

# The Power of Quantifying Cotinine



PTS Detect™ cotinine system: <sup>1,2,3</sup>



## Proof positive.

Passive exposure to cigarette smoke can blur the lines of a positive tobacco-use test.

Other point-of-care cotinine (a metabolite of nicotine) tests only offer a qualitative “preliminary positive” result which oftentimes requires a second confirmation test.

The PTS Detect™ cotinine system provides quantitative results that measures an individual’s exact cotinine level from 25 ng/mL to 200 ng/mL. In just 5 minutes and using a simple fingerstick, the PTS Detect system can clearly identify a light from a heavy tobacco user. This specific measurement significantly reduces the need for expensive confirmation testing and enables confident decision making.

Now that’s the power of quantifying cotinine. All at the point of care.

## Benefits of Quantitative Cotinine Measurement:

- Substantially reduces the need for confirmation tests
- Categorization of tobacco use
- Fast results allow for immediate consultation and tailored advice for smoking cessation
- Provides the ability to better monitor progress in smoking cessation efforts<sup>4</sup>



# Competitive Analysis Demonstrates Benefits of the PTS Detect System

An internal study compared the performance of the PTS Detect cotinine system to the Alere™ iScreen® OFD Test Device demonstrating the benefits of quantifying cotinine<sup>5</sup>.

## PTS Detect Cotinine System:

- Provides ability to not only identify tobacco users, but to effectively categorize an individual's tobacco habits.
- Accurate compared to the gold standard reference method (LC/MS-MS).
- Substantially reduces the need for confirmation tests that are recommended by manufacturers of qualitative urine and oral fluid test kits.



## PTS Detect Cotinine System and Alere iScreen® OFD Tobacco-Use Categorization Compared to Reference Lab (Study n=49)<sup>3,5,6,7</sup>

Non-Tobacco User	Possible Passive Exposure	Light Tobacco User (1-9 cigarettes /day)	Heavy Tobacco User (More than 10 cigarettes a day)
<25ng/mL Plasma <30 ng/mL Saliva	25-40ng/mL Plasma >30ng/mL Saliva	41-199ng/mL Plasma	>200ng/mL Plasma
PTS Detect Cotinine System			
4	4	18	23
Alere iScreen OFD Cotinine Test Device			
4	45 (Device provides only a preliminary analytical test result. <sup>8</sup> )		
LC/MS-MS			
3	4	22	20

Plasma cotinine cutoff for active tobacco users is above 20 ng/mL. Saliva cotinine values are 1.3x higher than plasma cotinine levels<sup>3,7</sup>

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- 2) Agaku, I. T.; Vardavas, C.I.; Connolly, G.N., Cigarette rod length and its impact on serum cotinine and urinary total NNAL levels, NHANES 2007-2010. Nicotine & Tobacco Research 2014, 16 (1), 100-107.
- 3) Mendelsohn, Mortimer L., Mohr, Lawrence C., and Peeters, John P., Biomarkers: Medical and Workplace Applications. Washington, DC, USA: Joseph Henry Press, 1998. ProQuest ebrary. Web. 12 August 2015.
- 4) Jarvis, Russell, Benowitz and Feyerabend. Elimination of Cotinine from Body and Fluids: Implications for Noninvasive Measurement of Tobacco Smoke Exposure, American Journal of Public Health. (1988 June); 78(6): 696-698.
- 5) Data on file.
- 6) CONE, E. J., & HUESTIS, M. A. (2007). Interpretation of Oral Fluid Tests for Drugs of Abuse. Annals of the New York Academy of Sciences, 1098, 51-103. doi:10.1196/annals.1384.037
- 7) Iqbal, S. S., K. Mendoza, M.J. Curran, and S.T. Lindau. (2007). Salivary Cotinine Measurement in Wave I of the National Social Life, Health & Aging Project (NSHAP). Chicago Core on Biomarkers in Population-Based Aging Research.
- 8) Alere iScreen OFD Cotinine Test Device, Package Insert for the COT Test for Oral Fluids. Limitations. 11-19-2013.



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