



## HIV ADVANCED (YEAR 2) PHARMACY RESIDENCY

### ORAL EXAM

#### Goals of the assessment:

The oral exams are an additional opportunity for the resident to demonstrate the acquired medication and disease knowledge and his/her ability to integrate this knowledge in decision making to resolve drug-therapy problems (DTPs) and optimize disease and symptom management. The resident is expected to develop and orally communicate an evidence-based patient-centred pharmacy care plan to achieve optimal patient outcomes. The oral exams allow the identification of the resident's strengths and areas of improvement.

#### Objectives:

1. Present relevant patient information in a concise and organized manner;
2. Interpret the results of relevant diagnostic tests / physical findings / laboratory tests (including HIV resistance tests) accurately;
3. Determine the presence and prioritize all relevant actual or potential DTPs;
4. Determine appropriate efficacy endpoints and outcomes for each DTP;
5. List, compare and contrast all feasible therapeutic strategies (including options which follow standard treatment guideline options based on experience in primary literature, and preventive measures) to resolve the DTPs, using critical appraisal of the literature, reflecting on current standard of practice and recognizing limited or conflicting evidence;
6. Recommend for each DTP the most reasonable therapeutic option best suited for the patient;
7. Establish a patient-centred monitoring plan for each DTP, specifying the monitoring parameters (efficacy, safety, adherence), time frame and expected degree of change;
8. Apply disease and medication knowledge into clinical decision-making;
9. Clearly and concisely present and justify the patient care plan.

#### Description:

The resident must successfully complete two (2) oral, case-based exams, one at the midpoint of the residency year and one at the end of the residency year. These exams will be administered by the program coordinators who will serve as evaluators.

Each exam consists of two complex patient cases. The cases are generally more complex for the final oral exam.



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The resident has 2 hours to work-up both cases (i.e., prepare his/her pharmacy care plan for each case).

The pharmacy care plans do not need to be submitted in writing but the resident is strongly encouraged to draft the plans to facilitate presentation of the cases. The resident has access to a calculator and the IAS-USA HIV mutations reference during the exam. Otherwise, the exam is closed-book and the resident does not have access to the internet.

The resident then presents his/her pharmacy care plan orally to the evaluators. The resident has approximately 20 minutes to present each case. After each case presentation, the evaluators have an additional 10 minutes to ask questions. The exam lasts a total of 3 hours.

The resident and evaluators then complete the *oral exam assessment form* separately. The evaluators may use a case-specific answer key checklist to assist them with the assessment. The evaluators deliberate and finalize the grade for each case. The evaluators then meet with the resident to provide constructive feedback and present the grades for each case.

### Preparing for the exam:

Cases in the exam may be similar to cases seen in practice during the residency year or cover new topics. As such, all clinical work completed during the residency year helps prepare the resident for the oral exams. The resident should also review guidelines and key clinical trials before the exam.

The resident is expected to be able to:

- recommend treatments for HIV in antiretroviral-naïve and antiretroviral-experienced patients (including with multiresistant HIV), in all populations including special populations (i.e., pregnancy, geriatrics, paediatrics, renal/hepatic dysfunction);
- recommend treatments for viral hepatitis;
- recommend treatments for HIV post-exposure prophylaxis and pre-exposure prophylaxis;
- recommend treatments for prevention of mother-to-child transmission;
- recommend treatments for the prophylaxis and treatment of opportunistic infections, HIV-related complications and other comorbidities;
- identify and manage drug-drug interactions;
- identify and manage adverse drug reactions;
- take into consideration social, economic and psychological factors that influence choice of therapy.



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### Assessment:

The *Oral Exam Assessment Form* will be used. The resident is expected to complete the assessment form as a self-assessment after completing each exam. Evaluators will also complete the same assessment form and the final grade will be the mean of the evaluators. The resident and evaluators will then review the assessments together during an in person/virtual meeting. The resident and evaluators must then sign the assessment form in a timely manner (i.e.,  $\leq$  1 week after completion of the exam).

### Conditions to pass the oral exam

The resident must achieve a minimum score of 70% per case for the midpoint exam and 75% per case for the final exam.

### Remediation

If the resident does not achieve the minimum score for each case at the midpoint and/or final exam, a make-up exam including 1 case will be conducted within 1 month of the failed exam. The conditions to pass the make-up exam are the same (i.e., minimum score of 70% for the midpoint exam and 75% for the final exam). If the resident fails the make-up exam, the resident will be terminated from the program.

### References / Useful tools:

- Pharmacotherapy Workshop for Case Presentation  
Available in the residency manual
- IAS-USA mutations reference  
Wensing AM, Calvez V, Ceccherini-Silberstein F, Charpentier C, Günthard HF, Paredes R et al. 2019 Updated of the Drug Resistance Mutations in HIV-1. *Top in Antivir Med.* 2019;27(3):111-121.  
Available at: <https://120qrk11gh163n79gg1cg656-wpengine.netdna-ssl.com/wp-content/uploads/2019/09/27-3-111.pdf> (consulted November 18th 2020)

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