201 randomly selected adolescents who remained healthy during 24 months of follow-up, yielded a higher specificity of 88% (Scriba TJS, Hathrell M, unpublished). We have also commenced a trial to test whether application of the RNA signature for targeted intervention with an isoniazid and rifapentine regimen can modulate tuberculosis outcomes on a population basis (CORTIS; NCT02735590).

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WHO recommendations for multidrug-resistant tuberculosis

Giovanni Sotgiu and colleagues[1] (June 18, p 2486) described the choices facing national tuberculosis programmes in implementing the 2016 WHO recommendations for drug-resistant tuberculosis.[2] However, they might be being unduly pessimistic about the shortened treatment regimen (9–12 months). Successful implementation of this regimen, in settings from Somalia to India, shows the potential benefit for some patients with multidrug-resistant (MDR) tuberculosis.[3]

We wish to address their concern regarding applicability in countries of the former Soviet Union. Interim data (1-year, relapse-free outcomes due in 2017) from our observational study of the shortened regimen in Karakalpakstan, Uzbekistan,[4] contributed to the meta-analysis on which WHO based their recommendations. The Ministry of Health of Karakalpakstan, in partnership with Médecins sans Frontières, chose to pilot the shortened regimen in parallel with the line-probe assay for second-line drugs. This decision was made on the basis of the challenges of maintaining quality patient-centred care when scaling up a 20-month regimen: successful outcomes dropped to 62%; and loss to follow-up increased to 20%.[5]

When considering whether to incorporate some or all of the WHO recommendations, national programme managers must balance the benefit of reducing treatment duration for some patients against the extra resources required to identify them. While some settings have high levels of resistance, there remain patients within these contexts who are likely to benefit from shorter regimens.

Keeping patients at the centre of these decisions is key. With global successful treatment outcomes of just 50% for MDR tuberculosis,[6] perhaps the focus should be on who might benefit from the shorter regimen rather than who might not.

We declare no competing interests.

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Authors' reply

We agree entirely with Catherine Berry and colleagues that improving patient outcomes is a major objective we all share. Unfortunately, a large majority who are representative of patients treated in our centres[1,2] would not benefit from the shorter multidrug-resistant (MDR) tuberculosis regimen: only 14 (4·0%) of 348 patients would benefit. This is most likely because we have had a backlog of very resistant patients to treat. We hypothesise that when these patients are treated, more patients will be able to benefit from the shorter regimen.

We hope that the STREAM trial[3] will bring good news for a completely oral shorter regimen, contributing to the reduction of MDR tuberculosis burden around the globe, while increasing access to treatment, tolerability, and adherence, and improving outcomes. An increased number of patients receiving treatment will also reduce transmission.

However, we believe a degree of caution is required for three reasons. First, the positive experience from the Second Line-Line Probe Assay (SL-LPA, used under trial conditions in your pilot) might be different in programmatic conditions. Second, the test, although