**Module 8: ART Resistance and Second Line Regimens**

|  |  |
| --- | --- |
| https://d30y9cdsu7xlg0.cloudfront.net/png/1303-200.png **Time: 1 hour, 20 minutes**  **Session Objectives**  By the end of this session, participants will be able to:   * Understand when to switch to a second-line regimen * Know preferred second-line regimens for adults (including pregnant and breastfeeding women), adolescents, and children * Describe common drug resistance mutations and how they influence choosing a second-line regimen * Be familiar with characteristics of the drugs commonly used in second-line regimens   **Session Overview**   * [https://d30y9cdsu7xlg0.cloudfront.net/png/16392-200.png](https://thenounproject.com/term/survey/16392)Management of Treatment Failure * Second-Line Regimens * ARV Characteristics * Common Resistance Mutations * Third-Line Regimens   **Materials Needed**   * Slides | |
| 55 minute Lecture  https://d30y9cdsu7xlg0.cloudfront.net/png/128330-200.png | Trainer will:   * Review management of treatment failure, when to switch to second line treatments. * Describe the preferred and alternative second-line regimens for adults and adolescents, pregnant or breastfeeding women, and children. * Discuss characteristics of different ARVs in order to understand how the recommendations for second line regimens were devised. * Review commonly used ARVs for first and second line regimens. * Discuss common resistance mutations and their effect on regimen selection, including:   + M184V   + Y181C and K103N   + K65R   + TAMs * Discuss different protease and integrase inhibitors. * Review the formulations available in your country.   Break for questions. |
| 5 minute lecture  https://d30y9cdsu7xlg0.cloudfront.net/png/128330-200.png | * Trainer will summarize key points:   + Avoid premature as well as delayed switching of ART   + When switching for treatment failure, avoid single agent switches   + Selection of 2nd and 3rd line regimens must take into account common resistance mutations that arise from 1st line agents. |
| 20 minute Activity  https://d30y9cdsu7xlg0.cloudfront.net/png/33918-200.png | Facilitator will conduct case two discussions. (See slides and speakers notes for instructions). |

**Methodologies**



* Lecture
* Case Discussion

**Advance Preparation for Trainers**

****

* Trainer must update **slides 8, 10, 27, and 28** with second and third line regimens available in their country.