

Supplementary material

This material has been provided by the authors to give readers additional information about their work.

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Supplementary material

Safety of prolonged treatment with bedaquiline in programmatic conditions

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Supplementary Table 1. Bacteriological, clinical and laboratory assessment schedule of the patients.

| Measure to be monitored | Time point(s) |
|--|---|
| Vital signs | At baseline, monthly during treatment and semi-annually during follow-up period |
| Weight | At baseline, monthly during treatment and semi-annually during follow-up period |
| Brief peripheral neuropathy screen | At baseline and monthly during treatment |
| Visual acuity and colorblindness screen | At baseline and monthly during treatment |
| Smear and culture | At baseline, monthly during treatment and semi-annually during follow-up period |
| LPA (Hain GenoType MTBDRsl) | At baseline and if susceptibility sustained, then in case of smear- or culture-positivity after 3 rd month of treatment |
| Culture-based second-line DST | At baseline and if smear- or culture-positive after 3 rd month of treatment |
| Full blood count (hemoglobin, white blood cells and platelets) | At baseline and monthly during treatment |
| Liver function tests (AST, ALT, ALP, bilirubin) | At baseline and monthly during treatment |
| Serum creatinine | At baseline and monthly during treatment |
| Serum potassium, calcium, magnesium | At baseline and monthly during treatment |
| Glucose | At baseline and monthly during treatment |
| Hepatitis Bs antigen | At baseline |
| Hepatitis C antibody | At baseline |
| HIV testing | At baseline |
| ECG | At baseline, 2 nd week and monthly thereafter during treatment. QT interval correction was calculated according to Fridericia formula (QTcF) |
| Chest X-Ray | At baseline, quarterly during treatment and semi-annually during follow-up period |

ALP: alkaline phosphatase; ALT: alanine aminotransferase; AST: aspartate aminotransferase; DST: drug susceptibility test; ECG: electrocardiogram; HIV: human immunodeficiency virus; LPA: line probe assay.

Supplementary Table 2. List of registered serious events within 5 months of Bedaquiline stop.

