Table S1. Linkage disequilibrium among PON1 polymorphisms

	***PON1* 192**		***PON1* 55**	
	D%	***p***	**D%**	***p***
PON1 -108	22.55	0.06	56.36	<0.001
PON1 192			71.73	<0.001

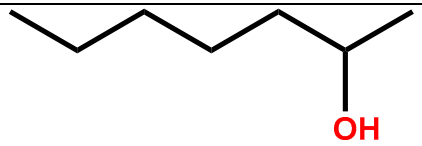
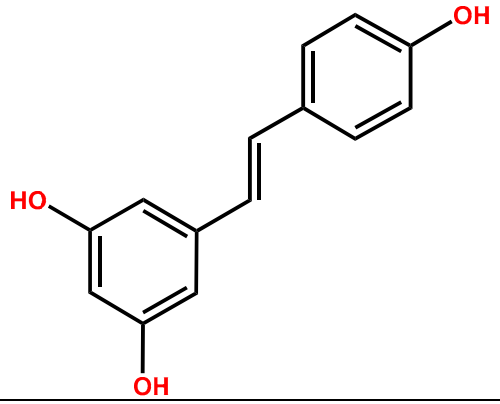
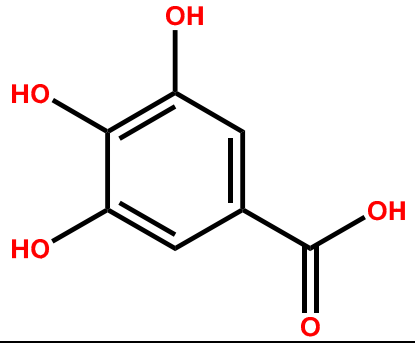
Values presented as percentage. Chi-squared test and Fisher's exact tests were used to obtain D% and *p* values.

Table S2. Allele and genotype frequencies of *PON1*

	Polymorphic site											
	C-108T				*L55M*				*Q192R*			
		Men n = 19	Women n = 26	*p*		Men n = 18	Women n = 24	*p*		Men n = 19	Women n = 26	*p*
Allele	C	0.53	0.67		L	0.69	0.71		Q	0.50	0.42	
	T	0.47	0.33		M	0.31	0.29		R	0.50	0.58	
Genotype	CC	0.26	0.46		LL	0.44	0.54		Q Q	0.26	0.27	
	CT	0.53	0.42	0.39[a]	LM	0.50	0.33	0.59[a]	Q R	0.48	0.31	0.45[b]
	TT	0.21	0.12		MM	0.06	0.13		R R	0.26	0.42	

Note: C/T denote nucleotide exchange for -108 polymorphic site; L/M and Q/R denote the amino acid exchange for 55 and 192 polymorphic sites. Analyses made using [a]Fisher's exact and [b]Chi-squared tests.

Table S3: UPLC-MS. Data of the compounds detected from Malbec wine Retention times and MS fragmentation data in positive ion mode for wine Cabernet Sauvignon Malbec.

Peak number	Tentatively Identified Compound	RT min	Tentatively identified compound	Experimental m/z	Theorical m/z	Ion type	Molecular formula	Metabolite class	Reference
1		0.634	(±)-2-Heptanol, heptan-2-ol	116.09	116.2013	$[M+H]^+$	$C_7H_{16}0$	Fatty alcohols	[81]
2		0.668	Trans-resveratrol	229.26	229.243	$[M+H]^+$	$C_{14}H_{12}O_3$	Stilbene	[82]
3		0.99	**Gallic acid**	171.21	171.029	$[M+H]^+$	$C_7H_7O_5$	Gallotannins, Phenolic fragment	[83]

