Noroxycodone concentration in oral fluid: A retrospective study

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• Detection of metabolites in oral fluid can be helpful for medical monitoring clinics that need to determine if the drug is in fact being ingested and is metabolized by the body.

• Oxycodone confirmation data from oral fluid samples received into our laboratory were reexamined.

• Previously confirmed samples were re-extracted and analyzed for oxycodone and its metabolites noroxycodone and oxymorphone.

• To analyze previously confirmed oxycodone positive samples in order to determine a metabolite profile for oxycodone.

• Oral fluid samples were retrospectively analyzed using LC-MS/MS for oxycodone and its metabolites noroxycodone and oxymorphone.

• Specimens which confirmed above 10ng/mL for oxycodone, noroxycodone, and oxymorphone were noted.

### Introduction

- Of 29 specimens analyzed, 18 specimens confirmed for both oxycodone and noroxycodone.
- None of the samples confirmed for oxymorphone above 10ng/mL.
- The percentages of noroxycodone to oxycodone in those samples ranged from 4.9% to 50%.
- This wide range may be accounted for by the variability in dosage; the time of dosage and oral fluid collection; and the period of time the samples were stored since this was not a controlled study.
- The average percentage of noroxycodone to oxycodone in oral fluid was 17.6%.

### Objective

- Noroxycodone is a major metabolite of oxycodone in oral fluid.
- Monitoring noroxycodone would validate that the patient in question is in fact taking the drug.
- Future studies will focus on fresh samples analyzed in real time in order to better monitor oxycodone metabolites.