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For a current list of the publications on COVID-19 and kidney health, please visit: [www.acistmedical.com/COVID](http://www.acistmedical.com/COVID)

**ACIST Medical Systems provides a suite of diagnostic tools to help you provide optimal care to your patients.**

*Education is a key aspect of our partnership.*

Clinical studies on the short and long-term impact of COVID-19 are being published daily. There is a large body of clinical evidence published on COVID-19 and kidney health. The following is a summary based on a review of the publications cited by the National Kidney Foundation, CDC, and other professional societies:

- A meta-analysis of over 30 studies demonstrates that COVID-19 is tough on organs, including kidneys.<sup>1</sup>
- Acute kidney injury (AKI) has been observed in COVID-19 patients, even among non-elderly, otherwise healthy adults.<sup>2</sup> A recent study reported that of 3993 New York patients hospitalized for COVID-19, 46% experienced AKI; among survivors, 35% had not recovered baseline kidney function at the time of discharge.<sup>4</sup>
- Among COVID-19 patients, there is a strong correlation between cardiac injury and kidney injury.<sup>3</sup>
- An analysis of over 1.7 million US veterans, including 89,216 30-day COVID-19 survivors, found that COVID-19 survivors had a higher risk of AKI, ESKD (end stage renal disease), MAKE (major adverse kidney event) and eGFR decline of  $\geq 30\%$ ,  $\geq 40\%$ , and  $\geq 50\%$ .<sup>5</sup>
- AKI is present in up to 30% of hospitalized patients and it is uncertain how many will regain their kidney function.<sup>6</sup> According to the National Kidney Foundation, after COVID-19 recovery, these patients are at increased risk of developing Chronic Kidney Disease.<sup>2</sup>
- Before COVID-19, ~30% of patients presenting for coronary angiography procedures were at risk for post-procedure CI-AKI.<sup>7</sup> With the impact of COVID-19, this population may increase, as COVID-19 survivors who experienced AKI or blood and/or protein in their urine are at an elevated risk of developing chronic kidney disease.<sup>2</sup>

**ACIST CVi™ Can Help Protect Renal Function During Angiography**

For over 20 years, ACIST CVi has given physicians the ability to obtain quality angiographic images with precise<sup>8</sup> contrast delivery and tracking, reducing the potential risk for CI-AKI compared to hand manifold.<sup>9</sup>

SCAI/ACC/AMA guidelines recommend that contrast dose for CKD patients should be limited as much as clinically possible as it has been clearly shown to reduce the risk of CI-AKI.<sup>10</sup>

A November 2019 JAMA article demonstrates that the majority of PCI patients are still receiving greater than 150 cc of contrast per procedure.<sup>11</sup>

CVi is a proven technology that results in a **22%<sup>9</sup> reduction in delivered contrast over hand manifold.**

ACIST CVi can help **reduce and track contrast delivery** during angiography procedures **without adding time** to your busy cath lab workflow and with technology you may already have at your hospital.<sup>9</sup>

## References

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