| Patient ID | Age | Sex | Event | Time of event from treatment start (days) | Time event ended if resolved) from treatment start (days) | Received Standard or Prolonged Bedaquiline | Event possibly bedaquiline-related? | Grade of the event | Patient hospitalized? | Event outcome |
|------------|-----|-----|------------------------------|---|---|--|-------------------------------------|--------------------|-----------------------|---------------|
| 1 | 27 | F | Pancreatitis | 49 | 84 | Standard | Yes | 3 | No | Resolved |
| 2 | 40 | M | Hyperuricaemia | 21 | 55 | Standard | Yes | 3 | No | Resolved |
| 2 | 40 | M | Liver enzyme elevation [AST] | 147 | 231 | Standard | Yes | 3 | No | Resolved |
| 3 | 34 | F | QTc prolongation | 182 | 271 | Prolonged | No | 3 | No | Resolved |
| 3 | 34 | F | QTc prolongation | 308 | U | Prolonged | No | 3 | No | Resolved |
| 4 | 18 | F | Hypokalaemia | 63 | 151 | Standard | No | 3 | No | Resolved |
| 5 | 31 | M | Liver enzyme elevation [GGT] | 126 | N/A | Standard | No | 3 | No | Not resolved |
| 5 | 31 | M | Liver enzyme elevation [ALT] | 126 | 323 | Standard | No | 3 | No | Resolved |
| 5 | 31 | M | Liver enzyme elevation [ALT] | 140 | 152 | Standard | No | 4 | Yes | Resolved |
| 5 | 31 | M | Liver enzyme elevation [AST] | 154 | 323 | Standard | No | 3 | No | Resolved |
| 6 | 16 | M | Hypomagnesaemia | 98 | 227 | Standard | No | 3 | No | Resolved |
| 7 | 50 | F | Neoplasm | 28 | N/A | Standard | No | 4 | No | Not resolved |
| 8 | 25 | F | Hypokalaemia | 98 | N/A | Prolonged | No | 4 | No | Not resolved |
| 9 | 30 | M | Seizure | 35 | U | Standard | No | 4 | No | Resolved |
| 9 | 30 | M | Liver enzyme elevation [AST] | 217 | 359 | Standard | No | 3 | No | Resolved |
| 10 | 53 | M | Eosinophilia | 119 | 210 | Standard | No | 3 | No | Resolved |
| 11 | 23 | F | Psychomotor agitation | 14 | U | Prolonged | No | 3 | Yes | Unknown |
| 12 | 33 | F | QTcF prolongation | 210 | 327 | Standard | Yes | 3 | No | Resolved |
| 12 | 33 | F | Hypokalaemia | 217 | 237 | Standard | No | 4 | No | Resolved |
| 13 | 52 | M | QTcF prolongation | 112 | 161 | Prolonged | Yes | 3 | No | Resolved |
| 14 | 27 | F | Eosinophilia | 35 | 272 | Standard | No | 3 | No | Resolved |
| 15 | 31 | M | Hypokalaemia | 35 | 181 | Standard | No | 3 | No | Resolved |
| 15 | 31 | M | Eosinophilia | 35 | 212 | Standard | No | 3 | No | Resolved |
| 16 | 42 | M | Liver enzyme elevation [AST] | 182 | 270 | Standard | No | 3 | No | Resolved |
| 17 | 34 | F | Blood enzyme elevation | 35 | 97 | Standard | No | 3 | No | Resolved |
| 17 | 34 | F | Liver enzyme elevation [GGT] | 35 | 97 | Standard | No | 3 | No | Resolved |
| 17 | 34 | F | Liver enzyme elevation [AST] | 35 | 65 | Standard | No | 3 | No | Resolved |
| 18 | 44 | M | Hypocalcaemia | 308 | N/A | Prolonged | No | 4 | No | Not resolved |
| 19 | 58 | M | Liver enzyme elevation [GGT] | 63 | 306 | Standard | No | 3 | No | Resolved |
| 20 | 39 | M | Liver enzyme elevation [GGT] | 252 | N/A | Prolonged | No | 3 | No | Not resolved |
| 21 | 18 | M | Liver enzyme elevation [GGT] | 91 | 114 | Standard | No | 3 | No | Resolved |
| 21 | 18 | M | Eosinophilia | 91 | 176 | Standard | No | 3 | No | Resolved |
| 22 | 27 | M | Eosinophilia | 168 | 252 | Standard | No | 3 | No | Resolved |
| 23 | 40 | M | Liver enzyme elevation [GGT] | 28 | N/A | Standard | No | 3 | No | Not resolved |
| 24 | 56 | M | Liver enzyme elevation [GGT] | 119 | U | Standard | No | 3 | No | Resolved |
| 25 | 31 | F | QTcF prolongation | 343 | N/A | Prolonged | No | 4 | No | Died |
| 25 | 31 | F | Thrombosis | 350 | N/A | Prolonged | No | 5 | No | Died |
| 26 | 55 | M | Liver enzyme elevation [GGT] | 224 | U | Standard | No | 3 | No | Resolved |
| 27 | 34 | M | Hypomagnesaemia | 140 | U | Standard | No | 3 | No | Resolved |
| 28 | 28 | F | Eosinophilia | 182 | 299 | Standard | No | 4 | No | Resolved |
| 29 | 44 | M | Hypokalaemia | 175 | 203 | Standard | No | 3 | No | Resolved |
| 30 | 50 | M | Hypocalcaemia | 322 | 471 | Prolonged | No | 3 | No | Resolved |
| 30 | 50 | M | Hypokalaemia | 322 | 623 | Prolonged | No | 3 | No | Resolved |
| 31 | 49 | M | Eosinophilia | 91 | 246 | Standard | No | 3 | No | Resolved |
| 31 | 49 | M | Liver enzyme elevation [AST] | 126 | N/A | Standard | No | 3 | No | Not resolved |
| 31 | 49 | M | Liver enzyme elevation [ALT] | 154 | 246 | Standard | No | 3 | No | Resolved |
| 31 | 49 | M | Hypomagnesaemia | 154 | N/A | Standard | No | 3 | No | Not resolved |
| 31 | 49 | M | Liver enzyme elevation [GGT] | 154 | N/A | Standard | No | 3 | No | Not resolved |
| 32 | 29 | M | Hypokalaemia | 210 | 240 | Standard | No | 3 | No | Resolved |
| 33 | 19 | F | QTcF prolongation | 35 | U | Standard | Yes | 4 | No | Resolved |
| 33 | 19 | F | Hypomagnesaemia | 35 | 273 | Standard | No | 3 | Yes | Resolved |
| 33 | 19 | F | Hypokalaemia | 35 | U | Standard | No | 4 | No | Resolved |
| 34 | 51 | M | Liver enzyme elevation [AST] | 63 | 91 | Prolonged | No | 3 | No | Resolved |
| 35 | 20 | F | Eosinophilia | 91 | 217 | Standard | No | 3 | No | Resolved |
| 36 | 29 | F | Liver enzyme elevation [GGT] | 42 | 101 | Standard | No | 3 | No | Resolved |
| 37 | 53 | M | QTcF prolongation | 364 | 371 | Prolonged | No | 3 | Yes | Resolved |

