

# Glucagon-like peptide 1 receptor agonists: inpatient use during the COVID-19 pandemic

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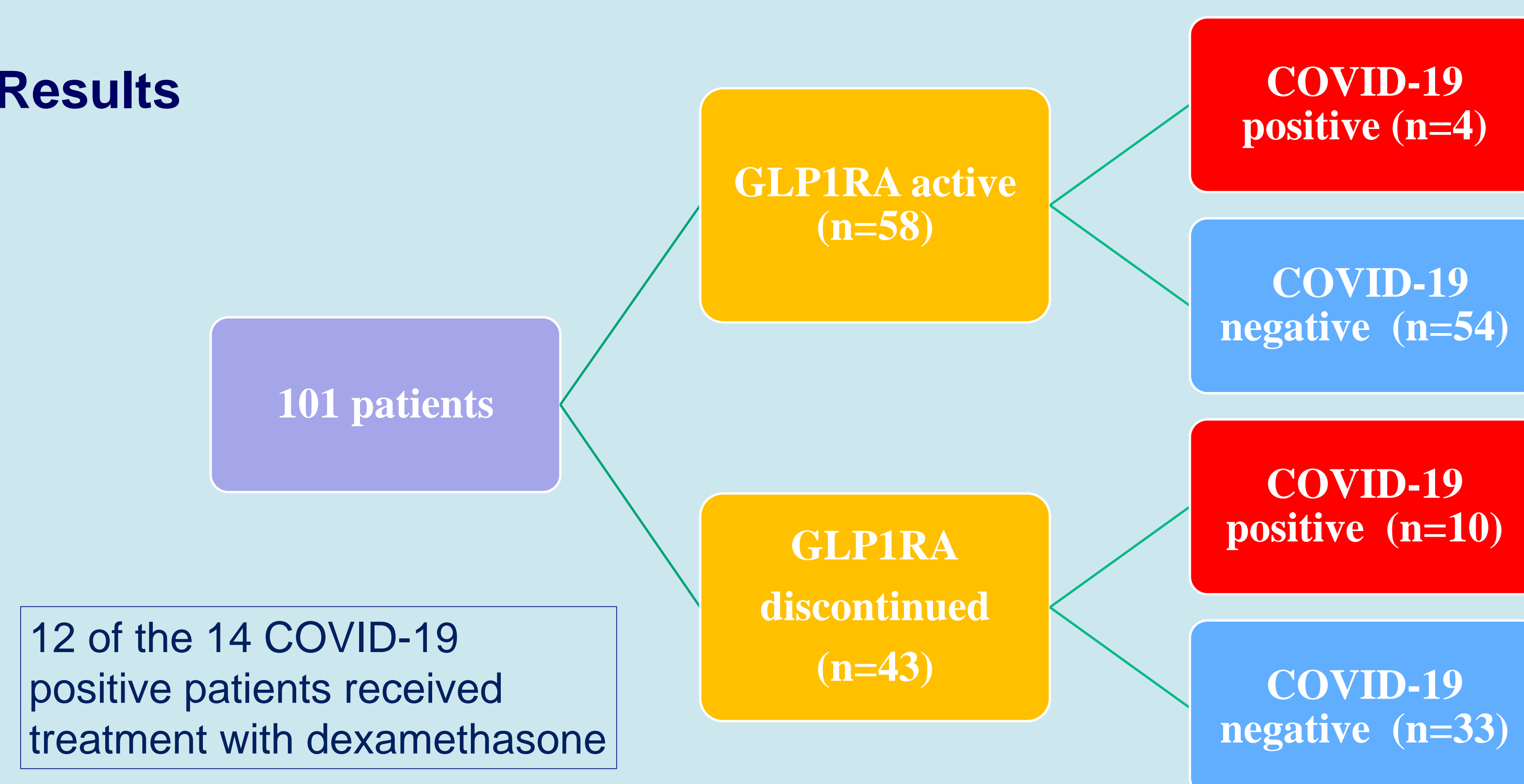
## Background

Glucagon-like peptide 1 receptor agonists (GLP1RAs) are increasingly used in the management of type 2 diabetes. There is uncertainty surrounding their use during acute hospitalisation, and few data for inpatient outcomes - especially during COVID-19 infection. The treatment of COVID-19 infection frequently involves treatment with high dose steroids which has presented challenges in the management of patients with diabetes.

