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DISEASE-BURDEN OF AROMATIC L-AMINO ACID DECARBOXYLASE (AADC) DEFICIENCY: HEALTHCARE RESOURCE UTILIZATION (HCRU) OVERALL AND BY DISEASE SEVERITY

Saberian S,1 Rowan P,1 Patel P,2 Fernández-Cortés F,2 Harmes F,4 Belita Ortiz de Zárate 1, Buesch F,4 1OPEN HEALTH, MARLOWE, UK, 2PTC Therapeutics, Madrid, Spain, 3PTC Therapeutics France, Paris, France, 4PTC Therapeutics, Paris, 75, France, 4PTC Therapeutics, Steinhausen, Switzerland

Objectives: Aromatic l-amino acid decarboxylase (AADC) deficiency is a rare neurological condition; Healthcare resource utilization (HCRU) information for this rare disease is scarce but required for economic evaluations. Therefore, the aim of this multi-country study was to generate data on the HCRU of patients with AADC deficiency. Methods: A case study questionnaire was developed based on data published in literature and clinician input capturing information about individuals with AADC deficiency, disease symptoms and HCRU related to the management of the disease. The questionnaires were completed by experts with experience in treating patients with AADC deficiency based on information available in the patients’ medical records prior to a telephone interview. Results: Eleven clinicians involved in the management of patients with AADC deficiency participated in the interviews (6 from France, 4 from Italy and 1 from Spain) providing information on 20 patients, 70% were able to stand/walk with assistance (30% able to sit, and 9 had no motor function/head control). The median (IQR) duration of follow-up per patient at the time of the survey was 5.00 (2.00 to 7.50) years. At the last follow-up, 19 (95%) patients had a neuropsychologist involved in their medical management. Paramedical support was mainly provided by physiotherapists (75% of all patients [60% in patients with no motor function/head control]). All recommended medications were used. Medical device use was higher in patients with no motor function/head control (i.e. 75% for electric wheelchair). Hospitalizations were frequent with a mean (SD) number of hospitalisations since diagnosis of 19.66 (46.03) due to uncontrollable movements. Conclusions: These data show the high medical care and HCRU to manage patients with AADC deficiency.

MOДЕLLING THE IMPACT OF SCREENING ON FUTURE FRACTURE BURDEN AMONGST POST-MENOPAUSAL WOMEN WITH ONE PRIOR OSTEOPOROTIC FRACTURE IN GREECE

Souliotis K,1 Golna C,2 Golnas P,2 Markakis I,2 Makras P,2 1University of Peloponnese, Corinth, A1, Greece, 2Health Policy Institute, Maroussi, Greece, 3251 Hellenic Air Force & VA General Hospital, Athens, Greece

Objectives: Treatment for osteoporosis is widely available – nonetheless, suboptimal screening and linkage to care (SILC) leads to additional, preventable frailties. We estimate future fracture burden amongst Greek post-menopausal women aged 50–74, with one prior osteoporotic fracture, in the next 10 years, applying two scenarios: the current, assuming an 8.6% background SLTC, and a hypothetical, assuming 100% SLTC. Methods: A cohort stochastic model was developed for a hypothetical cohort of 50,000 women. The model followed them as they progressed in age while remaining in or exiting various health states. Women exited the model only through death. Costs were calculated for screening and treating cohort population and for the decrease in new fractures, from the perspective of the third-party payer, namely the National Organisation for Health Services Provision (EOPYY). Results: Applying the new versus the current scenario would result in a reduction in deaths (-0.6%) and fractures (-4.3%) amongst the cohort over 10 years. In the new scenario, treatment initiations and total screenings increased almost 10-fold versus the current scenario, at an incremental cost of 27.83€ per woman per year in the cohort. Key cost drivers of the difference in costs were screening and treatment costs in the new scenario and vertebral and hip fractures costs in the current scenario. Applying the new scenario led to greater reductions in costs associated with vertebral (-8.1%) and hip (-5.5%) fractures, followed by costs in other non-vertebral (-3.0%) and forearm (-2.5%) fractures. Conclusions: Applying a 100% SLTC strategy amongst post-menopausal women aged 50–74, with one prior osteoporotic fracture would result in additional averted deaths and fractures at a manageable incremental cost, from the perspective of the third-party payer. These findings confirm the importance of integrated disease management for osteoporosis, which should include comprehensive SILT.

