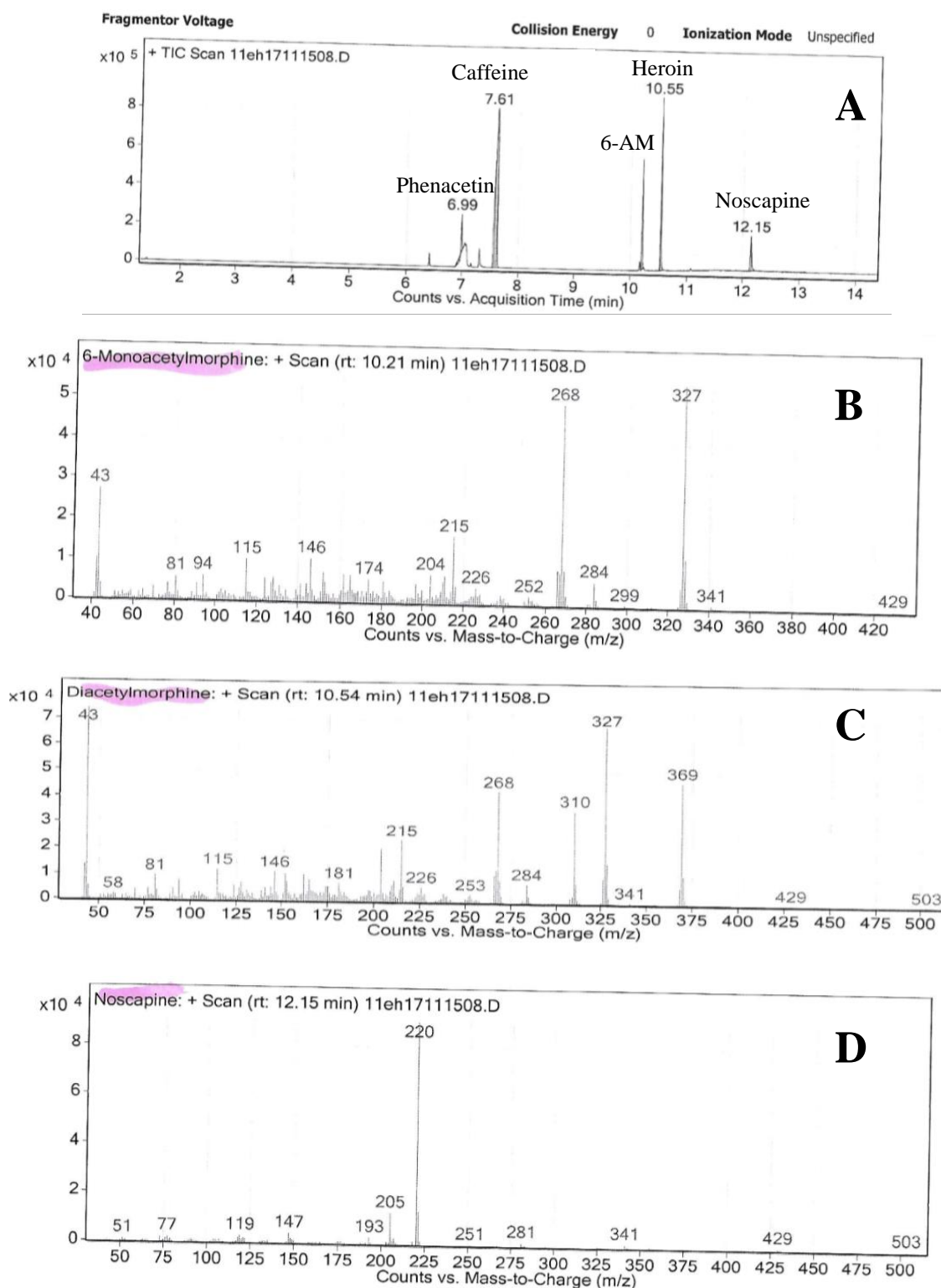


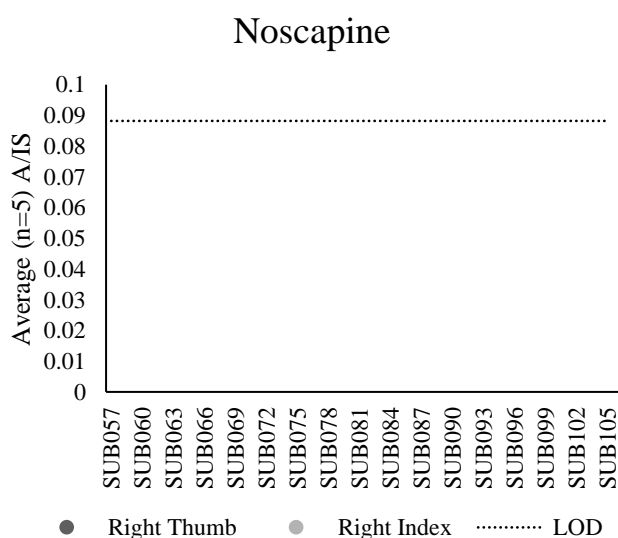
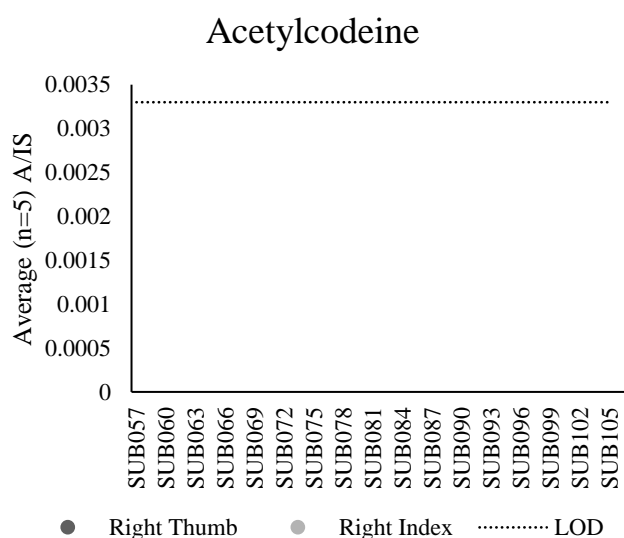
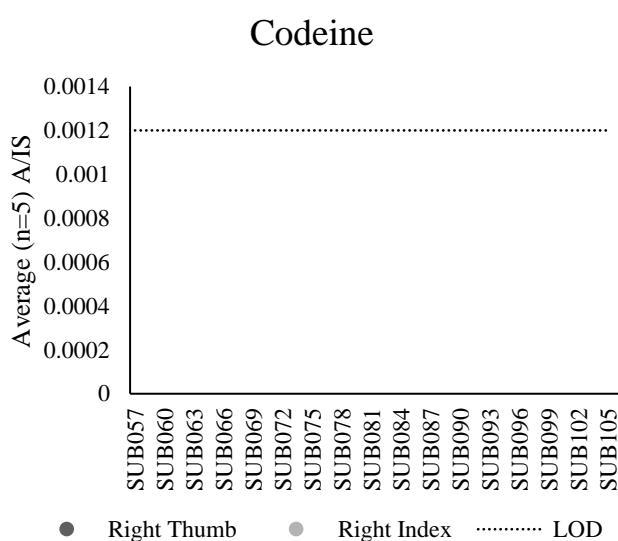
