
SPECIAL ISSUE ON

ADVANCES IN RENAL ASSIST DEVICE (RAD)

CALL FOR PAPERS

In our journal *Urinary and Renal Research*, a special issue is calling for papers about Renal Assist Device (RAD).

The implantable bioartificial kidney builds on the existing extracorporeal Renal Assist Device (RAD), which is a bioartificial kidney that combines a membrane hemofilter with a bioreactor of human renal tubular cells to mimic many of the metabolic, endocrine and immune functions of a healthy kidney. The device consists of a regular CVVH hemofilter which is then hooked up to a separate cartridge containing many thousand microfibers lined with human renal tubular epithelial cells. After filtrate is produced in the CVVH cartridge, a portion (about half) of the filtrate goes into the RAD cartridge, where the filtrate undergoes reabsorption. Blood bathes the extraluminal space of the RAD cartridge so that it can take back the stuff reabsorbed by the tubule cells before it is returned to the body. RAD should provide a more physiologic means of renal replacement therapy since instead of just solute removal and volume regulation, additional renal functions (e.g., endocrinologic, tubular reabsorption, ammonia genesis, etc.) are also achieved.

In this special issue of the journal *Urinary and Renal Research*, we are soliciting papers about Renal Assist Device around topics of **tissue engineering of RAD, RAD in ICU, treatment by RAD, the innovation and advance of RAD, implantable RAD, etc.**

For more details, you can view them via the following link: <https://aber.apacsci.com/si.php/index/detail?id=54>

Submission Deadline: August 25, 2023

Publication Date: Jan 2024

SI Website: <https://aber.apacsci.com/si.php/index/detail?id=54>

This Issue is now open for submissions. Manuscripts should be submitted online at aber.apacsci.com by registering and logging in to this website. Then you can submit the manuscripts.

Papers are published upon acceptance, regardless of the Special Issue publication date.