| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| **Distinct Identifier** | | | | | |
| Record ID | text | CHAR | NA | C0681857 | individual as study subject |
| **Physical At Enrollment** | | | | | |
| TB treatment started? | yesno | BOOLEAN | NA | C0041296; C0013216; C1272689 | Tuberculosis; Pharmacotherapy; Started |
| If yes, date started | text | DATE | NA | C1531783 | Date treatment started |
| Lung disease (excl. TB) | radio | BOOLEAN | 1, Yes \| 0, No | C0024115 | Lung diseases |
| Diabetes | radio | BOOLEAN | 1, Yes \| 0, No | C0011849 | Diabetes Mellitus |
| Hypertension | radio | BOOLEAN | 1, Yes \| 0, No | C0020538 | Hypertensive disease |
| Heart disease | radio | BOOLEAN | 1, Yes \| 0, No | C0018799 | Heart Diseases |
| Kidney disease | radio | BOOLEAN | 1, Yes \| 0, No | C0022658 | Kidney Diseases |
| Thyroid disease | radio | BOOLEAN | 1, Yes \| 0, No | C0040128 | Thyroid Diseases |
| Cancer | radio | BOOLEAN | 1, Yes \| 0, No | CL604836 | Cancer (e.g., lung, breast, genitourinary, colon, etc. in some patients) |
| Psychiatric disorders | radio | BOOLEAN | 1, Yes \| 0, No | C1718246 | Psychiatric or mood diseases or conditions |
| Hepatitis B | radio | BOOLEAN | 1, Yes \| 0, No | C0019163 | Hepatitis B |
| Hepatitis C | radio | BOOLEAN | 1, Yes \| 0, No | C0019196 | Hepatitis C |
| Other liver diseases | radio | BOOLEAN | 1, Yes \| 0, No | C0023895 | Liver diseases |
| Asthma | radio | BOOLEAN | 1, Yes \| 0, No | C0004096 | Asthma |
| Gout | radio | BOOLEAN | 1, Yes \| 0, No | C0018099 | Gout |
| Arthritis | radio | BOOLEAN | 1, Yes \| 0, No | C0003864 | Arthritis |
| Alcoholism/Excessive alcohol use | radio | BOOLEAN | 1, Yes \| 0, No | C0455500 | H/O: alcoholism |
| If yes other lung disease, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes other lung disease, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes other lung disease, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes diabetes, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes diabetes, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes diabetes, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes hypertension, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes hypertension, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes hypertension, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| If yes heart disease, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes heart disease, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes heart disease, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes kidney disease, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes kidney disease, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes kidney disease, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes thyroid disease, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes thyroid disease, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes thyroid disease, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes cancer, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes cancer, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes cancer, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes psychiatric disorder, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes psychiatric disorder, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes psychiatric disorder, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes Hep B, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes Hep B, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes Hep B, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes Hep C, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes Hep C, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes Hep C, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes other liver disease, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes other liver disease, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes other liver disease, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes asthma, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| If yes asthma, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes asthma, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes gout, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes gout, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes gout, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes arthritis, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes arthritis, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes arthritis, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes alcoholism, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes alcoholism, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |
| If yes alcoholism, please provide ICD10 code: | text | VARCHAR | ICD10 | CL936147 | ICD10, 2016 |

**Smoking History**

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| Has the participant ever smoked tobacco? | radio | ENUMERATE | 1, Yes \| 0, No \| 98, Unknown | C0543414 | Tobacco use |
| If yes, is the smoking ongoing? | radio | ENUMERATE | 1, Yes \| 0, No \| 98, Unknown | C3853727 | Tobacco user |
| Duration of smoking (current/past): | text | INT | NA | C0543414; C0449238 | Tobacco use; Duration (temporal concept) |
| Duration unit: | radio | ENUMERATE | 1, Months \| 2, Years | C1519384; C0449238 | Tobacco Smoking History; Duration (temporal concept) |
| Has participant quit smoking? | radio | ENUMERATE | 1, Yes \| 0, No \| 98, Unknown | C1698618 | Ex-tobacco user |
| How long since quitting? | text | INT | NA | C1698618; C1707889 | Ex-tobacco user; Elapse |
| Duration unit: | radio | ENUMERATE | 1, Months \| 2, Years | C1519384; C0449238 | Tobacco Smoking History; Duration (temporal concept) |

