

Figure S1. Representative SRM chromatograms by liquid chromatography-tandem mass spectrometry (LCMS/MS) monitored in positive ion mode in Panels 1, 2, 3 and 4-Blank sample with Milli-Q water, without deuterated IS and EPA 521 mixture, extracted under similar experimental conditions, 1-NDEA (m/z 103.1· m/z 75.1), 2-NPIP (m/z 115.1 · m/z 69.1), 3-NDPA (m/z 131.1· m/z 89.1), 4-NDBA (m/z 159.1 · m/z 57.1). Inset of panel 1 and Panels 5 and 6- Solvent blanks for NDEA, NDPA and NDBA with similar parent to product ion transitions as in 1, 3 and 4 respectively.

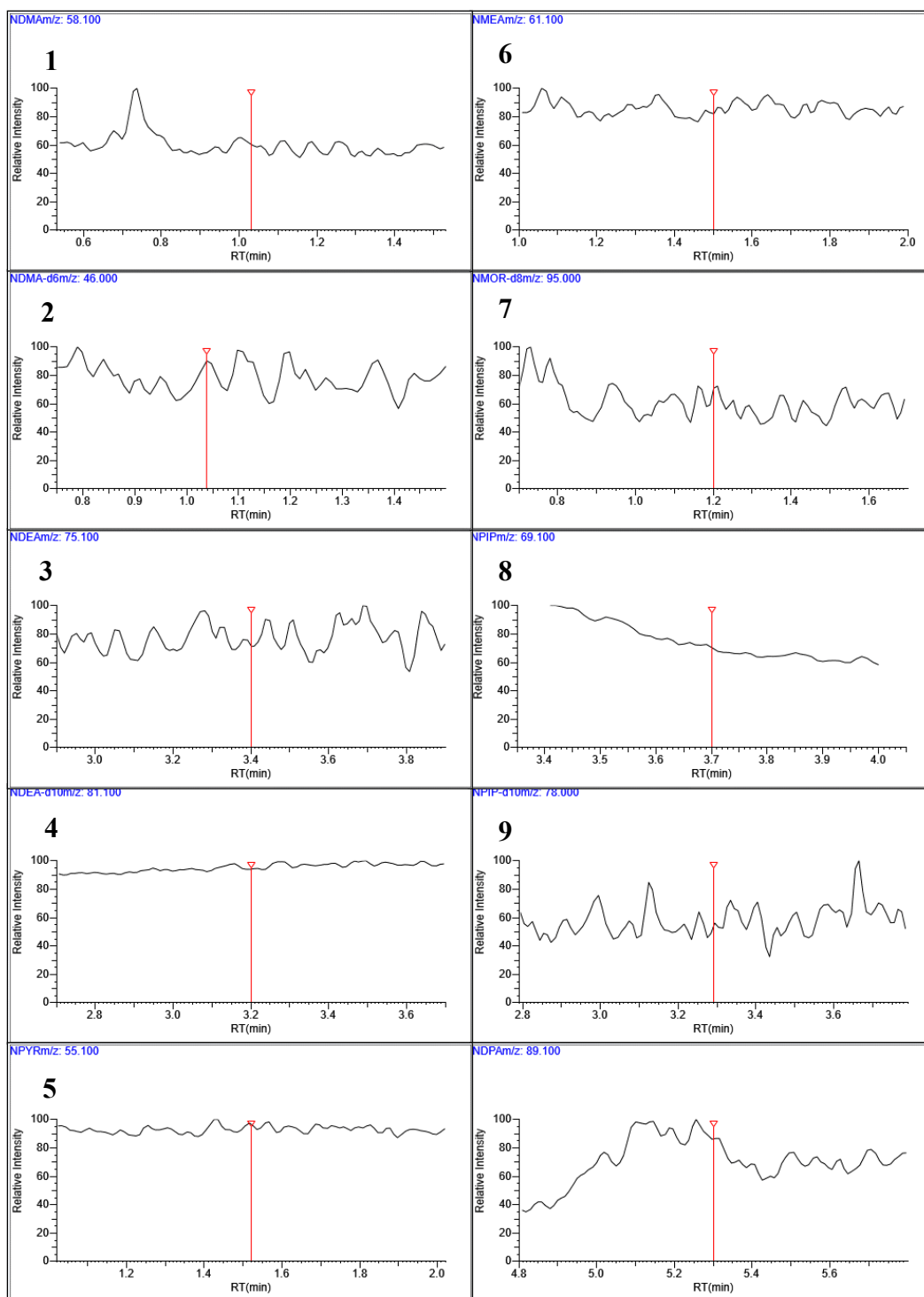


Figure S2. Representative SRM chromatograms by liquid chromatography-tandem mass spectrometry (LCMS/MS) monitored in positive ion mode in methanol solvent wash run *panels* 1-NDMA (m/z 75.1 · m/z 58.1), 2-NDMA- d_6 (m/z 81.088 · m/z 46.0), 3-NDEA (m/z 103.1 · m/z 75.1), 4-NDEA- d_{10} (m/z 113.175 · m/z 81.1), 5-NPYR (m/z 101.1 · m/z 55.1), 6-NMEA (m/z 89.1 · m/z 61.1), 7-NMOR- d_8 (m/z 125.1 · m/z 95.0), 8-NPIP (m/z 115.1 · m/z 69.1), 9-NPIP- d_{10} (m/z 125.2 · m/z 78.0), 10-NDPA (m/z 131.1 · m/z 89.1).

Table S1. Precision for injection repeatability and %CV for (A) standard solution of *N*-Nitrosamines, EPA 521 mixture (4 ng) and (B) urine spiked with EPA 521 mix (4 ng) following extraction.

Compound	A		B	
	Amount (ng)	% CV	Amount (ng)	% CV
NDMA	3.85 ±0.17	4.49	1.72 ±0.10	6.74
NDEA	4.34 ±0.22	5.07	1.98 ±0.08	4.10
NMEA	4.53 ±0.13	2.79	1.84 ±0.13	7.07
NPYR	4.82 ±0.13	2.79	1.69 ±0.10	6.06
NPIP	4.11 ±0.09	2.27	1.93 ±0.17	8.80
NDPA	4.06 ± 0.23	5.57	1.94 ±0.13	6.80
NDBA	4.44 ± 0.17	3.93	1.92 ±0.13	6.95