Supplementary Material

Antitumor effect of *Guatteria olivacea* R. E. Fr. (Annonaceae) leaf essential oil in liver cancer

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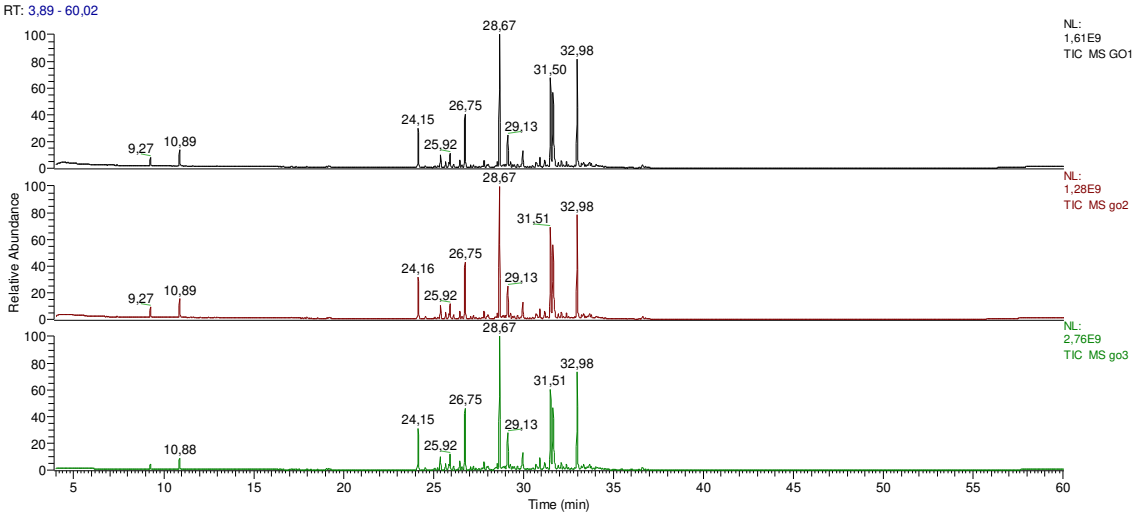
A



B

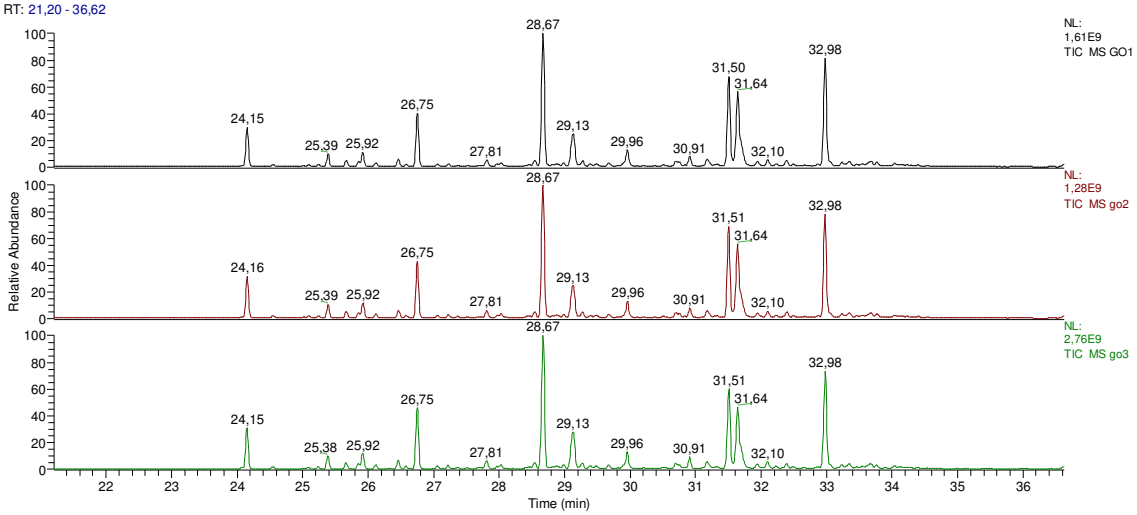


Figure S1. (**A**) Chromatogram of the total ions of *G. olivacea* leaf EO (triplicate); (**B**) Enlargement of the region between 22.0 min to 36.0 min.

