

Survival following hospitalization with hepatocellular carcinoma among people notified with HBV or HCV in New South Wales, Australia 2000-2014

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Introduction

- Hepatocellular carcinoma (HCC) is the third leading cause of cancer death worldwide
- Prognosis is poor with limited curative treatment options available
- Little is known about the recent trends in HCC in people with HBV or HCV in Australia

Aims

To assess trends in HCC survival in people with HBV or HCV in New South Wales (NSW), Australia

Methods

- Data on HBV (n=54,399) and HCV (n=96,908) notifications (1993 - 2012) were linked to:
 1. Admitted Patients Data Collection database (July 2000 - June 2014)
 2. National HIV/AIDS
 3. Births Deaths Marriages registries
- A case of HCC was defined by hospitalization with a HCC code (C22.0) as principal or additional diagnosis

Conclusion

In NSW, Australia between 2000-2014:

- Survival for HBV-HCC patients has improved considerably, suggesting an impact of more effective antiviral therapy from mid-2000s
- Survival for HBV-HCC patients improved for those with and without potentially curative surgical procedures
- In contrast, HCV-HCC survival is unchanged

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Results

- Over the study period a total of 725 (1.3%) first HCC hospitalizations occurred among individuals with HBV and 1,309 (1.4%) among individuals with HCV
- Death occurred in 60.4% of HBV-HCC and 69.6% of HCV-HCC individuals
- Median age at death was 61 years (IQR=18) in HBV-HCC and 58 years (IQR=15) in HCV-HCC

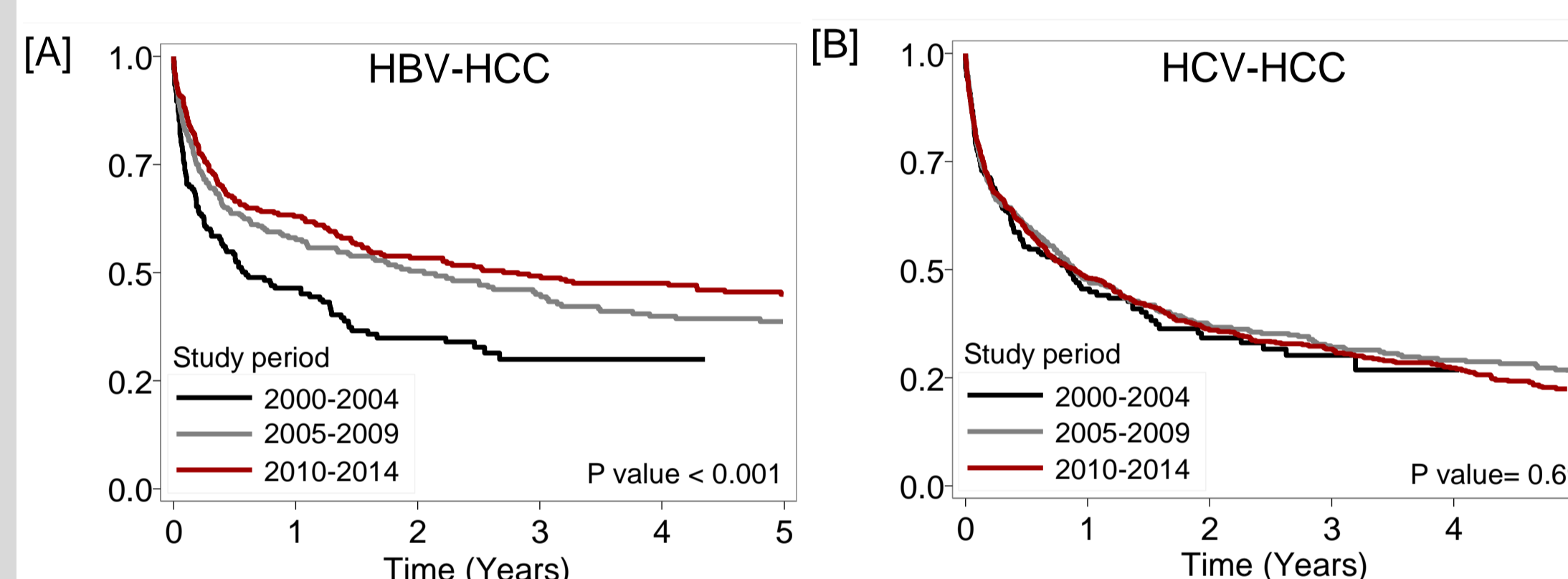


Fig.1. Kaplan Meier graphs of survival probability following first HCC hospitalization by study period among those with A) HBV notification and B) HCV notification in NSW, Australia 2000-2014

