**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.pngManagement of Treatment Failure
* Second-Line Regimens
* ARV Characteristics
* Common Resistance Mutations
* Third-Line Regimens

**Materials Needed*** Slides
 |
| 55 minute Lecturehttps://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 lecturehttps://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 Activityhttps://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.