## Additional file 3: Assessment of cost-effectiveness

The table includes an assessment of the cost-effectiveness of faecal microbiota transplantation (FMT) compared with antibiotics in alternative treatment scenarios. If indicated, an incremental cost-effectiveness ratio (ICER) is calculated as costs per additional quality-adjusted life-year (QALY) between the relevant alternatives. The ICER is compared with the willingness-to-pay (WTP)-threshold stated in the study: if the ICER is below the WTP-threshold, the alternative is considered cost-effective. The cost-effective treatment alternative in each scenario is indicated in italics. Authors' calculation/interpretation refer to calculations/interpretations made by the authors of the present systematic review.

| **Konijeti et al., 2014 [1], (WTP=50,000)** | | | |
|---|---|---|---|
| **Scenario: All strategies available (as reported in the study)** | | | |
| **Treatment** | **Costs** | **QALYs** | **ICER** |
| Vancomycin | 2,912 | 0.8580 | |
| *FMT colonoscopy* | *3,149* | *0.8719* | *17,016* |
| Metronidazole | 3,941 | 0.8292 | Dominated |
| FMT enema | 4,090 | 0.8543 | Dominated |
| FMT duodenal infusion | 4,208 | 0.8553 | Dominated |
| Fidaxomicin | 4,261 | 0.8653 | Dominated |
| **Scenario: Restricted to FMT enema (as reported in the study)** | | | |
| **Treatment** | **Costs** | **QALYs** | **ICER** |
| *Vancomycin* | *3,488* | *0,8485* | |
| Metronidazole | 3,941 | 0,8292 | Dominated |
| FMT enema | 4,090 | 0,8543 | 105,003 |
| Fidaxomicin | 4,602 | 0,8597 | 99,862 |
| **Scenario: Restricted to FMT duodenal infusion (as reported in the study)** | | | |
| **Treatment** | **Costs** | **QALYs** | **ICER** |
| *Vancomycin* | *3,531* | *0.8484* | |
| Metronidazole | 3,941 | 0.8292 | Dominated |
| FMT duodenal infusion | 4,208 | 0.8553 | 97,352 |
| Fidaxomicin | 4,628 | 0.8596 | 98,443 |

| **Varier et al., 2015 [2], (WTP=not reported)** | | | |
|---|---|---|---|
| **Scenario: All strategies available (as reported in the study)** | | | |
| **Treatment** | **Costs** | **QALYs** | **ICER** |
| *FMT colonoscopy* | *1669* | *0.242* | |
| Vancomycin | 3788 | 0.235 | Dominated |

| **Lapointe-Shaw et al., 2016 [3], (WTP=50,000)** | | | |
|---|---|---|---|
| **Scenario: All strategies available (as reported in the study)** | | | |
| **Treatment** | **Costs** | **QALYs** | **ICER** |
| *FMT colonoscopy* | *5,246* | *9.40* | |
| Metronidazole | 5,386 | 9.09 | Dominated |
| FMT enema | 5,667 | 9.26 | Dominated |
| Vancomycin | 5,929 | 9.03 | Dominated |
| FMT nasogastric tube | 5,935 | 9.15 | Dominated |
| Fidaxomicin | 7,319 | 9.16 | Dominates |
| **Scenario: Restricted to FMT enema (as reported in the study)** | | | |
| **Treatment** | **Costs** | **QALYs** | **ICER** |
| Metronidazole | 5,386 | 9.09 | |
| *FMT enema* | *5,667* | *9.26* | *1,708* |
| Vancomycin | 5,929 | 9.03 | Dominated |
| Fidaxomicin | 7,319 | 9.16 | Dominated |
| **Scenario: Restricted to FMT nasogastric tube (authors' calculations)** | | | |
| **Treatment** | **Costs** | **QALYs** | **ICER** |
| Metronidazole | 5,386 | 9.09 | |
| Vancomycin | 5,929 | 9.03 | Dominated |
| *FMT nasogastric tube* | *5,935* | *9.15* | *9,150* |
| Fidaxomicin | 7,319 | 9.16 | 138,400 |