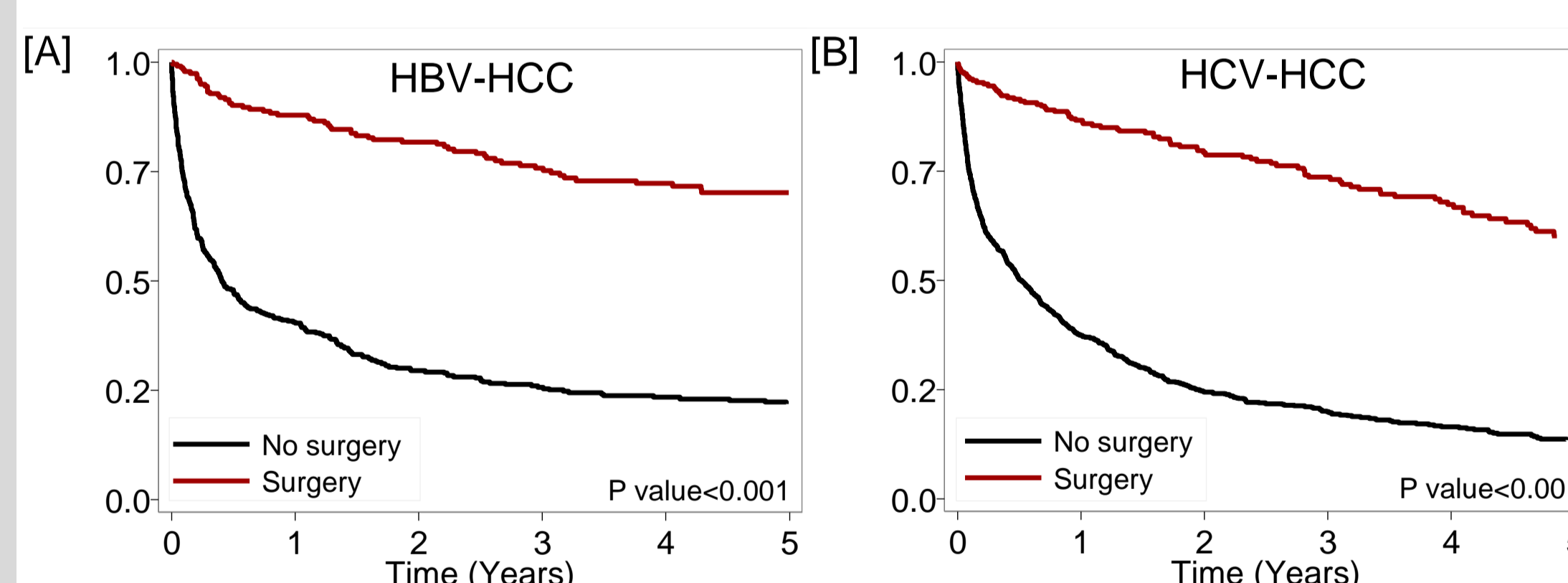


Fig.2. Kaplan Meier graphs of survival probability following first HCC hospitalization by receiving potentially curative surgical procedures (liver resection, liver transplantation) among people with A) HBV notification and B) HCV notification in NSW, Australia 2000-2014

Results

	Study period	n	Median survival time years (95% CI)
HCC-HBV	2000-2004	183	0.6 (0.39,1.28)
	2005-2009	320	2.0 (1.10,3.07)
	2010-2014	436	2.8 (1.54,5.54)
HCC-HCV	2000-2004	207	0.8 (0.45,1.33)
	2005-2009	475	0.9 (0.72,1.24)
	2010-2014	895	0.9 (0.67,1.18)

Table.1. Median survival time following first HCC hospitalization among those with HBV or HCV notification

