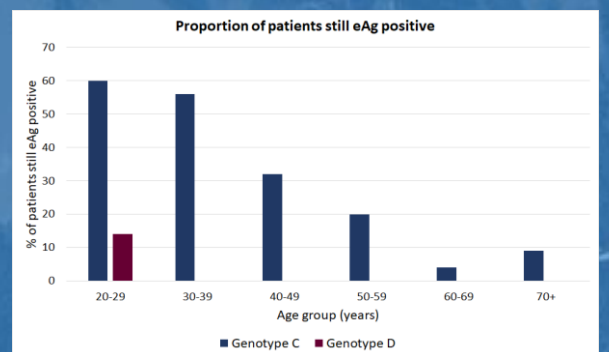
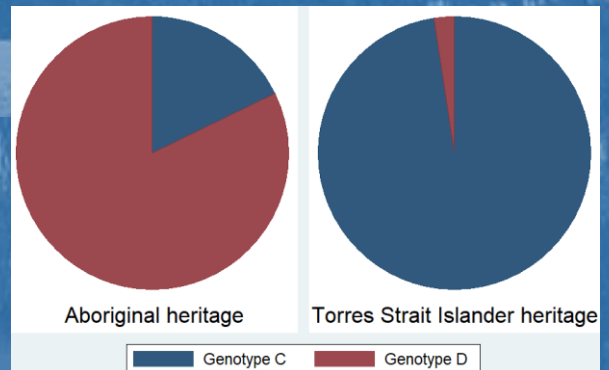


The impact of hepatitis B virus genotype on disease manifestations among Aboriginal and Torres Strait Islander Australians in Far North Queensland

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- **Background:** No Aboriginal Australian living with chronic hepatitis B has been diagnosed with hepatocellular carcinoma (HCC) in Far North Queensland (FNQ) since 2000.
- **Methods and results:** This study enrolled Aboriginal and Torres Strait Islander Australians living with chronic hepatitis B in FNQ. It was possible to determine the HBV genotype of 129/191 (68%) individuals: this was genotype C in 89 (69%) and genotype D in 39 (30%). All 39 people with genotype D were Aboriginal. Of the 89 people with genotype C, only 8 (9%) were Aboriginal, 71 (80%) were Torres Strait Islanders, 10 (11%) identified as both.
- All 3 HCCs that developed occurred in Torres Strait Islanders; The genotype could be determined in 2/3 and was C14 in both. 9/10 cases of cirrhosis occurred in Torres Strait Islanders. The genotype could be determined in 5/9 and was C14 in all. One case of cirrhosis occurred in an Aboriginal individual with a D2 genotype, but he also had a history of hazardous alcohol use.



- Individuals with genotype C were older than those with genotype D (median (IQR) 51 (40-65) versus 41 (37-46), $p=0.0003$). However, they were more likely to be HBeAg positive (23/89 (26%) versus 2/39 (5%), $p=0.007$).
- **Conclusion:** HBV genotypes in Aboriginal and Torres Strait Islander Australians in FNQ differ markedly and could explain the significant differences in the clinical phenotype seen in the two populations.