Review of: "Long-term beneficial effect of faecal microbiota transplantation on colonisation of multidrug-resistant bacteria and resistome abundance in patients with recurrent Clostridioides difficile infection"

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Potential competing interests: No potential competing interests to declare.

The authors try to investigate the role of Fecal transplantation (FMT) or recurrences of *Clostridioides difficile* infections and other gut pathologies. Yet, they studied the effect of FMT on intestinal colonization with MDR bacteria and antibiotic resistance genes (ARG) by classic cultural methods as well as fecal metagenomics.

A reduction in relative abundances of ARGs in feces was observed, however the number of different resistance genes in patients remained higher compared to healthy individuals.

Yet, plasmid predictions in metagenomic data showed that Clostridioides difficile infected patients carried increased levels of resistance plasmids, which appear unaffected by FMT.

Their results showed that FMT restores the gut microbiota to a composition that is similar to healthy individuals. Also, potential pathogens are either lost or forced to very low abundances. FMT may lead to a more stable microbiota composition ,even if several resistant genes remains in the gut.

It is a well-written paper, based on a well designed hard methodology (metagenomics)and their results statistically evaluated are consistent and extensively discussed based on the bibliography.

My suggestion is to ACCEPT the paper in its present form.