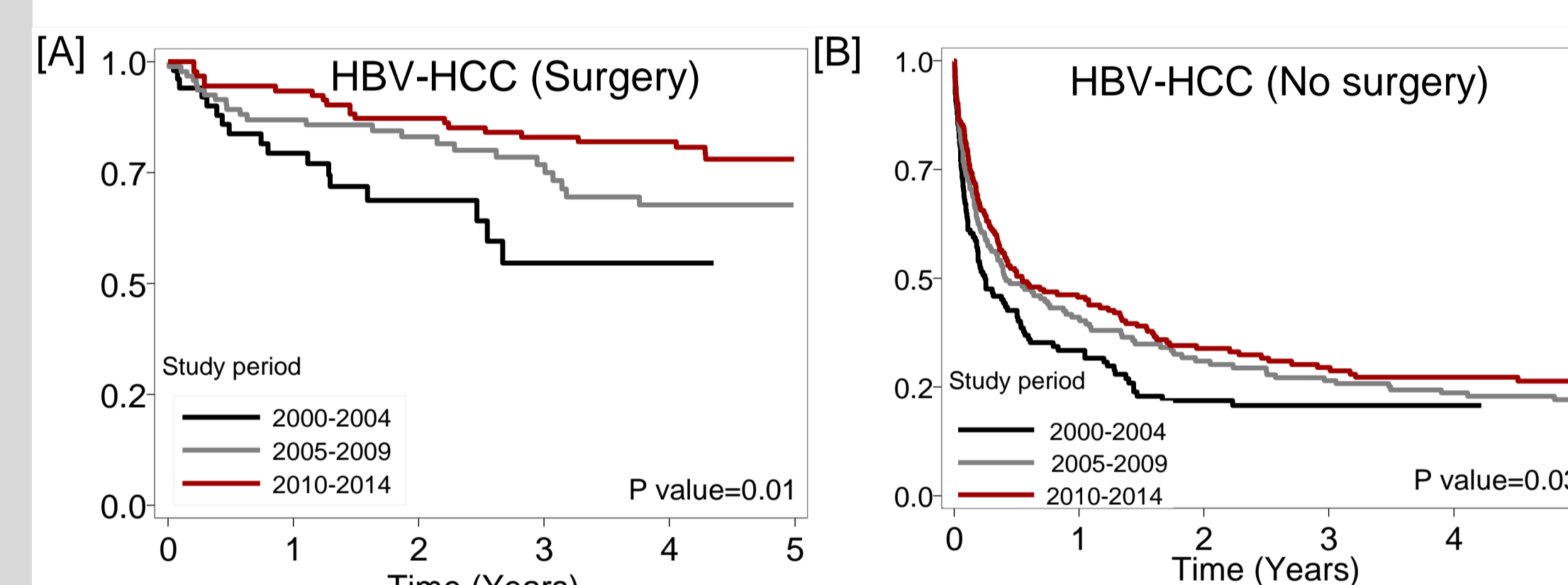


Fig.3. Kaplan Meier graphs of survival probability following first HCC hospitalization by study period among those with HBV notification who received A) Potentially curative surgical procedures and B) No surgery in NSW, Australia 2000-2014

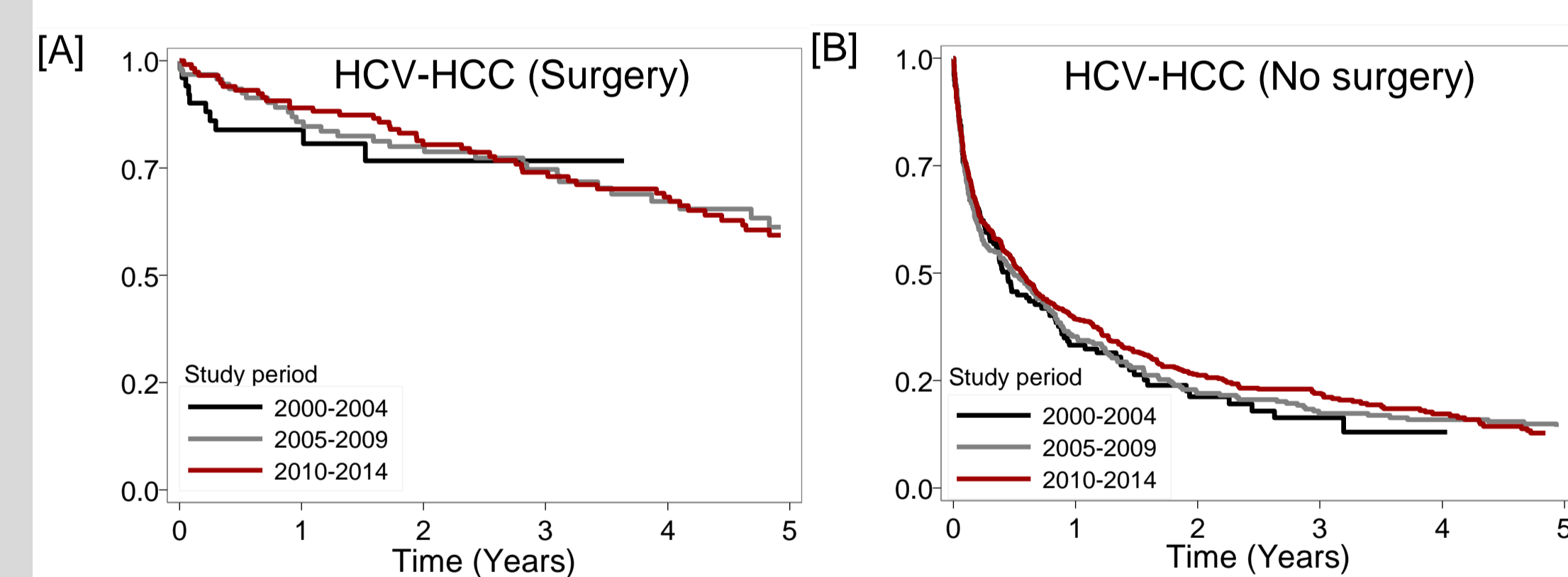


Fig.4. Kaplan Meier graphs of survival probability following first HCC hospitalization by study period among those with HCV notification who received A) potentially curative surgical procedures and B) No surgery in NSW, Australia 2000-2014

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