

## ALCOHOL

The widespread consumption of alcohol in the United States, partnered with increasing numbers of patients requiring chronic opioid or sedative therapy, has made identifying alcohol use very important.<sup>1</sup> Alcohol consumption can increase adverse drug reactions among these patients.

Alcohol detection in urine has traditionally been limited to a detection window of less than 24-hours after use.<sup>2</sup> Precision Diagnostics offers the addition of alcohol metabolite tests, ethyl glucuronide (EtG) and ethyl sulfate (EtS), which can be detected up to several days following moderate to excessive consumption of alcoholic beverages.<sup>3</sup> Testing of these metabolites may offer more effective monitoring of abstinence, detect relapse, and deter drinking among patients. Furthermore, alcohol detection alone can have implications among patients with certain illnesses such as diabetes mellitus, in which urinary alcohol is often caused by fermentation of urinary glucose excretion.<sup>4</sup>

Living in an alcohol rich environment can lead to incidental exposure to alcohol; hygiene products, cooking products, antibacterial hand gels, over the counter medications, fermented tea, non-alcoholic beverages etc. Individuals monitored for EtG and EtS should avoid products containing alcohol.<sup>56</sup> Due to the possibility of incidental exposure, Precision Diagnostics has carefully selected the cut off levels for EtG and EtS to be 500 ng/mL and 200 ng/mL respectively.

Interpretations of low concentration metabolites can be challenging. Refer to the table below for interpretation examples.

ETHANOL	ETG	ETS	COMMON INTERPRETATION
POSITIVE	POSITIVE	POSITIVE	Patient has had recent exposure to alcohol within 12 hours.
NEGATIVE	POSITIVE	POSITIVE	Patient has been exposed to alcohol greater than 12 hours prior to collection.
NEGATIVE	NEGATIVE	POSITIVE	Patient has been exposed to alcohol. No Ethanol or EtG indicates exposure was not recent or may be incidental.
POSITIVE	NEGATIVE	NEGATIVE	Alcohol detection likely due to fermentation.

\*The presence of EtG alone could indicate fermentation or degradation of the urine due to the presence of E. Coli, therefore Precision Diagnostics will not report a stand-alone positive EtG result.<sup>4</sup>

> A Precision Diagnostics trained Clinical Support Specialist can assist with further review of your patient's results

> > (800) 635-6901 Option 2

## **References:**

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