| | | | | | | | | | | |
|----|----|---|---------------------|-----|-----|-----------|-----|---|-----|--------------|
| 38 | 30 | F | Eosinophilia | 28 | 383 | Prolonged | No | 3 | No | Resolved |
| 38 | 30 | F | Hypokalaemia | 112 | 175 | Prolonged | No | 3 | No | Resolved |
| 39 | 40 | F | Hyperglycaemia | 42 | N/A | Prolonged | No | 3 | No | Not resolved |
| 40 | 31 | M | Hypomagnesaemia | 35 | 339 | Prolonged | No | 3 | No | Resolved |
| 40 | 31 | M | Hypokalaemia | 35 | 339 | Prolonged | No | 3 | No | Resolved |
| 41 | 41 | M | Cardiac Failure | 42 | N/A | Standard | Yes | 5 | Yes | Died |
| 41 | 41 | M | Respiratory Failure | 42 | N/A | Standard | No | 5 | Yes | Died |

F: female; M: male; QTcF: QT interval corrected using Fredericia formula; U: unknown; AST: Aspartate aminotransferase; ALT: Alanine aminotransferase; GGT: Gamma-glutamyl transferase

Supplementary Table 3. Comparison of serious adverse events that occurred within five-months of cessation of bedaquiline between patients of standard and prolonged bedaquiline group.

| Variable | Events / person-months | Univariate IRR (95% CI) | Univariate p-value | Multivariate IRR (95% CI) |
|---|------------------------|-------------------------|--------------------|---------------------------|
| Bedaquiline duration ¹ | | | | |
| Less than 6 months | 38 / 767 | 1.0 (Reference) | | 1.0 (Reference) |
| More than 6 months | 18 / 405 | 0.90 (0.48 to 1.72) | 0.75 | 0.82 (0.42 to 1.61) |
| Sex | | | | |
| Female | 21 / 316 | 1.0 (Reference) | | 1.0 (Reference) |
| Male | 35 / 857 | 0.62 (0.33 to 1.16) | 0.14 | 0.73 (0.35 to 1.53) |
| Age | | | | |
| Per 10-year increase | | 0.78 (0.58 to 1.06) | 0.11 | 0.88 (0.64 to 1.20) |
| Concomitant anti-TB medicines | | | | |
| Per additional concomitant anti-TB medicine | | 0.96 (0.76 to 1.21) | 0.74 | -- |
| Injectable received | | | | |
| No | 24 / 772 | 1.0 (Reference) | | 1.0 (Reference) |
| Yes | 32 / 401 | 2.55 (1.31 to 4.96) | 0.01 | 2.42 (1.14 to 5.13) |
| BMI | | | | |
| BMI \geq 18.5 kg/m ² | 43 / 929 | 1.0 (Reference) | | |
| BMI < 18.5 kg/m ² | 13 / 243 | 1.16 (0.59 to 2.25) | 0.67 | -- |
| Baseline ECG ² | | | | |
| Per 10 ms increase | | 0.95 (0.88 to 1.04) | 0.26 | -- |
| Alcohol | | | | |
| No alcohol abuse | 49 / 995 | 1.0 (Reference) | | |
| Alcohol abuse | 7 / 177 | 0.80 (0.34 to 1.89) | 0.61 | -- |
| Diabetes | | | | |
| No diabetes | 52 / 1098 | 1.0 (Reference) | | |
| Has diabetes | 4 / 74 | 1.14 (0.28 to 4.60) | 0.86 | -- |
| HIV | | | | |
| No HIV | 55 / 1140 | 1.0 (Reference) | | |
| Has HIV | 1 / 32 | 0.65 (0.12 to 3.45) | 0.61 | -- |
| Surgery | | | | |
| No MDR surgery | 49 / 992 | 1.0 (Reference) | | |
| Had MDR surgery | 7 / 181 | 0.78 (0.36 to 1.71) | 0.54 | -- |
| Baseline Sputum smear ³ | | | | |
| Smear negative | 44 / 950 | 1.0 (Reference) | | |
| Smear positive | 10 / 212 | 1.02 (0.49 to 2.15) | 0.95 | -- |
| Chest X-Ray findings | | | | |
| No cavitation | 19 / 404 | 1.0 (Reference) | | |
| Cavitation | 37 / 768 | 1.03 (0.53 to 1.97) | 0.94 | -- |

BMI: body mass index; ECG: electrocardiography; HIV: human immunodeficiency virus; IRR: incidence rate ratio; MDR: multidrug-resistant tuberculosis; TB: tuberculosis.

Estimates generated using generalized estimating equations with a Poisson distribution and log-link to estimate incidence rate ratios and their 95% confidence intervals (using robust standard errors).

¹: Person-months reflective of follow-up time, not the duration of bedaquiline receipt. ²: only 100 patients. ³: only 104 patients. Note: no difference in findings if all predictors included in multivariate model.

