

**Table S2** The threshold effect of log2-HbEO on LFTs using a two-stage phased regression model

Threshold effect analysis of Ethylene oxide on ALP using the two-piecewise linear regression model

Gamma-glutamyltransferase	Adjusted $\beta$ (95% CI) <i>P</i> value
Fitting by the standard linear model	2.25 (1.63, 2.87)
Inflection point	6.73
Log2 Ethylene oxide<6.73 (pmol/g Hb)	0.54 (-0.47, 1.55) 0.2918
Log2 Ethylene oxide>6.73 (pmol/g Hb)	7.24 (4.83, 9.65) <0.0001
Log likelihood ratio	<0.001

Threshold effect analysis of Ethylene oxide on ALT using the two-piecewise linear regression model

Gamma-glutamyltransferase	Adjusted $\beta$ (95% CI) <i>P</i> value
Fitting by the standard linear model	0.68 (0.23, 1.13)
Inflection point	6.58
Log2 Ethylene oxide<6.58 (pmol/g Hb)	-0.41 (-1.16, 0.35) 0.2884
Log2 Ethylene oxide>6.58 (pmol/g Hb)	3.43 (1.83, 5.03) <0.0001
Log likelihood ratio	<0.001

Threshold effect analysis of Ethylene oxide on AST using the two-piecewise linear regression model

Gamma-glutamyltransferase	Adjusted $\beta$ (95% CI) <i>P</i> value
Fitting by the standard linear model	-0.21 (-0.72, 0.30)
Inflection point	6.62
Log2 Ethylene oxide<7.97 (pmol/g Hb)	-1.82 (-2.67, -0.97) <0.0001
Log2 Ethylene oxide>7.97 (pmol/g Hb)	4.02 (2.16, 5.89) <0.0001
Log likelihood ratio	<0.001

Threshold effect analysis of Ethylene oxide on GGT using the two-piecewise linear regression model

Gamma-glutamyltransferase	Adjusted $\beta$ (95% CI) <i>P</i> value
Fitting by the standard linear model	5.48 (4.22, 6.74)
Inflection point	6.08
Log2 Ethylene oxide<6.08 (pmol/g Hb)	-2.10 (-4.42, 0.23) 0.0769
Log2 Ethylene oxide>6.08 (pmol/g Hb)	17.81 (14.38, 21.23) <0.0001
Log likelihood ratio	<0.001