THE EFFECTS OF COVID-19 INFECTION ON MEDICATION ADHERENCE WITH CHRONIC THERAPIES IN ITALY: THE FAIL-TO-REFILL PROJECT

Delegi Esposti L,1 Ghigi A,1 Ancora DD,1 Andretta M,1 Barbieri A,4 Barbolini F,2 Cavaliere A,2 Giacca A1, Dell’Orco S,1 Di Manno G,2 Grego S,1 Latini M,1 Lubož J,1 Nava E,1 Piaciello A,1 Pagliaró R,10 Penna A,3 Salzano S,4 Tonelli L,1 Uberzâto L,3 Vercellone A,1 Perrone V,1 1Ciclo S.r.l. Health, Economics & Outcomes Research, Bologna, Italy, 2ASL BAT, Trani, Italy, 3Azienda USL BS Berica, Vicenza, Italy, 4ASL Vercelli, Vercelli, Italy, 5USL Umbria 2, Teramo, Italy, 6ASL Viterbo, Viterbo, Italy, 7ASL Foggia, Foggia, Italy, 8ASL Roma 5, Albano Laziale, Italy, 9ASL 3 Azienda Siscurezza Sanitaria, Figure 3, Genova, Italy, 10ASL Roma 5, Tivoli, Italy, 11USL della Valle d’Aosta, Aosta, Italy, 12ASL Napoli 3 SUD, Torre del Greco, Italy, 13ATS Bergamo, Bergamo, Italy, 14ASL 4. Cividalecchia (RN), Italy

Objectives: The study aimed to design and develop a monitoring system to assess the possible implications of the COVID-19 infection and the measures taken to limit its spreading on adherence to chronic therapies. Methods: Within the HEALTH-DB project and in collaboration with a pool of Local Healthcare Entities, a monitoring system called “fail-to-refill” was designed to evaluate the lack of adherence to chronic treatments in Italian settings. During the COVID-19 period, in May 2020, an increase (42%) of the fail-to-refill rate for lipid-lowering agents distributed in community pharmacies was observed, compared to the rate during the no-COVID-19 period (34% – 35% during 2017-2019), while negligible changes were observed in the following months. Regarding the direct distribution, the fail-to-refill rate of biologics was higher during the COVID-19 period, 34% (May), 35% (June), and 37% (July) versus 26-30% (May 2017-2019), 28-29% (June 2017-2021), and 24-28% (July 2017-2019) of the no-COVID-19 period. Conclusions: During the COVID-19 pandemic, an increasing trend of failed refill to chronic therapies has been observed, especially among biologics, probably due to their dispensing system and the difficulty of accessing hospitals. The “fail-to-refill” monitoring system could support the Health Authorities to identify patients who do not correctly refill their prescriptions, thus optimizing the medication adherence and reducing negative clinical outcomes related to it.

A RETROSPECTIVE STUDY OF THE MANAGEMENT OF ANAEMIA IN PATIENTS WITH DIALYSIS-DEPENDENT CHRONIC KIDNEY DISEASE IN FRANCE: THE AMACK STUDY

Cho Khoughn G,1 Courivaud C,2 Rostoker G,3 Zauoi P,3 Menoyo V,3 Harmand S,3 Dubel L,3 Lorenzo MM,1 1CHU Amiens, Somme, France, 2CHU B. Brancion, Doubs, France, 3Hôpital Privé Claude Galien, Essonne, France, 4AGGUD, Isère, France, 5Association ECHD, Loire-Atlantique, France, 6QVPh, Hauts-de-Seine, France, 7Astellas Pharma, Hauts-de-Seine, France, 8Astellas Pharma Europe Ltd., Addlestone, UK

