# Evaluation of the incidence of Hepatitis B virus reactivation in patients treated with Pembrolizumab





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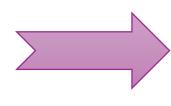
# **BACKGROUNG AND IMPORTANCE**

Recent studies have found that patients with anti PD-L1 treatment, as in the case of pembrolizumab, the incidence of Hepatitis B virus (HBV) reactivation has been increased in those patients with positive HbcAb, recommending the use of prophylaxis to avoid it.

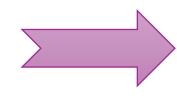
# AIM AND OBJECTIVES

To evaluate the incidence of Hepatitis B virus reactivation and the use of prophylaxis under real conditions in patients on Pembrolizumab treatment

#### MATERIAL AND METHODS



Retrospective observational study January 2014 - July 2024



Population: patients over 18 years old under treatment with pembrolizumab

#### **Study variables**

Demographics: gender, age, weight, height

Clinics: serologies in 3 periods (6 months before, during, and one year after starting treatment)

- HbsAb 

  Antibody against HBV surface antigen
- HbcAb 

  Antibody against HBV nucleus
- HBV vaccination status

Interpretation of clinical variables	HbsAb	HbcAb
Patient with resolved infection	+	+
Possibly infected patient	_	+
Vaccinated patient	+	_

Reactivation risk

#### RESULTS





263 patients

- 174 men (66%)
- Average weight 69 + 14 Kg
- Average age 65 + 11 años
- Average height 166 + 10 cm

### **Pre-treatment**

98 patients (37%) with serology before starting treatment

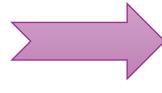
previous serology	HbsAb	HbcAb
Pos	<b>27</b>	18
Neg	71	80

9 patients (9%) only has positive HbsAb due to vaccination



18 patients (18%) with a positive serology for HbsAb and HbcAb, due to a resolved infection. risk of virus reactivation

# **Post- treatment initiation**



No patients had reactivation of the virus and in no case was pharmacological prophylaxis prescribed to prevent possible reactivation

### **CONCLUSIONS AND RELEVANCE**

- Despite having detected patients at risk of HBV reactivation, no HBV reactivations were detected. In no case was HBV prophylaxis recommended to prevent reactivation prescribed
- More tan half of the patients treated with pembrolizumab didn't have HBV serology, so there may be undetected infected patients.
- It would be advisable to establish systematic serology in patients with pembrolizumab in order to prevent posible reactivation of the virus

# REFERENCES

Ding Z-N, Meng G-X, Xue J-S, Yan L-J, Liu H, Yan Y-C, et al. Hepatitis B virus reactivation in patients undergoing immune checkpoint inhibition: systematic review with meta-analysis. J Cancer Res Clin Oncol. 2023;149(5):1993-2008



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