Supplementary Table 4. Comparison of serious adverse events up to the first 190 days of treatment with bedaquiline between patients of standard and prolonged bedaquiline group (N=105).

| Variable | Events / person-months | Univariate IRR (95% CI) | Univariate p-value | Multivariate IRR (95% CI) |
|---|------------------------|-------------------------|--------------------|---------------------------|
| Bedaquiline duration | | | | |
| Less than 6 months | 33 / 410 | 1.0 (Reference) | | 1.0 (Reference) |
| More than 6 months | 10 / 187 | 0.67 (0.30 to 1.50) | 0.33 | 0.73 (0.33 to 1.61) |
| Sex | | | | |
| Female | 17 / 163 | 1.0 (Reference) | | 1.0 (Reference) |
| Male | 26 / 434 | 0.57 (0.26 to 1.25) | 0.16 | 0.80 (0.35 to 1.83) |
| Age | | | | |
| Per 10-year increase | | 0.69 (0.46 to 1.03) | 0.07 | 0.76 (0.52 to 1.11) |
| Concomitant anti-TB Medicines | | | | |
| Per additional concomitant anti-TB medicine | | 0.76 (0.56 to 1.02) | 0.07 | 0.97 (0.68 to 1.40) |
| Injectable received | | | | |
| No | 13 / 344 | 1.0 (Reference) | | 1.0 (Reference) |
| Yes | 30 / 253 | 3.14 (1.42 to 6.97) | <0.01 | 2.81 (1.23 to 6.43) |
| BMI | | | | |
| BMI \geq 18.5 kg/m ² | 35 / 477 | 1.0 (Reference) | | |
| BMI < 18.5 kg/m ² | 8 / 120 | 0.91 (0.38 to 2.16) | 0.83 | -- |
| Baseline ECG¹ | | | | |
| Per 10ms increase | | 0.96 (0.87 to 1.06) | 0.41 | -- |
| Alcohol | | | | |
| No alcohol abuse | 39 / 507 | 1.0 (Reference) | | |
| Alcohol abuse | 4 / 90 | 0.58 (0.18 to 1.86) | 0.36 | -- |
| Diabetes | | | | |
| No diabetes | 39 / 557 | 1.0 (Reference) | | |
| Has diabetes | 4 / 39 | 1.45 (0.35 to 6.02) | 0.61 | -- |
| HIV | | | | |
| No HIV | 42 / 579 | 1.0 (Reference) | | |
| Has HIV | 1 / 18 | 0.79 (0.14 to 4.42) | 0.79 | -- |
| Surgery | | | | |
| No MDR surgery | 41 / 504 | 1.0 (Reference) | | 1.0 (Reference) |
| Had MDR surgery | 2 / 93 | 0.27 (0.07 to 1.04) | 0.06 | 0.26 (0.08 to 0.88) |
| Baseline Sputum Smear² | | | | |
| Smear negative | 36 / 491 | 1.0 (Reference) | | |
| Smear positive | 5 / 101 | 0.68 (0.21 to 2.16) | 0.51 | -- |
| Chest X-Ray findings | | | | |
| No cavitation | 15 / 208 | 1.0 (Reference) | | |
| Cavitation | 28 / 389 | 1.00 (0.45 to 2.19) | 0.99 | -- |

BMI: body mass index; ECG: electrocardiography; HIV: human immunodeficiency virus; IRR: incidence rate ratio; MDR: multidrug-resistant tuberculosis; TB: tuberculosis.

Estimates generated using generalized estimating equations with a Poisson distribution and log-link to estimate incidence rate ratios and their 95% confidence intervals (using robust standard errors).

¹: only 100 patients. ²: only 104 patients. Note: no difference in findings if all predictors included in multivariate model.

Supplementary Table 5. Comparison of serious adverse events that occurred in the first 189 days vs. beyond 189 days up to 5 months after bedaquiline stop in the prolonged bedaquiline group (N=30).