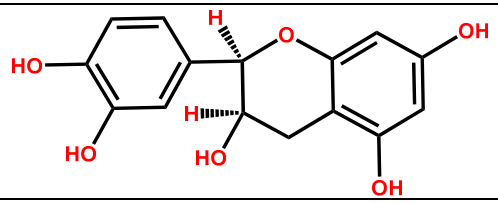
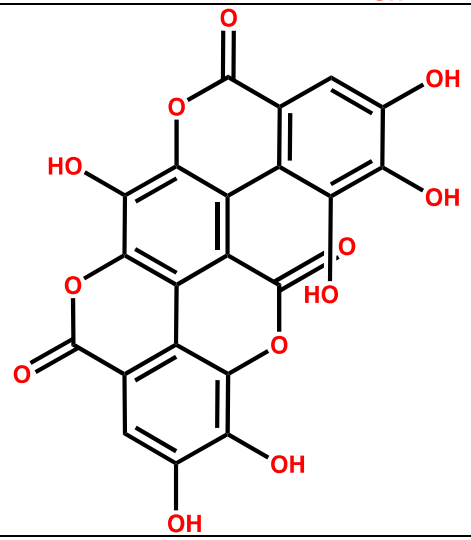
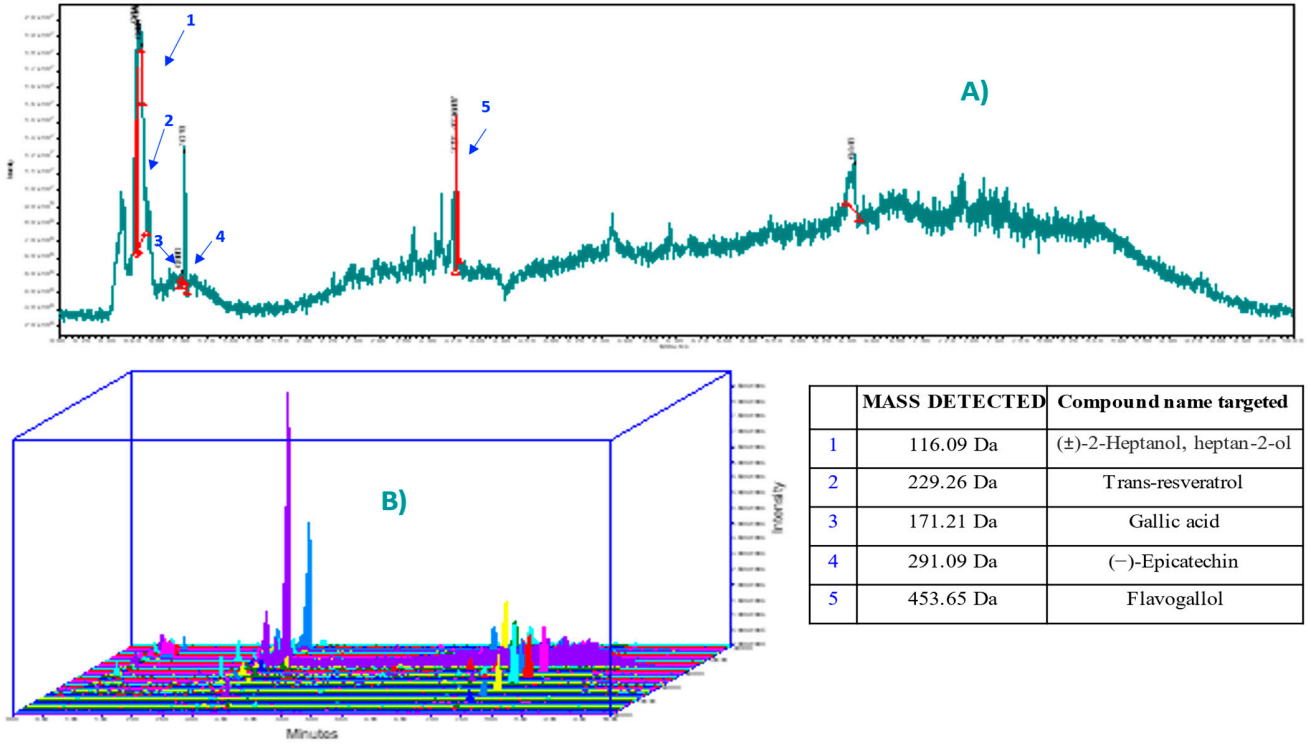
4		1.019	(−)-Epicatechin	291.09	291.0869	[M+H] $^{+}$	$C_{15}H_{14}O_6$	Flavonoids, catechins	[84]
5		3.220	**Flavogallol**	453.65	453.0096	[M+H] $^{+}$	C21H8O12	Hydrolysable Tannin	[85]

