

## Hepatic alterations associated with fine particulate matter exposure.

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### - Supplementary Material -

SM1 - HPLC running parameters.

Parameter	Configuration
Flow	1.500 mL min <sup>-1</sup>
Running Length	23 min
Sample Injection	20 µL
Mobile Phase Gradient	Acetonitrile:Water (67:33) to Acetonitrile (100)
Initial/Final Equilibration Phase	1 min
Pre/Post Colum Temperature	30°C
Flow Cell Temperature	45°C
Flow Cell Sensibility	6

**SM2** - PAHs retention times (min), detection parameters (nm), limits of quantification (ng mL<sup>-1</sup>) and recovery percentage (%).

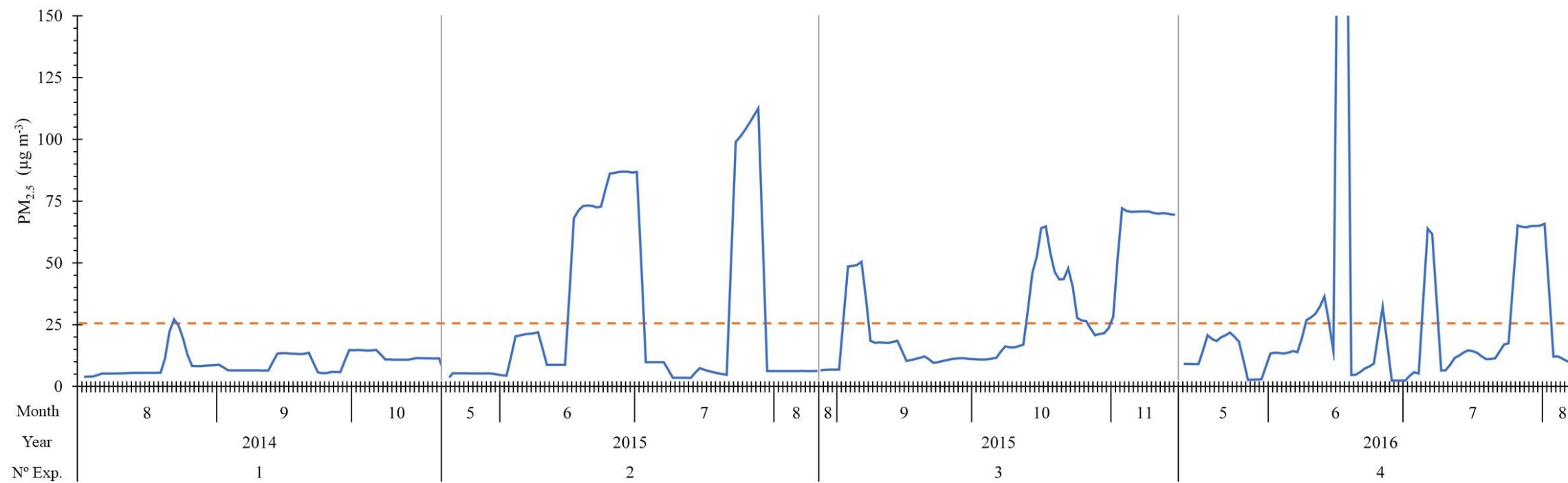
<b>Compound</b>	<b>Retention Time (± 0.150)</b>	<b>Detection*</b>		<b>Limit of Quantification</b>	<b>Recovery Percentage</b>
Naphtalene	4.553	FLD	254/331	0.275	94.2
Acenaphtylene	5.177	UV	254	2.394	103.9
Acenaphtene + Fluorene	6.306	FLD	254/309	0.537	93.4
Phenanthrene	7.116	FLD	254/373	0.280	116.6
Anthracene	7.654	FLD	254/373	0.119	83.9
Fluoranthene	8.867	FLD	254/466	0.143	103.9
Pyrene	9.779	FLD	254/359	0.076	99.8
Benzo[a]anthracene + Chrysene	11.817	FLD	254/389	0.096	83.5
Benzo[b]fluoranthene	14.797	FLD	254/436	0.087	79.1
Benzo[k]fluoranthene	15.243	FLD	254/436	0.066	100.6
Benzo[a]pyrene	16.404	FLD	254/402	0.107	56.8
Dibenzo[a, h]anthracene	17.694	FLD	254/402	0.097	86.3
Indene[1,2,3-c,d]pyrene	19.804	FLD	254/498	0.131	102.7
Benzo[g,h,i]perylene	20.208	FLD	254/498	0.097	93.0

\* FLD, Fluorescence Detection; UV, Ultraviolet Detection. Fluorescence values are expressed as  
Excitation/Emission.

