

Disposable Cassette for Dialysis

A disposable cassette for processing fluids to remove excess water, solutes, or toxins during continuous renal replacement therapy.

Inventors at Georgia Tech and Emory University have created a disposable cassette to assist kidney function by processing fluids to remove excess water, solutes, or toxins. The disposable cassette includes pumping chambers with pressure sensors and bubble collection chambers. The cassette is equipped with a radio frequency identification chip to alert clinicians of mode errors that may arise during dialysis procedures. The pump chambers communicate with the bubble detectors, blood leak detectors, and temperature and pressure sensors to ensure that the dialysis process continues efficiently.

Summary Bullets

- **Efficient-** designed to minimize human error and reduces set-up time of dialysis treatment
- **Automated-** enables automated dialysis mode selection using radio frequency identification
- **Disposable-** eliminates potential contamination in patient treatment

Solution Advantages

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Potential Commercial Applications

- Continuous renal replacement therapy

Background and More Information

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Inventors

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