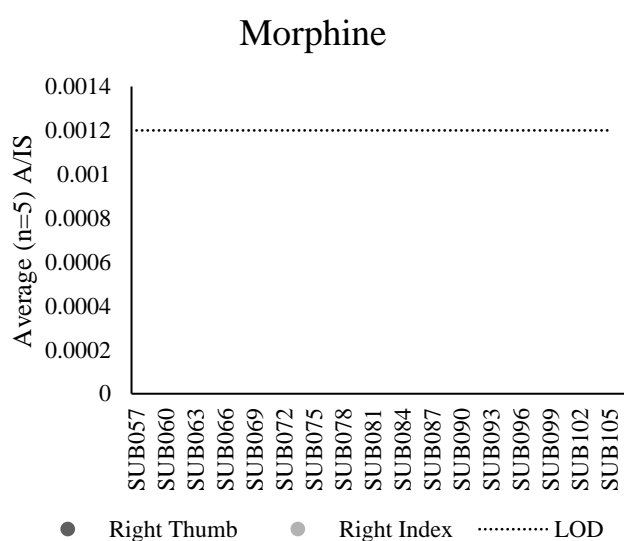
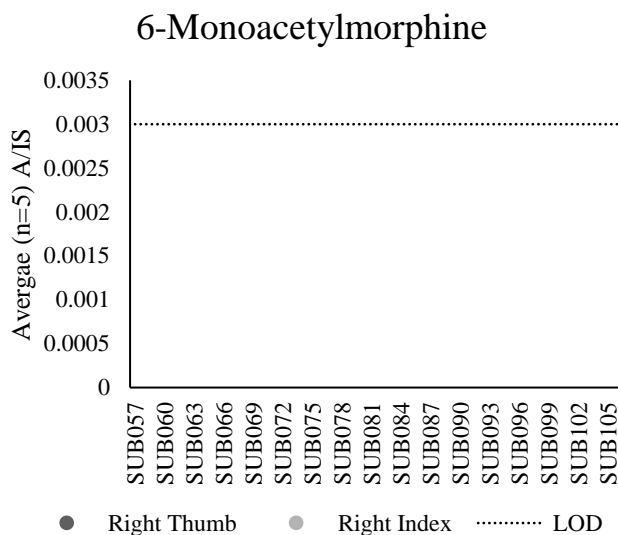
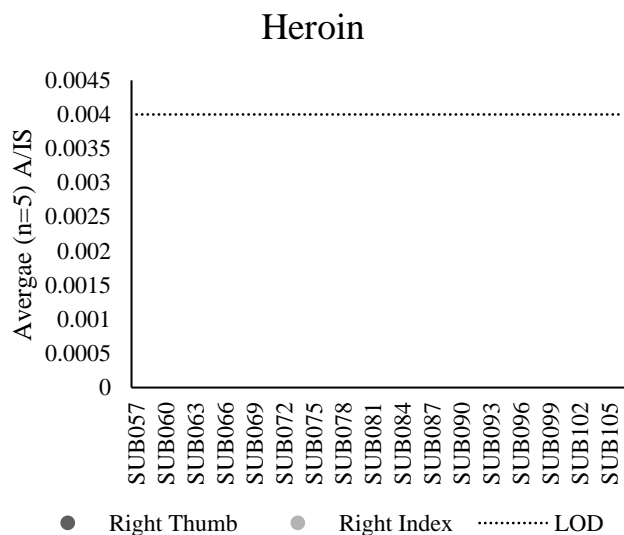
Costa *et al.*: Supplemental Data



