Hematology, Brazzaville, Republic of Congo; 8Brazzaville Hospital and University Center, Nephrology-Hemodialysis Service, Brazzaville, Republic of Congo, 9Brazzaville Hospital and University Center, Clinical Hematology and National Reference Center of Sickle Cell Disease CNDr, Brazzaville, Republic of Congo.

Introduction: The general objective of this study was to contribute to improving the management of sickle cells subjects in Brazzaville.

Methods: We carried out a retrospective, descriptive and analytical study. It spanned a 10-year period from July 1, 2010 to July 1, 2019. The study involved homozygous sickle cells patients 16 years of age and over regardless of age and sex who passed or stayed in hematology, orthopedics and pediatric surgery departments of the CHU-B, at the CNDr or in the multipurpose surgery and pediatric surgery departments of the CAH. The serum creatinine was in micromoles and the formula for MDRD was used to calculate glomerular filtration rate. The statistical analysis was done using Microsoft Excel version 2016 software, Epi info version 7.3.3.2. And IBM SPSS. The parameters evaluated were epidemiological and diagnostic.

Results: Out of 10072 sickle cells patients identified, 70 presented a suspected or graphically confirmed ONFH. The prevalence of the disease in Brazzaville was 0.7%, with an average age of 27.1 ± 11.8 years as extremes 7 and 63 years. The most represented age group was from 15 to 24 years, pupils and students were the most affected. The sex ratio was 0.75 in favor of women. The maximum proportion in the female gender was in the age group between 26 and 35 years, while men had the most ONFH between 16 and 25 years, this difference was significant with a p-value of 0.03. The ONFH was bilateral in 42.9% of the cases and 53% of the affected hips were left. Of the patients with serum creatinine 95% had glomerular hyperfiltration.

Conclusions: Sickle cells anemia remains a public health problem, despite the establishment of many specialized centers on the continent. Sickle cells osteonecrosis diagnosed early by the avenue of MRI and scintigraphy is not common in our countries, due to a difficulty of accessibility to these diagnostic means related to the low socio-economic level of patients and the existence of insufficiently equipped technical platforms.

No conflict of interest

POS-318

PATIENT PREFERENCES FOR RISKS AND BENEFITS OF MEDICATIONS TO MANAGE ANEMIA OF CHRONIC KIDNEY DISEASE: A DISCRETE CHOICE EXPERIMENT

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Introduction: Anemia is a common complication of advanced chronic kidney disease (CKD) and is associated with reduced health-related quality of life and early mortality. To better understand treatment attributes that matter most in complications of anemia of CKD a patient-centric discrete choice experiment (DCE) was conducted among patients with non-dialysis dependent CKD (NDD-CKD). The experiment was conducted to investigate how patients trade-off potential risks and benefits of anemia medications and how they quantify the value of various medication features through a willingness to pay analysis.

Methods: Australian and Canadian adults living with NDD-CKD were recruited through an Australian patient advocacy group, Kidney Health Australia, the Canadian Can-SOLVE CKD patient network, and online panels. Those who met the NDD-CKD screening criteria and provided consent completed a 12-scenario DCE through an online survey.

The DCE required participants to choose between three hypothetical treatment alternatives labelled by their mode of administration (Oral, Subcutaneous injection (SC), Intravenous injection (IV)). The opt-out option was ‘None of these’ for patients not on an erythropoiesis-stimulating agents (ESA) and ‘Stay on my current medication’ for patients currently on ESA. Figure 1 provides an example scenario presented in the DCE. Participants were shown multiple scenarios and asked to choose their preferred treatment.

Participants were told to assume the medications were equally effective in controlling their anemia symptoms. Preferences were assessed using advanced modelling, which allowed for preference heterogeneity between participants.

Figure 1: Example of a treatment scenario for a patient not currently on ESA
Results: Preliminary results indicate a strong preference for the hypothetical oral pill among NDD-CKD patients. A lower chance of hospitalisation, a lower chance of requiring additional anaemia therapy, and reducing the amount of "bad" cholesterol were also preferred by patients and were significant drivers of choice. Simplicity, convenience, and needle fear were included as reasons in the open text provided by patients, for increased patient value of the oral pill above SC and IV injections. Treatment attributes for frequency of administration, personnel, and location of medication administration had lower importance to patients. As expected, patients' preferences for all modes of administration decreased with increases in monthly out-of-pocket costs over the range $0-$75 AUD and $0-$150 CAD. Final data including similarities and differences between Australian and Canadian patients will be explored.

Conclusions: The results of this DCE show that both Australian and Canadian NDD-CKD patients strongly preferred the hypothetical oral pill (holding all else constant). Our findings could be used as evidence to prioritise the most important characteristics of medications for anaemia of CKD from the patients' perspective.

Conflict of Interest: This research was funded by AstraZeneca and conducted by CaPPRe. JS, EW, PB, SG, NR, DW, RK, AP are employed by AstraZeneca Limited and hold stock options. SF and BW are employed by CaPPRe. CaPPRe has consulted to Abbvie, Amgen, AstraZeneca, Celgene, GSK, Ipsen, Roche, Sanofi, and Shire outside of the submitted work. DJ has received consultancy fees, research grants, speaker’s honoraria and travel sponsorships from Baxter Healthcare and Fresenius Medical Care, consultancy fees from AstraZeneca, Bayer and AWAK, speaker’s honoraria and travel sponsorships from ONO, and travel sponsorships from Amgen. He is a current recipient of an Australian National Health and Medical Research Council Practitioner Fellowship. KKT has received consultancy fees from Otsuka, AstraZeneca, Janssen and Baxter, and receives grant support from Orsuka and Astellas.

