**Conclusions:** CU-HCC and REACH-B scores were significantly lower after 1-year of AVT and were maintained thereafter. CU-HCC and REACH-B scores after 1-year of AVT independently predicted the risk of HCC development in patients with CHB in whom AVT was initiated.

**Keywords:** Hepatocellular carcinoma, Chronic hepatitis B, Antiviral therapy, Risk prediction model

## O-047

## Improved Bone and Renal Safety at 1Year after Switching from TDF to TAF: In Chronic HepatitisB(CHB) Patients from East Asia

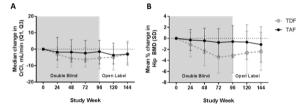
Young-Suk Lim<sup>1</sup>, Hyung Joon Kim<sup>2</sup>, Ki Tae Yoon<sup>3</sup>, Won Young Tak<sup>4</sup>, Jae-Seok Hwang<sup>5</sup>, Sang Hoon Ahn<sup>6</sup>, Kwan Soo Byun<sup>7</sup>, Seung Woon Paik<sup>8</sup>, Sook-Hyang Jeong<sup>9</sup>, Yoon Jun Kim<sup>10</sup>, So Young Kwon<sup>11</sup>, John F Flaherty<sup>12</sup>, Vithika Suri<sup>12</sup> Shuyuan Mo<sup>12</sup>, Anuj Gaggar<sup>12</sup>, Ting-Tsung Chang<sup>13</sup>, H. Edward Gane<sup>14</sup>, Henry LY Chan<sup>15</sup>, Wan Long Chuang<sup>16</sup>

<sup>1</sup>Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea; <sup>2</sup>Chung-Ang University Hospital, Seoul, South Korea; <sup>3</sup>Pusan National University Yangsan Hospital, Yangsan, Korea, South; <sup>4</sup>Department of Internal Medicine, Kyungpook National University Hospital, Daegu, South Korea; <sup>5</sup>Department of Internal Medicine, Keimyung University School of Medicine; <sup>6</sup>Department of Internal Medicine, Yonsei University College of Medicine, Seoul, Korea; <sup>7</sup>Department of Internal Medicine, Korea University College of Medicine, Seoul, Korea; <sup>8</sup>Department of Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea; Department of Internal Medicine, Seoul National University Bundang Hospital, Seoul National University College of Medicine, Seongnam, Korea; <sup>10</sup>Department of Internal Medicine and Liver Research Institute, Seoul National University College of Medicine, Seoul, Korea; 11 Department of Internal Medicine, Konkuk University School of Medicine, Seoul, Korea; <sup>12</sup>Gilead Sciences, Foster City, CA, USA, <sup>13</sup>National Cheng Kung University Hospital, Tainan, Taiwan; 14Auckland City Hospital, 15The Chinese University of Hong Kong, Hong Kong, <sup>16</sup>Kaohsiung Medical University Hospital, Kaohsiung, Taiwan

**Aims:** TAF has shown similar efficacy to TDF with less bone and renal effects in 2 large multinational Phase 3 studies after 96weeks(2 years) of double-blind (DB) treatment. Here we evaluated efficacy and safety, including bone and renal parameters, in the subset of patients from East Asia(EA) who completed 2 years of DB treatment with TAF 25mg or TDF 300mg once daily and were switched to open label(OL) TAF 25mg once daily for 1 year.

**Methods:** In 2 identically-designed studies, 1298 CHB patients who were HBeAgnegative (Study 108; N=425) or HBeAgpositive(Study 110; N=873) were randomized and treated. At Week96, 540(42%; TAF 360; TDF 180) patients including 240(18%; TAF 156; TDF 84) EA patients, had completed 2years of DB TAF or TDF treatment and been switched to OL TAF. Safety including bone(serial DXA scans of spine and hip) and renal(CrCl by Cockcroft-Gault [eGFR<sub>CG</sub>]) parameters, viral suppression and biochemical response were assessed at Year 3.

