

Table S2. Compound Discoverer processing settings for generating 5-methyl etodesnitazene putative metabolites.

Phase I reactions	Dehydration ($-2H -O \rightarrow \emptyset$)
	Desaturation ($-2H \rightarrow \emptyset$)
	<i>N</i> -Deethylation ($-2C -5H \rightarrow +H$)
	Hydration ($\emptyset \rightarrow +2H +O$)
	Ketone formation ($-O \rightarrow +2H$)
	Oxidation ($\emptyset \rightarrow +O$)
	Oxidative deamination to alcohol ($-2H -N \rightarrow +H +O$)
	Oxidative deamination to ketone ($-3H -N \rightarrow +O$)
	Reduction ($\emptyset \rightarrow 2H$)
Phase II reactions	Acetylation ($-H \rightarrow +2C +3H +O$)
	Cysteine conjugation ($-H \rightarrow +3C +6H +N +2O +S$)
	Cysteine-Glycine conjugation ($-H \rightarrow +5C +9H +2N +3O +S$)
	Glucuronide conjugation ($-H \rightarrow +6C +9H +6O$)
	GSH conjugation ($-H \rightarrow +10C +15H +3N +6O +S$)
	Methylation ($-H \rightarrow +C +3H$)
	Sulfation ($-H \rightarrow +H +3O +S$)
Max number of dealkylations	3
Max number of phase II reactions	2
Max number of all steps	5
Adducts	$[M+H]^+$
	$[M-H]^-$
	$[M+2H]^{2+}$
	$[M-2H]^{2-}$