AASLD Nov. 4-8, 2022

The Liver Meeting®

Dear Joseph George:

Congratulations! On behalf of the Scientific Program Committee of the American Association for the Study of Liver Diseases (AASLD), it is my pleasure to inform you that your abstract "HUMAN PLACENTAL EXTRACT ATTENUATES HEPATIC FIBROSIS AND CIRRHOSIS IN RATS WITH NONALCOHOLIC STEATOHEPATITIS" has been selected for poster presentation at The Liver Meeting® 2022 in Washington, DC. Please note that all poster presenters are expected to be at The Liver Meeting in person.

To formally accept our invitation, carefully review the information below and complete the required forms in the **Speaker Center**. The presenting author's prompt response is required *by Wednesday, August 10, 5pm EST*. Failure to respond may result in the withdrawal of your abstract.

Please be sure to notify all co-authors regarding the status of your abstract.

POSTER PRESENTATION DETAILS

Abstract Number: 35036

Abstract Title: *HUMAN PLACENTAL EXTRACT ATTENUATES HEPATIC FIBROSIS AND CIRRHOSIS IN RATS WITH NONALCOHOLIC STEATOHEPATITIS*

Presentation Type: Poster Presentation

Presentation Time: TBD

***Poster Session Schedule by Day**

Poster Session I (Friday, November 4): 12:00 PM – 1:00 PM

Poster Session II (Saturday, November 5): 1:00 PM – 2:00 PM

Poster Session III (Sunday, November 6): 1:00 PM – 2:00 PM

Poster Session IV (Monday, November 7): 1:00 PM – 2:00 PM

CONFIRM PARTICIPATION

Visit the **Speaker Center** to confirm your participation in The Liver Meeting.

Look up AASLD Account Login Information

Use this email address to look up your login information.

POSTER PRESENTER EXPECTATIONS

As a poster presenter, you are required to:

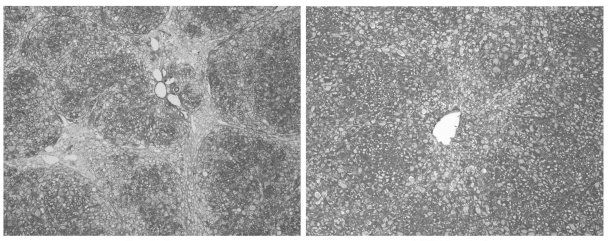
the signaling of collagen catabolic process, extracellular matrix structural constituent and negative-regulation of JAK-STAT cascade etc. **Conclusion:** Improvement of liver fibrosis post DAA treatment could be affected by the change of miRNAs expression profile in the liver and serum.

Disclosures:
Yasuhito Tanaka – Gilead Sciences: Speaking and Teaching; Gilead Sciences: Grant/Research Support; AbbVie: Grant/Research Support; AbbVie: Speaking and Teaching; Fujirebio Inc,: Grant/Research Support; Sysmex Corp,: Grant/Research Support; GlaxoSmithKline Pharmaceuticals Ltd,: Grant/Research Support; Stanford Junior University: Grant/Research Support; Chugai: Speaking and Teaching; Takeda: Speaking and Teaching; Otsuka: Speaking and Teaching;
The following people have nothing to disclose: Yasuteru Kondo, Tatsuki Morosawa, Takayuki Kogure, Masashi Ninomiya, Soichiro Minami

1426 | HUMAN PLACENTAL EXTRACT ATTENUATES HEPATIC FIBROSIS AND CIRRHOSIS IN RATS WITH NONALCOHOLIC STEATOHEPATITIS

Mitsuyoshi Yamagata, Mutsumi Tsuchishima, Mikihiro Tsutsumi and Joseph George, Hepatology, Kanazawa Medical University, Uchinada, Ishikawa 920-0293, Japan

Background: Nonalcoholic steatohepatitis (NASH) is always accompanied with hepatic fibrosis that could potentially progress to liver cirrhosis and hepatocellular carcinoma (HCC). Employing a rat model, we evaluated the role of human placental extract (HPE) to arrest the progression of hepatic fibrosis to cirrhosis and HCC in patients with NASH. ***Methods***: SHRSP5/Dmcr rats were fed with a high-fat and cholesterol diet for 4 weeks and evaluated the development of steatosis. The animals were divided into control and treated groups and received either saline or HPE (3.6 mg/kg body weight) subcutaneously thrice a week. A set of control and HPE treated animals were sacrificed at the end of 6th, 8th, and 12th weeks from the beginning of the experiment. Blood and liver samples were collected for biochemical studies and histopathological evaluations. Immunohistochemical staining was performed for α-SMA, TNF-α, 4-hydroxy-2-nonenal (4-HNE), collagen type I, and type III. ***Results***: Control rats depicted progression of liver fibrosis at 6 weeks, advanced fibrosis and bridging at 8 weeks, and cirrhosis *at* 12 weeks, which were significantly decreased in HPE treated animals. Immunohistochemical staining demonstrated marked decrease in the staining intensity of α-SMA, TNF-α, 4-HNE, and both collagen type I and type III in HPE treated rats compared to control animals. ***Conclusion***: The results of the present study indicated that HPE treatment mediates immunotropic, anti-inflammatory, and antioxidant responses and attenuates hepatic fibrosis and cirrhosis. Therefore, HPE may be used as a therapeutic agent to prevent progression of liver fibrosis to cirrhosis in patients with NASH.
**Presenting author Email:* georgej@kanazawa-med.ac.jp



Control HPE treated

Azan staining for collagen in the liver sections of SHRSP5/Dmcr rats fed with a high-fat and cholesterol diet for 12 weeks and after the treatment with human placental extract (HPE) at a dose of 3.6 mg/kg body weight for 8 weeks. Azan staining demonstrated well developed fibrosis and early cirrhosis in untreated control animals at 12 weeks. Treatment with HPE for 8 weeks prevented formation fibrous septa, depicted marked reduction in the deposition of collagen fibers, and significant decrease of hepatic fibrosis.

Disclosures:
The following people have nothing to disclose: Mitsuyoshi Yamagata, Mutsumi Tsuchishima, Mikihiro Tsutsumi, Joseph George

1427 | ACTIVATION OF LXR/RXR REVERSES HEPATIC FIBROSIS IN ATP7B−/− (WILSON DISEASE) MICE VIA NON-CANONICAL TGFβ SIGNALING PATHWAY

Som Dev[1], James P. Hamilton[2,3] and Svetlana Lutsenko[1], (1)Physiology, Johns Hopkins University, (2)Medicine, Johns Hopkins University, (3)Division of Gastroenterology and Hepatology, Johns Hopkins University School of Medicine, Baltimore, MD, USA

Background: Wilson disease (WD) is caused by inactivation of the copper-transporter ATP7B, associated elevation of hepatic copper (Cu) and reduction in nuclear receptor (NR) function. Activation of the liver X receptor/retinoid X receptor (LXR/RXR) pathway in *Atp7b−/−* mice prior to the development of hepatitis improves liver function and delays the development of fibrosis without Cu chelation. Here, we tested whether activation of LXR/RXR after the onset of disease will reverse fibrosis and characterized the associated signaling mechanisms. **Methods:** *Atp7b−/−* (knockout) and *Atp7b+/−* (heterozygous) mice of C57BL/6x129S6/SvEv background were fed with a LXR agonist, T0901317 for 8 weeks starting at 12 weeks (advanced disease stage) after birth. Total RNA-sequencing in male livers was performed to identify the affected metabolic and signaling pathways. Indicators of fibrosis were evaluated by qRT-PCR, Western blotting (WB), immunofluorescence