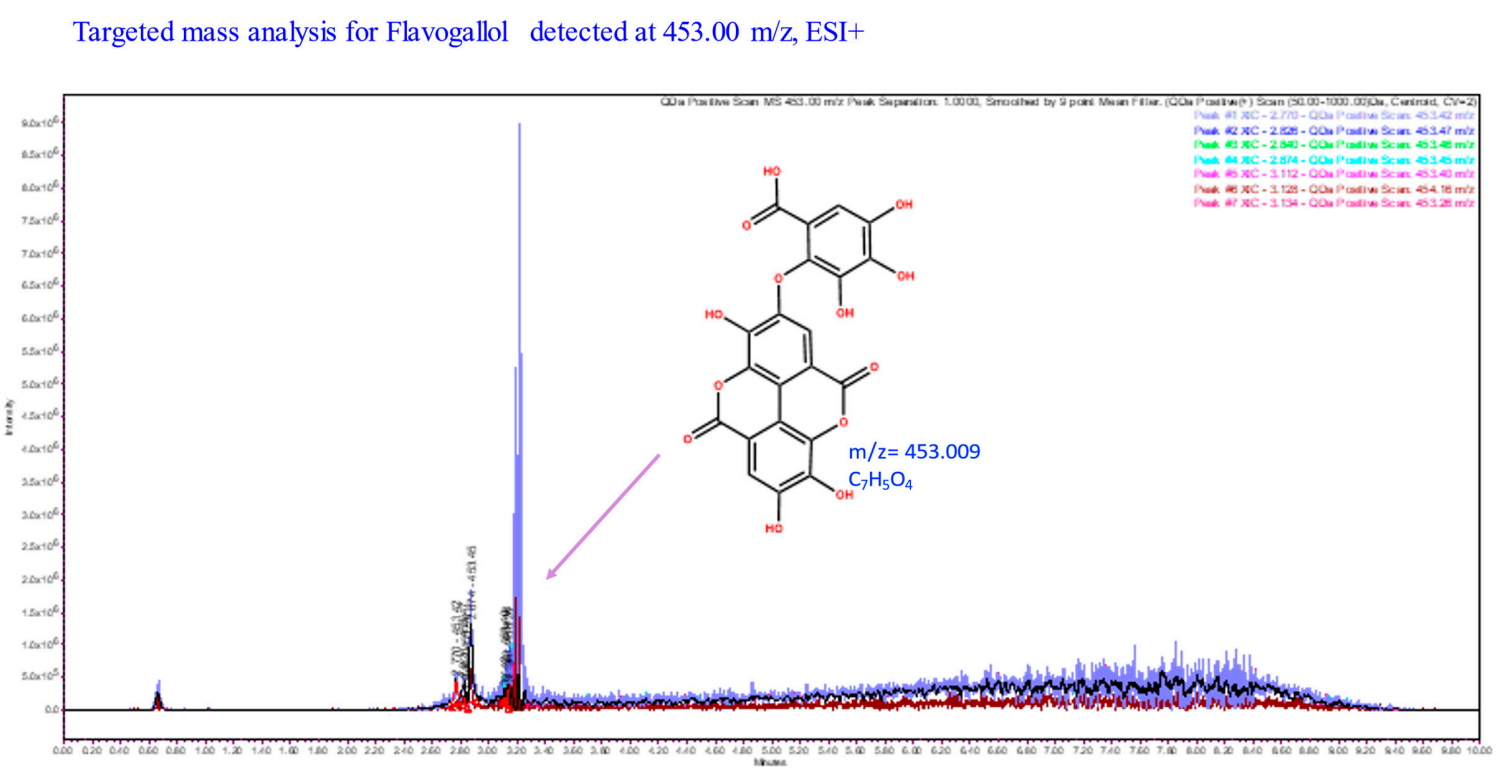
Figure S1. Preliminary fingerprinting: Total Ion Chromatogram, and 3D Chromatogram for Cabernet Sauvignon Malbec wine sample by UPLC-QDa.

