

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.

Dear authors,

I have carefully reviewed the manuscript by San Nooij et al. *Long-term beneficial effect of fecal microbiota transplantation on colonization of multidrug-resistant bacteria and resistome abundance in patients with recurrent Clostridioides difficile infection*". I think your work is very interesting and your results are very encouraging. Emerging bacterial antibiotic resistance represents a public health problem and I think that ongoing research into the formulation of new antibiotics have to be join with alternative scientific strategies like FMT (Fecal Microbiota Transplantation) in order to limit the Multi Drug Resistant bacteria (MDR) spread.

I report below some comments and questions for the authors:

Introduction

- In line **46-47** you should add a reference at the end of the period, or put reference [9-11].
- In line **59** you should specify the full meaning of acronym RCT

Methods

- About line **76-77**, considering that antibiotic therapy have an impact on gut microbiota composition, why pre-FMT samples were collected pre **or** post antibiotic therapy and not at same time?

Results

- In line **399-409** you have described two different group of resistant gene (ARGs), present in both donor and patients, which have had different impact on richness and abundance of recipient's resistome after FMT. In your opinion, why the second group of ARGs (most common in donors) had no effect on resistome abundance?

Discussion

in line **459-462** you have described the hypothetical outcome in which *C.difficile* and MDR bacteria, being present in low

abundance (after FMT), could still represent a risk of infection; do you know if some of the patients in long- term follow up have developed MDR infection?

Best Regards

Alessandra Guarnaccia