Introduction AFP is a tumour marker that is elevated in some patients with HCC and has been recommended as a method of screening for HCC in at risk patients. The authors wished to assess the level of AFP at diagnosis to determine if this was related with survival.

Methods A single centre, retrospective cohort analysis was performed. Patients with HCC were identified from the department’s database (2008–2014). The diagnosis of HCC was made on internationally agreed criteria. Screening for HCC was based on 6-monthly liver ultrasound and serum measurement of AFP. The point of diagnosis was taken as the date when the diagnosis was confirmed radiologically or histologically. The severity of patient’s disease was scored using the Barcelona Liver Cancer Clinic (BCLC) classification. The serum AFP was measured at diagnosis. The end-point for the study was patient death.

Results 180 patients were identified in our cohort. The median age was 68 years (58–75), the number of males was 142 (79%), and aetiology was as follows: ALD (50, 39%), NASH (17, 13.3%), HCV (22, 17.2%), HBV (10, 7.8%), haemochromatosis (10, 7.8%), others 19 (14.8%). The stage of BCLC at presentation was: 0 – 18 (10%), A – 43 (24%), B 30 (16.7%), C 19 (10.6%), and D 25 (13.3%). Survival at 1 and 5 years from diagnosis was 69% and 46% respectively. AFP was elevated (>10) in 93 cases. AFP was elevated (>10) in 37 cases (40%). On univariate analysis the following variables were associated with a poor outcome at 1 year (AFP p = 0.001, tumour diameter 0.06) and 5 years (AFP p < 0.0001 and tumour diameter 0.04). The median AFP in survivors at 5 years was 4(3, 6), and in non-survivors was 97(24–673). An AFP >100 at presentation was associated with an increased risk of death at 1 (OR 4.5(2–10) and 5 years (OR 7.2(3–17) irrespective of treatment modality employed.

Conclusion AFP does have prognostic utility in patients with HCC. It is a poor screening tool as it is not elevated in the majority of patients with HCC. New biomarkers are needed to help earlier detection when the disease is at a potentially curative stage.

Disclosure of Interest None Declared.