

## Examples of exam questions ECVPT examination

### Part 3 : Oral case management

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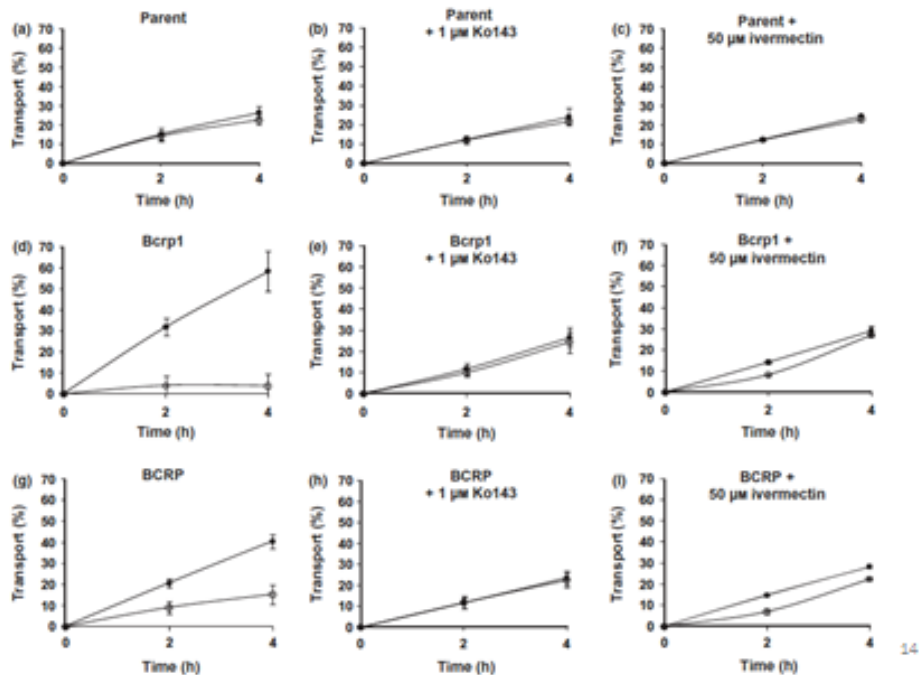
Exam procedure (in short)

- During the exam there will be 2 – 5 essay questions.
- You have 3 hours (180 minutes) to complete this paper.
- Marks will not be awarded or deducted for English grammar, spelling and style.
- Use bullet points, diagrams and/or brief statements where appropriate.
- Type your essays using the word processor provided.
- During the OCM examination, candidates are expected to discuss case management of 2-3 cases with panels of 2 - 3 examiners.
- One examiner will lead the discussion while the other examiner(s) document the answers the candidates give.
- The candidate may choose whether the session is recorded or not.
- Candidates may be given some information on the cases to be discussed to review in the 40-60 minutes immediately prior to the examination. Divide the time allocated equally between the cases.
- For this reason, it is necessary to ask candidates who have completed the exam early in the day, to remain in a secure room until all candidates have completed the exam.
- The examination will be conducted in English and each part of the examination will take no longer than 30 minutes.
- Under the current examination regulations, candidates are entitled to have a translator present.

Please find below an example of an oral case. This covers approximately 1/3 of a case during the examination.



## Case B: figure 1



## Case B: figure 1 legend

**Fig. 1.** Trans epithelial transport of danofloxacin (10 µM) in MDCKII (parent) (a-c), MDCKII-Bcrp1 (d-f), and MDCKII-BCRP (g-i) monolayers. The experiment was started with the addition of danofloxacin to one compartment (basolateral or apical). After 2 and 4 h, the percentage of drug appearing in the opposite compartment was measured by HPLC. Ko143 (b, e, and h) or ivermectin (c, f, i) was present as indicated. Results are the mean; error bars indicate the standard deviation ( $n = 3-6$ ). Closed circles: translocation from the basolateral to the apical compartment; open circles: translocation from the apical to the basolateral compartment.