**Tuberculosis History**

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| Any previous TB episodes? | radio | ENUMERATE | 1, Yes \| 0, No \| 2, Unknown | C0041296; C3258978 | Tuberculosis; Medical History |
| Year of last TB episode? | text | VARCHAR | NA | C0041296; C3258978 | Tuberculosis; Medical History |
| Number of previously treated TB episodes: | text | VARCHAR | NA | C0041296; C3258978 | Tuberculosis; Medical History |
| Was one of those previous episodes DRTB? | radio | ENUMERATE | 1, Yes \| 0, No \| 98, Unknown | C0041296; C3258978 | Tuberculosis; Medical History |
| When was most recent TB treatment completed? | radio | ENUMERATE | 1, One year ago \| 2, >= one year ago | C0040223 | Time, temporal concept |
| History of BCG vaccination | radio | ENUMERATE | 1, Yes \| 0, No \| 98, Unknown | C3257574; C3258978 | BCG Vaccine; Medical History |
| Does the participant report any of the following symptoms listed below? | yesno | BOOLEAN | NA | C3258978 | Medical History |
| Night sweats | radio | ENUMERATE | 1, Less than one week \| 2, At least 1 week and less than 2 weeks \| 3, At least 2 weeks \| 0, None | C0028081; C3258978; C0449238 | Night sweats; Medical History; Duration, temporal concept |
| Fevers | radio | ENUMERATE | 1, Less than one week \| 2, At least 1 week and less than 2 weeks \| 3, At least 2 weeks \| 0, None | C0015967; C3258978; C0449238 | Fevers; Medical History; Duration, temporal concept |

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| Loss of appetite | radio | ENUMERATE | 1, Less than one week \| 2, At least 1 week and less than 2 weeks \| 3, At least 2 weeks \| 0, None | C0232462; C3258978; C0449238 | Decrease in appetite; Medical History; Duration, temporal concept |
| Unintentional Weight loss | radio | ENUMERATE | 1, Less than one week \| 2, At least 1 week and less than 2 weeks \| 3, At least 2 weeks \| 0, None | C0936227; C3258978; C0449238 | Abnormal weight loss (finding); Medical History; Duration, temporal concept |
| Malaise/fatigue | radio | ENUMERATE | 1, Less than one week \| 2, At least 1 week and less than 2 weeks \| 3, At least 2 weeks \| 0, None | C0024528; C3258978; C0449238 | Malaise and fatigue; Medical History; Duration, temporal concept |
| Cough | radio | ENUMERATE | 1, Less than one week \| 2, At least 1 week and less than 2 weeks \| 3, At least 2 weeks \| 0, None | C3258978; C0449238 | Medical History; Duration, temporal concept |
| Sputum production | radio | ENUMERATE | 1, Less than one week \| 2, At least 1 week and less than 2 weeks \| 3, At least 2 weeks \| 0, None | C3258978; C0449238 | Medical History; Duration, temporal concept |
| Haemoptysis | radio | ENUMERATE | 1, Less than one week \| 2, At least 1 week and less than 2 weeks \| 3, At least 2 weeks \| 0, None | C3258978; C0449238 | Medical History; Duration, temporal concept |
| Dyspnoea | radio | ENUMERATE | 1, Less than one week \| 2, At least 1 week and less than 2 weeks \| 3, At least 2 weeks \| 0, None | C3258978; C0449238 | Medical History; Duration, temporal concept |
| Pleuritic chest pain | radio | ENUMERATE | 1, Less than one week \| 2, At least 1 week and less than 2 weeks \| 3, At least 2 weeks \| 0, None | C3258978; C0449238 | Medical History; Duration, temporal concept |
| Abdominal pain | radio | ENUMERATE | 1, Less than one week \| 2, At least 1 week and less than 2 weeks \| 3, At least 2 weeks \| 0, None | C3258978; C0449238 | Medical History; Duration, temporal concept |
| Nausea | radio | ENUMERATE | 1, Less than one week \| 2, At least 1 week and less than 2 weeks \| 3, At least 2 weeks \| 0, None | C3258978; C0449238 | Medical History; Duration, temporal concept |
| Vomiting | radio | ENUMERATE | 1, Less than one week \| 2, At least 1 week and less than 2 weeks \| 3, At least 2 weeks \| 0, None | C3258978; C0449238 | Medical History; Duration, temporal concept |