| **Merlo et al., 2016 [4], (WTP=not reported)** | | | |
|---|---|---|---|
| **Scenario: All strategies available (as reported in the study)** | | | |
| **Treatment** | **Incremental costs compared with vancomycin** | **Incremental QALYs compared with vancomycin** | **ICER** |
| *FMT nasoduodenal tube* | *-4,094* | *1.2* | |
| FMT colonoscopy | -4,045 | 1.2 | Dominated (authors' interpretation) |
| Vancomycin | | | Dominated |
| **Scenario: Restricted to FMT colonoscopy (authors' calculations)** | | | |
| **Treatment** | **Incremental costs compared with vancomycin** | **Incremental QALYs** | **ICER** |
| *FMT colonoscopy* | *-4,045* | *1.2* | |
| Vancomycin | | | Dominated |

| **Baro et al., 2017 [5], (WTP=32,000)** | | | |
|---|---|---|---|
| **Scenario: All strategies available (as reported in the study)** | | | |
| **Treatment** | **Costs** | **QALYs** | **ICER** |
| Vancomycin | 1,235 | 0.1812 | |
| *FMT enema* | *1,610* | *0.2019* | *18,092* |
| FMT colonoscopy | 1,816 | 0.2047 | 73,571 |
| FMT duodenal infusion | 1,834 | 0.2013 | Dominated |
| Fidaxomicin | 2,464 | 0.1988 | Dominated |
| **Scenario: Restricted to FMT colonoscopy (authors' calculations)** | | | |
| **Treatment** | **Costs** | **QALYs** | **ICER** |
| Vancomycin | 1,235 | 0.1812 | |
| *FMT colonoscopy* | *1,816* | *0.2047* | *24,723* |
| Fidaxomicin | 2,464 | 0.1988 | Dominated |
| **Scenario: Restricted to FMT duodenal tube (authors' calculations)** | | | |
| **Treatment** | **Costs** | **QALYs** | **ICER** |
| Vancomycin | 1,235 | 0.1812 | |
| *FMT duodenal infusion* | *1,834* | *0.2012* | *29,801* |
| Fidaxomicin | 2,464 | 0,1988 | Dominated |

| **Luo et al., 2020 [6], (WTP=100,000)** | | | |
|---|---|---|---|
| **Scenario: All strategies available (as reported in the study)** | | | |
| **Treatment** | **Costs** | **QALYs** | **ICER** |
| *FMT colonoscopy* | *5,250* | *0.435* | |
| FMT capsules | 5,436 | 0.429 | Dominated (authors' interpretation) |
| Vancomycin | 7,006 | 0.421 | Dominated |
| Fidaxomicin | 7,557 | 0.429 | Dominated |
| Bezlotoxumab | 9,612 | 0.426 | Dominated |
| **Scenario: Restricted to FMT capsules (authors' calculations)** | | | |
| **Treatment** | **Costs** | **QALYs** | **ICER** |
| *FMT capsules* | *5,436* | *0.429* | |
| Vancomycin | 7,006 | 0.421 | Dominated |
| Fidaxomicin | 7,557 | 0.429 | Dominated |
| Bezlotoxumab | 9,612 | 0.426 | Dominated |

| **Abdali et al., 2020 [7], (WTP=20,000)** | | | |
|---|---|---|---|
| **Scenario: All strategies available (as reported in the study)** | | | |
| **Treatment** | **Costs** | **QALYs** | **ICER** |
| *FMT nasogastric tube* | *8,877* | *0.645* | |
| FMT colonoscopy | 11,716 | 0.657 | 24,2514 |
| Fidaxomicin | 14,339 | 0.577 | Dominated |
| Vancomycin | 17,279 | 0.513 | Dominated |

| **Scenario: Restricted to FMT colonoscopy (authors' calculations)** | | | |
|---|---|---|---|
| **Treatment** | **Costs** | **QALYs** | **ICER** |
| *FMT colonoscopy* | *11,716* | *0.657* | |
| Fidaxomicin | 14,399 | 0.577 | Dominated |
| Vancomycin | 1,729 | 0.513 | Dominated |

**References**


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