



Patients and TB: Improving treatment outcomes through a patient centred approach and access to new treatments

**5th TB Symposium – Eastern Europe and Central Asia
Ministry of Labour, Health and Social Affairs of Georgia
and Médecins Sans Frontières**

22- 23 March , 2016 , TBILISI , GEORGIA

Combination of Bedaquiline and Delamanid for the Treatment of MDR-TB: From Theory to Practice

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Objectives

- Discuss recent developments in the use of BDQ and DLM in combination for the treatment of MDR-TB
- Review clinical indications for combination BDQ/DLM therapy
- Review 2 cases in which combination therapy is being used in the field
- Discuss possible future directions for combination chemotherapy for MDR-TB while awaiting clinical trial results

BDQ-DLM combination

- Until January 2016, the combination was not available outside of Europe, due to concern over QTc prolongation
- In January of 2016 DLM was made available for use with BDQ provided certain clinical indications and monitoring parameters met
- Report from France of one Congolese patient successfully treated with BDQ-DLM combination
- Approximately 10 patients on the combination worldwide



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Clinical Considerations

- Patient selection: any individual in whom a four drug regimen (plus PZA) cannot be constructed for reasons of resistance or intolerance
- Should be offered to all XDR-TB patients
- Monitoring the same as for BDQ, except need ECG every 2 weeks for the first 12 weeks
- Hospitalization not required if monitoring can be done in the outpatient setting



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Clinical Case 1

- 36 yo male with HIV, CD4 count of 287 failing an MDR-TB treatment regimen of KM-Moxi-PZA-CS-Ethio-PAS after 7 months
- Repeat DST shows resistance to Oflox
- Patient started on a regimen of BDQ-DLM-LZD-CFZ-PZA
- Initiated and followed in outpatient setting

Clinical Case 2

- 32 yo male with MDR-TB plus OFX resistance who failed a regimen of LZD-CFZ-KM-HDLFX-CS-PZA. DST with resistance to INH (inhA), RIF, OFX, sensitive to OFX
- Started on a DLM-containing regimen that also included LZD-CFZ-Amikacin-HD-INH-PAS-PZA; BDQ combination not allowed and DLM preferred given prior CFZ exposure
- Developed renal failure on Amikacin and this drug stopped and BDQ added
- Initiated and followed in outpatient setting

Future Directions for Combination

- Clinical trials being planned but none started and results expected in 2021
- Need to make clinical decisions about ideal therapy now
- Focus on medications for which there is actual clinical trial evidence of effectiveness (BDQ, DLM, CFZ, LZD), especially for patients with additional second-line resistance.



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Thank you!



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