



Better health through
laboratory medicine.

Topic: The Laboratory's Role in Drug Monitoring for Pain Management

Date: Wednesday, June 15, 2016

Q&A SESSION 5 | Time: 12:30PM-12:40PM

Krisztina Larraillet-Sallai	Dear Dr. Kwong, you mentioned Fentanyl and Nor fentanyl (the main metabolite), but do you see a need to test other derivate on fentanyl, like 3-methylfentanyl?
Robin Pearn	Do you report your drug levels normalized to creatinine?
Jennifer Brown	Although MS confirmation quantitation can be important to interpret some situations, many medical providers believe a change in quantitative value is due to change in dose or patient behavior. How do we justify reporting quantitative confirmations in urine when as specialists we know the change of quantitation is due to many more factors than dose?
Mahin Park	What is the typical Turnaround time for MS assays?
Robert Bucu	Thanks for another great talk. You mentioned several times the relatively long run time and low throughput of MS versus immunoassay techniques. Can you quantify that? For example, a specimen that needs to be screened for multiple drug classes, requires multiple sequential analyses by immunoassay; how long on average is each. What do you consider a long run time for MS methods?
Tai Kwong	Larraillet-Sallai: the concentration sof fentanyl and nor fentanyl in patients on fentanyl patcehs are in the easily detectable ranges by MS. Other fentanyls concentrations are lower and can be challenging to analyze.
Henning Proelss	Are there approved GC/MS or LC/MS analytical methods for the determination of the active ingredients of synthetic marijuana available?
Tai Kwong	Pearn, No in general, but Yes for quantitative THC carboxylic acid
Barbarajean Magnani	Jennifer, In my opinion, I would not just report out quantitation without interpretation or consultation from the lab (unless you have very knowledgeable providers). You are correct in that the results can vary on hydration status and elimination patterns.

Robert Bucu	Robin: That's a great question. Thanks for asking it. One of my concerns with quantitative numbers by MS is handling differences in the hydration state of the patient at the time of specimen collection. Do you think rationing results to creatinine might be able to address this?
Tai Kwong	Brown: you are right. We have no control over how clinicians use our reports. We can only do our best to educate them. We can tell them that there is a legal case where the court has said to urine drug concentration cannot be extrapolated to dosage
Tai Kwong	Park: my lab turns it around in 24 - 48 hours
Robert Bucu	As a follow up to your answer regarding turnaround time in your lab, is that for use of MS as a confirmation of positive specimens, or use of MS directly, bypassing immunoassay?
Tai Kwong	Bucu: on an automated chemistry analyzer, a 5 drug panels take a few minutes with sample preparation. For MS, the run time is typically < 5min, but need to add on calibrators and controls and sample prep time.
Carlos Martinez	It has seemed to me that testing for just EDDP (methadone metabolite) at a 50 ng/mL cutoff vs testing for both methadone and EDDP, is a sufficient for determining methadone use. Your thought?
Tai Kwong	Proeess: no approved methods. Each state has its own requirements for which cannabinoids to analyze for
Tai Kwong	Bucu: re creatinine. In general, for monitoring compliance, going much beyond its there or not there and try to extract additional, more precise information based on concentration may be difficult. Using THCA: creatinine ratio is because of the long half-lives of THC and the continued excretion vs new use. Isolated drug: creatinine ratio is mostly not helpful; need serial ratios to see trend
Tai Kwong	Bucu: both confirmation and direct assay. I should clarify that TAT is longer because of weekend.
Sonia Kapur	Great presentation! Thank you.