#### 0403

#### SUPPLEMENTARY DATA

\*STREAM QT Sub-study Collaborators

Armauer Hansen Research Institute (AHRI), Addis Ababa, Ethiopia: Mekonnen Teferi and Adamu Bayissa Kiltu

King Dinuzulu Hospital Complex, Durban, South Africa: Nosipho Ngubane and Sunitha Chotoo

MRC CTU at UCL and other UCL collaborators, UCL, UK: Saiam Ahmed, Claire Cook, Pier Lambiase

National Center for Communicable Diseases, Mongolia: Oyunchimeg Adilaa and Chuluunbaatar Zagd

Pham Ngoc Tach Hospital, Ho Chi Minh City, Vietnam: Phan-Thuong Dat and Pham Ngoc Phuong

Sizwe Tropical Diseases Hospital, Johannesburg, South Africa: Francesca Conradie and Pauline Howell

St Peter's Tuberculosis Specialized Hospital, Addis Ababa, Ethiopia: Daniel Meressa and Mohammed Yesuf

Think Tuberculosis & HIV Investigative Network, Doris Goodwin Hospital, South Africa: Ronelle Moodliar and Lynette Duckworth

### Supplementary Table S1. QT or QTcF prolongation 500 ms predictors – mg per kg – all weight groups

|   | No Prolongation | Prolongation | P-Value | Overall   |
|---|-----------------|--------------|---------|-----------|
|   | (N=251)         | (N=31)       |         | (N=282)   |
| Baseline Moxifloxacin per kg, Mean (SD) | 13.7(1.4)       | 13.5(1.5)    | 0.644   | 13.7(1.4) |
| Week 4 Moxifloxacin per kg, Mean (SD)   | 13.6(1.4)       | 13.5(1.4)    | 0.814   | 13.6(1.4) |
| Week 8 Moxifloxacin per kg, Mean (SD)   | 13.5(1.5)       | 13.5(1.4)    | 0.961   | 13.5(1.5) |
| Week 12 Moxifloxacin per kg, Mean (SD)  | 13.4(1.5)       | 13.3(1.5)    | 0.615   | 13.4(1.5) |
| Week 16 Moxifloxacin per kg, Mean (SD)  | 13.3(1.4)       | 13.2(1.5)    | 0.862   | 13.3(1.4) |
| Baseline Clofazimine per kg, Mean (SD)  | 2.0(0.3)        | 1.9(0.4)     | 0.636   | 2.0(0.3)  |
| Week 4 Clofazimine per kg, Mean (SD)    | 1.9(0.3)        | 1.9(0.4)     | 0.983   | 1.9(0.3)  |
| Week 8 Clofazimine per kg, Mean (SD)    | 1.9(0.3)        | 1.9(0.4)     | 0.817   | 1.9(0.3)  |
| Week 12 Clofazimine per kg, Mean (SD)   | 1.9(0.3)        | 1.9(0.4)     | 0.612   | 1.9(0.3)  |
| Week 16 Clofazimine per kg, Mean (SD)   | 1.8(0.3)        | 1.9(0.4)     | 0.607   | 1.9(0.3)  |

# Supplementary Table S2. QT or QTcF prolongation 500ms predictors – mg per kg – 33-50kg $\,$

|   | No Prolongation | Prolongation | P-Value | Overall   |
|---|-----------------|--------------|---------|-----------|
|   | (N=114)         | (N=13)       |         | (N=127)   |
| Baseline Moxifloxacin per kg, Mean (SD) | 13.5(1.2)       | 13.8(1.7)    | 0.444   | 13.5(1.3) |
| Week 4 Moxifloxacin per kg, Mean (SD)   | 13.4(1.3)       | 14.0(1.1)    | 0.131   | 13.5(1.2) |
| Week 8 Moxifloxacin per kg, Mean (SD)   | 13.3(1.2)       | 14.1(1.0)    | 0.026   | 13.3(1.2) |
| Week 12 Moxifloxacin per kg, Mean (SD)  | 13.2(1.2)       | 14.0(1.3)    | 0.050   | 13.3(1.3) |
| Week 16 Moxifloxacin per kg, Mean (SD)  | 13.1(1.1)       | 14.0(1.2)    | 0.013   | 13.2(1.2) |
| Baseline Clofazimine per kg, Mean (SD)  | 2.3(0.2)        | 2.3(0.3)     | 0.444   | 2.3(0.2)  |
| Week 4 Clofazimine per kg, Mean (SD)    | 2.2(0.2)        | 2.3(0.2)     | 0.131   | 2.2(0.2)  |
| Week 8 Clofazimine per kg, Mean (SD)    | 2.2(0.2)        | 2.3(0.2)     | 0.026   | 2.2(0.2)  |
| Week 12 Clofazimine per kg, Mean (SD)   | 2.2(0.2)        | 2.3(0.2)     | 0.050   | 2.2(0.2)  |
| Week 16 Clofazimine per kg, Mean (SD)   | 2.2(0.2)        | 2.3(0.2)     | 0.013   | 2.2(0.2)  |

