Aim and objectives To determine the association between PDE5i exposure and incident dementia in PCa patients treated with ADT.
Material and methods We conducted a retrospective cohort study using the Chang Gung Research Database (CGRD) in Taiwan. We included PCa patients newly receiving ADT between 2009 and 2016. We conducted a three step matching and modified landmark approach to identify PDE5i users and non-users after ADT use. The landmark date was defined as 1 year following the start of ADT, and we defined PDE5i users as patients initiating PDE5i before and after the landmark date. We matched PDE5i users to non-users by (1) age, (2) prostatic specific antigen and (3) 1:4 propensity scores for comorbidity and co-medication. We followed the patients from the landmark date until the incident diagnosis of dementia, last date of clinical visit or 31 December 2019. We performed multivariate Cox proportional hazard models to compare the dementia risk between PDE5i users and non-users.
Results We included 4557 PCa patients starting ADT treatment, with a mean age of 69.5 (SD 7.0) years. After matching, we identified 161 PDE5i users and 644 non-PDE5i users. A total of 5.1 person years of PDE5i users and 4.6 person years of PDE5i non-users were included. Compared with non-users of PDE5i, PCa patients treated with ADT initiating PDE5i had a lower risk of dementia (adjusted HR=0.17, 95% CI 0.04 to 0.70) in the modified landmark analyses.
Conclusion and relevance PDE5i use in PCa patients treated with ADT was associated with a decreased risk of subsequent dementia. Future large scale studies are suggested to confirm our findings.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-197 CONTRAINDICATED DRUG–DRUG INTERACTIONS WITH PAN-GENOTYPIC DIRECT ACTING ANTIVIRAL AGENTS IN CHRONIC HEPATITIS C PATIENTS IN TAIWAN

[1]CH Lee*, [2]SC Shao, [1]YY Chan, [3]ECC Lai. *[1]Chang Gung Medical Foundation, Department of Pharmaceutical Materials Management, Taoyuan, Taiwan ROC; [2]Keelung Chang Gung Memorial Hospital, Department of Pharmacy, Keelung, Taiwan ROC; [3]National Cheng Kung University, Institute of Clinical Pharmacy and Pharmaceutical Sciences, Tainan, Taiwan ROC*

10.1136/ejhpharm-2021-eahpconf.316

Background and importance Treatment of chronic hepatitis C (CHC) has become simpler and more effective since the introduction of pan-genotypic direct acting antiviral agents (DAA), but contraindicated drug–drug interactions (DDI) with DAA should be carefully evaluated to avoid the risk of side effects or loss of treatment efficacy.
Aim and objectives To investigate the patterns of contraindicated DDI with pan-genotypic DAA in real world practice.
Material and methods We conducted a retrospective cohort study by analysing the Chang Gung Research Database, a multi-institutional electronic medical records database which covers 1.3 million individuals (6% of the Taiwan population). We included CHC patients newly receiving pan-genotypic DAA (eg, glecaprevir/pibrentasvir (GLE/PIB) or sofosbuvir/velpatasvir (SOF/VEL)) from 1 August 2018 to 31 September 2019. We identified drugs with contraindicated DDI following the HEP Drug Interaction Checker and pharmaceutical package insert. We calculated the numbers and rates of exposure to contraindicated DDI 3 months prior to initiation of pan-genotypic DAA, and evaluated the changes under pan-genotypic DAA treatment.
Results We included 1311 and 239 CHC patients newly receiving GLE/PIB and SOF/VEL, respectively. Before pan-genotypic DAA treatment, 33 (2.5%) and 3 (1.3%) patients receiving GLE/PIB and SOF/VEL, respectively, received prescriptions involving contraindicated DDI. Among the prescriptions with contraindicated DDI with GLE/PIB, 25 (75.8%) included lipid lowering agents and 6 (18.2%) included anticonvulsants. Among those with contraindicated DDI with SOF/VEL, 2 (66.6%) were for anticonvulsants and 1 (33.3%) involved a nucleoside reverse transcriptase inhibitor. After initiation of pan-genotypic DAA, we found exposure to contraindicated DDI decreased to 14 patients (1.1%) for those receiving GLE/PIB treatment. No change in contraindicated DDI exposure was observed in patients receiving SOF/VEL treatment.
Conclusion and relevance The rate of exposure to contraindicated DDI generally decreased after initiation of pan-genotypic DAA, but some contraindicated drugs remained co-prescribed. Future studies are required to evaluate the outcomes in patients exposed to contraindicated DDI.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-198 VARIATIONS IN EFFECTIVENESS AND SAFETY OF GLECAPREVIR/PIBRENTASVIR AMONG HEPATITIS C PATIENTS WITH DIFFERENT GENOTYPES: A MULTI-INSTITUTIONAL COHORT STUDY IN TAIWAN

[1]MH Hung*, [1]KC Chang, [2]SC Shao, [3]ECC Lai. *[1]Linkou Chang Gung Memorial Hospital, Department of Pharmacy, Taoyuan, Taiwan ROC; [2]Keelung Chang Gung Memorial Hospital, Department of Pharmacy, Keelung, Taiwan ROC; [3]National Cheng Kung University, Institute of Clinical Pharmacy and Pharmaceutical Sciences, Tainan, Taiwan ROC*

10.1136/ejhpharm-2021-eahpconf.317

Background and importance Pan-genotypic direct acting antiviral agents (ie, glecaprevir/pibrentasvir (GLE/PIB)), have been proven in clinical trials to be effective and safe in the treatment of chronic hepatitis C (CHC) infection. However, CHC genotypes may vary in different populations and limited evidence is available regarding the effects of GLE/PIB in patients with different genotypes.
Aim and objectives To compare the effectiveness and safety of GLE/PIB in CHC patients with different genotypes in Taiwan.
Material and methods We retrospectively identified a cohort of CHC patients newly initiating GLE/PIB between August 2018 and June 2019 from the Chang Gung Research Database, a multi-institutional electronic medical records database covering approximately 1.3 million individuals (6% of the Taiwan population). We classified patients by genotype who were followed up for 12 weeks from completion of GLE/PIB therapy. Sustained virological response at 12 weeks (SVR12) was observed as the primary outcome. The safety outcome included elevation of alanine aminotransferase (ALT) or total bilirubin by three times the upper limit of normal (ULN), which was taken as an indicator of liver related adverse