OBJECTIVES
- Opioid induced constipation (OIC) is the most common, persistent and debilitating side effect reported in patients receiving opioids to manage pain.
- Laxatives are commonly prescribed to treat OIC but in some patients they provide inadequate response. Naloxegol is a peripherally acting mu-opioid receptor antagonist used to treat patients with inadequate response to laxative(s) (LIR).
- A cost-effectiveness model was constructed from the UK payer perspective to compare naloxegol 25mg with placebo, rescue laxatives and methylnaltrexone (MTX) in the LIR population and compared to oxycodone/naloxone (O/N) in the LIR population taking step 3 opioids.

METHODS
- KODIAC 4 and 5 are two phase III 12-week placebo controlled randomised controlled trials (RCTs) in patients with OIC in non-malignant pain.
- In KODIAC 4 and 5, in both the placebo and naloxegol arms, patients were allowed use of rescue laxatives if they did not have a bowel movement for 72 hours.
- Patients are defined as LIR if they reported moderate, severe or very severe constipation stool symptoms despite use of one class of laxatives on 4 or more days within 2 weeks of enrolment to the study.

RESULTS
- The exponential distribution was fitted to the KODIAC 4 and 5 data for the transition between the non-OIC (on treatment) and OIC states. Once a patient moved to the OIC state they discontinued treatment and did not return to the non-OIC (on treatment) state. Transition between the KODIAC 4 and 5 trials. Transition to death was constant across health states. This is presented in figure 1.
- The EQ-SD was gathered in KODIAC 4 and 5 at baseline, week 4 and week 12. Utility is estimated by treatment, time and health-state in the comparison vs placebo and by health state for other comparisons.
- Resource utilization data was gathered from a survey of 1000 UK physicians.

Figure 1. Structure of naloxegol Markov model

Table 1. Cost effectiveness of naloxegol in the LIR population

Table 2. Extra proportion of naloxegol patients in the non-OIC (on treatment) state

CONCLUSIONS

Naloxegol is a cost-effective treatment option for patients with OIC who have experienced inadequate response to laxative(s).

REFERENCES
2: Lawson, R et al. How does non-malignant opioid induced constipation (OIC) impact health state utility? ISPOR 2014 PG536