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Bedaquiline resistance in drug-resistant tuberculosis HIV co-infected patients

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Genetic mutations linked to bedaquiline resistance were found before starting treatment and acquired during treatment in patients with drug-resistant TB and HIV in KwaZulu-Natal, South Africa. Routine bedaquiline resistance testing needs to be accelerated. <http://bit.ly/2vnL4VY>

Cite this article as: Nimmo C, Millard J, Brien K, *et al.* Bedaquiline resistance in drug-resistant tuberculosis HIV co-infected patients. *Eur Respir J* 2020; 55: 1902383 [https://doi.org/10.1183/13993003.02383-2019].

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To the Editor:

Global tuberculosis (TB) control is threatened by drug resistance, with over 500 000 cases resistant to first-line drugs in 2018 [1]. Bedaquiline is a highly effective TB drug and has improved drug-resistant TB (DR-TB) outcomes in trial and programmatic settings [2, 3]. The World Health Organization (WHO) recommends its inclusion in most DR-TB regimens [4] and it is under further evaluation in clinical trials. There have been several reports of clinical bedaquiline resistance [5–8]. Resistance-associated variants (RAVs) in clinical isolates identified to date are almost exclusively caused by *Rv0678* mutations which can raise *Mycobacterium tuberculosis* minimum inhibitory concentrations (MICs) for bedaquiline and clofazimine [9].