Pharmaceutical opinion : **Interaction between anagelsics and anti-HCVs**

Patient : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DOB \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_ Telephone : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

After analyzing your patient's file, I noticed a problem with his medication.

**Glecaprevir/Pibrentasvir (Maviret)**  and Oxycodone

**Interaction mechanism :** An increase in analgesics adverse effects may occur following co-administration with the anti-HCV drugs mentioned above. Oxycodone is a CYP 3A4 substrate that is inhibited by some anti-HCVs.

***Glecaprevir/Pibrentasvir (Maviret) and Oxycodone***

Additional information:

Glecaprevir/Pibrentasvir (Maviret) is a weak inhibitor of CYP 3A4. Administration with midazolam did not show a clinically significant increase.

Administration with oxycodone has not been studied, but since oxycodone has a narrow therapeutic index, concomitant use especially with illicit oxycodone use could have serious consequences for the patient. Indeed, high concentrations of oxycodone following drug interactions are associated with a risk of respiratory distress and death.

The oxycodone product monograph recommends caution when combining oxycodone with drugs that are CYP3A4 inhibitors.

Possible therapeutic options:

*If the patient is already on oxycodone and treatment with Glecaprevir/Pibrentasvir (Maviret) is started.*

* Stop oxycodone and start the replacement analgesic (morphine or hydromorphone) with 60-75% of the converted dose of oxycodone.
* If oxycodone cannot be replaced by morphine or hydromorphone, reduce the dose of oxycodone to 50% (individualize) then closely monitor to assess tolerance and titrate the dose.

*If oxycodone is added to an already existing treatment with Glecaprevir/Pibrentasvir (Maviret).*

* Start with the lowest possible dose and titrate according to tolerance and efficacy.
* Alternative :
  + Hydromorphone
  + Morphine

*Patients currently under treatment with this combination and tolerating it.*

* Closely monitor side effects.

**Alternatives or in addition.**

* Tylenol, NSAIDs or co-analgesia.

**Follow up :**

* Monitor the effectiveness of analgesics.
* Monitor toxicity (miosis, euphoria, dysphoria, drowsiness, confusion, excessive sedation, decreased alertness, hallucinations, dizziness, bradycardia, myoclonus, hypotension, prolonged or recurrent respiratory depression) of analgesics.
* Watch for withdrawal symptoms (“craving”, irritability, myalgia, muscle spasms, redness, abdominal pain, nausea, vomiting, diarrhea, diaphoresis, tearing, rhinorrhea, mydriasis, yawning, piloerection, tachycardia, tremors).

Do not hesitate to contact us for additional information.  
In collaboration,

Pharmacist : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Telephone : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_​ Fax : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

As a prescription, date and sign:

Date : \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_ Signature and licence : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_