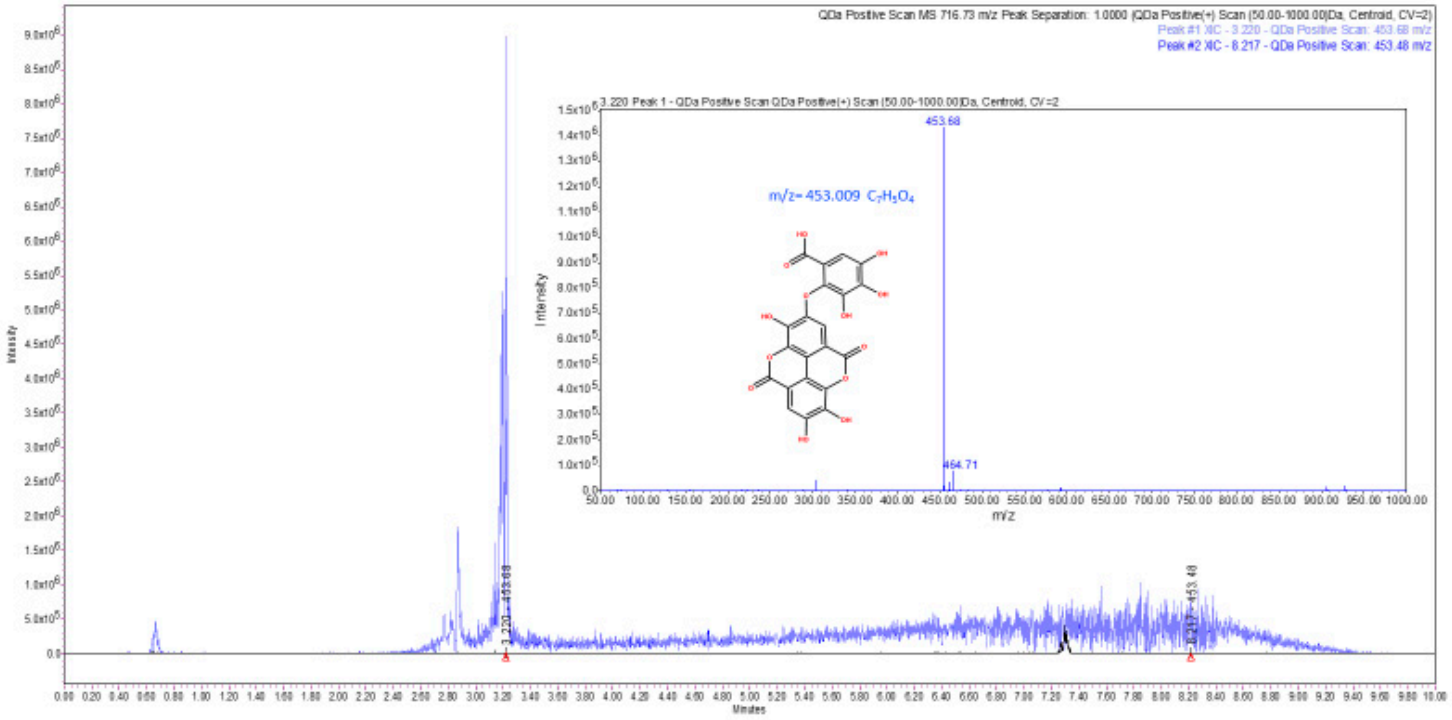
A) Cabernet Sauvignon Malbec wine TOTAL ION CHROMATOGRAM: Exploratory mass scan from 50 -1000 Da,
B) 3D Chromatogram [the x -axis represents time, and y -axis represents signal intensity]

