

Background and aims

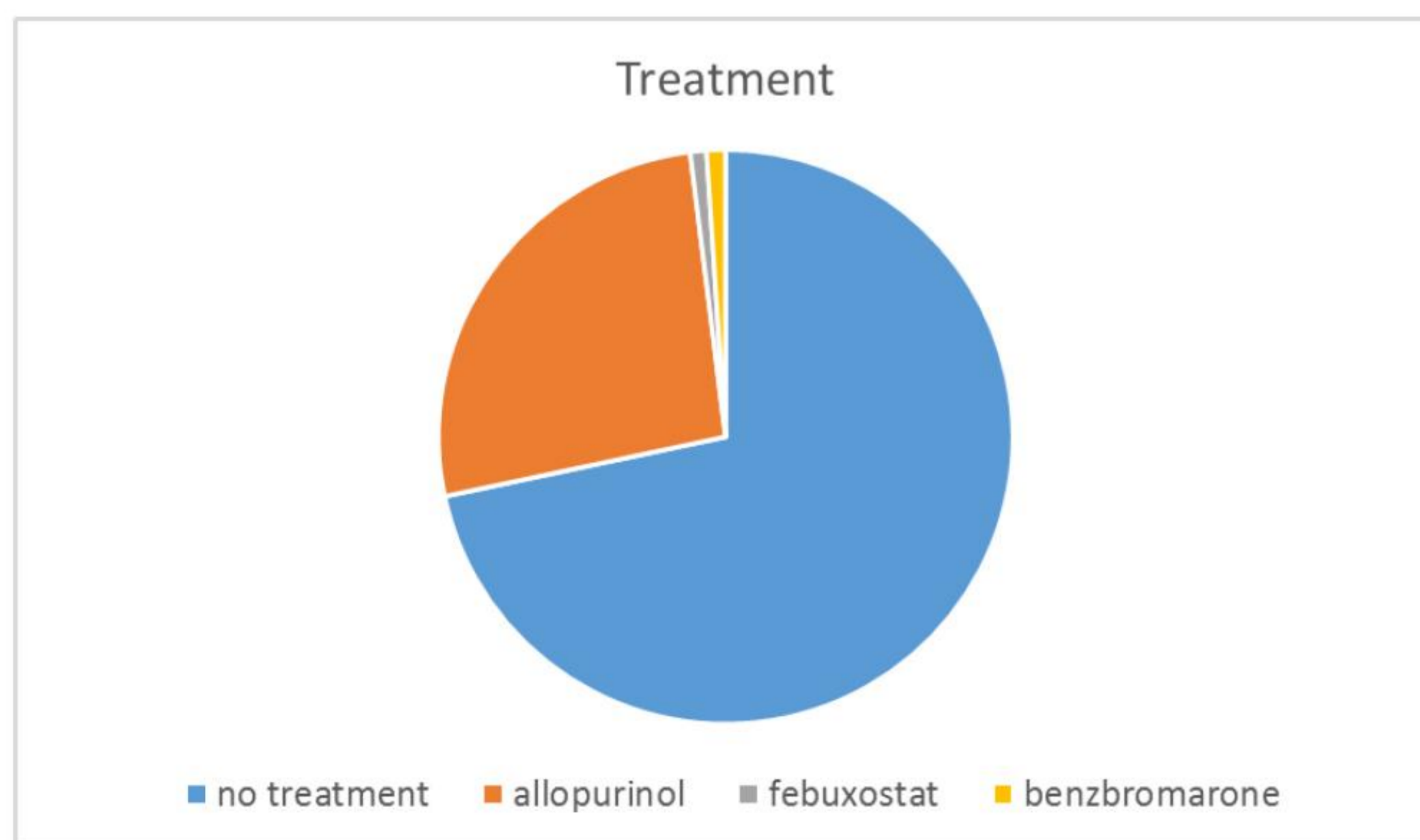
- up to 80 % of patients with CKD exhibit elevated urate levels
- retrospective data and small prospective studies suggest that progression of CKD can be delayed and proteinuria lowered by urate-lowering therapy (ULT)
- dose adjustment of ULT, i.e. allopurinol is required in CKD
- **Study aims:** i) determine the frequency of ULT in patients with CKD stage 3, ii) the dosing of ULT, and iii) the efficacy of ULT