## Methods

Electronic records of all patients using GLP1RAs at the point of hospital admission during the COVID-19 second-wave (1st November 2020 to 31st January 2021) were obtained. Data were collected for COVID-19 status, inpatient glycaemic control, continuation of GLP1RA, or reason(s) for discontinuation. Glycaemic control was determined by number of 'Good Diabetes Days' (GDD), defined as days with no values <4mmol/L and ≤1 value >11mmol/L, and ≥2 tests/day.

## Results



### Proportion of 'Good Diabetes Days'

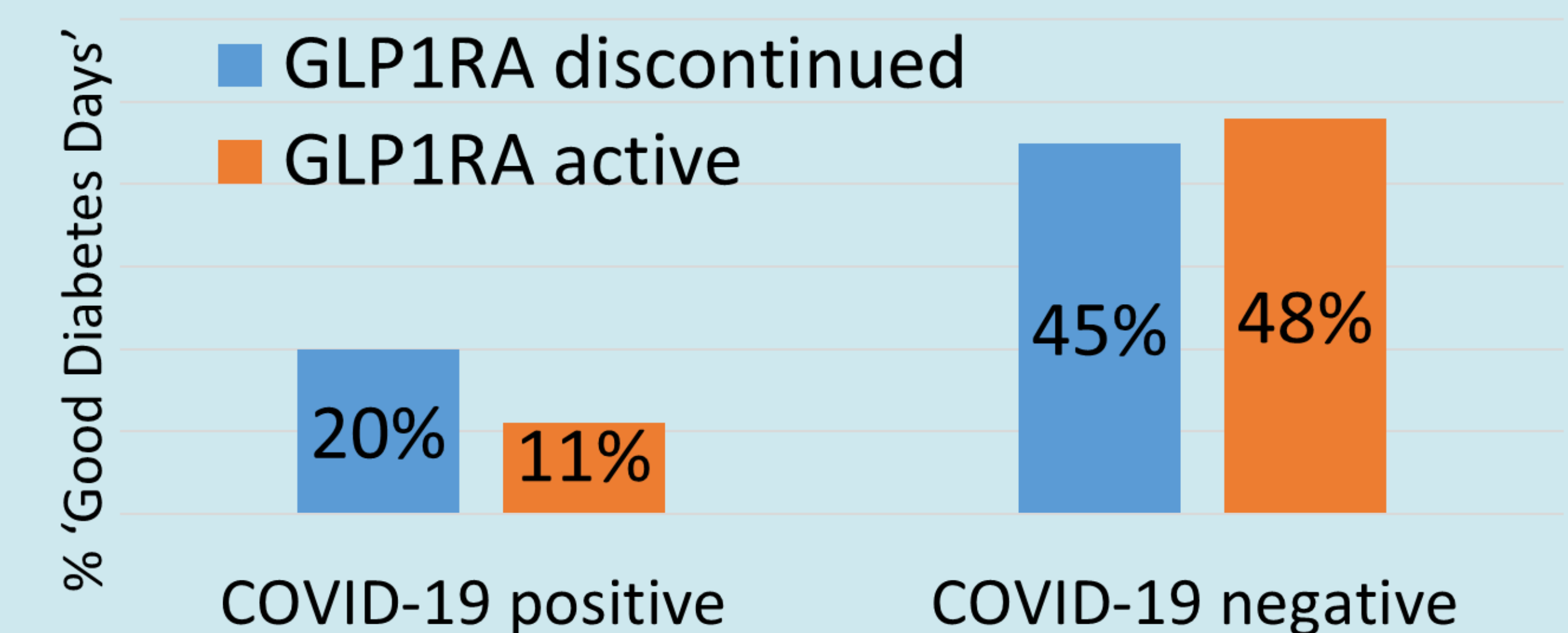
GLP1RA active (58 patients) 46% (128 of 279 days)

GLP1RA discontinued (43 patients) 35% (89 of 251 days)