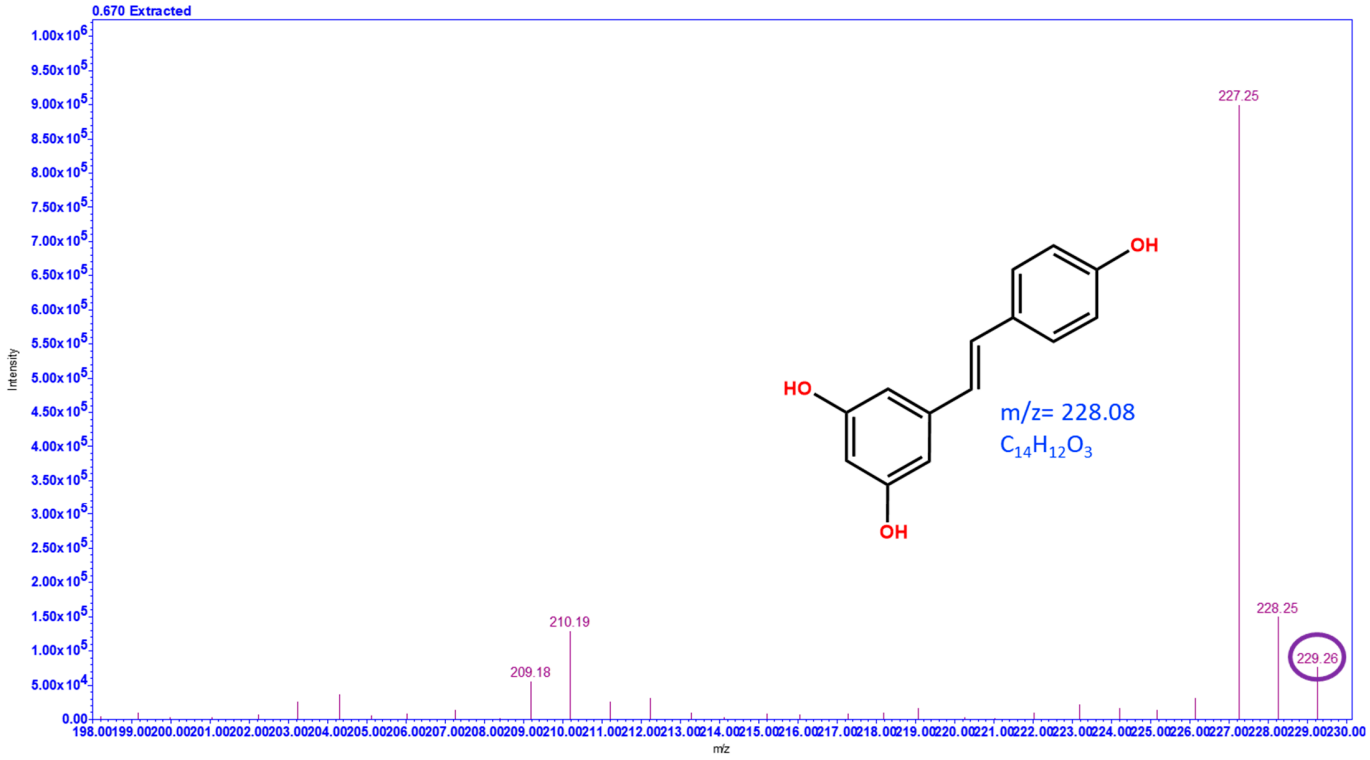


	MASS DETECTED	Compound name targeted
1	116.09 Da	(±)-2-Heptanol, heptan-2-ol
2	229.26 Da	Trans-resveratrol
3	171.21 Da	Gallic acid
4	291.09 Da	(−)-Epicatechin
5	453.65 Da	Flavogallol

Figure S2. Mass spectrum for flavagallol and trans-resveratrol.




QDa Positive Scan MS 716.73 m/z Peak Separation: 1.0000 (QDa Positive(+) Scan (50.00-1000.00)Da, Centroid, CV=2)
Peak #1 XIC - 3.220 - QDa Positive Scan: 453.68 m/z
Peak #2 XIC - 8.217 - QDa Positive Scan: 453.48 m/z
3.220 Peak 1 - QDa Positive Scan QDa Positive(+) Scan (50.00-1000.00)Da, Centroid, CV=2
453.68
464.71
m/z= 453.009 C7H5O4
Intensity
m/z
Minutes


0.670 Extracted
Intensity
m/z
227.25
228.25
229.26
210.19
209.18
HO
OH
OH
m/z= 228.08
C14H12O3