

Treating Patient, Not Disease: People-Centered Approach

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Paediatric SCR in Uzbekistan: Challenges and Successes

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Paediatric SCR in Uzbekistan: Challenges and Successes

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Background

- Paediatric DR-TB is a problem
 - Globally 30 000 children get DR-TB yearly (WHO, 2015)
- SCR is a potentially excellent solution
 - Children are good candidates given nature of disease (i.e. low burden)
- But limited global experience with SCR in children
- Current study in Karakalpakstan will be first detailed description of use of SCR in a paediatric cohort

Paediatric SCR Study - Uzbekistan

- Prospective, single armed, cohort study
- Recruiting since July 2016 – (ongoing)
- 5 districts Karakalpakstan, Uzbekistan

SCR Protocol, Uzbekistan

4-6 mo hdH – Z – E – Km/Cm – Mfx – Pto – Cfz

5 mo Z – E – – Mfx – Pto – Cfz

7 days a week (DOT)
NB: Mfx 400mg



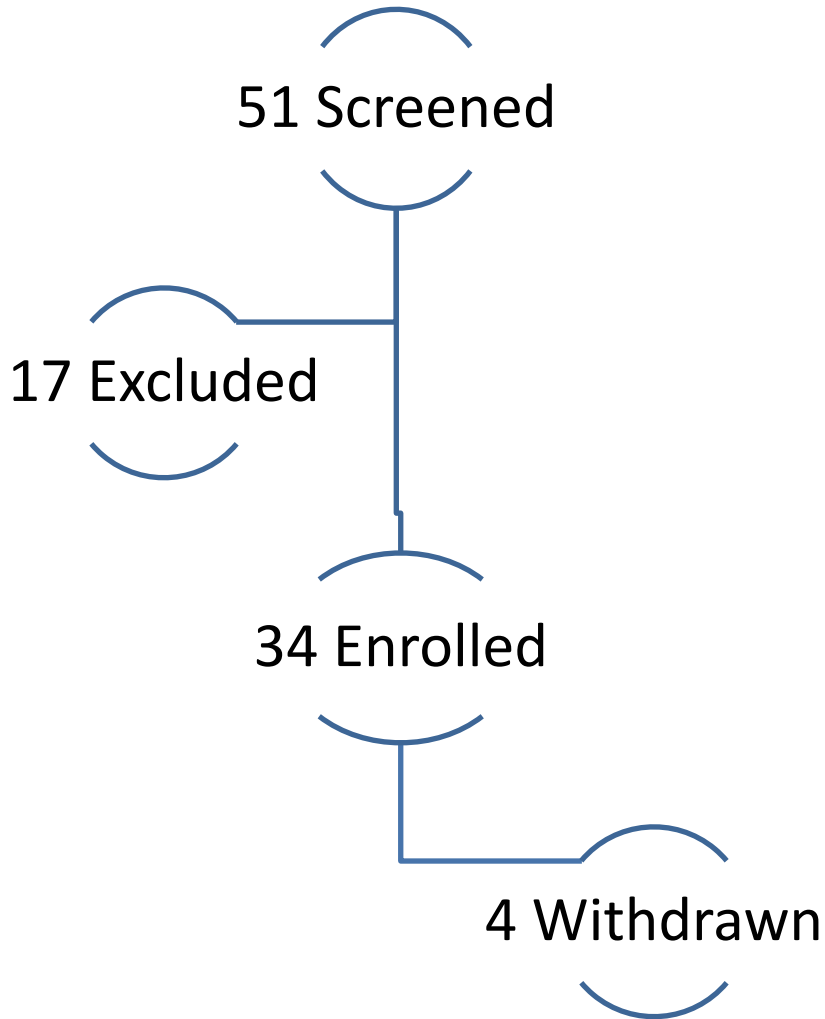
- High levels of *katG* mutation (95%)
- High levels of Z resistance (>70%)
- High levels of E resistance (>70%)

Ref: Unpublished local laboratory data

Eligibility

| Inclusion Criteria | | Exclusion Criteria |
|--------------------------------|--|---|
| <18 years old | | Ofx resistance |
| Either / OR | GXP: Rifampicin resistance | Km + Cm resistance |
| | <14 years old + Clinical TB + Rif. Resistant contact | >1 month of 2 nd line drug use |
| Informed consent | | Critically unwell |
| PTB, Pleural TB, Lymph Node TB | | Other EPTB |
| | | Pregnancy |

Recruitment



Excluded (17)

- Contact of Pre-XDR/XDR (6)
- Refusal (3)
- Contact with failed MDR (1)
- Previous 2nd line drug use (1)
- DST showed resistance (1)
- TB excluded (1)
- Drug contraindication (1)
- Refused by consilium (1)
- Non-active rayon (1)
- EPTB (1)

