## Supplementary file 2: Stool sample collection, storage and processing in the included studies

| Study                    | Timing of<br>stool<br>collection<br>relative to<br>start anti-TB<br>treatment | Stool sample<br>collected per<br>participant | Stool<br>volume   | Stool<br>storage<br>prior to<br>processing | Stool processing method                                     |                                 |                |                    |  |
|--------------------------|---|--|-------------------|--|---|---------------------------------|----------------|--------------------|--|
|                          |   |  |                   |  | Pretreatment,<br>decontaminatio<br>n and<br>neutralization  | Homogenization<br>process       | Centrifugation | Filtration         |  |
| Kokuto 2015 (30)         | < 7 days  | 1  | 2 cm <sup>3</sup> | Not<br>reported                            | distilled water,<br>3% NACL-NaOH,<br>PBS                    | vortex mixing                   | Yes            | Not reported       |  |
| Konno 2019 (31)          | Not reported  | 1  | 100 – 200<br>μl   | Not<br>reported                            | semi alkaline<br>proteinase,<br>NALC-NaOH, PBS              | Not reported                    | Yes            | Not reported       |  |
| Liu 2019 (32)            | Prior to<br>treatment   |  | 1gm               | Not<br>reported                            | PBS, sample<br>reagent                                      | vortex mixing                   | Not reported   | Not reported       |  |
| Oramasionwu<br>2013 (33) | Prior to<br>treatment   | 1  | 1 gm              | Not<br>reported                            | sterile water, 1%<br>NACL-NaOH, PBS                         | emulsifying<br>with glass beads | Yes            | Yes, sterile gauze |  |
| Rahman 2018 (34)         | Not reported  | 1  | 2 gm              | -20° C                                     | sterile normal<br>saline, NALC-<br>NaOH-Na-<br>citrate, PBS | vortex mixing                   | Yes, twice     | Not reported       |  |

| Study                   | Timing of<br>stool<br>collection<br>relative to<br>start anti-TB<br>treatment | Stool sample<br>collected per<br>participant | Stool<br>volume | Stool<br>storage<br>prior to<br>processing | Stool processing method  |  |                |                             |
|-------------------------|---|--|-----------------|--|--|--|----------------|-----------------------------|
|                         |   |  |                 |  | Pretreatment,<br>decontaminatio<br>n and<br>neutralization         | Homogenization<br>process                            | Centrifugation | Filtration                  |
| Abaye 2017 (35)         | Prior to<br>treatment   | 1  | 1 gm            | 4° C                                       | NALC-NaOH, Tris<br>buffer, 1%<br>chlorhexidine<br>digluconate, PBS | Emulsifying with<br>glass beads and<br>vortex mixing | Yes            | Yes                         |
| DiNardo 2018 (36)       | Median of 5<br>days (0-14)  | 1  | 50 mg           | -80° C                                     | MP Fast DNA soil<br>kit  | Bead-beating   | Not reported   | Not reported                |
| Musisi 2022 (37)        | Not reported  | 1  | 12 gm           | -20°C                                      | OM-S, PBS  | Not reported   | Yes            | Not reported                |
| ElKhechine 2009<br>(38) | Prior to<br>treatment   | Not reported                                 | Not<br>reported | Not<br>reported                            | Tris buffer, PBS,<br>1% chlorhexidine<br>digluconate               | Vortex mixing  | Yes            | Yes, filtration vial<br>kit |

NALC-NaOH: N-acetyl-L-cysteine-sodium hydroxide; PBS: Phosphate buffer solution; NALC-NaOH-Na-citrate: N-acetyl-L-cysteine (NALC)-NaOH-Na-citrate solution (0.5% NALC, 4% NaOH, and 2.94% Na-citrate); OM-S: OMNIgene-sputum reagent