Retention time of some main constituents present in the OE:

α-Pinene (9.27 min)	**β-Pinene** (10.89 min)	**δ-Elemene** (24.15; 24.16 min)	**β-Elemene** (25.92 min)
(*E*)-Caryophyllene (26.75 min)	**α-Humulene** (27.81 min)	**Germacrene D** (28.67 min)	**Bicyclogermacrene** (29.13 min)
δ-Cadinene (29.96 min)	**Spathulenol** (31.50; 31.51 min)	**Caryophyllene oxide** (31.64 min)	**1-*epi*-Cubenol** (32.98 min)

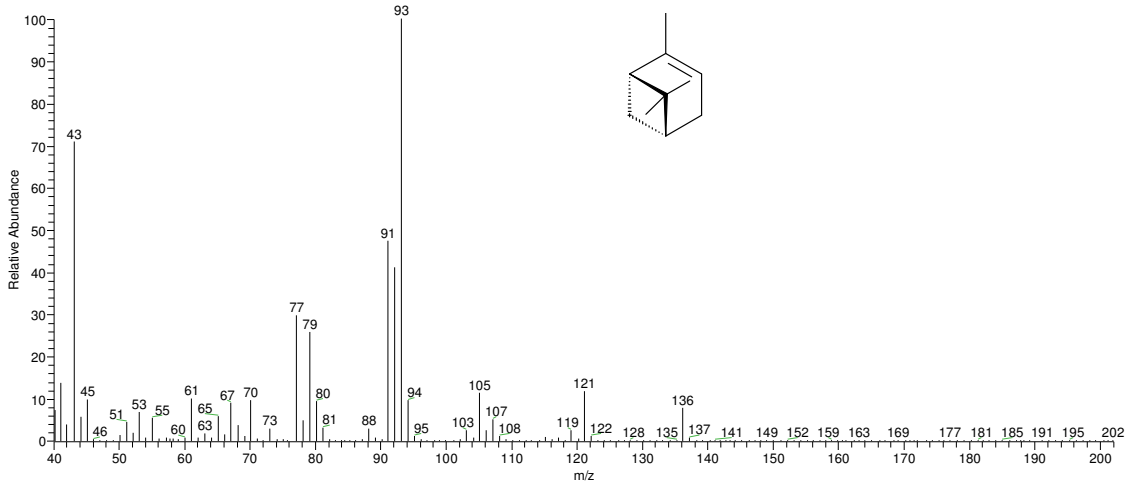


Figure S2. Mass spectrum of α-pinene (t_R 9.27 min).

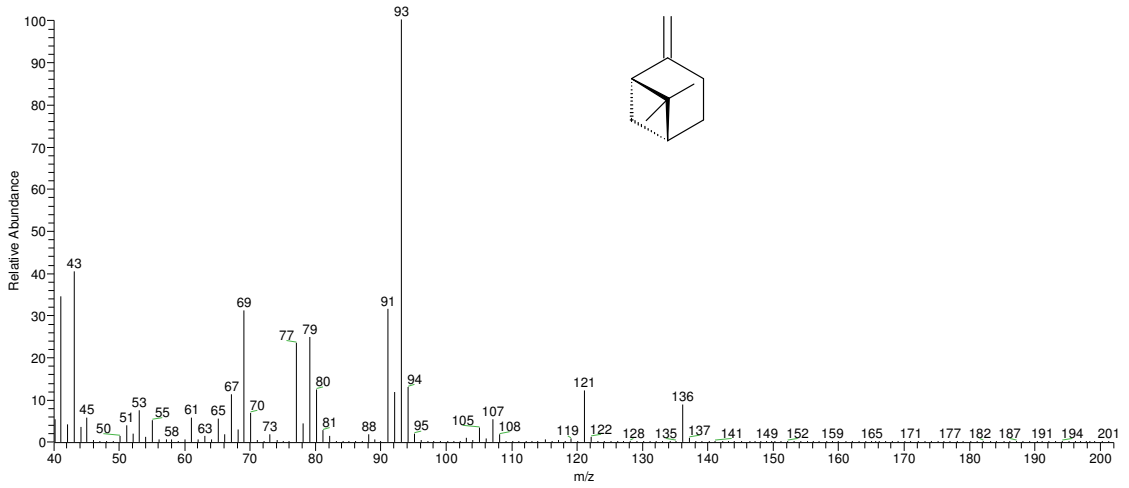


Figure S3. Mass spectrum of β-pinene (t_R 10.89 min).