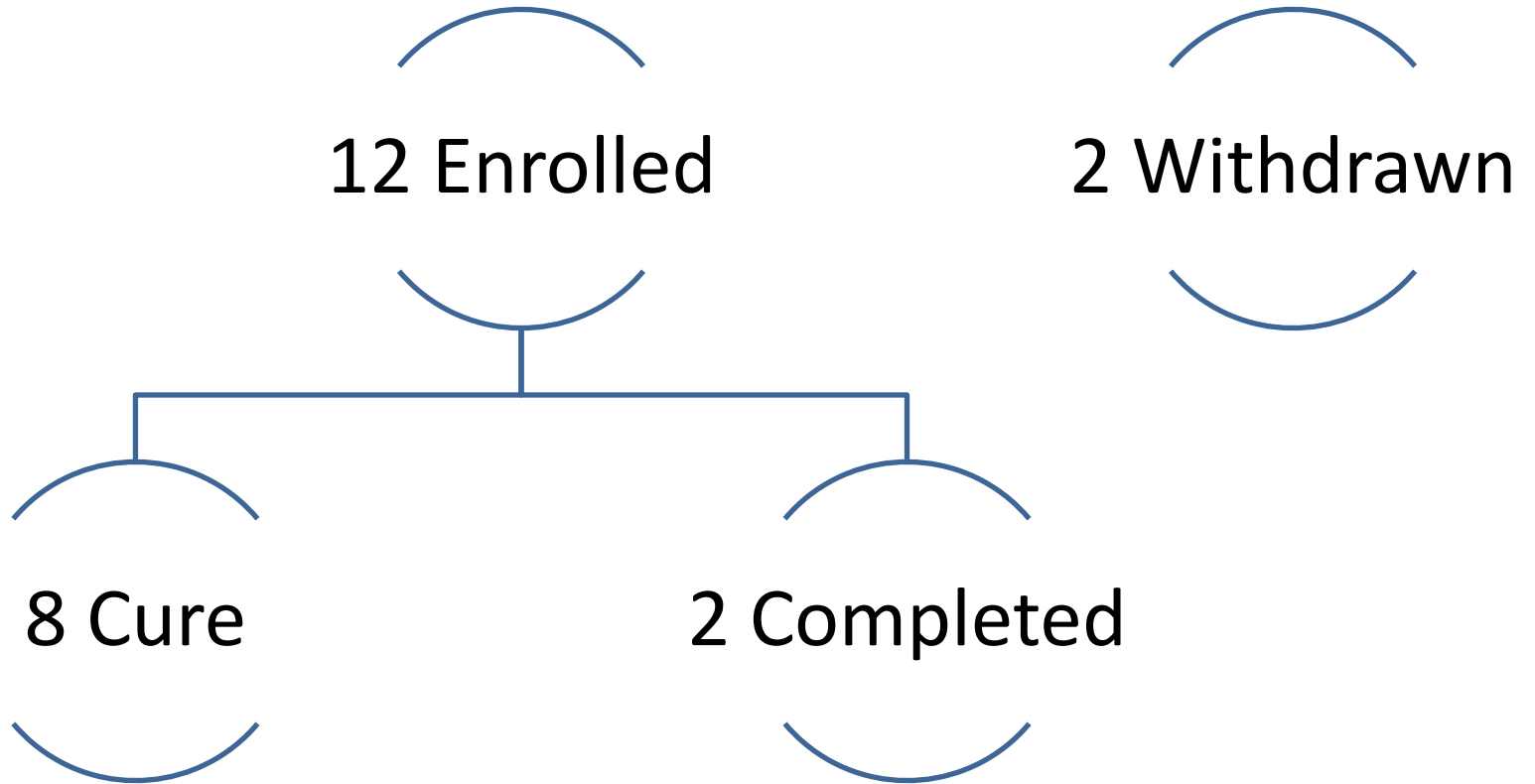
Withdrawn (4)

- Incompatible phenotypic DST (3)
- Other (1)

Demographics - Enrolled

| | |
|--|---------------------------|
| Sex | 15/34 (44%) female |
| Age | 16yr 3mo (8mo – 17yr 7mo) |
| Pulmonary TB | 28/34 (82%) |
| Microbiological evidence of TB at time of recruitment | 29/34 (85%) |
| Kanamycin Resistant | 15/28 (54%) |

Outcomes



For those starting prior to 1st Feb 2017

Recruitment Challenges

- Difficulty making microbiological diagnosis
 - Increased use of clinical diagnosis and contact history
 - New diagnostic methods (i.e. stool geneXpert)
 - Invasive diagnostics (i.e. gastric aspiration)
 - Wider access to sputum induction
- Stigma
 - Psychosocial support and improved treatment literacy aiming for family-centred care

Programmatic Challenges

- Sunday dosing
- Access to paediatric formulations
- Knowledge/Experience with paediatric DR-TB less than that for adult DR-TB

Treatment Challenges

- Frequent dose adjustment for weight gain
- Time required to take drugs (often >1hr)

Successes

- Good access to GeneXpert
 - Able to diagnose based on that alone
- Adherence is easier
 - Family often very invested in treatment
- Able to return to school earlier
 - Duration of school exclusion = duration of IP

Successes

- Good access to ambulatory care
 - Usually discharged after a month (can be earlier)
- Good outcomes
 - 85% success rate (end of 2017)

Questions?