Methods

- baseline data and drug prescription pattern were obtained in a 1965 patient subset of the GCKD study by chart review
- the GCKD study is a prospective observational national cohort study that enrolled more than 5000 patients with CKD 3 of various aetiologies and aims to follow them for up to 10 years
- at the time of enrolment (2011) patients had an estimated glomerular filtration rate (eGFR) of 30-60 mL/min/1.73 m²

Results

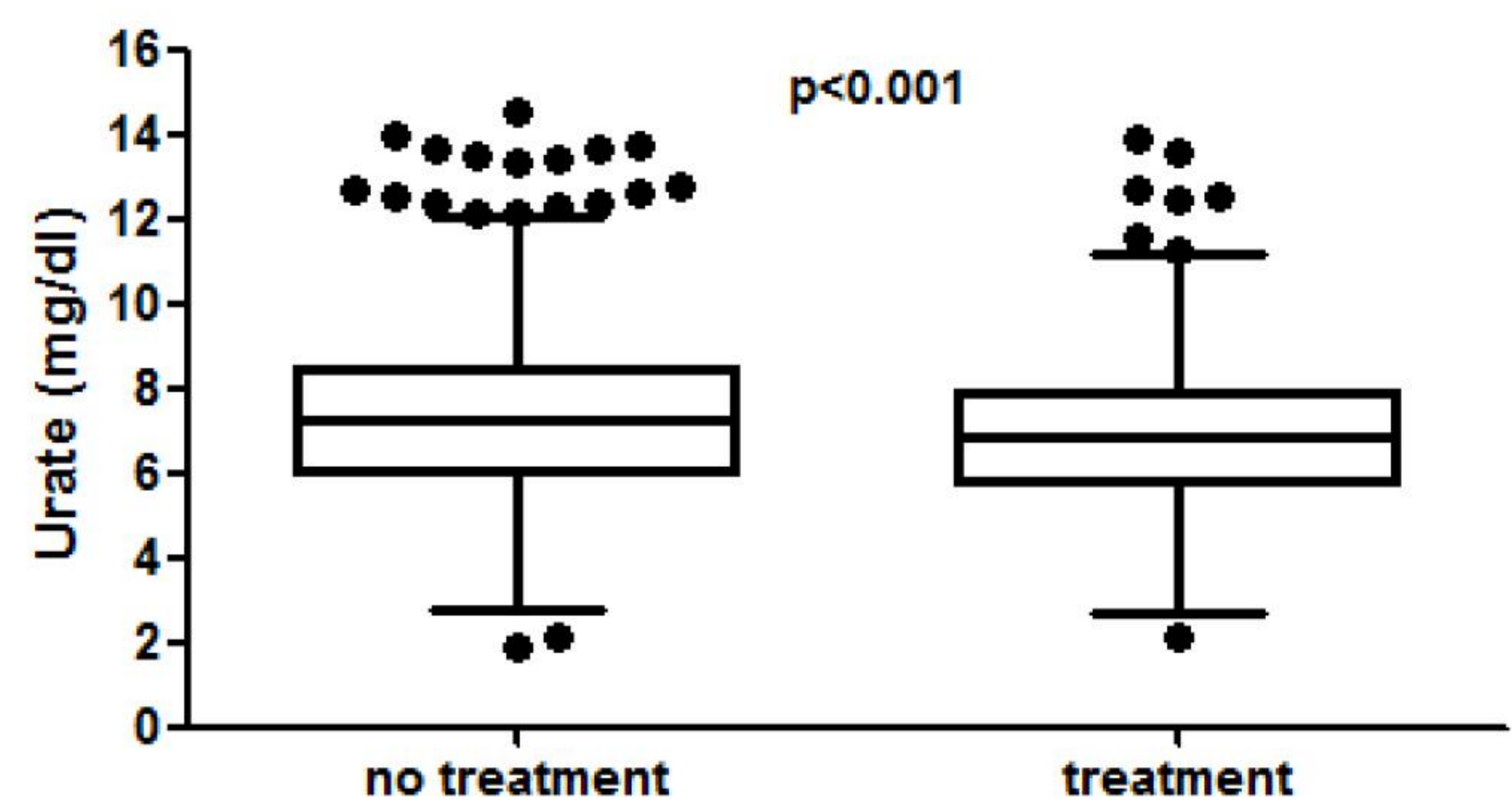
- 919 (47%) patients had hyperuricemia (>6.5mg/dl) and were not treated by ULT
- among those, 332 (36%) had a urate above 8.5 mg/dl
- 551 (28.1%) of all patients received ULT:
 - 519 (94.1%) allopurinol
 - 18 (3.4%) febuxostat and 21 (3.8%) benzbromarone



