

ANALYSIS OF DRUGS INTERACTIONS BETWEEN CORONAVIRUS (COVID-19) ANTIVIRAL TREATMENT AND CONCOMITANT MEDICATION

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BACKGROUND AND IMPORTANCE

Drugs used for covid (lopinavir/ritonavir, hydroxychloroquine) have a large number of interactions. If any of these drugs are used, we should be cautious and monitor the clinical evolution of each patient closely.

AIM AND OBJECTIVES

To analyse potential drug interactions of the treatment for COVID-19 and to evaluate physician acceptance of pharmacist recommendation.

MATERIAL AND METHODS

Prospective interventional study from **March to May 2020**

Patients who started antiviral treatment for COVID-19 with **positive PCR and hospital admission**

Data was collected from **DIRAYA®** and **PRISMA®**



Collected data

Age

Sex

Concomitant medication

Interaction classified according to severity (major /moderate)

Mechanism of the interaction (MI) (pharmacokinetic/ pharmacodynamic)

Pharmaceutical recommendation (PR)

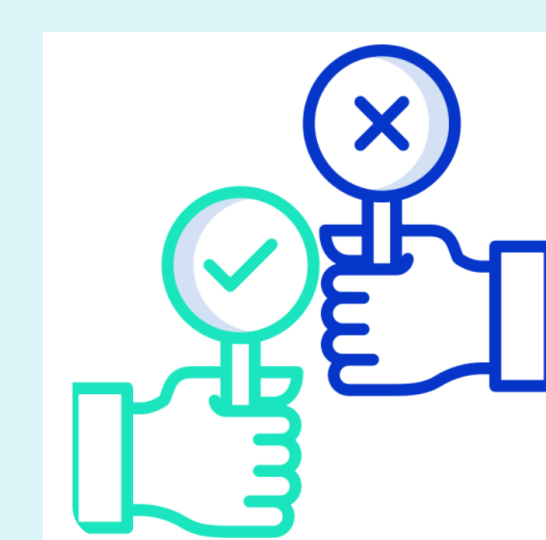
RESULTS

- **178 patients** (56.2% men)
- Median age of **63** [range 22-90] years
- **267 interactions** were detected (**56.9% moderate / 43.1% major**)
- The **MI** involved was: **pharmacokinetic (63.9%) / pharmacodynamic (36.1%)**
- **22,8%** of the collected drugs may affect **QT interval**
- Antiviral therapy: **lopinavir/ritonavir (96,6%) and hydroxychloroquine (94,9%)**

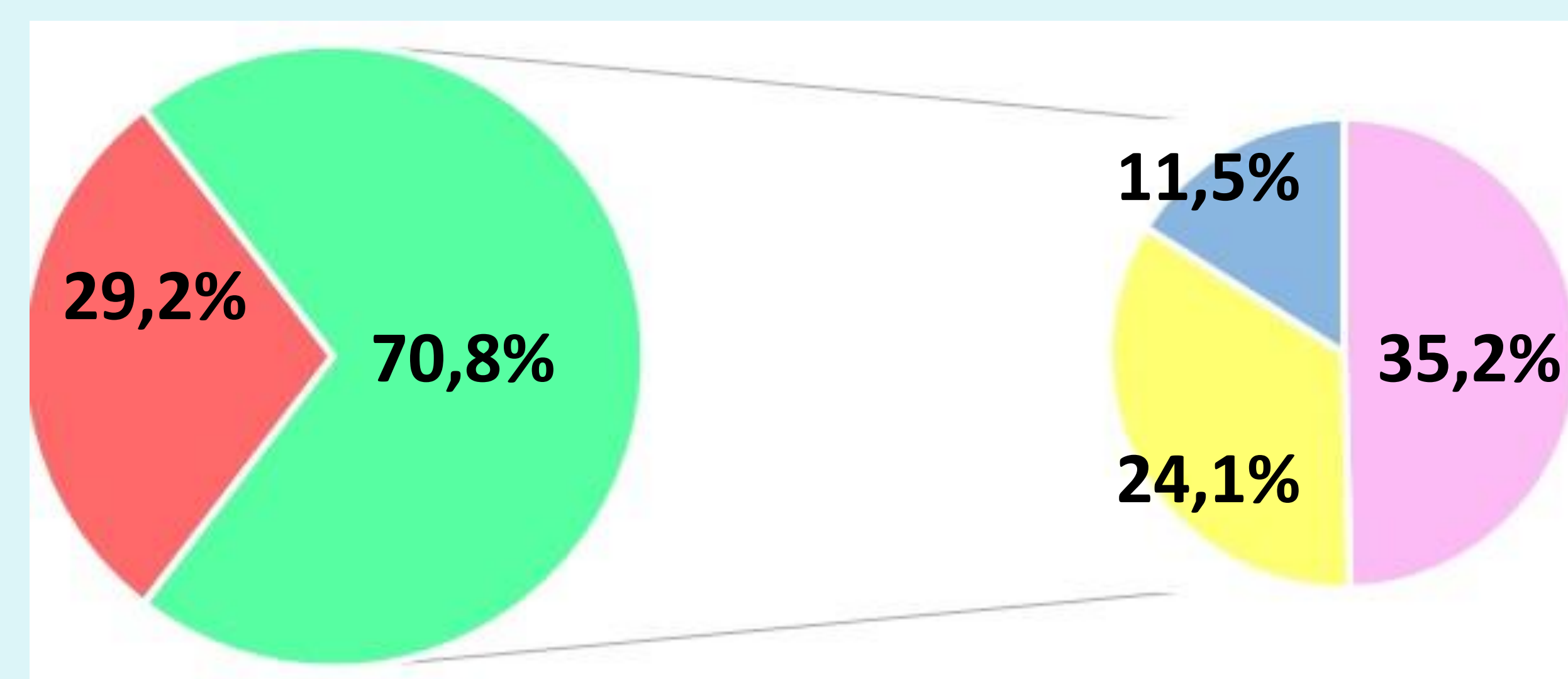
72.5% of the patients had at least one interaction

15,7% selective calcium channel blockers
11,2% topical nasal corticosteroids
10,5% angiotensin II receptor blockers
8,8% HMG-COA reductase inhibitors

185 PR were made



✓ The rate of acceptance was **70.8%**:



■ Acceptance
■ Non acceptance

■ Change dose
■ Change treatment
■ Drug suspension

CONCLUSION

Pharmacist participation in the multidisciplinary team COVID was relevant for the **detection of multiple interactions, helping doctors in decision-making about drugs not commonly used** in an overwhelmed healthcare situation.

REFERENCES

<https://www.drugs.com>
<https://www.druginteractions.org/>