

## **Current Uses of Dialytic Therapies in Non-renal Organ Failure**

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Extracorporeal therapies designed to remove substances from the circulation now include hemodialysis, hemofiltration, hemoadsorption, plasma filtration, cell-based therapies and combinations of any of the above. In recent years, there have been considerable advances in our understanding and technical capabilities, but consensus over the optimal way, and under what conditions to use these therapies does not exist. Extracorporeal therapies are being used or investigated in the management of many non-renal disease processes including systemic inflammation, liver disease, cardiac disease and thrombotic diseases. Although this wider approach to blood purification seems logical, promising and opens new perspectives, many questions still remain unanswered including the timing, duration and frequency of these therapies in the clinical setting. However for now, one can safely conclude that these techniques are usually well tolerated and are effective in clearing “mediators” of various diseases (e.g. sepsis) from the plasma, often improving physiological parameters. Large multicenter trials evaluating their efficacy to improve clinical outcomes (i.e. mortality or organ failure), rather than surrogate markers such as plasma mediator clearance or transient improvement in physiologic variables, are required to define the precise role of these therapies in the management of various disorders.