Therapeutic Delivery

Decision Letter (TDE-2018-0028.R2)

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Subject: Therapeutic Delivery - Decision on Manuscript ID TDE-2018-0028.R2

Body: 19-Jul-2018

Dear Prof. Longhi,

It is a pleasure to accept your manuscript entitled "Binary and ternary complexes of norfloxacin to improve the solubility of the active pharmaceutical ingredient" in its current form for publication in Therapeutic Delivery. Our production department will be in touch with the galley proofs - please do let me know if you are going to be away at any point and unable to check them.

Please note, we are able to offer a fast-track production service, for a fee of $800, providing guaranteed online publication within 3 weeks (subject to turnaround of proofs by the author within 3 working days). Should you be interested in this service, please let me know.

Common errors to check and watch out for when approving your proofs (those that are harder for our copy editors to catch):
– Have you listed all your co-authors, and spelt their names correctly?
– Have you included correct affiliation details for yourself and your co-authors?
– Have you included all your funding information, including grant numbers, in the acknowledgement section (i.e., NIH, Wellcome Trust, etc.)?

Although corrections can be made after publication, these will only be carried out if they are deemed by the editor to be critical to the understanding of the article. So it is important to check information such as the above is correct when the article goes to print, as it cannot always be corrected at a later date.

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Finally, if your institution does not already subscribe to Therapeutic Delivery, it would be great if you would be willing to email your librarian to recommend the journal to them (or alternatively, reply to this email if this is of interest, and we can contact your librarian to discuss free trial and subscription options).

Thank you for your contribution. On behalf of the Editors of Therapeutic Delivery, we look forward to working with you in the future.

Sincerely,
Rhiannon Finnie
Commissioning Editor, Therapeutic Delivery
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Date Sent: 19-Jul-2018

Binary and ternary complexes of norfloxacin with hydroxypropyl-ß-cyclodextrin and amino acids to improve the solubility of the pharmaceutical active ingredient

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Abstract

Aim: Binary and ternary complexes with hydroxypropyl-β-cyclodextrin (HPβCD), using glutamic acid (GA), proline (PRO) or lysine (LIS) as the third component, where developed to increase the solubility and the dissolution rate of norfloxacin (NOR). **Methods/results:** Complexation was evaluated by phase solubility studies, obtaining the highest NOR solubility with GA and HPβCD. Thermal analysis suggested that different kinds of interactions occur among NOR, HPβCD and each aminoacid (AA), and when the systems were prepared by kneading or by means of freeze-drying technique. Dissolution studies, performed on simulated gastric fluid and subsequent simulated intestinal fluid, showed the highest rate of NOR from NOR:HPßCD:GA. **Conclussion:** NOR:HPβCD:GA was the best approach for improving the bioavailability of NOR.

KEYWORDS: norfloxacin; hydroxypropyl-β-cyclodextrin; glutamic acid; proline; lysine; solubilty; release; ternary complexes; thermal analysis; FT-IR spectroscopy;