



Reading Smoke Signature Test Results

Smoke Signature® results are displayed in an easy-to-understand, cigarettes-per-day metric.

After obtaining a whole blood specimen from a local clinic, healthcare center, or lab, simply send it to our Iowa-based lab in a secure, prepaid mailer. Receive confidential results within three business days.

The results will look like this...

Smoke Signature® Results
Date: February 1, 2019
Subject ID: Sample
Date Received: Jan. 31, 2019

RESULTS

Smoke Signature Methylation Score	45%
Estimated average cigarette consumption per day	17

Interpretation
Non-smokers: above 80%
Heavy smokers: below 50%

Estimated average cigarette consumption per day assumes regular current smoking. Methylation status in those who have quit smoking slowly reverts to the value found in nonsmokers. Subjects who quit smoking are often highly de-methylated at this locus for substantial periods of time. After smoking cessation, we recommend repeat testing to monitor this reversion process.

**BDi^{CH₃} Behavioral
Diagnostics, LLC**

We assign a unique ID number to each specimen to track it through our lab.

We process a specimen within one to two days of receipt.

When someone smokes, white blood cells react to cigarette tobacco toxins by de-methylating a single genetic locus. This exposes the locus and activates that particular gene. Our test is the *only* one that measures methylation: the extent to which the specific genetic locus is inactive due to the presence of methyl molecules.

This score represents the degree to which the specific genetic locus is methylated. The lower the percentage, the more smoking that has occurred (smoking decreases methylation at that locus). This is a fairly heavy smoker.

This number translates the methylation percentage to a practical way to measure smoking: cigarettes per day. This estimate comes from comparing methylation scores in thousands of subjects over dozens of clinical trials to measured smoking in those subjects. It reflects average consumption over the past three to six months.

Based on clinical trials, we estimate non-smokers to have a methylation score of 80% or higher. Heavy smokers have a methylation score of 50% or lower. Smoking amounts between these scores generally follow a linear pattern.