

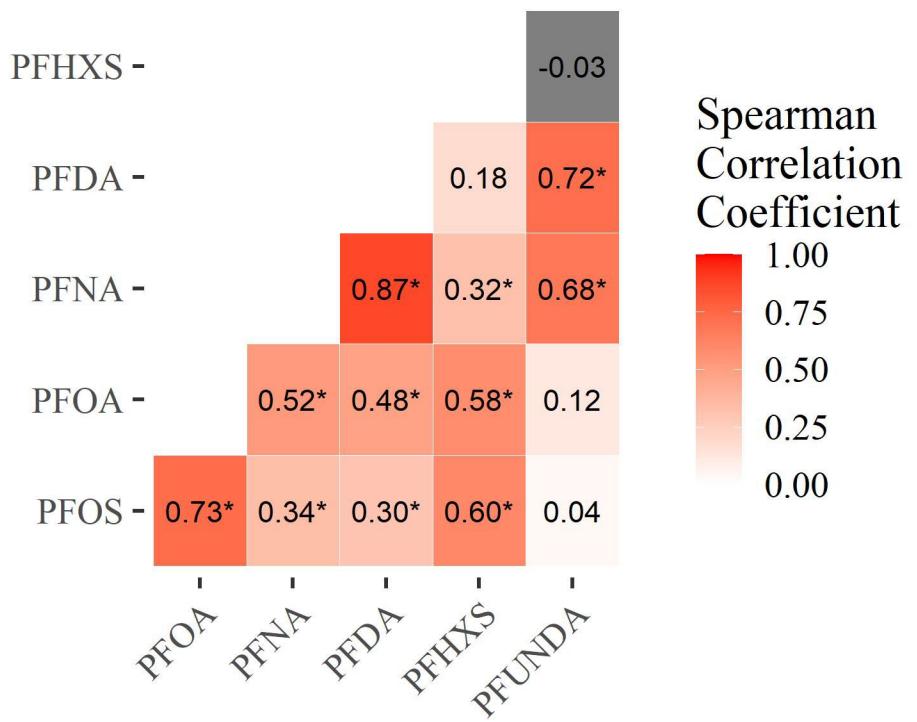
# **Exposure to perfluoroalkyl substances and risk of hepatocellular carcinoma in a multiethnic cohort**

Jesse A. Goodrich, Douglas Walker, Xiangping Lin, Hongxu Wang, Tiffany Lim, Rob McConnell, David V. Conti, Lida Chatzi, Veronica Wendy Setiawan

## Table of contents

Fig. S1.....	2
Table S1.....	3
Table S2.....	4
Table S3.....	5
Table S4.....	6

**Fig. S1.** Correlation between plasma PFAS concentrations at baseline in 50 HCC cases and 50 controls matched on age, sex, ethnicity, and study area from the Multiethnic Cohort.



**Table S1.** Results of sensitivity analysis modeling PFAS as continuous exposures. Odds ratios and 95% confidence intervals for each standard deviation increase in prediagnostic serum concentrations of PFAS and risk of hepatocellular carcinoma in the Multiethnic Cohort.

<b>Chemical Category</b>	<b>PFAS</b>	<b>Odds Ratio (95% CI)</b>	<b>p-value</b>
PFSA's	PFOS	1.20 (0.91, 1.60)	0.18
	PFHxS	1.10 (0.89, 1.50)	0.29
PFCA's	PFOA	0.86 (0.64, 1.20)	0.36
	PFDA	0.95 (0.66, 1.40)	0.76
	PFNA	1.10 (0.81, 1.50)	0.51
	PFUdA	*	*

**Table S2.** Results of sensitivity analysis using ordinary logistic regression and controlling for the matching variables (age, sex, ethnicity, and study site). Odds ratios and 95% confidence intervals evaluating prediagnostic serum concentrations of PFAS levels and risk of hepatocellular carcinoma in the Multiethnic Cohort.

<b>Chemical Category</b>	<b>PFAS</b>	<b>µg/L</b>	<b>Odds Ratio (95% CI)</b>	<b>p-value</b>
PFSA's	PFOS	>54.9	4.40 (1.20, 20.00)	0.03
	PFHxS	>4.3	1.20 (0.38, 3.70)	0.77
PFCA's	PFOA	>8.6	1.20 (0.37, 3.80)	0.78
	PFDA	>0.8	0.85 (0.25, 2.80)	0.79
	PFNA	>1.5	1.20 (0.35, 4.10)	0.79
	PFUdA	>1.2	2.60 (0.77, 9.70)	0.14

**Table S3.** Results of a supplemental analysis adjusting for baseline Body Mass Index (BMI). Odds ratios and 95% confidence intervals evaluating prediagnostic serum concentrations of PFAS levels and risk of hepatocellular carcinoma in the Multiethnic Cohort.

<b>Chemical Category</b>	<b>PFAS</b>	<b>µg/L</b>	<b>Odds Ratio (95% CI)</b>	<b>p-value</b>
PFSA's	PFOS	>54.9	2.90 (0.78, 10.00)	0.11
	PFHxS	>4.3	1.10 (0.44, 2.60)	0.89
PFCA's	PFOA	>8.6	0.86 (0.34, 2.20)	0.75
	PFDA	>0.8	1.00 (0.42, 2.40)	0.99
	PFNA	>1.5	1.50 (0.64, 3.50)	0.35
	PFUdA	>1.2	2.70 (0.92, 7.80)	0.069

**Table S4.** Results of the sensitivity analysis adjusting for baseline Diabetes Mellitus Status. Odds ratios and 95% confidence intervals evaluating prediagnostic serum concentrations of PFAS levels and risk of hepatocellular carcinoma in the Multiethnic Cohort.

Chemical Category	PFAS	µg/L	Odds Ratio (95% CI)	p-value
PFSA's	PFOS	>54.9	5.70 (1.10, 30.00)	0.042
	PFHxS	>4.3	1.60 (0.63, 4.00)	0.32
PFCA's	PFOA	>8.6	1.40 (0.60, 3.40)	0.43
	PFDA	>0.8	0.54 (0.19, 1.50)	0.24
	PFNA	>1.5	1.40 (0.50, 3.70)	0.54
	PFUdA	>1.2	2.50 (0.74, 8.30)	0.14