Editorial Note: this manuscript has been previously reviewed at another journal that is not operating a transparent peer review scheme. This document only contains reviewer comments and rebuttal letters for versions considered at Nature Communications.

## REVIEWERS' COMMENTS:

Reviewer #1 (Remarks to the Author):

The authors have addressed all the previous comments from the Nature submission. There are a few points to be addressed, but otherwise this work has significantly expanded our understanding of the pore forming process by the aerolysin-like family of proteins.

## Minor comments

- 1. The authors make the statement at the end of the introduction: "...describe the entire pore formation 30 process by the aerolysin family members: from the monomer to the oligomer, to the zipper- 31 like formation of the  $\beta$ -barrel, to the final piston-like puncturing of the lipid bilayer." This is perhaps a bit over the top in the interpretation of the results and should be stated in a more precise manner as to the important aspects of aerolysin pore formation revealed by this work and how it may apply to other systems.
- 2. In the section "Structure of the aerolysin prepore" the authors should break up a single long paragraph into logical sections.
- 3. In the discussion the use of " $\beta$ -inner barrel seems clumsy and should be changed "inner  $\beta$ -barrel"
- 4. The authors may want to expand their discussion a bit and make a few more comparisons with mechanisms of other unrelated pore forming toxins.

Reviewer #2 (Remarks to the Author):

The revision has addressed all of my previous comments. No further comments.