SP480 **MEDIUM CUT-OFF VERSUS HEMODIAFILTRATION DIALYZERS**

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INTRODUCTION: Medium cut-off (MCO) dialyzers, a novel class of membranes that have recently been designed, are suggested to achieve interesting removal capacities for middle and large middle molecules in hemodialysis (HD) treatments. The few studies published until now have reported contradictory results regarding middle-sized molecules when comparing MCO dialyzers versus dialyzers used in online hemodiafiltration (OL-HDF). We have therefore conducted this comparative study.

METHODS: A prospective observational, single-center study was carried out in 22 patients. Each patient underwent nine dialysis sessions with routine dialysis parameters, one with an MCO dialyzer in hemodialysis and the other eight with different dialyzers in OL-HDF.

The removal ratio of urea, creatinine, β2-microglobulin, myoglobin, prolactin, α1-microglobulin, α1-acid glycoprotein, and albumin was intraindividually compared. Albumin loss in dialysate was also measured.

RESULTS: No significant differences in the removal ratios (RRs) of small and middle molecular wieght range molecules were observed between the MCO versus OL-HDF dialyzers (range 60-80%).

Lower RRs were found for α1-microglobulin and α1-acid glycoprotein without statistically significant difference.

The albumin RR was less than 11% and dialysate albumin loss was less than 3.5 g in all situations without significant differences.

CONCLUSIONS: Removal of a wide range of molecular weights was almost equal with the MCO dialyzer in hemodialysis treatment compared with eight high-flux dialyzers in high-volume OL-HDF without relevant changes in albumin loss.