Objectives: Anaemia, a common complication of chronic kidney disease (CKD), is associated with poor outcomes. This study aimed to describe current routine anaemia management in dialysis-dependent (DD) CKD patients in France. Methods: This longitudinal, observational study included retrospective electronic health records (the MEDRA database) for DD-CKD patients aged ≥18 years managed in French hospitals, 01/01/2016-31/12/2016 (inclusion period). The ‘CKD anaemia’ cohort comprised DD-CKD patients with at least one anaemic marker (haemoglobin <13 g/dl for males, <12 g/dl for females; record of any anaemia treatment) for anaemia during the 10th COVID-19 code date (ID) was the date of first anaemic marker during the inclusion period. One-year patient medical history prior to ID and ≥2-year follow-up data were collected. The primary objective was to describe treatment (erythropoiesis-stimulating agents (ESAs), oral/IV iron) of CKD-related anaemia. Results: Of 1729 DD-CKD patients in the database, 1632 were eligible for inclusion; of these, 1286 (78.8%) had anaemia. Mean (SD) age was 70.4 (±14.6) years. At ID, 83.1% (1069/1286) of the CKD anaemia cohort received ESAs, 77.4% (995/1286) IV iron, 0.2% (2/1286) oral iron, and 4.6% (59/1286) no treatment. The most frequent treatment combinations were IV iron + ESA (65.1%, 837/1286) and ESA only (18.0%, 231/1286). During the COVID-19 period, in May 2020, an increase (42%) of the fail-to-refill rate for lipid-lowering agents distributed in community pharmacies was observed, compared to the rate during the no-COVID-19 period (34% – 35% during 2017-2019), while negligible changes were observed in the following months. Regarding the direct distribution, the fail-to-refill rate of biologics was higher during the COVID-19 period, 34% (May), 35% (June), and 37% (July) versus 26-30% (May 2017-2019), 28-29% (June 2017-2021), and 24-28% (July 2017-2019) of the no-COVID-19 period. Conclusions: During the COVID-19 pandemic, an increasing trend of failed refill to chronic therapies has been observed, especially among biologics, probably due to their dispensing system and the difficulty of accessing hospitals. The “fail-to-refill” monitoring system could support the Health Authorities to identify patients who do not correctly refill their prescriptions, thus optimizing the medication adherence and reducing negative clinical outcomes related to it.

TELEMEDICINE USE DURING YEAR 2020 OF THE COVID-19 PANDEMIC IN OLDER US MEDICARE BENEFICIARIES

Davis-Ajami ML,1 Lu ZK,2 Wu J1 1Indiana University Purdue University Indianapolis (IUPUI), Indianapolis, IN, USA, 2University of South Carolina, Columbia, SC, USA

Objectives: This study aimed to assess telemedicine utilization patterns offered by health care providers and used by older Medicare beneficiaries during the coronavirus pandemic. Methods: The Medicare Current Beneficiary Survey (MCBS) supplemental
COVID-19 survey - for Fall 2020 was used to identify Medicare beneficiaries (≥ 65 years) with a regular place for medical care and offered telemedicine during the pandemic. Majority of those indicated consultation for hospital visits (≥ 65 years) who were offered before and during the pandemic, telemedicine use, and digital access to telemedicine. Demographic factors associated with telemedicine use were identified using logistic regression. Results: The study included 4380 eligible older individuals (weight ≥ 2,628 m/s with local Medicare beneficiaries (≥ 65 years). Of those 42.9% made telemedicine visits during the pandemic. Approximately 60% of the telemedicine visits were made via telephone call only. Telemedicine was offered to 18% of Medicare beneficiaries before the pandemic vs. 64% during year 2020. In the pandemic, both voice and video calls were offered to 45% of the respondents before the pandemic vs. 60.2% during the pandemic. Among telemedicine users, 57.2%, 28.3%, and 14.5% used voice calls, video calls, and both voice and video calls for appointments, respectively. Variations in overall telemedicine use were observed by race. Beneficiaries with chronic conditions numbered 2 to 4 or ≥ 4 were 38% or 119% more likely to use telemedicine. Individuals 65-74 years female, in a metropolitan area, with higher income were more likely to make video visits. Experience of telecommunication via internet influenced telemedicine use significantly. Conclusions: Telemedicine offered to older Medicare beneficiaries increased dramatically during the coronavirus pandemic. Less than half of the beneficiaries made telemedicine visits. Demographic disparities were different in overall telemedicine use and type of telemedicine use.