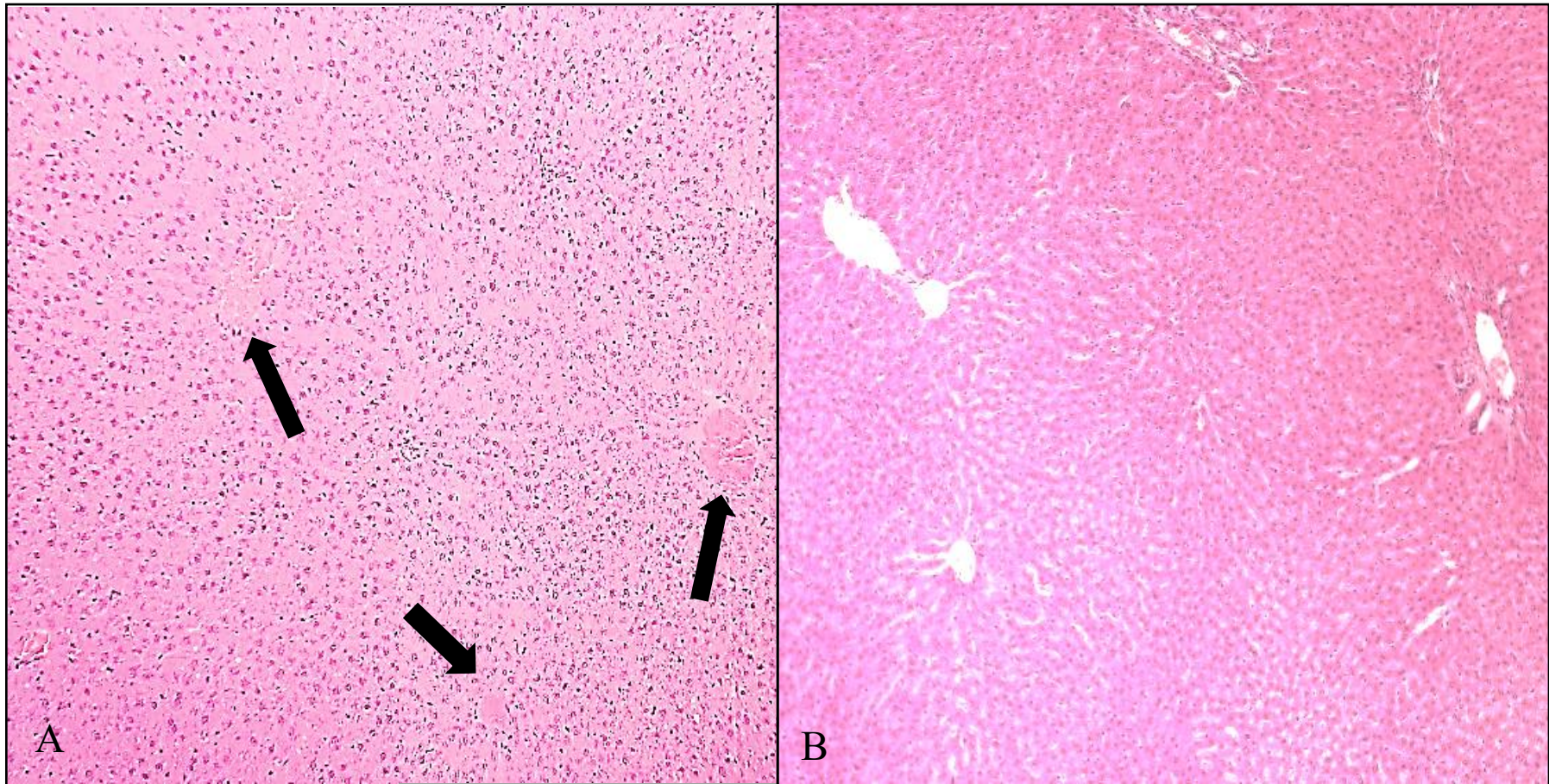
**SM3** - Diagnostic ratios reference values and sources.

<b>Diagnostic Ratio</b>	<b>Value</b>	<b>Source</b>
Flt / (Flt + Pyr)	0.40 - 0.5	Vehicular Traffic
	> 0.5	Coal Combustion
	0.42, 0.52	Road Dust
B[ghi]P / B[a]P	1.2 - 2.2	Diesel Cars
	2.5 - 3.3	Gasoline Cars
	0.86, 0.91	Road Dust
B[b]F / B[k]F	> 0.5	Diesel Cars
	0.21 - 0.22	Gasoline Cars
Ind / (Ind + B[ghi]P)	0.35 - 0.70	Diesel Cars
	0.56	Coal Combustion
	0.62	Wood Combustion
	0.36	Road Dust
Flt / Pyr	> 0.6	Vehicular
(Flt + B[b]F + B[k]F) / B[ghi]P	1.60	Diesel Cars
	0.33	Gasoline Cars
	3.18	Wood Combustion

SM4 - PM<sub>2.5</sub> concentration over the exposure periods. Blue line shows daily concentration and orange dotted line the exposures overall mean.



**SM5** - Vascular congestion of the lobule central vein (H/E, 100x) in a treatment (A) and a control (B) animal. Arrows indicate congested veins.





**SM6** - Carbohydrates distribution (PAS, 100x) in a treatment (A) and control (B) animal. Black arrows show the highest intensity of coloration in the centrilobular vein, indicating a carbohydrates concentration gradient contrary to what was expected. Blue arrow shows the lack of coloration due to the absence of carbohydrates.

