- immunosuppressant drugs is variable ranging from weeks to months. So, how can 6 months chemoprophylaxis be universal?
- 6. The statement "a child born to mother who was diagnosed to have TB in pregnancy should receive prophylaxis for 6 months, provided congenital TB has been ruled out" has not been supported by clinical and investigatory approach for of ruling out congenital tuberculosis. It is of paramount importance to diagnose a case of congenital TB and treat as a new case as early as possible as untreated disease is invariably fatal [5]. Therefore, diagnostic algorithm of congenital TB must be included in the guidelines both for exclusion as well as for treatment.

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REPLY

In reference to letter received from Kumar and Patwari, we would like to add that:

- The current recommendations [1] highlight that the diagnosis of TB is most reliable with microbiological methods and in such cases the findings on chest skiagrams usually do not help any further in diagnosis. Chest skiagram, however, may be done, for detailing the pulmonary disease, depending upon the feasibility.
- They themselves have pointed out, the existing PCR-based tests available in most commercial laboratories
 are not reliable therefore these were clubbed with all
 other inaccurate diagnostic tests. With the
 advancement in technologies, the guidance may be

- revised in future as and when new tools or evidence emerges. Cartridge-based nucleic amplification test is one such test currently being evaluated.
- 3. DOTS for new cases does not need a skilled person as there are only oral drugs to be administered. School based DOTS may be an option but the limited capacities and lack of time or motivation with in the school staff as well as the potential risk of stigmatisation are the likely hurdles Also, partnerships for provision of directly supervised treatment must have a continued link with health providers to monitor the child for response to therapy, adverse events and management of other comorbidities, including malnutrition. There is certainly a need to make DOTS more user-friendly for children and there is a need to pilot test to achieve innovative out of the box alternatives (school based, home based or neighbourhood DOTS).
- 4. INH prophylaxis is the only proven and established chemoprophylactic drug for tuberculosis [2-4]. The committee after reviewing the scientific literature and deliberating on programmatic implementation the committee opined that INH therapy should continue to be the mainstay of chemoprophylaxis in our country; albeit at a higher dosage of 10 mg/kg body weight per day.
- 5. The prophylaxis is recommended for all asymptomatic contacts (children under the age of six years) of smear positive tuberculosis because (a) the exposure to an infectious case (which is usually a smear positive TB case) is one of the strongest determinant for the risk of infection, (b) and at a younger age the risk of developing disease after infection is very high. Though tuberculin skin test (TST) is performed to establish infection, it may not be required when there is a definite exposure. The current recommendations merely simplifies the mechanism to clinically identify children, in the family/household, who are likely to be recently infected.

The current evidence is for the post exposure prophylaxis and is recommended for six months. The benefit of a prolonged or continuous use of INH prophylaxis for TB, in a continued state of immunosuppression is not known. We, therefore, found it appropriate to recommend six months prophylaxis only for those cases who are found to be infected at the first point when the immunosuppressive therapy is started.

6. The recommendations clearly state the need to rule out active disease before initiating any child on preventive therapy including suspected perinatal

cases. Congenital TB is suspected based upon clinical examination (hepatosplenomegaly with or without pneumonia), chest skiagrams, microbiological diagnosis and ultrasonology of the abdomen for any hepatic granulomas, particularly in a neonate born to a mother who is suffering from active tuberculosis.

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Pediatric Tuberculosis

I read the recent updated guidelines for pediatric tuberculosis in India with interest, and found them to be informative. However, there may be practical difficulty in evaluating exact weight loss which has been defined as weight loss more than 5% of highest weight recorded in 3 months [1]. Weight loss in terms of percentage can only be defined if previous weight of the child is known. Common presentation of children belonging to rural area is anorexia, fever and complain by parents of weight loss as measured from dress size.

What are suggestions of the authors regarding interval between subsequent repetition of tuberculin sensitivity test as TST is being used as a tool to diagnose pediatric tuberculosis in conjunction with sputum and gastric lavage microscopy along with chest X-ray; every time child presents with unexplained fever, anorexia and weight loss. Should it not be recommended to keep a record of tuberculin sensitivity testing.

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REPLY

In response to Kaur, we wish to state that (a) while it is true that the weight records may not be available in many situations but objectively defining these symptoms to cleanly identify disease suspect leads to a better yield as it will improve the performance of the diagnostic algorithm. In the event where the exact weight loss cannot be quantified, one may still investigate for TB if the clinical suspicion is high; (b) prior TST testing, even when repeated, is not considered likely to give rise to false positive reactions.

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Tuberculosis - A Quest Towards Objectivity

I read with interest "updated National Guidelines for pediatric tuberculosis in India, 2012" and appreciate the effort made to clarify certain grey areas of interpretation like weight loss or no weight gain besides presenting the contents as flow diagrams for ready reference [1]. I would like to draw attention to certain points requiring further clarification to enable a clinician to use these guidelines

practically and effectively in a wider range of situations.

According to figure 1a and 1b, a symptomatic sputum negative patient undergoes chest X-ray and TST. Following this, the possible results would be in six ways as per the outcome of these two investigations.

Chest X-ray can be read as: (a) Highly suggestive of tuberculosis, (b) Non-specific shadows (c) Normal; TST can be read as: (i) Positive, (ii) Negative. Though most of the possible scenarios are dealt with properly, it does not provide an approach for (a+ii) that is highly suggestive XRC and TST negative. Similarly it does not justify the