#### Supplementary Table S3. QT or QTcF prolongation 500ms predictors – mg per kg – over $50 \mathrm{kg}$

|   | No Prolongation | Prolongation | P-Value | Overall   |
|---|-----------------|--------------|---------|-----------|
|   | (N=136)         | (N=18)       |         | (N=154)   |
| Baseline Moxifloxacin per kg, Mean (SD) | 13.8(1.5)       | 13.4(1.4)    | 0.241   | 13.8(1.5) |
| Week 4 Moxifloxacin per kg, Mean (SD)   | 13.7(1.5)       | 13.2(1.6)    | 0.201   | 13.7(1.6) |
| Week 8 Moxifloxacin per kg, Mean (SD)   | 13.6(1.6)       | 13.1(1.5)    | 0.155   | 13.6(1.6) |
| Week 12 Moxifloxacin per kg, Mean (SD)  | 13.5(1.6)       | 12.7(1.4)    | 0.058   | 13.4(1.6) |
| Week 16 Moxifloxacin per kg, Mean (SD)  | 13.3(1.6)       | 12.7(1.5)    | 0.104   | 13.3(1.6) |
| Baseline Clofazimine per kg, Mean (SD)  | 1.7(0.2)        | 1.7(0.2)     | 0.241   | 1.7(0.2)  |
| Week 4 Clofazimine per kg, Mean (SD)    | 1.7(0.2)        | 1.7(0.2)     | 0.201   | 1.7(0.2)  |
| Week 8 Clofazimine per kg, Mean (SD)    | 1.7(0.2)        | 1.6(0.2)     | 0.155   | 1.7(0.2)  |
| Week 12 Clofazimine per kg, Mean (SD)   | 1.7(0.2)        | 1.6(0.2)     | 0.058   | 1.7(0.2)  |
| Week 16 Clofazimine per kg, Mean (SD)   | 1.7(0.2)        | 1.6(0.2)     | 0.104   | 1.7(0.2)  |