**Medications History**

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| Is the participant currently on medication? If yes, please continue with name of drug,dose etc. | yesno | BOOLEAN | NA | CL972932 | History of medication |
| Has the participant taken any medication in past 8 weeks? If yes, please continue with name of drug,dose etc. | yesno | BOOLEAN | NA | CL972932 | History of medication |
| Drug name #1: | text | VARCHAR | NA | NULL | Translate to RxNorm post facto |
| Drug name #2: | text | VARCHAR | NA | NULL | Translate to RxNorm post facto |
| Drug name #3: | text | VARCHAR | NA | NULL | Translate to RxNorm post facto |
| Drug name #4: | text | VARCHAR | NA | NULL | Translate to RxNorm post facto |

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| Drug name #5: | text | VARCHAR | NA | NULL | Translate to RxNorm post facto |
| Drug name #6: | text | VARCHAR | NA | NULL | Translate to RxNorm post facto |
| Drug name #1: | text | VARCHAR | NA | NULL | Translate to RxNorm post facto |
| Drug name #2: | text | VARCHAR | NA | NULL | Translate to RxNorm post facto |
| Drug name #3: | text | VARCHAR | NA | NULL | Translate to RxNorm post facto |
| Drug name #4: | text | VARCHAR | NA | NULL | Translate to RxNorm post facto |
| Drug name #5: | text | VARCHAR | NA | NULL | Translate to RxNorm post facto |
| Drug name #6: | text | VARCHAR | NA | NULL | Translate to RxNorm post facto |

**PET/Bronchoscopy Physical**

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| CD4 cell count result done & available | radio | ENUMERATE | 1, Yes \| 0, No \| 99, N/A | CL523893 | CD4 Count determination procedure |
| CD4 cell count [cells/mm3] | text | INT | NA | C3541261 | CD4 Expressing Cell Count |
| HIV viral load result done & available | radio | ENUMERATE | 1, Yes \| 0, No \| 99, N/A | C1168369 | HIV Viral Load Measurement |
| HIV viral load [copies/ml] | text | INT | NA | C1168369; C0456984 | HIV Viral Load Measurement; Test Result |
| HIV ELISA test result | radio | ENUMERATE | 0, Negative \| 1, Positive \| 98, Not Done | C0201388; C0456984 | HIV-1 ELISA assay; Test Result |
| Weight (kg) | text | INT | NA | C0005910; C0031809 | Body Weight; Physical Examination |
| Height (cm) | text | INT | NA | C0489786; C0031809 | Body Height; Physical Examination |
| Blood Pressure: systolic | text | INT | NA | C0871470; C0031809 | Systolic Blood Pressure; Physical Examination |
| Repeat Blood Pressure: systolic | text | INT | NA | C0871470; C0031809 | Systolic Blood Pressure; Physical Examination |
| Blood Pressure: diastolic | text | INT | NA | C0428883; C0031809 | Diastolic Blood Pressure; Physical Examination |
| Repeat Blood Pressure: diastolic | text | INT | NA | C0428883; C0031809 | Diastolic Blood Pressure; Physical Examination |
| Temperature (?C) | text | DOUBLE | NA | C0005903; C0031809 | Body Temperature; Physical Examination |
| Pulse Rate | text | INT | NA | C0232117; C0031809 | Pulse Rate; Physical Examination |
| Respiratory rate/min | text | INT | NA | C0231832 | Respiratory Rate |
| Hb [g/dL] | text | DOUBLE | NA | C1984226 | Hemoglobin test status |
| Random HGT [mmol/L] | text | DOUBLE | NA | C0428567 | Random blood glucose measurement |
| HbA1c result | text | DOUBLE | NA | C0474680 | Hemoglobin A1c measurement |

