# Hepatitis B Screening compliance for patients commencing chemotherapy



# Casey Hutchinson<sup>1</sup>, Gillian Blanchard<sup>1</sup>, Zoe Feighan<sup>1</sup>, Laura Healey<sup>1</sup>

1 Medical Oncology Department; Calvary Mater Newcastle, Waratah

### Introduction

Hepatitis B virus reactivation (HBVr) has potentially serious consequences including hepatitis flares associated with elevated alanine aminotransferase (ALT) and increased mortality due to liver failure. Undiagnosed HBV, either chronic or resolved HBV infection cases, are at risk of HBVr when they receive chemotherapy.

In 2022, Calvary Mater Newcastle (CMN) identified that there were no standard procedures or departmental guidelines for the testing for HBV prior to commencing chemotherapy. Given the inaccuracies in ascertaining risks and incidence rate for HBV or HBVr, the Department of Medical Oncology endorsed a guideline for Pre-Chemotherapy Hepatitis Screening.

#### **Objectives**

To evaluate the compliance of the Pre-Chemotherapy Hepatitis Screening guideline and the proportion of HBV detected through pre-screening. Secondary objective evaluated the types of screening performed in addition to the recommended Hepatitis Screening with Hepatitis B surface antigen (HBsAg) only.





#### Methods

This is a 6-month retrospective chart review study between 21<sup>st</sup> November 2022 and 26<sup>th</sup> May 2023 inclusive. The electronic ordering program ARIA was be used to identify eligible patients within the allocated time frame.

#### Inclusion criteria-

Adult patients >18 years undergoing treatment for a solid malignancy with curative intent

#### Exclusion criteria-

Patients treated with a palliative intent or best supportive care, enrolled in a clinical trial, treated with immunotherapy agents or patients undergoing treatment for a haematological malignancy were excluded.

## <u>Results</u>

- N=703 total number of medical oncology referrals received for triage
- N= 88 regimens met inclusion criteria
- N= 83 had evidence of baseline hepatitis screening.
- Screening compliance rate of **94%**.
- 100% of those screened tested HBsAg negative.
- Screening not completed on N= 3 oral regimens (adjuvant capecitabine) and N= 2 adjuvant infusional chemotherapy
- Hepatitis Screening guideline for targeted cohort specifies HBsAg only; the audit demonstrated there was significant variation in the screening tests ordered

Test	Number tested	Percentage tested
HBsAg	83	94%
anti-HBc	60	68%
anti-HBs	43	49%
Hep C Virus	62	70%
Hep A Virus	4	4%
HIV	16	18%

#### **Conclusion**

This audit demonstrates that there is now a robust process to ensure HBV screening, although gaps in compliance exist. Strategies for bridging this gap need to be further explored.