| Variable | Events / person-months | Univariate IRR (95% CI) | Univariate p-value | Multivariate IRR (95% CI) |
|---|------------------------|-------------------------|--------------------|---------------------------|
| Time period of bedaquiline receipt ¹ | | | | |
| First 189 days of treatment | 10 / 187 | 1.0 (Reference) | | 1.0 (Reference) |
| From Day 190 to up to 5 months after stop | 8 / 212 | 0.71 (0.26 to 1.99) | 0.52 | 0.75 (0.30 to 1.88) |
| Sex | | | | |
| Female | 9 / 113 | 1.0 (Reference) | | 1.0 (Reference) |
| Male | 9 / 285 | 0.40 (0.15 to 1.06) | 0.07 | 0.13 (0.03 to 0.64) |
| Age | | | | |
| Per 10-year increase | | 0.89 (0.57 to 1.38) | 0.59 | 1.63 (0.82 to 3.39) |
| Concomitant anti-TB medicines | | | | |
| Per additional concomitant anti-TB medicine | | 0.84 (0.55 to 1.29) | 0.42 | -- |
| Injectable received | | | | |
| No | 10 / 229 | 1.0 (Reference) | | |
| Yes | 8 / 169 | 1.08 (0.39 to 3.02) | 0.88 | -- |
| BMI | | | | |
| BMI \geq 18.5 kg/m ² | 8 / 265 | 1.0 (Reference) | | 1.0 (Reference) |
| BMI < 18.5 kg/m ² | 10 / 133 | 2.50 (0.95 to 6.59) | 0.06 | 3.04 (0.97 to 9.50) |
| Baseline ECG ² | | | | |
| Per 10 ms increase | | 1.05 (0.91 to 1.22) | 0.48 | -- |
| Alcohol | | | | |
| No alcohol abuse | 13 / 321 | 1.0 (Reference) | | |
| Alcohol abuse | 5 / 77 | 1.59 (0.62 to 4.07) | 0.34 | -- |
| Diabetes | | | | |
| No diabetes | 17 / 386 | 1.0 (Reference) | | |
| Has diabetes | 1 / 12 | 1.92 (0.47 to 7.88) | 0.36 | -- |
| HIV | | | | |
| No HIV | 18 / 398 | 1.0 (Reference) | | |
| Has HIV | 0 / 0 | -- | -- | -- |
| Surgery | | | | |
| No MDR surgery | 14 / 322 | 1.0 (Reference) | | |
| Had MDR surgery | 4 / 76 | 1.22 (0.36 to 4.19) | 0.75 | -- |
| Baseline sputum smear | | | | |
| Smear negative | 10 / 272 | 1.0 (Reference) | | |
| Smear positive | 8 / 126 | 1.72 (0.61 to 4.83) | 0.31 | -- |
| Chest X-Ray findings | | | | |
| No cavitation | 8 / 107 | 1.0 (Reference) | | 1.0 (Reference) |
| Cavitation | 10 / 291 | 0.46 (0.17 to 1.25) | 0.13 | 0.31 (0.13 to 0.76) |

BMI: body mass index; ECG: electrocardiography; HIV: human immunodeficiency virus; IRR: incidence rate ratio; MDR: multidrug-resistant tuberculosis; TB: tuberculosis.

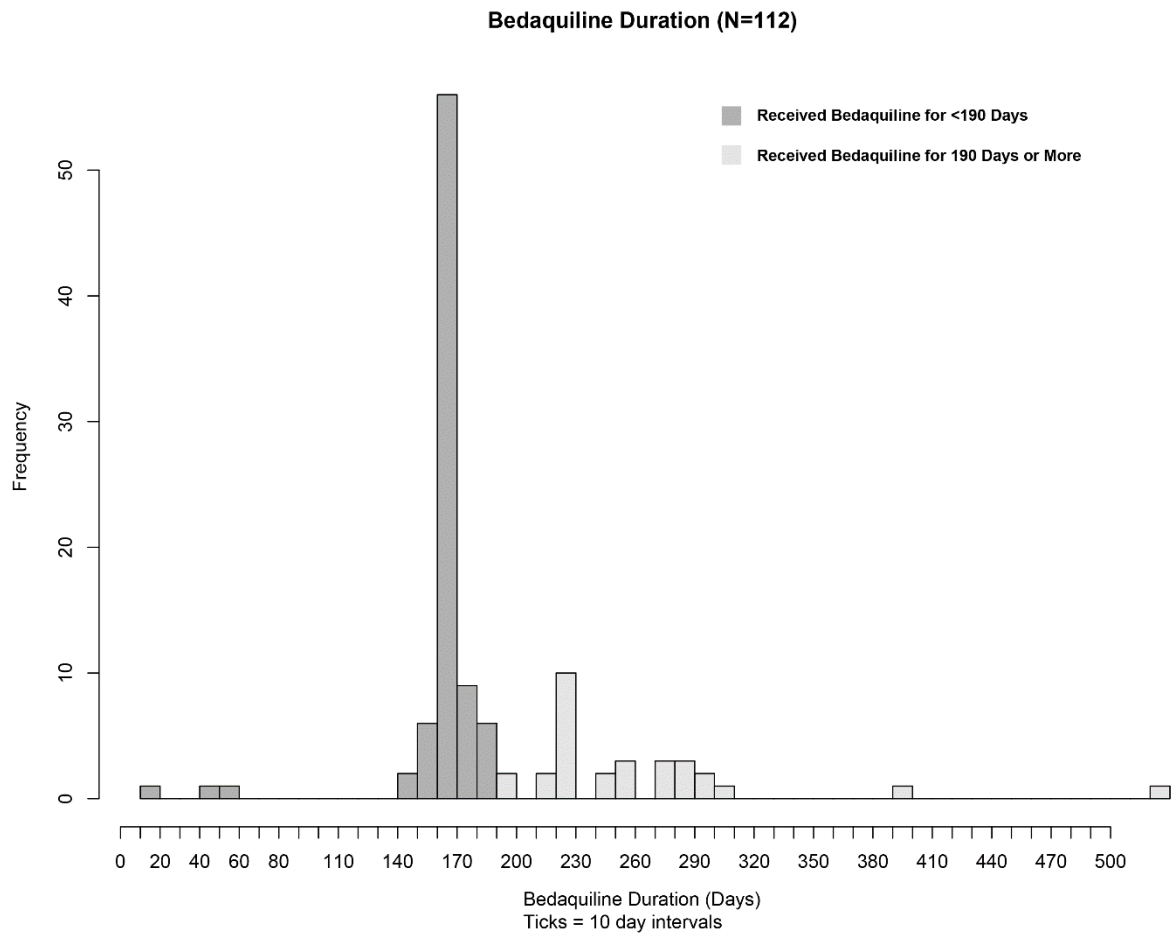
Estimates generated using generalized estimating equations with a Poisson distribution and log-link to estimate incidence rate ratios and their 95% confidence intervals (using robust standard errors).

