The review “Human microbiota alterations — emerging predictors of renal diseases and kidney-specific aging” sets out to provide a compendium of the interactions between the human microbiota and renal pathology, with some details about kidney aging.

The authors provide an extensive list of changes in the composition of the microbiome, sometimes intestinal, sometimes oral, sometimes unspecified, in relation to a few notable kidney diseases. Little attention is given to the details of the studies cited, their rigor, soundness of results, and limitations. With a few exceptions, no context is provided on whether studies were conducted on patients or laboratory animals.

Finally, there is no attempt to integrate the scientific literature to provide an overarching theme, a take-home message, a perspective unique to the authors’ work and opinion on the current state of the field, the challenges and the opportunities ahead, or something that would provide value to this manuscript over the superficial overview provided. This is a critical flaw of the manuscript, as reviews are supposed to provide the casual reader with an introductory understanding of the field, and the expert with engagement over how to interpret the state of the art.

Some additional details that require further attention are as follows:

Line 107: It is unclear what figure 1 and its legend are supposed to be communicating to the reader

Line 113: Neither figure 2 nor its legend provide an explanation of what the acronyms on the left stand for.

This list is by no means extensive. It is my opinion that serious rewriting and restructuring of this manuscript is necessary.

Thank you and good luck.