BACKGROUND AND OBJECTIVES
Solid organ transplantation (SOT) recipients’ immunosuppression management is challenging. Drugs used in COVID-19 involve drug-drug interactions (DDI) with immunosuppressants. The aim of this study was:

- Describe DDIs in hospitalized SOT recipients (SOTr).
- Analyze DDIs management and their clinical impact.

MATERIALS AND METHODS
- Retrospective unicentric study including SOTr with COVID-19 hospitalized during March 11th - April 25th.
- Clinical data and pharmacotherapy were recorded from admission up to 28 days (d) or discharge.
- Lexicomp® was used to detect and categorize DDI according to: risk level, reliability rating and severity.

RESULTS

46 patients were included: 
- 33 (71.7%) men 
- 62.7 ± 12.6 (mean±SD) years.

Kidney: 30 (56.2%)
Lung: 13 (28.3%)
Liver: 3 (6.5%)

- Immunosuppression at admission
  - tacrolimus: 41 (89.1%)
  - mycophenolate mofetil/mycophenolate sodium: 28 (60.9%)
  - prednisone: 39 (84.8%)
  - everolimus: 7 (15.2%)
  - sirolimus: 7 (15.2%)
  - cyclosporine: 1 (2.2%)

Immuno-suppressors involved in DDIs

Anti-infectious treatments involved in DDIs

106 DDIs were detected and affected 42 (91.3%) patients.

Imunosuppressant was withheld in 33 (71.7%) patients due to DDI.

- 36 (87.7%) out of 41 patients receiving **tacrolimus** suffered 65 DDIs.
- Treatment was withdrew in 22 patients (61.1%), dose was reduced in 18 (50%) patients and increased in 4 (11.1%).
- Through tacrolimus levels were supratherapeutic in 8 (25%) patients at admission, 13 (43.3%) at 48h, 10 (31.3%) at 7d and 2 at 14d (17.7%, n= 28).
- No graft rejection was detected.
- 2 cases of kidney acute failure were attributable to tacrolimus.

- **DDIs were highly prevalent in hospitalized SOTr with COVID-19.**

- **Pharmaceutical care is critical to promptly detect and manage DDIs in SOTr.**