



## Time to hepatocellular carcinoma after notification of hepatitis B or C infection: a population-based cohort study, 1992–2007

Maryam Alavi<sup>1</sup>, Matthew G Law<sup>1</sup>, Jason Grebely<sup>1</sup>, Hla-Hla Thein<sup>2</sup>, Janaki Amin<sup>1</sup>, Gregory J Dore<sup>1</sup>

The Kirby Institute, UNSW, Sydney, NSW, Australia, <sup>2</sup>Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada



### Conflict of Interest

None of the authors has commercial relationships that might pose a conflict of interest in connection with this presentation.



### Background

- HBV and HCV liver disease burden continues to rise, including HCC
- Highly effective HBV and HCV therapies are available, with further advances expected in the next few years
- Low HBV and HCV treatment uptake is a key factor in rising HCC burden, but late hepatitis diagnosis is another potential contributor
- Timing of HBV and HCV diagnosis in relation to HCC diagnosis is uncertain
- The extent of "late hepatitis diagnosis" could be used as a surrogate for the level of HBV and HCV screening

Thein H-H, et al. *Journal of Viral Hepatitis*, 2011; El-Serag HB, et al. *Gastroenterology*, 2012; Alani N, et al. *Cancer Institute NSW*, 2009; El-Serag HB, Krawoff F. *Hepatology* 2014.

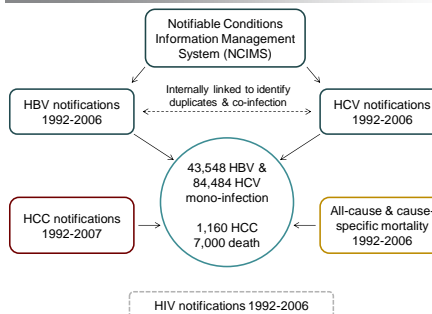


### Objectives and Study Outcomes

- To evaluate timing of HBV and HCV diagnosis among people with HBV and HCV-related HCC
- Timing of HBV and HCV diagnosis: >2 years prior to HCC; 6-24 months prior to HCC; <6 months prior to HCC or at time of HCC; following HCC
- To evaluate temporal trends in level of "late hepatitis diagnosis"
- "Late hepatitis diagnosis" defined by an HBV or HCV diagnosis 6-24 months prior to HCC, <6 months prior to HCC, at the time or following HCC diagnosis

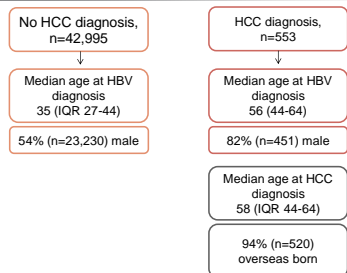


### Data Linkage

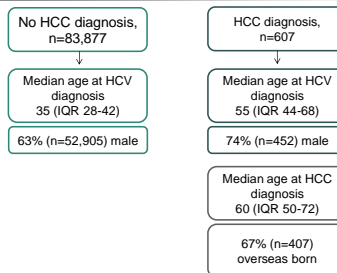




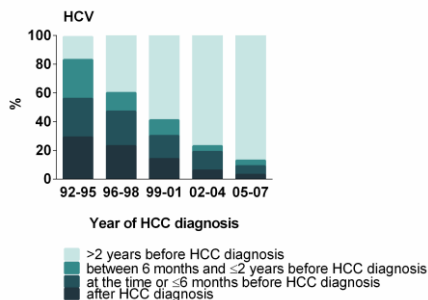
### People With an HBV Diagnosis



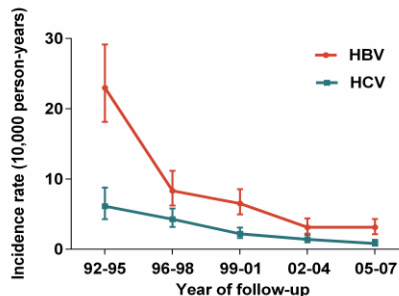
### People With an HCV Diagnosis



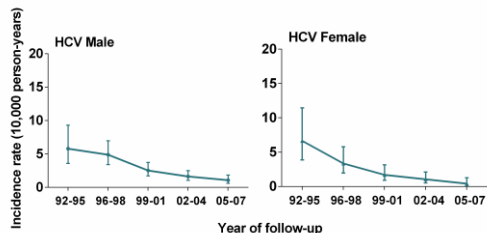
### Time From Viral Hepatitis to HCC Diagnosis



### Incidence of Late Viral Hepatitis Diagnosis



### Incidence of Late Viral Hepatitis Diagnosis, by Sex



### Conclusions

- A declining proportion of people with HBV and HCV-related HCC have “late hepatitis diagnosis”
- The high proportion of people with relatively early HBV and HCV diagnosis suggests relatively high levels of screening among people at higher risk of HCC (age >50 years, longer duration of infection)
- The higher proportion of late HBV vs late HCV diagnosis (23% vs 8% in 2005-2007) suggests a larger undiagnosed pool of chronic HBV infection
- “Late hepatitis diagnosis” could be used to monitor population-level screening for HBV and HCV, including comparisons across countries



## Acknowledgments

---

The Kirby Institute is funded by the Australian Government Department of Health and Ageing, and is affiliated with the Faculty of Medicine, University of New South Wales. The views expressed in this presentation do not necessarily represent the position of the Australian Government.