

# Use of molnupiravir: a Danish nationwide drug utilization study

Louise Ladebo<sup>1</sup>, Lotte Rasmussen<sup>1</sup>, Peter Bjødstrup Jensen<sup>1</sup>, Mette Lindahl<sup>2</sup>, Anne Øvrehus<sup>3</sup>, Jesper Hallas<sup>1</sup>, and Mette Reilev<sup>1</sup>

<sup>1</sup>Syddansk Universitet Klinisk Farmakologi Farmaci og Miljomedicin

<sup>2</sup>Fredericia Kommune

<sup>3</sup>Odense Universitetshospital

February 27, 2023

## Abstract

**Purpose** To describe utilization patterns, characteristics of users and prescriber responsibility of the new oral antiviral medication, molnupiravir, indicated for mild-to-moderate COVID-19. **Methods** Using nationwide registries, we identified all Danish adults who filled a prescription for molnupiravir from December 16<sup>th</sup>, 2021, to August 31<sup>st</sup>, 2022. We described weekly incidence rates and patient characteristics over time, prescriber responsibility as well as time between molnupiravir initiation and a positive SARS-CoV-2 test. Patient characteristics were compared to an untreated SARS-CoV-2 positive cohort. **Results** By August 31<sup>st</sup>, 2022, 5,847 individuals had filled a prescription for molnupiravir. The incidence rate gradually increased to 2,000 weekly prescriptions per 100,000 RT-PCR SARS-CoV-2 positives. Users of molnupiravir were most often men (55% vs. 45% women). The majority (81%) had a positive RT-PCR SARS-CoV-2 test and few (2.9%) redeemed molnupiravir outside the recommended window of 5 days from the positive test result. Compared to an untreated SARS-CoV-2 positive cohort, users of molnupiravir had a median age of 74 years vs. 44 years, a higher proportion resided in a nursing home (12% vs. 1.1%) and had a higher number of comorbidities (median of 3 vs. 0); most commonly hypertension (38%), chronic lung disease (35%), diabetes (20%) and mood disorders (20%). General practitioners were the primary prescribers of molnupiravir (91%). **Conclusions** Molnupiravir was mainly prescribed by general practitioners to RT-PCR SARS-CoV-2 positive individuals who had a potentially increased risk of severe COVID-19. Though some off-label prescribing occurred, our study indicates a high level of adherence to contemporary guidelines.

## Hosted file

pds-23-0079-File001.docx available at <https://authorea.com/users/590169/articles/626648-use-of-molnupiravir-a-danish-nationwide-drug-utilization-study>