**Results:** In EA patients on DB TDF switched to OL TAF(TDF®-TAF), eGFR<sub>CG</sub> improved at Year 3 vs. Year 2 (median [Q1, Q3] change = +3.0 [-3.0, +8.4] ml/min); and was stable in those continuing TAF(TAF®TAF)(figure). BMD also improved at Year 3 vs. Year 2 in TDF®TAF patients (mean[SD]% change: spine = +2.2%[3.48]; hiP=+0.7%[2.44]) while BMD changes were stable for TAF®TAF patients (figure). High rates of virologic control (HBV DNA<29IU/mL) were maintained in those on treatment at Year3 vs Year2(TDF®TAF 96% and 95% and TAF®TAF 90% and 93%); ALT normalization (AASLD criteria) increased in TDF®TAF patients and was similar to TAF®TAF patients at 1 year following switch(46% vs 42%; M=F).



**Conclusions:** EA patients switched to TAF after 2 years of TDF had improved bone and renal safety; virologic control was maintained and ALT normalization increased. The results in EA patients are comparable to those seen in the overall population. **Keywords:** CHB, TDF, TAF, Switch

## O-048

## Safety and Efficacy at 1-Year after Switching from TDF to TAF in CHB Patients with Risk Factors for TDF Use

Byoung Kuk Jang<sup>1</sup>, Edward Gane<sup>2</sup>, Wai Kay Seto<sup>3</sup>, Harry LA Janssen, <sup>4,5</sup>, Florin A Caruntu<sup>6</sup>, Hyung Joon Kim<sup>7</sup>, Dzhamal Abdurakhmanov<sup>8</sup>, Shuhei Nishiguchi<sup>9</sup>, Andrzej Horban<sup>10</sup>, Ho Bae<sup>11</sup>, John F Flaherty<sup>12</sup>, Anuj Gaggar<sup>12</sup>, Vithika Suri<sup>12</sup>, Shuyuan Mo<sup>12</sup>, G Mani Subramanian<sup>12</sup>, Jia-Horng Kao<sup>13</sup>, Maurizia Brunetto<sup>14</sup>, Maria Buti<sup>15</sup>

<sup>1</sup>Department of Internal Medicine, Keimyung University School of Medicine, Daegu, Korea, <sup>2</sup>Auckland Clinical Studies, Auckland, NZ, <sup>3</sup>Queen Mary Hospital, Hong Kong, <sup>4</sup>Toronto Western Hospital, Toronto, ON, Canada, <sup>5</sup>Erasmus Medical Center, Rotterdam, The Netherlands, <sup>6</sup>Institutul National de Boli Infectioase "Prof. Dr. Matei Bals", Bucharest, Romania, <sup>7</sup>Chung-Ang Hospital, Seoul, Korea, <sup>8</sup>1st Moscow State Medical University, University Clinical Hospital #3, Moscow, Russia, <sup>9</sup>Hyogo College of Medicine, Nishinomiya, Hyogo Prefecture, Japan, <sup>10</sup>Warsaw Medical University and Hospital of Infectious Diseases, Warsaw, Poland, <sup>11</sup>St. Vincent Medical Center, Los Angeles, CA, <sup>12</sup>Gilead Sciences, Foster City, CA, USA, <sup>13</sup>National Taiwan University, Taipei, Taiwan, <sup>14</sup>University Hospital of Pisa, Pisa, Italy, <sup>15</sup>Hospital General Universitari Vall d'Hebron, Barcelona, Spain

**Aims:** Tenofovir alafenamide (TAF), a new prodrug of tenofovir (TFV), is now a preferred treatment in the 2017 EASL HBV Guidelines, and may be particularly useful in patients with risk factors for TDF associated renal and bone effects. We assessed the 1 year safety and efficacy in CHB patients with TDF risk factors who were switched from TDF to TAF.