Supplemental Data Figure 1. Gas chromatography-mass spectrometry results by Forensic Science Ireland of seized heroin. (A) Total ion chromatogram (TIC) of heroin samples; (B) MS/MS spectrum of 6-monoacetylmorphine (6-AM) peak at retention time 10.21 min; (C) MS/MS spectrum of heroin (diacetylmorphine) peak at retention time 10.54 min; (D) MS/MS spectrum of noscapine peak at retention time 12.15 min.

Supplemental Data Table 1. Protonated molecular ion monoisotopic mass and respective retention times for morphine, codeine, acetylcodeine and noscapine.

Substance	[M+H]⁺	Retention time (min)
Morphine	286.1427	1.62
Codeine	300.1594	1.78
Acetylcodeine	342.1700	2.05
Noscapine	414.1547	2.15



Supplemental Data Figure 2. Results from the analysis of fingerprint samples collected from 50 non-drug users after handwashing with soap using LC-MS.

Supplemental Data Table 2. Corresponding oral fluid results and patient testimony for fingerprint samples collected from patients at a drug rehabilitation clinic.

	Participant #	Patient Testimony	Oral Fluid Results
Group 1a	41033	Heroin	<i>Positive</i> Morphine: >240 ng/mL 6-AM: >32 ng/mL Codeine: 74 ng/mL
	41035	Heroin	<i>Positive</i> Morphine: 138 ng/mL 6-AM: 32 ng/mL Codeine: 36 ng/mL
	41044	Cocaine, Heroin, Cannabis	<i>Positive</i> 6-AM: 23 ng/mL
	41045	Crack cocaine, Heroin	<i>Positive</i> Morphine: 90 ng/mL
Group 1b	41037	Heroin, Cocaine (crack), Diazepam	<i>Negative</i>
	41038	Heroin, Cocaine	<i>Negative</i>
	41046	Heroin, Cocaine	<i>Negative</i>
Group 2	41026	Cocaine	<i>Negative</i>
	41028	Cocaine	<i>Negative</i>
Group 3	41036	Cocaine, Morphine	<i>Negative</i>