¹Person-months reflective of follow-up time, not the duration of bedaquiline receipt. ²: only 27 patients. Note: no difference in findings if all predictors included in multivariate model.

Supplementary Appendix 1. Bacteriological tests used during the study.

All cultures were done using BACTEC broth media using a fluorometric BACTEC MGIT960 system (Becton Dickinson, Sparks, MD, USA). The full drug susceptibility testing (DST) was performed as an indirect test by the proportion method rifampicin (1.0 µg/mL), isoniazid (0.1 µg/mL), streptomycin (1.0 µg/mL), ethambutol (5.0 µg/mL), pyrazinamide (100.0 µg/mL), levofloxacin (1,5 µg/mL), moxifloxacin (0,5 µg/mL), kanamycin (30.0 µg/mL), capreomycin (40.0 µg/mL), amikacin (1.0 µg/mL) and prothionamine (40.0 µg/mL). DST to linezolid, clofazimine and bedaquiline was not available at the time of the study. Genotypic DST was obtained with commercially available assays: Xpert MTB/RIF (Cepheid, Sunnyvale, CA, USA), GenoType MTBDRplus and GenoType MTBDRsl (Hain Lifescience, Nehren, Germany). If resistance was identified to rifampicin, the respective isolate was tested against the rest of the first- and second-line anti-TB drugs.

Supplementary Appendix 2.



Histogram of the duration of bedaquiline use by the patients. Based on a histogram of the duration of bedaquiline use, we grouped the patients to those, who received bedaquiline for <190 days (referred to as receiving standard treatment with bedaquiline) and to patients, who received bedaquiline for ≥ 190 days (referred to as receiving prolonged treatment with bedaquiline).

Supplement Appendix 3.

List of registered events classified as per system organ class.

| System.Organ.Class | Total events |
|---|--------------|
| Investigations | 879 |
| Metabolism and nutrition disorders | 417 |
| Blood and lymphatic system disorders | 201 |
| Cardiac Disorders | 188 |
| Hepatobiliary disorders | 69 |
| Gastrointestinal Disorders | 59 |
| Ear and labyrinth disorders | 39 |
| Nervous system disorders | 31 |
| Skin and subcutaneous system disorders | 30 |
| Infections and Infestations | 29 |
| Psychiatric disorders | 23 |
| Musculoskeletal and connective tissue disorders | 19 |
| General disorders and administration site conditions | 14 |
| Renal and urinary disorders | 9 |
| Respiratory, thoracic and mediastinal disorders | 9 |
| Eye disorders | 7 |
| Endocrine disorders | 4 |
| Vascular disorders | 2 |
| Neoplasms benign, malignant and unspecified (incl cysts and polyps) | 1 |

List of registered events classified as per category.

