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**Conclusions:** SNPs in IL-6 –572 and RANTES gene affect the chronic hepatitis B infection independently and jointly. The IL-6 –572GG and RANTES In1.1TC are the high risks of CHB.

## PP-122 S100A11, transcriptional regulated by hepatitis B virus X antigen and growth inhibition on BEL-7402 cell line

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**Objective:** S100A11 is a putative tumor suppressor gene. This study aimed to uncover the function that S100A11 protein playing on BEL-7402 cell growth and investigate the effect of transcriptional regulation of HBx on S100A11 gene

Methods: HBx recombinant expression plasmid and S100A11-p promoter reporter vectors were constructed. After transfection into BEL-7402 cell, reporter gene expression was detected by luciferase. The expression vector S100A11 (experimental group) was constructed and transfected BEL-7402 cells. Stabilized expression was screened. The rate in BEL-7402 S phase is detected by Flow Cytometry (FCM). Living cell rate of two groups were detected by Celltiter-Glo luminescent cell viability assay.

Results: Compared with the group which cotransfected with pGL4.10-S100A11-promoter and pcDN43.1(1)-HBY, the

**Results:** Compared with the group which cotransfected with pGL4.10-S100A11-promoter and pcDNA3.1(–)-HBX, the promoter activity of the group which cotransfected with pcDNA3.1(–) and pGL4.10-S100A11-promoter was obviously decreased. Fluorescein reporters is 1/3 fold lower. In control group and mocked transfected group, BEL-7402 cells were detected by FCM and S phase cell population in each group was  $26.49\pm1.94\%$  and  $30.42\pm1.62\%$  respectively. Celltiter-Glo luminescent cell viability assay showed that after 36 hour of transfection, the proliferation was obviously decreased in experimental group than control.

Conclusion: S100A11 has obvious growth inhibiting effect on BEL-7402 cell line. HBxAg has inhibiting effect on promoter activity of S100A11 gene, indicating that HBV may play a role of carcinogenesis by regulating anti-oncogene S100A11.

## PP-123 Screening of the target genes transactivated by human gene 5 transactivated by HBV X protein using suppression subtractive hybridization technique

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**Objective:** Clone and identification of human gene 5 transactivated by HBxAg protein (XTP5) by constructing a cDNA subtractive library with suppression subtractive hybridization (SSH) technique were investigated, which indicated its modulation function. Moreover, Suppression subtractive hybridization (SSH) and bioinformatics techniques were used for screening and cloning of the target genes transactivated by XTP5 protein.

Methods:The mRNA was isolated from HepG2 cells transfected pcDNA3.1(-)-XTP5 and pcDNA3.1(-) empty vector, respectively, and SSH method was employed to analyze the differentially expressed DNA sequence between the two groups. After restriction enzyme Rsal digestion, small sizes cDNAs were obtained. Then tester cDNA was divided into two groups and ligated to the specific adaptor 1 and adaptor 2, respectively. After tester cDNA was hybridized with driver cDNA twice and underwent

polymerase chain reaction (PCR) twice and then was subcloned into pGEM-T easy plasmid vectors to set up the subtractive library. Amplification of the library was carried out with  $E.\ coli$  strain DH5 $\alpha$ . The cDNA was sequenced and analyzed in GenBank with Blast search after PCR.

**Results:** The subtractive library of genes transactivated by XTP5 was constructed successfully. The amplified library contains 101 positive clones. Colony PCR showed that these clones contain 200–1000bp inserts. Sequence analysis was performed in 28 clones, at random, and the full length sequences were obtained with bioinformatics method. Altogether 18 coding sequences were gotten, which consisted of 14 known and 4 unknown ones.

**Conclusion:** The obtained sequences transactivated by XTP5, coded different proteins and played important roles in cell growth and metabolism, energy synthesis and metabolism, material transport and signal transduction. This finding brought some new clues not only for studying the biological functions of mHA-8, but also for exploring HBV infection mechanism.

## PP-124 Chinese herbs + adefovir dipivoxil short-term suppress HBV infection in personalized treatment

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Background and Objectives: Chinese herb (CB) consisting of 13 ingredients + Adefovir Dipivoxi (AD) made about 29% chronic HBV patients' HBV DNA levels be less than 1000 copies/ml and get HBeAg/anti-HBe seroconversions for 130 weeks treatment. This study shows that improving previous CB prescription and personality treatment may suppress HBV infection for some CHB patients in short-term.

Methods: The improved main prescription consists of 15 herb ingredients, which is used for all CHB patients. The sub-prescription consist of 4–5 different herb ingredients, which is used for CHB patients with different symptoms. The net weight of each of the improved traditional Chinese herb prescriptions (ITCPs) is about 450g-600g. They will be decocted for patients' taking. The CHB patients took the ITCPs two times each day. When a patient's serum HBeAg has been lower than 70S/CO, he will take AD (10mg/day additionally. Each selected CHB patient has baseline HBV DNA >1e5 copies/mL, HBeAg >100S/CO, ALT > ULN.

**Results:** Among 88 CHB patients, there are about 8% (7/88) patients whose HBV DNA <1000cp/mL and obtained, and/or HBeAg/anti-HBe seroconversion in half a year's therapy.

Conclusion: The short-Term Suppressing HBV Infection can be achieved to the CHB patients who have high baseline ALT (>8ULN), or low ALT (>1ULN and <1.5ULN) and low HBV DNA (<5e6 cp/mL). The analysis to the clinic data shows that the main anti-HBV infection function of the ITCPs is to raise and/ or activate patients immune responds and not only blocks the replications of patients' HBV DNA.

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