**Chest X-Ray**

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| Film quality? | radio | ENUMERATE | 1, Optimal \| 2, Sub-optimal \| 3, Unreadable | C0806487 | Image Quality |
| Infiltrate or Consolidation | checkbox | ENUMERATE | 1, Infiltrate or Consolidation | NULL | |
| Any cavity lesion | checkbox | ENUMERATE | 2, Any cavity lesion | NULL | |
| Nodule with poorly defined margins | checkbox | ENUMERATE | 3, Nodule with poorly defined margins | NULL | |

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| Pleural effusion | checkbox | ENUMERATE | 4, Pleural effusion | NULL | |
| Hilar or Mediastinal Lymphadenopathy | checkbox | ENUMERATE | 5, Hilar or Mediastinal Lymphadenopathy | NULL | |
| Other findings suggestive of TB e.g. milliary TB | checkbox | ENUMERATE | 6, Other findings suggestive of TB e.g. milliary TB | NULL | |
| Right Upper Lobe | checkbox | ENUMERATE | 1, Right Upper Lobe | C1261074 | Upper lobe of the right lung |
| Right Middle Lobe | checkbox | ENUMERATE | 2, Right Middle Lobe | C0225757 | Middle lobe of the right lung |
| Right Lower Lobe | checkbox | ENUMERATE | 3, Right Lower Lobe | C1261075 | Lower lobe of the right lung |
| Left Upper Lobe | checkbox | ENUMERATE | 4, Left Upper Lobe | C1261076 | Upper lobe of left lung |
| Left Lower Lobe | checkbox | ENUMERATE | 5, Left Lower Lobe | C1261077 | Lower lobe of left lung |
| Modified Ralph score: | text | DOUBLE | NA | NULL | |

**Inclusion Criteria**

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| Age 18 -65 years | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Not Applicable | C1704756; C0001779 | Trial Inclusion and Exclusion Criteria Domain; Age |
| Weight >35kg and < 120kg | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Not Applicable | C1704756; C0005910 | Trial Inclusion and Exclusion Criteria Domain; Body Weight |
| Absence of current source of infection | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Not Applicable | C1704756; C3714514 | Trial Inclusion and Exclusion Criteria Domain; Infection |
| HIV negative | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Not Applicable | C1704756; C0458074 | Trial Inclusion and Exclusion Criteria Domain; HIV status |
| Newly diagnosed, recurrent TB with previous TB treatment completed at least 36 months prior to recruitment. | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Not applicable | C1704756; C0857427 | Trial Inclusion and Exclusion Criteria Domain; Old Tuberculosis |
| Rifampicin sensitivity confirmed by Gene Xpert | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Not applicable | C1704756; C0035608; C0025948 | Trial Inclusion and Exclusion Criteria Domain; Rifampin; Microbial Sensitivity Test |
| No TB in past 3 years (this 3 years start when the tx is done) | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Not applicable | C1704756; C0857427 | Trial Inclusion and Exclusion Criteria Domain; Old Tuberculosis |
| They are smear positive OR Xpert positive (medium/high or very high) OR Xpert positive lower than medium with either symptoms or CXR positive or active TB | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Not applicable | ICD10-A15.0; ICD10-A15.3; C0039985 | Tuberculosis of lung, confirmed by sputum microscopy with or without culture; |
| Absent history of TB or known exposure to a TB patient | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Not applicable | C1704756; C0857427; C1708498 | Trial Inclusion and Exclusion Criteria Domain; Old Tuberculosis; Indirect Contact Transmission Infection; Tuberculosis of lung, confirmed by unspecified means; Chest Radiography |
| HIV negative | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Not applicable | C1704756; C0458074 | Trial Inclusion and Exclusion Criteria Domain; HIV status |
| No TB for 3 years (This 3 yrs start when the treatment is done) | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Not applicable | C1704756; C0857427 | Trial Inclusion and Exclusion Criteria Domain; Old Tuberculosis |
| Xpert negative | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Not applicable | C0587081 | Laboratory Test Result |
| No symptoms/CXR signs | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Not applicable | C0039985 | Chest Radiography |
| No known contact for past 1 yr | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Not applicable | NULL | |