- the median allopurinol dose was 150 mg/d
- 29.8% of the allopurinol treated patients received 300 mg/d

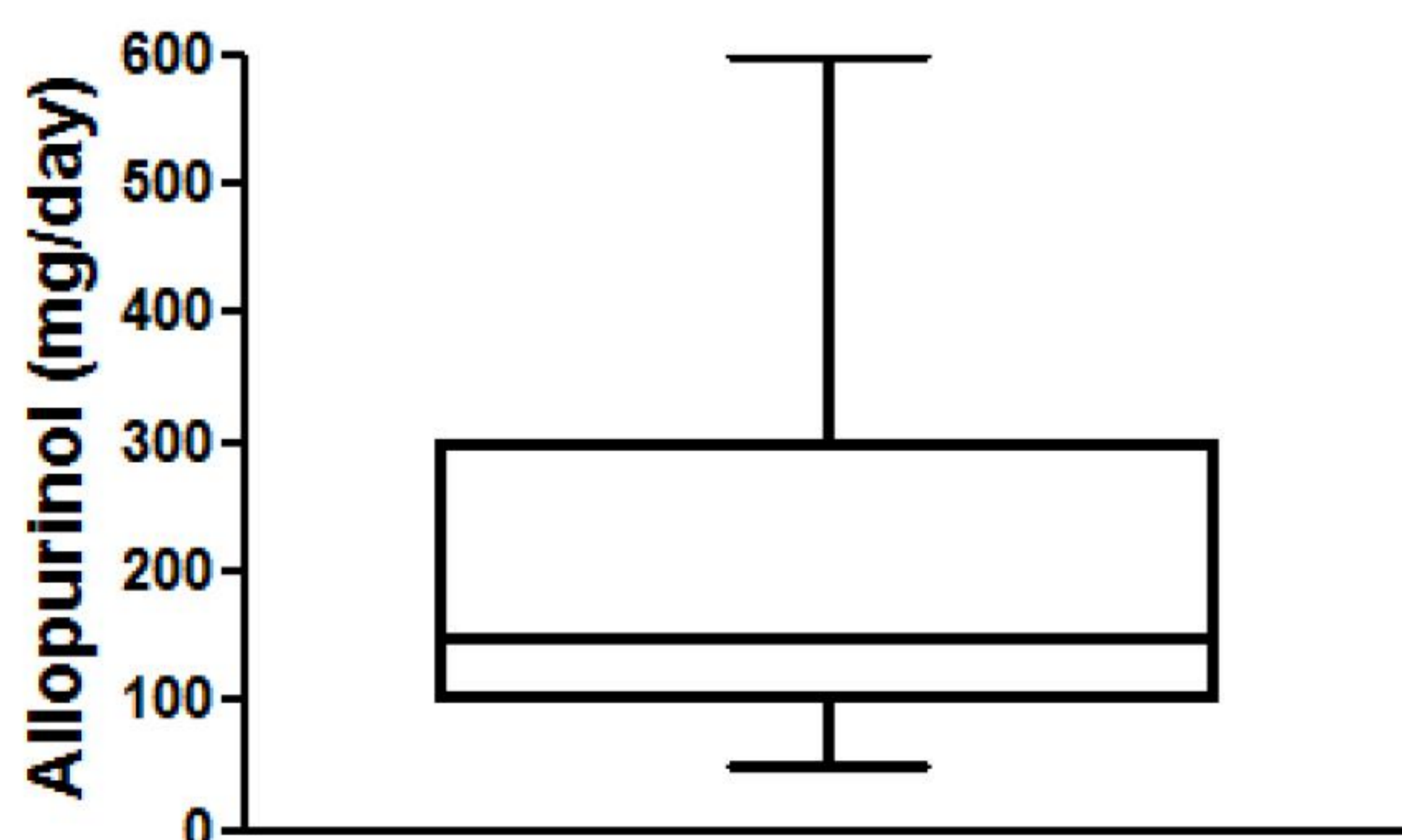
- patients without ULT had a median urate of 7.22 [5.98-8.34] mg/dl
- patients with ULT had a median urate of 6.81 [5.72-6.81] mg/dl
- patients being treated with allopurinol had a median urate of 6.89 [5.74- 7.94] mg/dl

