HIGH EFFICACY OF DIRECT-ACTING ANTIVIRAL THERAPY FOR CHRONIC HCV IN AN AUSTRALIAN REAL-WORLD COHORT: THE REACH-C STUDY

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Introduction: In Australia, unrestricted access to government-subsidised direct-acting antiviral (DAA) therapy has been available for all adults with chronic hepatitis C (HCV). Rapid DAA uptake, including among marginalised populations, and a broad range of models of care and prescribers, make evaluation of "real-world" treatment outcomes a priority.

Methods: REACH-C comprises a national observational cohort from 22 diverse clinical services including specialist clinics, primary care, drug and alcohol centres. Data were obtained on consecutive individuals who commenced DAAs from 1 March 2016. Efficacy was assessed by sustained virological response 12-weeks post-treatment (SVR12) using intention-to-treat (ITT) and per-protocol (PP) analyses.

Results: From March 2016-December 2017, 5416 individuals initiated DAA therapy. Demographic and clinical features reflected the broader Australian treated population: male 69%; ≥50years 57%; cirrhosis 22%; HCV genotype 1 55%; injecting drug use (IDU; last 6 months) 16%. Sofosbuvir/ledipasvir (49%) was most commonly prescribed, however, sofosbuvir/velpatasvir (52%) was most common from August 2017. SVR12 data were available in 83% (4513/5416). Reasons for missing data included death (38/903) and not attending clinic (865/903). SVR12 was 80% (4329/5416) by ITT and 96% (4329/4513) by PP. By genotype, PP SVR12 were; 1a 97%, 1b 99%, 3 94%. SVR12 was high across baseline characteristics with a reduction in cirrhosis vs no cirrhosis (93% vs 97%, $p<0.01$). Missing SVR12 was more likely with IDU compared to no IDU (30% vs 14%, $p<0.01$). Virological failure was documented in 184 patients (4%) with three reported cases of reinfection by SVR12. Thirty-four individuals were retreated, most commonly with sofosbuvir+velpatasvir (32%).

Conclusion: Treatment response was high in a diverse population and through a broad range of treatment services following universal access to DAA therapy, with a low rate of virological failure and minimal early reinfection. Missing data presents a real-world challenge, highlighting the need for innovative strategies to retain patients in post-treatment care.

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