

one patient shows a withdrawal symptom (severe anemic) and none of them shows a progression to advanced disease stages.

Conclusion and Relevance High percentage of candidates were safely discontinued and currently remain untreated. Reduction of toxicities associated with TKI therapy could drive to a clinical benefit for CML patients, improving living conditions.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest

4CPS-183 EFFECTIVENESS AND SAFETY OF NIRMATRELVIR/RITONAVIR IN REAL LIFE SETTING

MA Allende Bandres*, M Arenere Mendoza, P Gomez Rivas, MA Alcacera Lopez, I Varela Martinez, R Fresquet Molina, A Frutos Perez-Surio, L Cazorla Poderoso, T Salvador Gomez, JM Vinuesa Hernando, MDLR Garcia Osuna. *Hospital Clinico Universitario Lozano Blesa, Pharmacy, Zaragoza, Spain*

10.1136/ejhp-2023-eahp.174

Background and Importance On March 28th 2022, nirmatrelvir/ritonavir was marketed in Spain. The Spanish Agency for Medicines and Medical Devices (AEMPS) established criteria to prioritise its administration in patients at high risk of progression to severe COVID. Data regarding the effectiveness and safety of nirmatrelvir in preventing severe coronavirus disease outcomes are limited.

Aim and Objectives To assess the effectiveness and safety of nirmatrelvir/ritonavir in patients at high risk for severe COVID-19.

Material and Methods Prospective descriptive study from April to August 2022 of patients treated with nirmatrelvir/ritonavir. Sociodemographic variables, vaccination status, hospital admission, high risk factors for progression and concomitant treatment were recorded. Readmissions were recorded within 30 days of the end of antiviral treatment.

Results 53 patients were included with a mean age of 64 years, 51% women and 49% men. 57% were vaccinated with 3 doses, 17% with 2 doses, 9% with 4 doses, 6% with 1 dose and 11% were not vaccinated. 34% (18/53) were hospitalised at the time of initiation of treatment.

The most prevalent high-risk criteria were: 24% active treatment with myelotoxic chemotherapy, 21% treatment in the previous 6 months with anti-CD20 drugs, 14% over 80 years vaccinated with some risk factor for progression, 7% patients with onco-haematological treatment and 7% in treatment in the previous 3 months with inhibitors of the protein-kinase. 3 treatments were performed off-label for persistent covid.

The mean number of days from the onset of symptoms to the start of treatment was 1.6 days. 23% of patients required dose adjustment due to renal impairment.

53% required adjustment of chronic treatment for interactions, mainly with metemazole, statins, fentanyl and diazepam.

2 patients received remdesivir and sotrovimab, 2 remdesivir and another two sotrovimab.

4 (7%) patients were readmitted within 30 days after the end of treatment with nirmatrelvir ritonavir, 1 of them with persistent covid. One patient stopped treatment for hives.

Conclusion and Relevance Nirmatrelvir ritonavir has been shown to be a safe and effective drug in high-risk patients of progression to severe covid.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest

4CPS-184 WHAT IS THE ADDITIONAL VALUE OF PHARMACEUTICAL INTERVENTIONS ON [123I]-METAIODOBENZYLGUANIDINE SCINTIGRAPHY?

¹S Chaib*, ²A Flaus, ¹M Meguennani, ¹E Levigoureux, ¹C Bolot, ²M Janier, ³V Breant. ¹Radiopharmacy, Groupe Hospitalier Est-Hospices Civils de Lyon, Lyon, France; ²Nuclear Medicine, Hospices Civils de Lyon, Lyon, France; ³Pharmacy, Groupement Hospitalier Est-Hospices Civils de Lyon, Lyon, France

10.1136/ejhp-2023-eahp.175

Background and Importance [¹²³I]-metaiodobenzylguanidine (mIBG) scintigraphy is a tool to assess cardiac sympathetic innervation. It is used to discriminate parkinsonian syndromes. However, many drugs are known to interfere with this radiopharmaceutical that can lead to false results¹

Aim and Objectives The aim of this study was to try to assess the impact of stopping interfering drugs with [¹²³I]-mIBG in a retrospective study before the recent introduction of pharmaceutical interventions in a nuclear medicine department.

Material and Methods A retrospective study from 01/01/2010 to 31/03/2022 was conducted to find out if a drug interaction could explain diagnostic mismatches between a [¹²³I]-Ioflupane and [¹²³I]-mIBG scintigraphies, focusing on the neurological indication i.e. the differential diagnosis of Parkinson's disease. On the nuclear medicine software, a search of all the patients who had both a [¹²³I]-Ioflupane and a [¹²³I]-mIBG scan 2010 and June 2022 was performed. Each patient's chart is analysed and the diagnosis is collected.

Results 81 patients underwent [¹²³I]-mIBG imaging for the differential diagnosis of neurodegenerative disease and among them 42 had non-contributory [¹²³I]-Ioflupane imaging (51.9%). A divergent diagnosis between [¹²³I]-mIBG and [¹²³I]-Ioflupane was found in 31% of cases, representing 13 patients. A drug interaction could explain this medical interpretation mismatch in 2 patients (15.4%). Concerning the latter, drugs involved were calcium channel blockers. No abnormality of the sympathetic innervation was found whereas the [¹²³I]-Ioflupane scintigraphy found an abnormality of the dopaminergic transmission. These results may complement existing data suggesting that calcium channel blockers interfered in cardiac [¹²³I]-mIBG imaging through increased sympathetic activity².

Conclusion and Relevance There is a great medical interest in continuing pharmaceutical interventions because drug interactions can lead to non-contributory or inconclusive examinations. In addition, setting up a clinical trial by re-examining these two patients but temporarily stopping the drugs potentially involved could be very interesting. Indeed, this work demonstrates the complexity of assessing the impact of pharmaceutical interventions. Moreover, this process should be evaluated for other categories of radiopharmaceuticals.

REFERENCES AND/OR ACKNOWLEDGEMENTS

- Emilio B, Francesco G, Cumali A., et al. 131I/123I-metaiodobenzylguanidine (mIBG) scintigraphy: procedure guidelines for tumour imaging. *Eur J Nucl Med Mol Imaging*. 2010 Dec;**37**(12):2436–46.
- A Stefanelli, G Treglia, I Bruno, et al. Pharmacological interference with 123I-metaiodobenzylguanidine: A limitation to developing cardiac innervation imaging in clinical practice? *European Review for Medical and Pharmacological Sciences*. 2013 May; **17**(10):1326–33

Conflict of Interest No conflict of interest