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Fields of Interest: Nephrology, Dialysis, Medical Engineering, Molecular Biology

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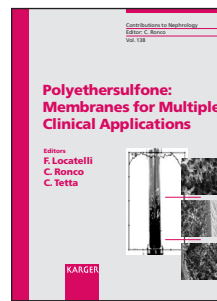
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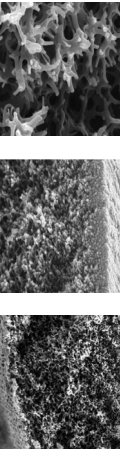
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*An in-depth evaluation of
a versatile new polymer*

Polyethersulfone: Membranes for Multiple Clinical Applications



Editors:
F. Locatelli, C. Ronco,
C. Tetta



Since high-permeability membranes were first introduced, their performance has constantly improved. The publication at hand focuses on a new polymer, polyethersulfone, which was designed to provide better hydraulic permeability as well as high diffusive performance, thus allowing for fine tuning for different clinical applications. In the first part of the book, physico-chemical characteristics and ultrastructural features of the polyethersulfone membrane with regard to different clinical uses ranging from low to high permeability membranes are dealt with. The second part is devoted to clinical applications of the polyethersulfone membrane in ESRD. Its high biocompatibility, combined with the matching set up of the hemodialyzer, was associated with stable functional efficiency and permeability with regard to albumin, amino acids, β_2 -microglobulin and sepsis-associated cytokines in different hemodialytic modalities such as hemodiafiltration, high-flux hemodialysis, paired hemodiafiltration (PHF online), and low-flux hemodialysis.

This publication is intended for students, clinicians and researchers alike. Descriptions of innovative technological and methodological approaches regarding the evaluation of membrane and dialyzer performances and biocompatibility make it a useful basis for those interested in future comparisons among different hemodialyzers.

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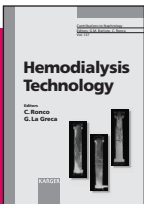
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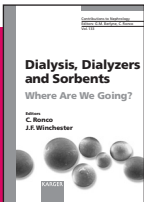
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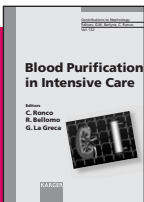
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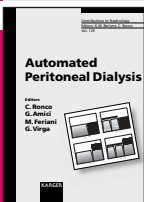
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