Abstract PWE-149 Figure

Introduction Treating hepatitis C with pegylated interferon alpha may induce or exacerbate psychiatric illness including depression, mania and aggressive behaviour. There is limited data regarding treatment in the context of chronic schizophrenia. We sought to establish the safety and efficacy of treatment of patients with a diagnosis of schizophrenia amongst patients attending treatment centres in Greater Glasgow.

Methods Patient and treatment data collected on the Scottish hepatitis C database were retrospectively analysed according to the presence or absence of a diagnosis of schizophrenia. Combination antiviral therapy was defined as Interferon (pegylated or standard) and Ribavirin. Treatment outcomes including sustained viral response (SVR) rates, reasons for treatment termination and adverse events were documented.

Results 5497 patients were recorded on the database, of whom 64 (1.2%) had a diagnosis of schizophrenia. Patients with and without schizophrenia were of similar age at diagnosis [median 34 (IQR 31–40) vs 36 (IQR 29–41) years, p = 0.85]. Patients with schizophrenia had higher rates of current or previous intravenous drug use [50/64 (78.1%) vs 3015/5433 (55.5%), p < 0.01] and prior alcohol excess > 21 units/week [25/64 (39%) vs 1211/5433 (22.2%), p = 0.02]. More patients with schizophrenia had a diagnosis of cirrhosis [15/64 (20.3%) vs 589/5419 (10.86%), p = 0.02]. Of those patients who had attended at least one clinic appointment 1639/4415 (37.1%) of patients without schizophrenia commenced treatment versus 26/61 (42.6%) of patients with schizophrenia (p = 0.21). Patients with schizophrenia took almost three times as long to commence treatment after initial referral [median 1123 (IQR 531–2130) vs 421 (IQR 209–1086) days, p < 0.01], despite similar times from referral to first attendance [median 65 (IQR 36–141) vs 62 (IQR 35–130) days, p = 0.92]. The treatment outcomes were as follows:

Conclusion Patients with stable schizophrenia are good candidates for hepatitis C treatment.

Disclosure of Interest None Declared.

Neoplasia and cancer pathogenesis

PWE-150 “THE EARLY GROWTH RESPONSE GENES INDEUCE APOPTOSIS IN COLON CANCER CELLS”

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Introduction The Egr family (Early Growth Respone Genes) of zinc finger transcription factors, which consists of four members; Egr-1, –2, –3 and –4, have been proved to have dynamic functions in the regulation of cell growth and the immune responses. Moreover, in a number of malignancies—which is a cell growth and immune related process—it seems that Egr1 and 2 induce apoptosis leading to the inhibition of the tumour growth. The present study was designed to answer the question whether colon cancer cells undergo apoptosis when the EGR genes are exogenously introduced and if the presence of a mutant p53 can affect this apoptotic pathway.

Methods Two cell lines deriving from human colon cancer; one p53 negative (DLD1) and another p53 positive (HCT116) were transfected with Egr-1, –2 and –3 and a fluorescent protein which was the marker of the transfection. The transfected cells were incubated for 48 hours. Flow cytometry was used to create a pure population of transfected cells and 24 hours later these cells were examined in the fluorescent microscope and compared with the controls.

Results We found that all three Egr members can suppress tumour cell growth suggesting that the function of Egr in the control of cell growth is not associated with the function of p53. In addition to the growth arrest, the transfected cells changed morphology to round shape indicating of senescence.

Conclusion This may suggest that Egr molecules are important to control the unwanted growth in response to malignant transformation. Our results not only demonstrated an important function of Egr molecules and also indicate the therapeutic potential for the treatment of tumour.

Disclosure of Interest None Declared.

PWE-151 CELL-MEDIATED IMMUNE RECOGNITION OF CEA IS ASSOCIATED WITH EARLY TUMOUR RECURRENCE FOLLOWING RESECTION OF COLORECTAL CANCER

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Introduction Colorectal cancer (CRC) is one of the commonest malignancies in men and women. Clinical staging is used to predict prognosis after resection. The interaction of the cancer with the adaptive cellular immune response plays an important role in disease pathogenesis, but this relationship may be compromised by a population of regulatory Foxp3⁺ CD4⁺ T cells (Tregs). Here, the 5 year post-operative clinical outcome was correlated with pre-operatively measured anti-tumour immune responses.

Methods Eighty patients with non-metastatic CRC, undergoing a resection with curative intent, were recruited over 24 months. CD4⁺ T cell responses to tumour associated antigens (CEA and ST4) were compared to control antigens (PPD and HA). The influence of immune regulation was measured by repeating the assays after in vitro depletion of Tregs. Clinical databases were interrogated for details, including morbidity and mortality data, and the five year overall survival (OS), time to progression (TTP), and progression free survival (PFS) was calculated. These parameters were compared to the original details of pre-operative anti-tumour immune responses.