



SDI Review Form 1.6

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2013_BJAST_8197
Title of the Manuscript:	Structural delineation of the Exeltra plus 210 hemodialyzer's capillary pores as targets to ameliorate its filtration
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	1. This is an in vitro study that tested one specific dialyzer. Do you know of similar studies of other dialyzers that have similar data? 2. It would be useful to have in vivo data on diffusivity, which may be different from in vitro results. 3. Will the conductivity of dialysate have similar impact on molecular flux as electric potential? 4. Can you comment on the impact of change in surface area of dialyzer? 5. In high flux dialyzers, molecular flux is impacted not only by diffusion, but also by convection. The net impact on flux should consider both diffusion and convection.	1. Thank you. Reference 15, 16, and 17 are studies that researched the same dialyzer membrane we used in this study. In addition, we have published previous results on another membrane (Polyflx 210H), which are given in references 1 and 13. 2. Absolutely...we agree. This is our final aim. A well appreciated comment. 3. This has not yet been studied. But we agree that it should be addressed in a future analysis. 4. Thank you. We added a sentence to signify that in the discussion. From our previous study (Reference 6), the molecular flux attributed to diffusion, J_{diff}, is represented by the equation: $J_{diff} = -D_o A K_{diff} (dC/dx)$, where A is the surface area of the membrane, and dC/dx is the concentration gradient across it. It is expected that the larger the surface area of the



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		membrane is, the higher will be the flux of the solutes. 5. We agree. A sentence was added at the end of the discussion to signify that.
Minor REVISION comments	Please correct grammar.	We pursued computer grammar corrections throughout the document.
Optional/General comments	None	