### Proportion of 'Good Diabetes Days'

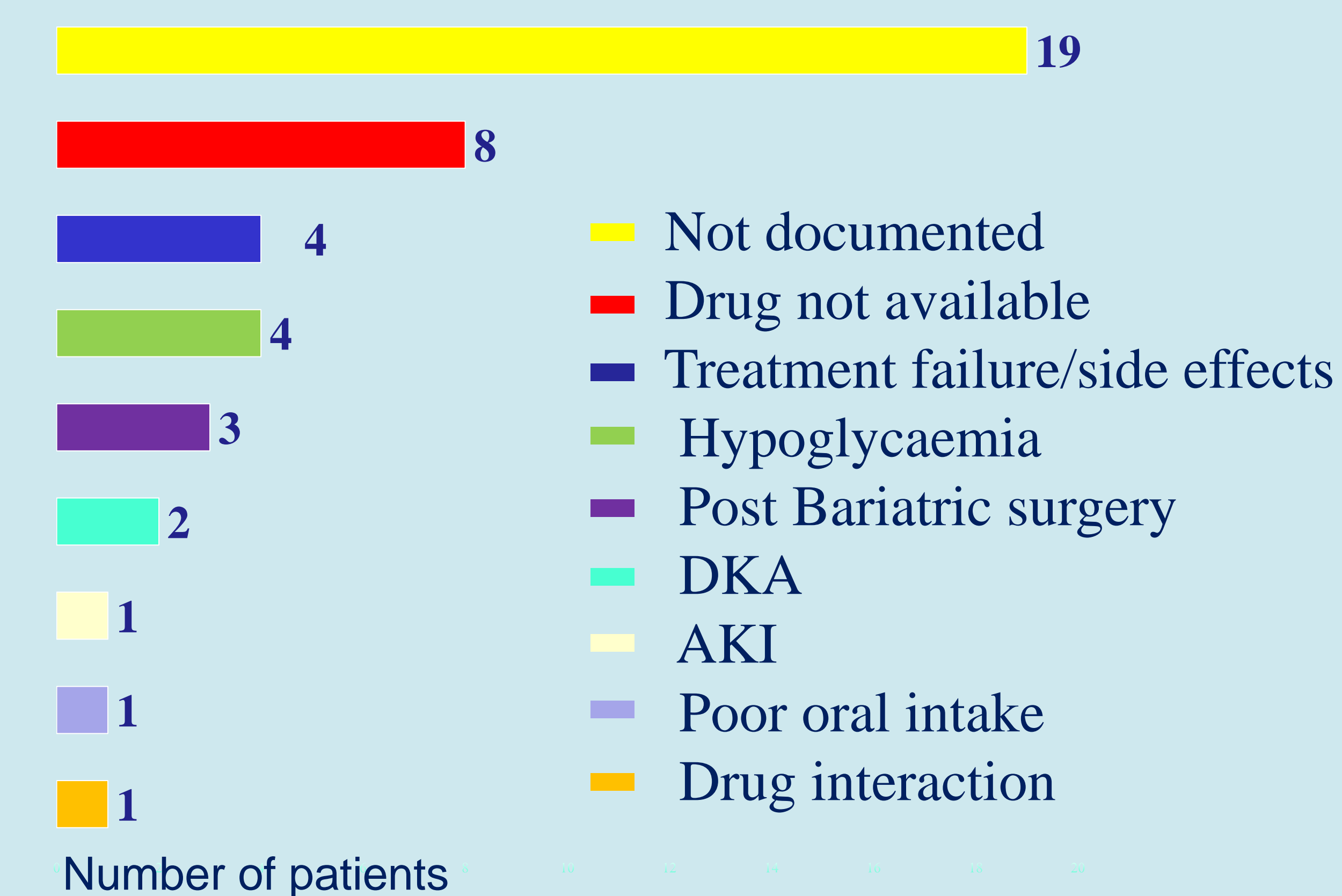
COVID negative (87 patients) 47% (196 of 417 days)

COVID positive (14 patients) 19% (21 of 113 days)



### Discontinuation of GLP1RAs

#### Reasons for GLP1RA discontinuation



- Overall 43% of patients had GLP1RA discontinued on admission.
- In those with COVID-19 infection, GLP1RAs were discontinued in 71% versus 38% without COVID-19

## Conclusion

Discontinuation of treatment with GLP1RAs on admission to hospital was common. In COVID-19 positive patients, this may be due to reduced efficacy in the context of treatment with high-dose steroids. No difference in glycaemic outcomes was seen in patient negative for COVID-19 infection.