| Category | Total events |
|--|--------------|
| Hepatobiliary investigations | 353 |
| Cardiac and vascular investigations | 203 |
| Renal and urinary tract investigations and urinalyses | 192 |
| Glucose metabolism disorders | 142 |
| Cardiac arrhythmias | 139 |
| White blood cell disorders | 120 |
| Bone, calcium, magnesium and phosphorus metabolism disorders | 111 |
| Enzyme investigations | 107 |
| Purine and pyrimidine metabolism disorders | 93 |
| Hepatic and hepatobiliary disorders | 69 |
| Electrolyte and fluid balance conditions | 65 |
| Anaemias (non-haemolytic) and marrow depression | 44 |
| Gastrointestinal signs and symptoms | 41 |
| Platelet disorders | 36 |
| Epidermal and dermal conditions | 28 |
| Gastrointestinal investigations | 27 |
| Hearing disorders | 22 |
| Cardiac disorder signs and symptoms | 19 |
| Fungal infectious disorders | 14 |
| Coronary artery disorders | 13 |
| Myocardial disorders | 13 |

| | |
|--|----|
| Rash | 11 |
| Joint disorders | 11 |
| Anxiety disorders and symptoms | 9 |
| Sleep disorders and disturbances | 9 |
| General system disorders | 8 |
| Inner ear and cranial nerve disorders | 8 |
| Gastrointestinal motility and defaecation conditions | 7 |
| Muscle disorders | 7 |
| Neurological disorders | 7 |
| Body temperature conditions | 6 |
| Middle ear infections and inflammations | 6 |
| Protein and amino acid metabolism disorders | 6 |
| Seizures | 6 |
| Peripheral neuropathies | 5 |
| Respiratory disorders | 5 |
| Vertigo | 5 |
| Gastrointestinal inflammatory conditions | 4 |
| Sleep disorders | 4 |
| Viral infectious disorders | 4 |
| Aural disorders | 3 |
| Nephropathies | 3 |
| Upper respiratory tract disorders | 3 |
| Urinary tract signs and symptoms | 3 |
| Vision disorders | 3 |
| Depressed mood disorders and disturbances | 2 |
| Diabetic complications | 2 |
| Eye disorders | 2 |
| Headaches | 2 |
| Mood disorders and disturbances | 2 |
| Movement disorders | 2 |
| Ocular infections, irritations and inflammations | 2 |
| Thyroid gland disorders | 2 |
| Tongue conditions | 2 |
| Adjustment disorders | 1 |
| Angioedema and urticaria | 1 |
| Bronchial disorders | 1 |
| Embolism and thrombosis | 1 |
| Exocrine pancreas condition | 1 |
| Gastrointestinal atonic and hypomotility disorders | 1 |
| Gastrointestinal conditions | 1 |
| Gastrointestinal ulceration and perforation | 1 |
| Haematopoietic neoplasm | 1 |
| Musculoskeletal and connective tissue disorders | 1 |
| Oral soft tissue conditions | 1 |
| Pericardial disorders | 1 |
| Renal and urinary tract neoplasm benign | 1 |
| Renal disorders | 1 |
| Skin and subcutaneous tissue disorders | 1 |

| | |
|---------------------------------|---|
| Urinary Tract Neoplasms | 1 |
| Urolithiases | 1 |
| Vascular haemorrhagic disorders | 1 |

List of registered events.

| Event | Total Events |
|---------------------------------------|--------------|
| Aspartate aminotransferase increased | 165 |
| Eosinophilia | 115 |
| Alanine aminotransferase increased | 113 |
| Electrocardiogram abnormal | 99 |
| Hyperuricaemia | 93 |
| Electrocardiogram QT prolonged | 89 |
| Hyperglycaemia | 85 |
| Gamma-glutamyl transferase increased | 75 |
| Blood alkaline phosphatase increased | 67 |
| Blood creatinine increased | 67 |
| Hyperbilirubinaemia | 66 |
| Blood urea increased | 65 |
| Glomerular filtration rate decreased | 60 |
| Hypomagnesaemia | 60 |
| Hypoglycaemia | 57 |
| Hypocalcaemia | 46 |
| Anaemia | 44 |
| Hypokalaemia | 41 |
| Blood Lactate Dehydrogenase Increased | 37 |
| Sinus tachycardia | 28 |
| Amylase increased | 26 |
| Thrombocytopenia | 26 |
| Bradycardia | 25 |
| Hyperkalaemia | 24 |
| Tachycardia | 22 |
| Nausea | 18 |
| Sinus bradycardia | 16 |
| Haemoptysis | 13 |
| Pruritus | 12 |
| Rash | 12 |
| Arrhythmia supraventricular | 11 |
| Arthralgia | 11 |
| Supraventricular extrasystoles | 11 |
| Chest pain | 10 |
| Thrombocytosis | 10 |
| Vomiting | 10 |
| Upper respiratory tract infection | 9 |
| Abdominal pain | 8 |
| Atrial hypertrophy | 8 |
| Insomnia | 8 |
| Oral candidiasis | 8 |

