

IMPROVED SURVIVAL FOLLOWING HEPATITIS C-RELATED HEPATOCELLULAR CARCINOMA DIAGNOSIS IN THE DIRECT-ACTING ANTIVIRAL THERAPY ERA IN NEW SOUTH WALES, AUSTRALIA

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Introduction: Population-level evidence for the impact of direct-acting antiviral (DAA) therapy on survival following HCV-related hepatocellular carcinoma (HCC) is limited. We evaluated survival following HCC diagnoses in the pre-DAA and DAA therapy eras in New South Wales (NSW), Australia.

Methods: HCV notifications (1995-2017) were linked to hospital admissions (2001-2017) and mortality (1995-2017). Median survival and one- and two-year survival probability after HCC diagnosis were calculated for the pre-DAA (2001-2007 and 2008-2014) and DAA eras (2015-2017).

Results: Among 103,288 people with HCV in NSW, 64% were male, median year of birth was 1967, and 13% died. During 2001-2017, 2% (n=1,865) had an HCC diagnosis; 80% were male, and median year of birth was 1956. Following HCC diagnosis, 70% (n=1,309) of individuals died. In 2001-2007, 2008-2014, and 2015-2017, there were 325, 901, and 639 HCC diagnoses; 83%, 80%, and 49% died, respectively. Median survival after HCC diagnosis increased from 0.79 years (95% CI 0.52, 1.02) in 2001-2007, to 0.85 years (95% CI 0.71, 1.05) in 2008-2014, and 1.50 years (95% CI 1.16, 1.82) in 2015-2017. One- and two-year survival after HCC diagnosis were 45% and 35% in 2001-2007, 47% and 35% in 2008-2014, and 56% and 45% in 2015-2017, respectively.

Conclusion: In the DAA era, survival following HCC diagnosis has markedly improved in NSW, Australia. Further analyses will explore the specific impacts of DAA therapy and HCC management strategies in relation to improved survival.

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