Bcrp1 = murine BCRP1  
BCRP1 = human BCRP1  
Ko143 = potent and selective inhibitor of BCRPs  
MDCKII = bovine kidney cells

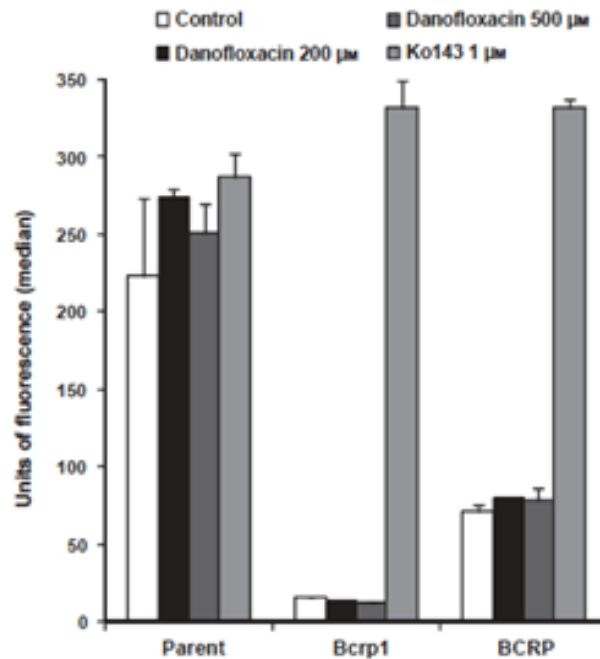
Of the active transporters, the ABC family is important in the pharmacokinetics and toxicokinetics of many drugs and toxins.

Please look at figure 1.

- Describe the results shown in figure 1 panels a, d and g
- What are the effects of Ko143 on the transport of danofloxacin in the different cells?
- What are the effects of ivermectin on the transport of danofloxacin in the different cells?
- What conclusion can be drawn from the results shown in figure 1?



## Case B: figure 2



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## Case B: legend figure 2

**Fig. 2.** Effect of danofloxacin on accumulation of mitoxantrone (10  $\mu\text{M}$ ) in parent MDCKII cells and in their murine Bcrp1- and human BCRP-transduced derivatives. Cells were preincubated with or without Ko143 or danofloxacin at the indicated concentrations. Results (units of fluorescence, median) are expressed as mean of at least three experiments; error bars indicate the standard deviation.

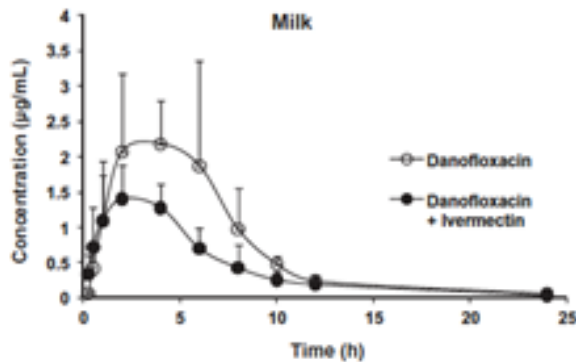
mitoxantrone is a BCRP substrate

Please look at figure 2.

- What conclusions can be drawn from figure 2?

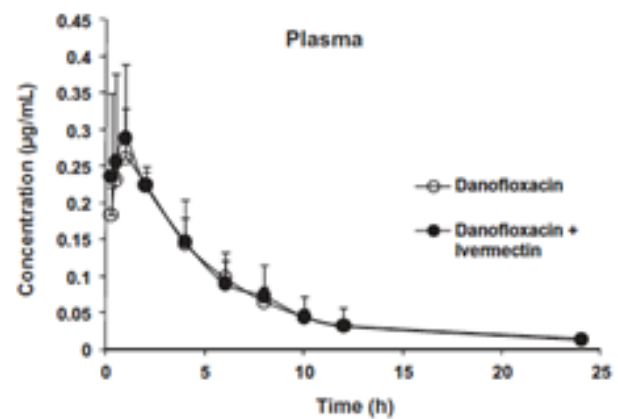


## Case B: figure 6 and 7



concentration in milk of danofloxacin in sheep after im administration of 1.25 mg/kg with or without ivermectin (0.2 mg/kg sc)

concentration in plasma of danofloxacin in sheep after im administration of 1.25 mg/kg with or without ivermectin (0.2 mg/kg sc)



Please look at figures 6 and 7.

- What conclusions can be drawn from these two figures?

**Answers:**

*The answers can be found in the reference: Real, R., Egado, E., Pérez, M., Álvarez, A.I., Merino, G. 2011. Involvement of breast cancer resistance protein (BCRP/ABCG2) in the secretion of danofloxacin into milk: Interaction with ivermectin Journal of Veterinary Pharmacology and Therapeutics Journal of Veterinary Pharmacology and Therapeutics 34 (4), pp. 313-321.*