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| **Study Arm** | | | | | |
| Assigned to Arm 3: Comm. Ctls (HN) | yesno | BOOLEAN | NA | NULL | |
| Assigned to Arm 2: TB Cases (HN) | yesno | BOOLEAN | NA | NULL | |
| Assigned to Arm 4: Close Contacts (HN) | yesno | BOOLEAN | NA | NULL | |
| Assigned to Arm 5: HIV Positive | yesno | BOOLEAN | NA | NULL | |
| **Laboratory GeneXpert** | | | | | |
| From where was the sputum collected that yielded this GeneXpert result? | radio | ENUMERATE | 1, Research sputum collection \| 2, Routine clinical care at treating facility \| 3, No GeneXpert was done | NULL | |
| GeneXpert date done? | text | DATE | NA | C0011008 | Date, temporal concept |
| Positive result found? | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Result not available | C0587081 | Laboratory Test Result |
| Rif resistance found? | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Result not available | C0035608; C0025948 | Rifampin; Microbial Sensitivity Test |
| Xpert ranking? | radio | ENUMERATE | 1, Very low \| 2, Low \| 3, Medium \| 4, High \| 5, Very high \| 99, Not available | NULL | |
| Where was this repeat done? | radio | ENUMERATE | 1, Research lab \| 2, Reference lab \| 3, No GeneXpert repeat was done | NULL | |
| GeneXpert date done? | text | DATE | NA | C0011008 | Date, temporal concept |
| Positive result found? | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Result not available | C0587081 | Laboratory Test Result |
| Rif resistance found? | radio | ENUMERATE | 1, Yes \| 0, No \| 99, Result not available | C0035608; C0025948 | Rifampin; Microbial Sensitivity Test |
| Xpert ranking? | radio | ENUMERATE | 1, Very low \| 2, Low \| 3, Medium \| 4, High \| 5, Very high \| 99, Not available | NULL | |
| **PET Result** | | | | | |
| Visible lesions on CT: | yesno | BOOLEAN | NA | C0202823 | Chest CT |
| If yes, how many? | dropdown | ENUMERATE | 1, 1 \| 2, 2 \| 3, 3 \| 4, 4 | NULL | |
| Is the lesion in keeping with TB lesion? | yesno | BOOLEAN | NA | NULL | |
| Main location of lesions: | radio | ENUMERATE | 1, LUL \| 2, RUL \| 3, RML \| 4, LLL \| 5, RLL | C1261076; C1261074; C0225757; C1261077; C1261075 | Upper lobe of left lung; Upper lobe of the right lung; Middle lobe of the right lung; Lower lobe of left lung; Lower lobe of the right lung |
| Morphology of lesions: | dropdown | ENUMERATE | 1, Enlarged lymphnode \| 2, Nodule \| 3, Consolidation \| 4, Cavity \| 5, Tree-in-bud \| 6, Bronchial thickening \| 7, Linear scar \| 8, Fibrosis \| 9, Bronchiectasis | NULL | |

