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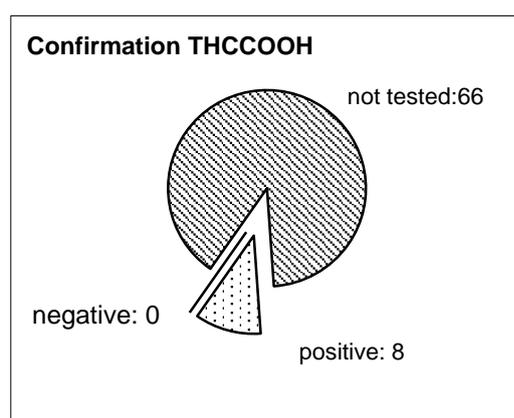
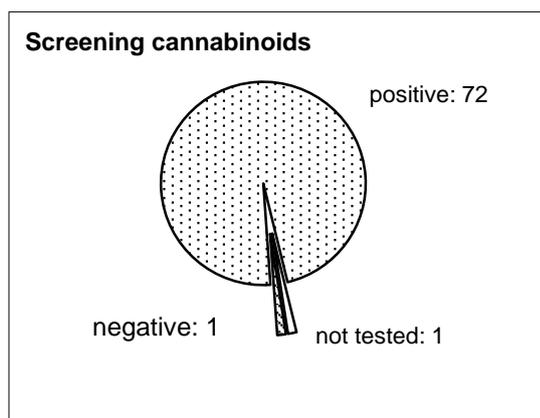
Casus:

Patient from a rehabilitation center.

Composition: urine spiked with THCCOOH 403 µg/L and buprenorfin 53,6 µg/L.

Results:

Cannabis: screening positive (>50 µg/l)					
Summary statistics:					
number of laboratories: 74					
screening:	pos.	neg.	not tested	FP*	FN*
	72=97%	1=1%	1=1%	0	1=1%
confirmation:	pos.	neg.	not tested		
THCCOOH	8=11%	0=0%	66=89%	0	0



Discussion by drs. P.G.M. Zweipfenning:

Both substances far above the cut-off values of 50 and 5,0 µg/L respectively. Immaculate (positive) reporting would be expected.

For cannabis it looks good: 72 out of 73 Labs that tested for it reported positive on the basis of an immuno assay. 1 Lab reported negative (test type 6h: Druglab). The Lab that did not use immuno assay used STIP-HPLC, LC/MS and GC/MS! For a number of cannabis immuno assays 403 µg/L THCCOOH is above the highest calibrator. With natural positive cannabis samples it makes no sense to make dilutions in order to measure in the linear part of the calibration range. This because of the large number of cross reacting cannabinoids present and matrix effects. In a diluted sample, cannabis values could be very well higher than in the original sample. The net effect of the dilution is difficult to predict.

Only two labs refer to buprenorfin. (So there is no statistical info.) Lab nr. 57 reports correctly >50 µg/L. Lab nr. 284 concludes negative. Even when 53,6 µg/L is higher than normally seen in urine of patients on opiate substitution using buprenorfin. Since about 2008 buprenorfin is used widely in NL in cases that, until then, methadone would have been used.

Remarkable is that a number of labs report TCA (tricyclic antidepressants) and even paracetamol, but no buprenorfin.

Lab nr. 2628 appears not to understand the difference between THC and the metabolite THCCOOH. But one can see that more often. As on the website of Dipromed GmbH supplier of Druglab tests

(http://shop.druglab.at/index.php?main_page=index&cPath=7_8_12&sort=20a&page=1). They claim that a drugs test of theirs reacts on THC and it even presents the structural formula of THC (N.B. not THCCOOH) with that. I wonder who would buy from such a supplier when he shows so little know how. It gives the impression to me that with substansive questions you would not come very far. In common speech often the terms cannabis and THC are interchanged. But in more formal reports and product specifications on websites one should use correct names and certainly correct structural formulas.