POS2824 REGIONAL VARIATION IN UPTAKE OF RECOMMENDED CANCER TREATMENTS IN ENGLAND (2018-2020) - AN OSMIERTINIB CASE STUDY
Watkins O, Lewis AL, Franceschini M, Jones CA
VAML, London, UK
Objectives: Recommendation from the National Institute for Health & Care Excellence (NICE) provides critical validation for drugs launching in England. Commissioners have a statutory responsibility to fund, but uniform patient access is not automatic. This analysis assessed whether current guideline is sufficient to ensure timely adoption of a new key treatment. Methods: The Innovation Scorecard 2018-2020 was analysed, and tyrosine kinase inhibitors (TKIs) were identified as under-utilised (~ 124,000 actual daily dose (ADD)/quarter) versus NICE expectations (~300,000 ADD/quarter). Osimertinib, indicated for advanced NSCLC, was selected for further study. Technology appraisal guidance (TA653+TA654) and relevant databases were identified, NICE-reported uptake (2019) was compared to published global data. Oncology pharmacists and clinicians in both low-uptake regions were interviewed to explore NICE guidance implementation processes and barriers. Results: Regional variation in osimertinib utilisation was observed, with Midlands and North East & Yorkshire predominantly in the lowest 20%. Annual purchase data showed that Clatterbridge (33,481), Royal Marsden (16,540) and Christie (13,805) NHS Foundation Trusts led acquisition; with 19 Trusts 500-1515; 33 300-499; and 47 < 299 ADD/100,000 in 2019. Barriers to adoption included treatment positioning, patient identification, biopsy, accessibility of genetic testing, poor data quality and Cancer Drugs Fund restrictions. Conclusions: Osimertinib utilisation was driven by London and the North West, with only modest uptake at other oncology centres over the study period. National adoption of osimertinib increased in Q3 2020 and will likely accelerate following the May 2021 approval of adjuvant use in early-stage patients. However, data suggest that usage was at the lower end of expectation for 3 years, potentially denying some patients access to videan new treatment. NHS Trusts implementation of NICE guidance appears to be inconsistent, and structured equitable frameworks are required to ensure timely access for all eligible patients.

POS2824 RETROSPECTIVE ANALYSIS OF REAL-WORLD CLINICAL OUTCOMES AND HEALTHCARE RESOURCE CONSUMPTION IN PATIENTS WITH CHRONIC KIDNEY DISEASE WITH AND WITHOUT SECONDARY HYPERPARATHYROIDISM IN ITALY
Perrone V, Veronesi C, Dorigo M, Blini V, Ancora DD, Barbieri A, Ferrante F, Lena F, Maddalena A, Manzoni F, Ongibene A, Palici S, Re D, Rizzi F, Viti G, Soro M, Degli Esposti L
Ciclo S.r.l, Health, Economics & Outcomes Research, Bologna, Italy, 1A.Si, BAT, Trans, Italy, 2A.Si, Vercelli, Vercelli, Italy, 3A.Si, Frasisono, Frasisono, Italy, 4USL Toscana Sud Est, Grosseto, Italy, 5Azienda Sanitaria Universitaria Integrata Giuliano-Isontina, Trieste, Italy, 6ASL Teramo, Teramo, Italy, 7Vigor Pharma, Zurich Area, Switzerland
Objectives: To evaluate the clinical and economic burden of secondary hyperparathyroidism (SHPT) in chronic kidney disease (CKD) Italian patients, in a real-world setting. Methods: A retrospective analysis of real-world data from administrative databases of 6 Italian Local Health Units was conducted. Adult non-diabetics CKD patients (stage 3-5) with ≥ 1 diagnosis of SHPT between January 2012 and December 2014 were included. Two cohorts were created: CKD-cohort and CKD/SHPT-cohort, with SHPT identified by ≥1 paricalcitol or calcitriol prescription or parathyroid hormone level ≥85pg/ml or ≥1 SHPT diagnosis or SHPT payment waiver code, during two years after CKD diagnosis. Patients were followed-up from index-date (diagnosis-