@asn-online.org

EMBARGOED FOR RELEASE UNTIL
OCTOBER 23, 2020 AT 5:00 PM ET

NEW ALGORITHM PREDICTS LIKELIHOOD OF ACUTE KIDNEY INJURY

Highlights

- In a recent study, a new algorithm outperformed the standard method for predicting which hospitalized patients will develop acute kidney injury.
- Results from the study will be presented online during ASN Kidney Week 2020 Reimagined October 19–October 25.

Washington, DC (October 23, 2020) — A new artificial intelligence–based tool can help clinicians predict which hospitalized patients face a high risk of developing acute kidney injury (AKI). The research will be presented online during ASN Kidney Week 2020 Reimagined October 19–October 25.

AKI is common among hospitalized patients and has a significant impact on morbidity and mortality. Unfortunately, it's difficult to predict which patients are most likely to develop AKI and could benefit from preventative treatments.

To address this, investigators at Dascena, Inc. developed and evaluated a prediction algorithm based on machine learning, a type of artificial intelligence. The algorithm analyzed 7,122 patient encounters and was compared with standard of care, the Sequential Organ Failure Assessment (SOFA) scoring system.

The Dascena algorithm outperformed SOFA, demonstrating superior performance in predicting acute kidney injury 72 hours prior to onset.

"Through earlier detection, physicians can proactively treat their patients, potentially resulting in better outcomes and limiting the severity of AKI symptoms," said Ritankar Das, MSc, president and chief executive officer of Dascena. "This presentation highlights our algorithm's ability to provide this earlier detection over traditional systems, which could profoundly impact AKI management in the hospital setting in the future."

Dascena has received Breakthrough Device Designation from the U.S. Food and Drug Administration for its AKI algorithm. This is the first Breakthrough Device Designation of a machine learning algorithm developed for the early detection of AKI.

Study: “Development and Validation of a Convolutional Neural Network Model for ICU Acute Kidney Injury Prediction”

ASN Kidney Week 2020 Reimagined, the largest nephrology meeting of its kind, will provide a forum for more than 13,000 professionals to discuss the latest findings in kidney health research and engage in educational sessions related to advances in the care of patients with kidney and related disorders. Kidney Week 2020 Reimagined will take place October 19–October 25.

Since 1966, ASN has been leading the fight to prevent, treat, and cure kidney diseases throughout the world by educating health professionals and scientists, advancing research and innovation, communicating new knowledge, and advocating for the highest quality care for patients. ASN has more than 21,000 members representing 131 countries. For more information, visit www.asn-online.org.

# # #