EMERGENCY AND CRITICAL HEALTHCARE RESOURCE UTILISATION OF PATIENTS WITH CHRONIC KIDNEY DISEASE ACCORDING TO SEVERITY OF ALBUMINURIA: A REPORT FROM THE DISCOVER CKD RETROSPECTIVE COHORT

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Introduction: Real-world data reporting healthcare resource utilization (HCRU) associated with CKD categorized according to severity of albuminuria, are scarce.

Methods: DISCOVER CKD is an observational study in patients with CKD. Data was extracted using the US hospital based electronic medical record database; TriNetX and the UK primary care Clinical Practice Research Datalink (CPRD) linked to hospital data. Patients were aged ≥18 years, with ≥2 urine albumin-creatinine-ratio (UACR) measure and two estimated glomerular filtration rate (eGFR) measures of 0-75 mL/min/1.73 m² recorded at least 90 days apart between January 2008 and September 2018. Index date was 2nd eGFR. Incidence rates per 100 person-years (PY) were estimated for critical care and emergency room visits.

Results: Preliminarily, 19,183 patients from TriNetX (mean [standard deviation] age of 65.0 [11.9] years, 55.1% female, median [interquartile range] eGFR 60.0 [49.9-68.6] and UACR 10.4 [4.5-30.1]) and 99,186 patients from CPRD (mean [SD] age 68.5 [11.3] years, 50.8% female, median [IQR] eGFR 65.0 [55.1-70.2] and UACR 15.9 [6.9-56.6]) met the inclusion criteria. Emergency room visits and critical care admission rates were frequent and increased considerably with increasing UACR. Large differences were seen between emergency room visits and critical care admissions in the US and UK, Table 1.

Table 1. Summary of healthcare resource use rates

<table>
<thead>
<tr>
<th></th>
<th>UACR ≥10 mg/L</th>
<th>UACR 0-90 mg/L</th>
<th>UACR ≥100 mg/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>Events Rate</td>
<td>Events Rate</td>
<td>Events Rate</td>
</tr>
<tr>
<td>UK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Care</td>
<td>6,704 (16.8)</td>
<td>6,216 (16.1)</td>
<td>3,769 (16.3)</td>
</tr>
<tr>
<td>Emergency Room Visit</td>
<td>5,728 (14.6)</td>
<td>5,295 (15.2)</td>
<td>3,544 (16.5)</td>
</tr>
<tr>
<td>US</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Care</td>
<td>2,897 (12.1)</td>
<td>2,747 (12.1)</td>
<td>1,907 (12.1)</td>
</tr>
<tr>
<td>Emergency Room Visit</td>
<td>2,635 (12.7)</td>
<td>2,486 (12.7)</td>
<td>1,587 (12.7)</td>
</tr>
</tbody>
</table>

Conclusions: This analysis demonstrated that higher HCRU is seen in patients with increasing albuminuria, emphasizing the clinical and economic burden of CKD. These results highlight the need for innovative therapies to improve patient outcomes in this population.

Conflict of Interest: JJS, MA, GJ, TC, AAS, and SN are employees and stockholders of AstraZeneca. HH has received grants and other fees from AstraZeneca, Merck, Mitsubishi Tanabe, Janssen, Mundipharma, Gilead, Abbvie, Retrophin, Boehringer Ingelheim, Bayer, Chinoon, Novo Nordisk, and CSL Pharma. CP is an advisory board member for AstraZeneca, Eli Lilly/ Boehringer Ingelheim, and has received speaker fees from Novartis, Janssen Glag, Orsuka, and Vifor. JJC has received institutional grants from AstraZeneca, ViforPharma and Astellas speaker fees from AstraZeneca, Abbott and Nutricia, and consultancy for AstraZeneca, Baxter Healthcare and Bayer. RPF is an employee of Arbor Research Collaborative for Health, which receives global support for the ongoing DOPPS Programs (provided without restriction on publications by a variety of funders – for details see https://www.dopps.org/AboutUs/Support.aspx) and has received research grants from Fresenius Medical Care, non-financial support from AstraZeneca, Bayer, Boehringer, Novo Nordisk, Akebia, and personal fees from Retrophin outside the submitted work. CL is supported by a Clinician Scientist Award from the National Medical Research Council of Singapore and has received research support from Boston Scientific, Bayer, Roche Diagnostics, AstraZeneca, Medtronic, and Vifor Pharma as consultant or on the Advisory Board/Steering Committee/Executive Committee for Abbott Diagnostics, Amgen, Applied Therapeutics, AstraZeneca, Bayer, Biofoumirs, Boehringer Ingelheim, Boston Scientific, Corvia Medical, Cytokinetics, Darma Inc., Eko.al Pte Ltd, JanaCare, Janssen Research & Development LLC, Medtronic, Menarini Group, Merck, MyoKardia, Novartis, Novo Nordisk, Radcliffe Group Ltd., Roche Diagnostics, Sanofi, Stealth Bio-Therapeutics, The Corpus, Vifor Pharma and WebMD Global LLC and serves as co-founder & non-executive director of Us2.ai Pte Ltd. This study is funded by AstraZeneca.

INSIDE ANEMIA OF CKD: QUANTIFYING THE EPIDEMIOLOGICAL BURDEN OF ANEMIA OF CKD IN CANADA VIA MICROSIMULATION MODELLING

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Introduction: Chronic kidney disease (CKD) is associated with adverse cardiovascular outcomes, premature mortality and reduced quality of life.