# Supplementary Table S4. Univariable analysis of risk factors for QT/QTcF $\geq$ 500 ms in the Short regimen arm

|                                    | No Prolongation            | Prolongation              | P-Value       | Overall                     |
|------------------------------------|----------------------------|---------------------------|---------------|-----------------------------|
| Age, Median (IQR)                  | (N=251)<br>31.8(25.0,41.5) | (N=31)<br>40.2(27.8,48.9) | 0.011         | (N=282)<br>32.8 (25.6,42.2) |
| Age Group, N (%)                   | 31.0(25.0,41.5)            | 40.2(21.0,40.9)           | 0.011 $0.072$ | 32.0 (23.0,42.2)            |
| 18-24                              | 61 (95.3)                  | 3(4.7)                    | 0.012         | 64                          |
| 25-34                              | 87 (91.6)                  | 8(8.4)                    |               | 95                          |
| 35-44                              | 57 (85.1)                  | 10(14.9)                  |               | 67                          |
| 45+                                | 46 (82.1)                  | 10(17.9)                  |               | 56                          |
| Sex, N (%)                         | 40(02.1)                   | 10(11.0)                  | 0.629         | 50                          |
| Male                               | 149(89.8)                  | 17(10.2)                  | 0.020         | 166                         |
| Female                             | 102(87.9)                  | 14(12.1)                  |               | 116                         |
| Country, N (%)                     | 102(01.0)                  | 11(12.1)                  | 0.000         | 110                         |
| Ethiopia                           | 82 (96.5)                  | 3(3.5)                    | 0.000         | 85                          |
| Vietnam                            | 61 (92.4)                  | 5(7.6)                    |               | 66                          |
| South Africa                       | 96 (88.1)                  | 13(11.9)                  |               | 109                         |
| Mongolia                           | 12 (54.5)                  | 10(45.5)                  |               | 22                          |
| HIV Status <sup>1</sup> , N (%)    | 12(31.0)                   | 20 (10.0)                 | 0.863         |                             |
| Negative                           | 85 (91.4)                  | 8(8.6)                    |               | 93                          |
| Positive                           | 93 (92.1)                  | 8(7.9)                    |               | 101                         |
| Smoking Status, N (%)              | ()                         | -()                       | 0.746         |                             |
| Never                              | 162(88.5)                  | 21(11.5)                  |               | 183                         |
| Smoker                             | 88 (89.8)                  | 10(10.2)                  |               | 98                          |
| Diabetes, N (%)                    | , ,                        | . ,                       | 0.810         |                             |
| No                                 | 229(88.8)                  | 29(11.2)                  |               | 258                         |
| Yes                                | 19 (90.5)                  | 2(9.5)                    |               | 21                          |
| Height (cm), Mean (SD)             | 164.7(8.5)                 | 163.4(11.0)               | 0.445         | 164.6(8.8)                  |
| Weight (kg), Mean (SD)             | 52.3 (9.4)                 | 53.6(10.2)                | 0.457         | 52.4(9.5)                   |
| BMI $(kg/m^2)$ , N (%)             | ` '                        | , ,                       | 0.710         | , ,                         |
| <16                                | 32 (91.4)                  | 3(8.6)                    |               | 35                          |
| 16-18.4                            | 81 (91.0)                  | 8(9.0)                    |               | 89                          |
| 18.5-24.9                          | 122(87.8)                  | 17(12.2)                  |               | 139                         |
| 25+                                | 15 (83.3)                  | 3(16.7)                   |               | 18                          |
| Moxifloxacin Dose, N (%)           |                            |                           | 0.872         |                             |
| 800mg                              | 136(88.3)                  | 18(11.7)                  |               | 154                         |
| 600mg                              | 114(89.8)                  | 13(10.2)                  |               | 127                         |
| 400mg                              | 1(100.0)                   | 0(0.0)                    |               | 1                           |
| Moxifloxacin $(mg/kg)$ , Mean (SD) | 13.7(1.4)                  | 13.5(1.5)                 | 0.644         | 13.7(1.4)                   |
| Clofazimine $(mg/kg)$ , Mean (SD)  | 2.0(0.3)                   | 1.9(0.4)                  | 0.636         | 2.0(0.3)                    |
| QTcF, N (%)                        |                            |                           | 0.000         |                             |
| Less than 400ms                    | 118 (96.7)                 | 4(3.3)                    |               | 122                         |
| Greater than or equal to 400ms     | 133(83.1)                  | 27(16.9)                  |               | 160                         |
| ALT, Mean (SD)                     | 20.5(16.3)                 | 20.8(14.8)                | 0.903         | 20.5 (16.1)                 |
| AST, Mean (SD)                     | 27.5(19.0)                 | 29.1(18.0)                | 0.649         | 27.7(18.9)                  |
| Creatinine, Mean (SD)              | 67.9(19.7)                 | 59.1(20.0)                | 0.021         | 66.9(19.9)                  |
| Glucose, Mean (SD)                 | 5.9(3.3)                   | 5.6(2.7)                  | 0.687         | 5.9(3.2)                    |
| Potassium, N (%)                   |                            |                           | 0.613         |                             |
| 3.5mmol/L and above                | 221 (88.8)                 | 28(11.2)                  |               | 249                         |
| Under 3.5mmol/L                    | 17 (85.0)                  | 3(15.0)                   |               | 20                          |

<sup>&</sup>lt;sup>1</sup> Ethiopia & South Africa only

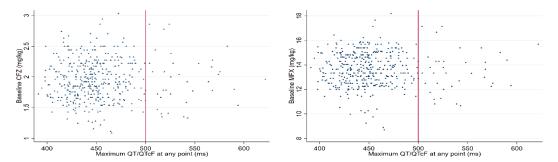
# Supplementary Table S5. Univariable analysis of risk factors for a QTcF≥60 ms increase from baseline in the Short regimen arm