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| | | | (ground-glass) \| 10, Mass \| 11, Bulla(e) \| 12, Other | | |
| If other, comment | text | VARCHAR | NA | NULL | |
| Does the lesion have increased FDG-avidity? | yesno | BOOLEAN | NA | NULL | |
| If yes, SUVmax: | text | DOUBLE | NA | NULL | |
| If yes, metabolic lesion volume: | text | DOUBLE | NA | NULL | |
| If yes, total glycolytic activity: | text | DOUBLE | NA | NULL | |
| Is the lesion in keeping with TB lesion? | yesno | BOOLEAN | NA | NULL | |
| Main location of lesions: | radio | ENUMERATE | 1, LUL \| 2, RUL \| 3, RML \| 4, LLL \| 5, RLL | C1261076; C1261074; C0225757; C1261077; C1261075 | Upper lobe of left lung; Upper lobe of the right lung; Middle lobe of the right lung; Lower lobe of left lung; Lower lobe of the right lung |
| Morphology of lesions: | dropdown | ENUMERATE | 1, Enlarged lymphnode \| 2, Nodule \| 3, Consolidation \| 4, Cavity \| 5, Tree-in-bud \| 6, Bronchial thickening \| 7, Linear scar \| 8, Fibrosis \| 9, Bronchiectasis (ground-glass) \| 10, Mass \| 11, Bulla(e) \| 12, Other | NULL | |
| If other, comment | text | VARCHAR | NA | NULL | |
| Does the lesion have increased FDG-avidity? | yesno | BOOLEAN | NA | NULL | |
| If yes, SUVmax: | text | DOUBLE | NA | NULL | |
| If yes, metabolic lesion volume: | text | DOUBLE | NA | NULL | |
| If yes, total glycolytic activity: | text | DOUBLE | NA | NULL | |
| Is the lesion in keeping with TB lesion? | yesno | BOOLEAN | NA | NULL | |
| Main location of lesions: | radio | ENUMERATE | 1, LUL \| 2, RUL \| 3, RML \| 4, LLL \| 5, RLL | C1261076; C1261074; C0225757; C1261077; C1261075 | Upper lobe of left lung; Upper lobe of the right lung; Middle lobe of the right lung; Lower lobe of left lung; Lower lobe of the right lung |
| Morphology of lesions: | dropdown | ENUMERATE | 1, Enlarged lymphnode \| 2, Nodule \| 3, Consolidation \| 4, Cavity \| 5, Tree-in-bud \| 6, Bronchial thickening \| 7, Linear scar \| 8, Fibrosis \| 9, Bronchiectasis (ground-glass) \| 10, Mass \| 11, Bulla(e) \| 12, Other | NULL | |
| If other, comment | text | VARCHAR | NA | NULL | |
| Does the lesion have increased FDG-avidity? | yesno | BOOLEAN | NA | NULL | |
| If yes, SUVmax: | text | DOUBLE | NA | NULL | |
| If yes, metabolic lesion volume (ml): | text | DOUBLE | NA | NULL | |

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| If yes, total glycolytic activity: | text | DOUBLE | NA | NULL | |
| Is the lesion in keeping with TB lesion? | yesno | BOOLEAN | NA | NULL | |
| Main location of lesions: | radio | ENUMERATE | 1, LUL \| 2, RUL \| 3, RML \| 4, LLL \| 5, RLL | C1261076; C1261074; C0225757; C1261077; C1261075 | |
| Morphology of lesions: | dropdown | ENUMERATE | 1, Enlarged lymphnode \| 2, Nodule \| 3, Consolidation \| 4, Cavity \| 5, Tree-in-bud \| 6, Bronchial thickening \| 7, Linear scar \| 8, Fibrosis \| 9, Bronchiectasis (ground-glass) \| 10, Mass \| 11, Bulla(e) \| 12, Other | NULL | |
| If other, comment | text | VARCHAR | NA | NULL | |
| Does the lesion have increased FDG-avidity? | yesno | BOOLEAN | NA | NULL | |
| If yes, SUVmax: | text | DOUBLE | NA | NULL | |
| If yes, metabolic lesion volume: | text | DOUBLE | NA | NULL | |
| If yes, total glycolytic activity: | text | DOUBLE | NA | NULL | |