Urate level and its relation to treatment

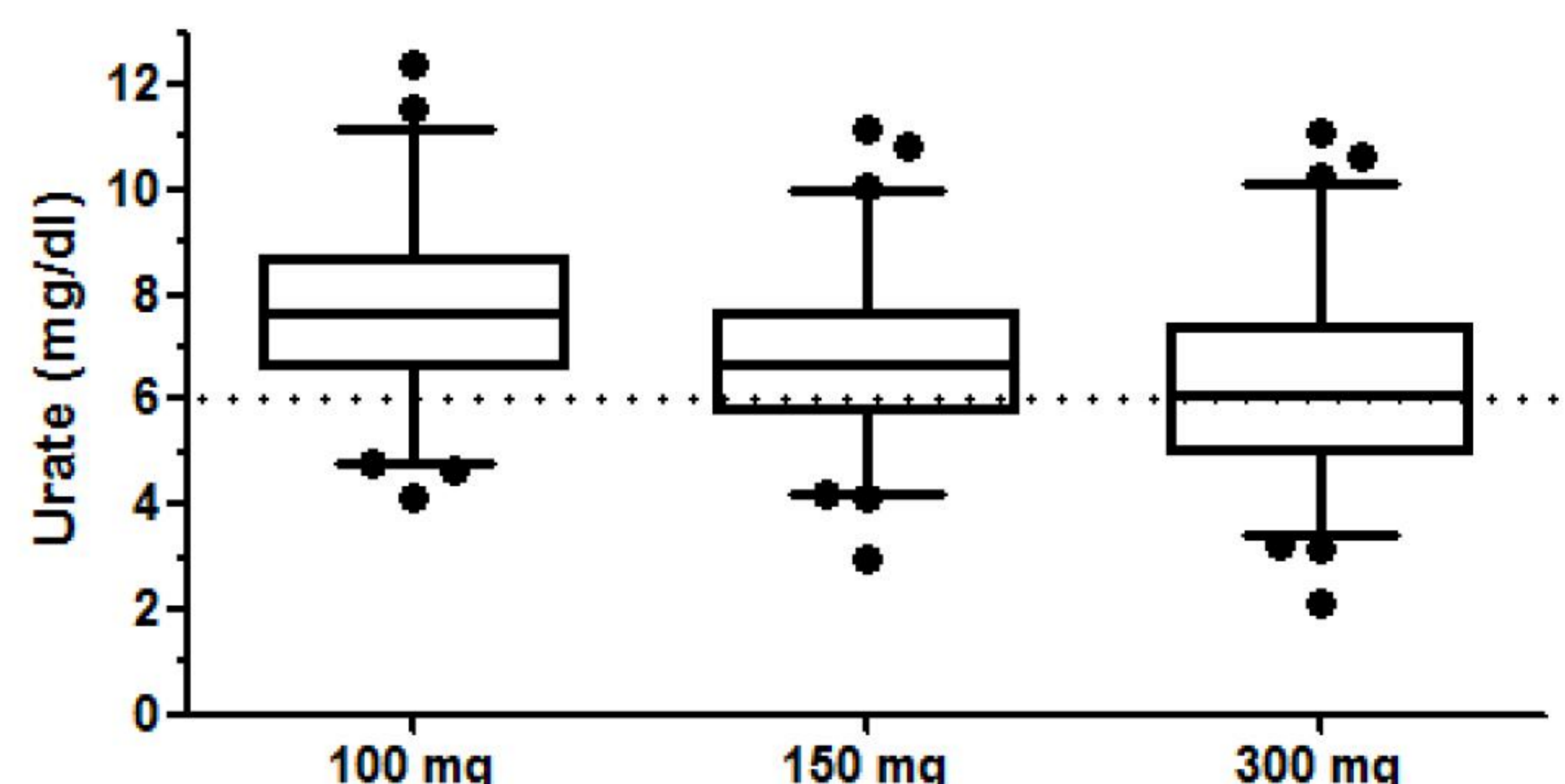


- In the group of patients on ULT, 376 (68,8%) were above the recommended UAL of 6 mg/dl

Allopurinol dose in the GCKD study cohort baseline examination



Urate level and daily allopurinol dose



Conclusions

- despite the fact that hyperuricemia is frequent in CKD stage 3, only 37% patients were treated
- treatment largely failed to lower the uric acid level below 6 mg/dl
- one third of the patients received an allopurinol dose that could lead to accumulation of the main metabolite of allopurinol, i.e. oxipurinol
- **treatment of hyperuricemia in CKD can be improved in both, treatment rate and dose adjustment, further prospective data are needed**

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