|                                    | No Prolongation | Prolongation    | P-Value | Overall         |
|------------------------------------|-----------------|-----------------|---------|-----------------|
|                                    | (N=190)         | (N=92)          |         | (N=282)         |
| Age, Median (IQR)                  | 32.0(26.0,41.3) | 33.8(25.4,45.6) | 0.353   | 32.8(25.6,42.2) |
| Age Group, N (%)                   | 10 (08 0)       | 22 (24 1)       | 0.369   | 0.4             |
| 18-24                              | 42 (65.6)       | 22 (34.4)       |         | 64              |
| 25-34                              | 69 (72.6)       | 26(27.4)        |         | 95              |
| 35-44                              | 46 (68.7)       | 21 (31.3)       |         | 67              |
| 45+                                | 33(58.9)        | 23(41.1)        |         | 56              |
| Sex, N (%)                         | 440 (05 11)     | ()              | 0.968   |                 |
| Male                               | 112 (67.5)      | 54 (32.5)       |         | 166             |
| Female                             | 78(67.2)        | 38(32.8)        |         | 116             |
| Country, N (%)                     | ()              | 45 (88.8)       | 0.000   |                 |
| Ethiopia                           | 68 (80.0)       | 17(20.0)        |         | 85              |
| Vietnam                            | 39 (59.1)       | 27 (40.9)       |         | 66              |
| South Africa                       | 78 (71.6)       | 31(28.4)        |         | 109             |
| Mongolia                           | 5(22.7)         | 17(77.3)        |         | 22              |
| HIV Status <sup>1</sup> , N (%)    |                 |                 | 0.319   |                 |
| Negative                           | 67(72.0)        | 26(28.0)        |         | 93              |
| Positive                           | 79(78.2)        | 22(21.8)        |         | 101             |
| Smoking Status, N (%)              |                 |                 | 0.578   |                 |
| Never                              | 121(66.1)       | 62(33.9)        |         | 183             |
| Smoker                             | 68(69.4)        | 30(30.6)        |         | 98              |
| Diabetes, N (%)                    |                 |                 | 0.127   |                 |
| No                                 | 177(68.6)       | 81 (31.4)       |         | 258             |
| Yes                                | 11(52.4)        | 10(47.6)        |         | 21              |
| Height $(cm)$ , $Mean$ $(SD)$      | 165.0(8.4)      | 163.6(9.5)      | 0.212   | 164.6(8.8)      |
| Weight $(kg)$ , $Mean (SD)$        | 52.8(9.8)       | 51.7 (8.8)      | 0.354   | 52.4(9.5)       |
| BMI $(kg/m^2)$ , N (%)             |                 |                 | 0.349   |                 |
| <16                                | 27(77.1)        | 8 (22.9)        |         | 35              |
| 16-18.4                            | 56 (62.9)       | 33 (37.1)       |         | 89              |
| 18.5-24.9                          | 92 (66.2)       | 47 (33.8)       |         | 139             |
| 25+                                | 14 (77.8)       | 4(22.2)         |         | 18              |
| Moxifloxacin Dose, N (%)           |                 |                 | 0.271   |                 |
| 800mg                              | 107(69.5)       | 47(30.5)        |         | 154             |
| 600mg                              | 83 (65.4)       | 44 (34.6)       |         | 127             |
| 400 mg                             | 0(0.0)          | 1(100.0)        |         | 1               |
| Moxifloxacin $(mg/kg)$ , Mean (SD) | 13.7(1.5)       | 13.6(1.3)       | 0.900   | 13.7(1.4)       |
| Clofazimine $(mg/kg)$ , Mean (SD)  | 2.0(0.3)        | 2.0(0.3)        | 0.661   | 2.0(0.3)        |
| QTcF, N (%)                        |                 |                 | 0.112   |                 |
| Less than 400ms                    | 76(62.3)        | 46(37.7)        |         | 122             |
| Greater than or equal to 400ms     | 114(71.3)       | 46 (28.7)       |         | 160             |
| ALT, Mean (SD)                     | 21.5(17.8)      | 18.4 (11.9)     | 0.121   | 20.5(16.1)      |
| AST, Mean (SD)                     | 28.3 (19.9)     | 26.3 (16.6)     | 0.409   | 27.7 (18.9)     |
| Creatinine, Mean (SD)              | 67.2 (20.1)     | 66.2 (19.6)     | 0.688   | 66.9 (19.9)     |
| Glucose, Mean (SD)                 | $5.6(2.6)^{'}$  | 6.3(4.1)        | 0.102   | 5.9(3.2)        |
| Potassium, N (%)                   | , ,             | , ,             | 0.495   | , ,             |
| 3.5mmol/L and above                | 168 (67.5)      | 81 (32.5)       |         | 249             |
| Under 3.5mmol/L                    | 12 (60.0)       | 8(40.0)         |         | 20              |

<sup>&</sup>lt;sup>1</sup> Ethiopia & South Africa only

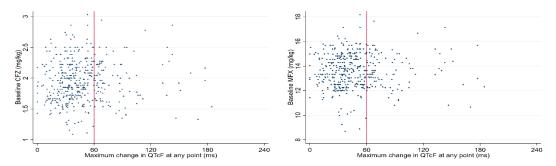
Supplementary Figure S1. Baseline clofazimine (A+C) and moxifloxacin (B+D) dose (mg/kg) and relationship to maximum QT/QTcF (A+B) and maximum QTcF increase (C+D) on the Short regimen.

A Baseline CFZ exposure by maximum QT/QTcF within one year B Baseline MFX exposure by maximum QT/QTcF within one year



C Baseline CFZ exposure by maximum increase in QTcF within one year

D Baseline MFX exposure by maximum increase in QTcF within one year



The red line indicates a maximum QT/QTcF of 500 ms (A+B) or a maximum increase in QTcF of 60 ms (C+D) within 52 weeks of follow-up, with patients to the right of this line exceeding the threshold. A non-linear relationship is seen in all four graphs plotting baseline mg/kg of clofazimine (A+C) and moxifloxacin (B+D) with maximum QT or QTcF value.