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|--|---|
| Tinnitus | 8 |
| Arrhythmia | 7 |
| Cochlear nerve deafness | 7 |
| Diarrhoea | 7 |
| Fatigue | 7 |
| Hearing decreased | 7 |
| Ventricular hypertrophy | 7 |
| Fever | 6 |
| Hypoalbuminaemia | 6 |
| Anxiety | 5 |
| Dyspepsia | 5 |
| Dyspnoea | 5 |
| Leukopenia | 5 |
| Seizure | 5 |
| Ventricular extrasystoles | 5 |
| Vertigo | 5 |
| Bundle branch block right | 4 |
| Cochlear nerve damage | 4 |
| Hypercalcemia | 4 |
| Muscle pain | 4 |
| Palpitation | 4 |
| Sleep disorders | 4 |
| Vaginal candidiasis | 4 |
| Blood pressure increased | 3 |
| Cramps legs | 3 |
| Ear pain | 3 |
| Gastritis | 3 |
| Hearing impaired | 3 |
| Hepatitis toxic | 3 |
| Hypoaesthesia | 3 |
| Influenza | 3 |
| Nephropathy toxic | 3 |
| Otitis media | 3 |
| Panic reaction | 3 |
| Right ventricular hypertrophy | 3 |
| Bundle branch block left | 2 |
| Eczema | 2 |
| Electrocardiogram QT interval abnormal | 2 |
| Epistaxis | 2 |
| Eustachitis | 2 |
| Headache | 2 |
| Myocardial infarction | 2 |
| Myopia | 2 |
| Neuritis | 2 |
| Polyneuropathy | 2 |
| Retinal disorder | 2 |
| Sinoatrial block | 2 |
| Syncope | 2 |

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|---|---|
| Tachyarrhythmia | 2 |
| Taste bitter | 2 |
| Abnormal dreams | 1 |
| Accommodation disorder | 1 |
| Adjustment disorders | 1 |
| Albuminuria | 1 |
| Aspergillosis | 1 |
| Atrial conduction time prolongation | 1 |
| Atrioventricular block | 1 |
| Back pain | 1 |
| Bad mood | 1 |
| Blood creatine phosphokinase increased | 1 |
| Blood pressure decreased | 1 |
| Candidiasis | 1 |
| Cardiac hypertrophy | 1 |
| Cardiomyopathy | 1 |
| Chest discomfort | 1 |
| Chills | 1 |
| Chronic obstructive airways disease exacerbated | 1 |
| Conjunctivitis | 1 |
| Depression | 1 |
| Dermatitis Allergic | 1 |
| Diabetic neuropathy | 1 |
| Diabetic retinopathy | 1 |
| Dizziness | 1 |
| Duodenal ulcer | 1 |
| Duodenitis | 1 |
| Electrocardiogram QRS complex prolonged | 1 |
| Eyelid oedema | 1 |
| Fear | 1 |
| Gastroesophageal reflux | 1 |
| FALSE | 1 |
| Haematoma | 1 |
| Haematuria | 1 |
| Herpes zoster | 1 |
| Hyperaemia eye | 1 |
| Hypermagnesaemia | 1 |
| Hypothyroidism | 1 |
| Kidney stone | 1 |
| Lactate Blood Increase | 1 |
| LDH Increased Serum | 1 |
| Lipase increased | 1 |
| Loss of consciousness | 1 |
| Lymphatic system neoplasm | 1 |
| Mood disorder | 1 |
| Myocardial ischaemia | 1 |
| Nasal septum ulceration | 1 |

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|---------------------------------------|---|
| Negative thoughts | 1 |
| Neuralgia | 1 |
| Neuropathy peripheral | 1 |
| Nodal arrhythmia | 1 |
| Oesophageal disorder | 1 |
| Otitis media chronic | 1 |
| Pancreatitis chronic | 1 |
| Papular rash | 1 |
| Partial Loss of Consciousness | 1 |
| Pericardial disease | 1 |
| Pneumonia | 1 |
| Psychomotor agitation | 1 |
| Renal cyst | 1 |
| Renal failure chronic | 1 |
| Renal pain | 1 |
| Skin ulceration | 1 |
| Stomatitis | 1 |
| Sudden hearing loss | 1 |
| Thrombosis | 1 |
| Thyroid Stimulating Hormone Increased | 1 |
| Tremor | 1 |
| Urinary Bladder Sarcoma | 1 |
| Urticaria | 1 |
| Ventricular tachycardia | 1 |

Average QTcF measurement resultss by month of patients grouped by the length of bedaquiline treatment

| Month | Standard (ms) | Prolonged (ms) |
|----------|---------------|----------------|
| Baseline | 384 | 388 |
| Month 1 | 400 | 410 |
| Month 2 | 411 | 431 |
| Month 3 | 415 | 420 |
| Month 4 | 419 | 427 |
| Month 5 | 420 | 432 |
| Month 6 | 420 | 435 |
| Month 7 | -- | 418 |
| Month 8 | -- | 411 |
| Month 9 | -- | 434 |
| Month 10 | -- | 442 |