**Laboratory** BAL

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| Date BAL sample taken: | text | DATE | NA | C0011008 | Date, temporal concept |
| Lobe | text | CHAR | NA | C1261076; C1261074; C0225757; C1261077; C1261075 | Upper lobe of left lung; Upper lobe of the right lung; Middle lobe of the right lung; Lower lobe of left lung; Lower lobe of the right lung |

**Laboratory Quantiferon**

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| QFN GOLD PLUS result? | radio | ENUMERATE | 1, Positive \| 0, Negative \| 2, Indeterminate \| 3, Borderline \| 98, Not tested | C0587081 | Laboratory Test Result |
| QFN Nil OD value [IU/ml] {cut-off = < 0.2} | text | DOUBLE | NA | C0587081 | Laboratory Test Result |
| QFN TB1 OD value [IU/ml] {cut-off = 0.2 - 0.7} | text | DOUBLE | NA | C0587081 | Laboratory Test Result |
| QFN TB2 OD value [IU/ml] {cut-off = 0.2 - 0.7} | text | DOUBLE | NA | C0587081 | Laboratory Test Result |
| QFN Mitogen OD value [IU/ml] {cut-off = >0.7} | text | DOUBLE | NA | C0587081 | Laboratory Test Result |
| QFN TB1 - Nil OD value [IU/ml] | text | DOUBLE | NA | C0587081 | Laboratory Test Result |
| QFN TB2 - Nil OD value [IU/ml] | text | DOUBLE | NA | C0587081 | Laboratory Test Result |
| QFN Mitogen - Nil OD value [IU/ml] | text | DOUBLE | NA | C0587081 | Laboratory Test Result |
| Date QFN ELISA done | text | DATE | NA | C0011008 | Date, temporal concept |

**Laboratory Sputum**

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| Where is the smear result 1 for this participant from? | radio | ENUMERATE | 1, Research smear \| 2, Routine clinical care at treating facility \| 3, Not Done | NULL | |

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| Smear1 specimen collection date? | text | DATE | NA | C0011008 | Date, temporal concept |
| Smear1 results as pos/neg | radio | ENUMERATE | 1, Positive \| 0, Negative \| 89, Data not known \| 99, Not tested | NULL | |
| Smear1 result as score? | radio | ENUMERATE | 0, Negative \| 1, 1+ = less than 1 AFB per field \| 2, 2+ = 1 to 10 AFB per field \| 3, 3+ = more than 10 AFB per field \| 4, Less than 10 AFB per all fields \| 89, Not available \| 99, Not tested | C0587081; C0152616 | Laboratory Test Result; Pulmonary tuberculosis, unspecified, tubercle bacilli found (in sputum) by microscopy |
| Where is the smear result 2 for this participant from? | radio | ENUMERATE | 1, Research smear \| 2, Routine clinical care at treating facility \| 3, Not Done | NULL | |
| Smear2 specimen collection date? | text | DATE | NA | C0011008 | Date, temporal concept |
| Smear2 results as pos/neg | radio | ENUMERATE | 1, Positive \| 0, Negative \| 89, Data not known \| 99, Not tested | C0587081; C0152616 | Laboratory Test Result; Pulmonary tuberculosis, unspecified, tubercle bacilli found (in sputum) by microscopy |
| Smear2 as score? | radio | ENUMERATE | 0, Negative \| 1, 1+ = less than 1 AFB per field \| 2, 2+ = 1 to 10 AFB per field \| 3, 3+ = more than 10 AFB per field \| 4, Less than 10 AFB per all fields \| 89, Not available \| 99, Not tested | NULL | |

