



Special Issue on  
**Addressing Peritoneal Dialysis: In vitro PD Models,  
in vivo Rodent PD Model, Clinical Biobanks, and  
Underutilization of PD**

# CALL FOR PAPERS

Renal replacement therapy (RRT) is necessary for the survival of patients with end-stage renal disease (ESRD) both prior to kidney transplantation and in patients where kidney transplantation is not available. Peritoneal dialysis (PD) and hemodialysis (HD) are lifesaving RRTs for more than 2 million patients with ESRD worldwide. As the incidence of chronic renal disease has doubled over the past decade the number of patients with ESRD is expected to increase 5-8% annually. Although long-term morbidity and mortality are comparable between PD and HD, there are an early patient survival advantages for PD and a better quality of life. Moreover, PD is cost-effective as compared to hospital-based HD. Nevertheless, only one out of 10 patients is treated with PD, which suggests a general underutilization. PD is a simple therapy in which PD fluid is exchanged several times a day; the major limitations are peritoneal membrane damage on the long term and infection. PD could be largely enhanced if one can identify diagnostic and therapeutic tools to improve PD outcome that promote function of the peritoneal membrane and prevent infectious complications.

Therefore we invite investigators to contribute original research articles and reviews that stimulate to understand the basic cell culture based research, that mimics the clinical situation in a relevant rodent PD model, that describes the outcome of clinical studies using new biomarkers or describes new interventions, and moreover contributes to the awareness of the different use of PD in countries all over the world.

Potential topics include, but are not limited to:

- ▶ Recent developments in in vitro research with key cell players like mesothelial cells, fibroblasts, macrophages, and lymphocytes
- ▶ Recent development with respect to proteomics
- ▶ Recent uremic PD models mimicking the clinical situation
- ▶ Recent interventions in these models improving the PD-induced changes
- ▶ Validation of new biomarkers in clinical trials
- ▶ New interventions in patients and personalized medicine
- ▶ Describing reasons for large discrepancies in PD use worldwide
- ▶ Going into complications of comorbidity as cardiovascular changes

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/bmri/nephrology/apdi/>.

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