**Laboratory Culture**

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| Liquid culture result? | radio | ENUMERATE | 1, Positive \| 0, Negative \| 2, Contaminated \| 89, Data not known \| 99, Not tested | C0587081 | Laboratory Test Result |
| Date positive? | text | DATE | NA | C0011008 | Date, temporal concept |
| If positive or contaminated, time to positive? | text | INT | NA | C0587081; | Laboratory Test Result; |
| Time to positive units? | radio | ENUMERATE | 1, Hours \| 2, Days | C0449238 | Duration, temporal concept |
| Liquid culture Mycobacterium speciation? | dropdown | ENUMERATE | 1, M. tuberculosis \| 2, M. bovis \| 3, M. avium \| 4, M. intracellulare \| 6, M. kansasii \| 7, M. fortuitum \| 8, M. asiaticum \| 9, Mtb Complex \| 30, MOTT, other \| 60, Myco spp unknown \| 90, Not detected \| 99, Not tested | C0587081 | Laboratory Test Result |
| Speciation method? | radio | ENUMERATE | 1, Capilia \| 2, PCR | C0587081 | Laboratory Test Result |
| ZN of MGIT culture Result1? | radio | ENUMERATE | 0, Negative \| 1, Negative (contaminated) \| 2, Positive \| 3, Positive (contaminated) \| 99, Not Done | C0587081 | Laboratory Test Result |

| Variable | REDCap Type | SQL Type | Enumeration | CUI | CUI Name |
|---|---|---|---|---|---|
| Blood Agar Result1? | radio | ENUMERATE | 0, No growth \| 1, Growth (contaminants) \| 99, Not Done | C0587081 | Laboratory Test Result |
| Mycobacterium Selectatab | radio | ENUMERATE | 0, No growth \| 1, Growth \| 2, Contaminated \| 98, Not Done | C0587081 | Laboratory Test Result |
| ZN of Selectatab | radio | ENUMERATE | 0, Negative \| 1, Negative (contaminated) \| 2, Positive \| 3, Positive (contaminated) \| 99, Not Done | C0587081 | Laboratory Test Result |
| **Study Arm** | | | | | |
| Participant qualifies for the following group: | radio | ENUMERATE | 1, Group 4 - Resister (n = 20) \| 2, Group 5 - Convertor (n = 20) \| 3, Group 6, Reverter (n = 20) \| 4, Group 7, IGRA pos, PET neg Adaptive Immune Control (n = 20) \| 5, Group 8, IGRA pos, PET pos Subclinical disease (n = 20) | NULL | |
| Participant qualifies for the following group: | radio | ENUMERATE | 1, Group 2 - IGRA neg Community Control (n=20) \| 2, Group 3 - IGRA pos Community Control (n =20) | NULL | |
| PTB confirmed? | yesno | BOOLEAN | NA | C1407689 | Primary respiratory tuberculosis |
| If yes: select all applicable (choice=GeneXpert positive) | checkbox | ENUMERATE | 1, GeneXpert positive | C1407689; C1880302 | Primary respiratory tuberculosis; Diagnostic Laboratory Biomarker Analysis |
| If yes: select all applicable (choice=Smear positive) | checkbox | ENUMERATE | 2, Smear positive | C0152548 | Primary tuberculous infection, unspecified type, tubercle bacilli found (in sputum) by microscopy |
| If yes: select all applicable (choice=Culture positive) | checkbox | ENUMERATE | 3, Culture positive | C0858489 | Primary tuberculous infection, unspecified type, confirmed by bacterial culture |
| If yes: select all applicable (choice=CXR suggest active TB) | checkbox | ENUMERATE | 4, CXR suggest active TB | C1407689; C0039985 | Primary respiratory tuberculosis; Chest Radiography |