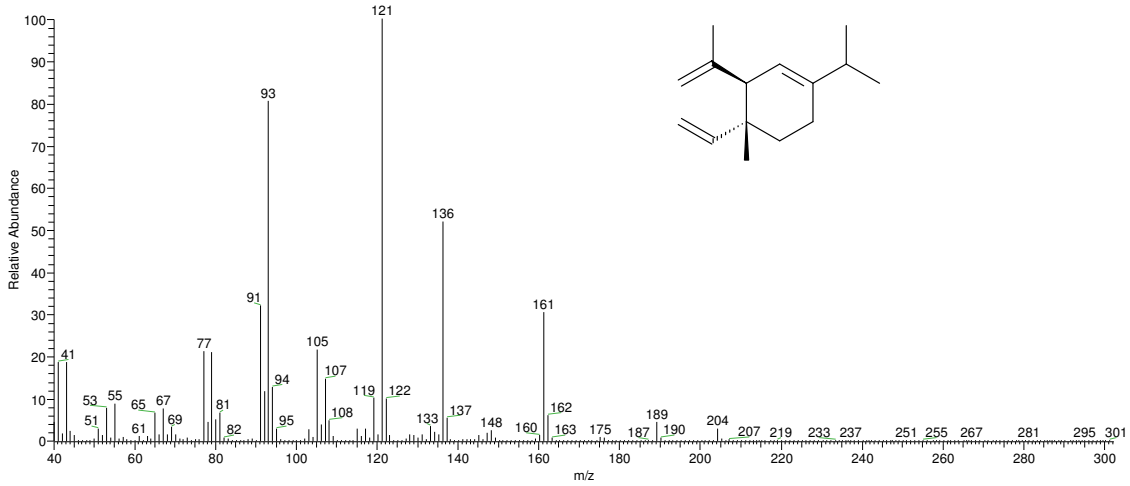


Figure S4. Mass spectrum of δ-elemene (t_R 24.15 min).

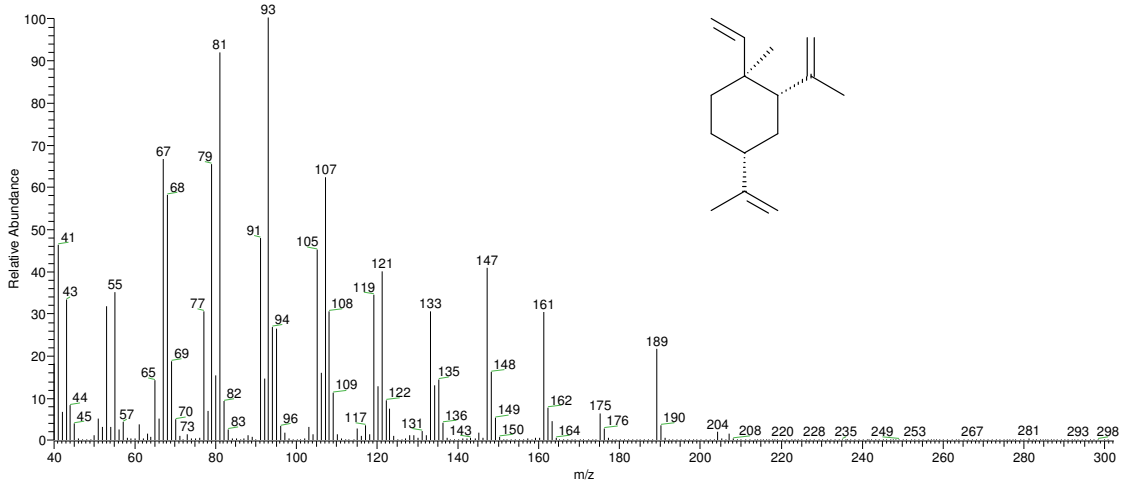


Figure S5. Mass spectrum of β-elemene (t_R 25.92 min).

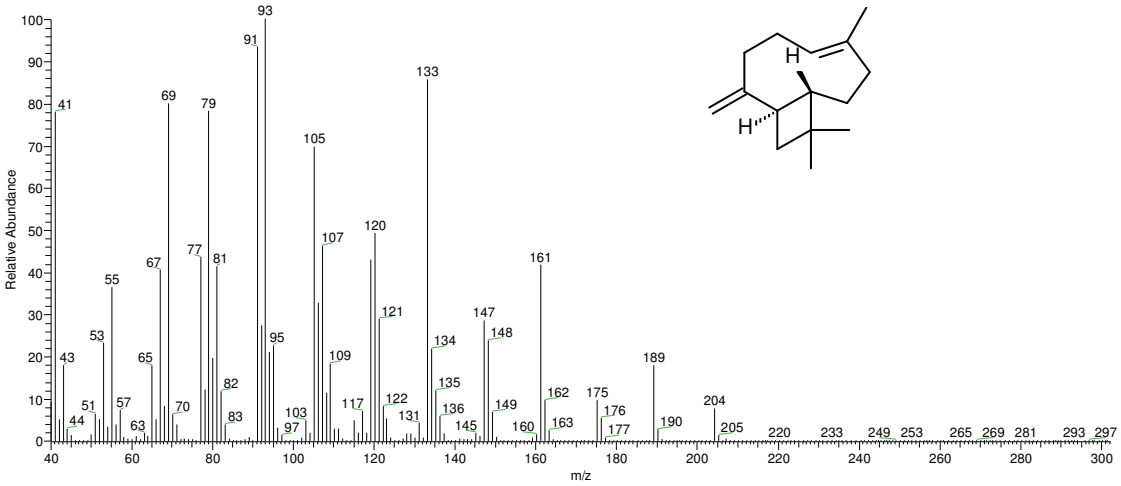


Figure S6. Mass spectrum of (*E*)-caryophyllene (t_R 26.75 min).

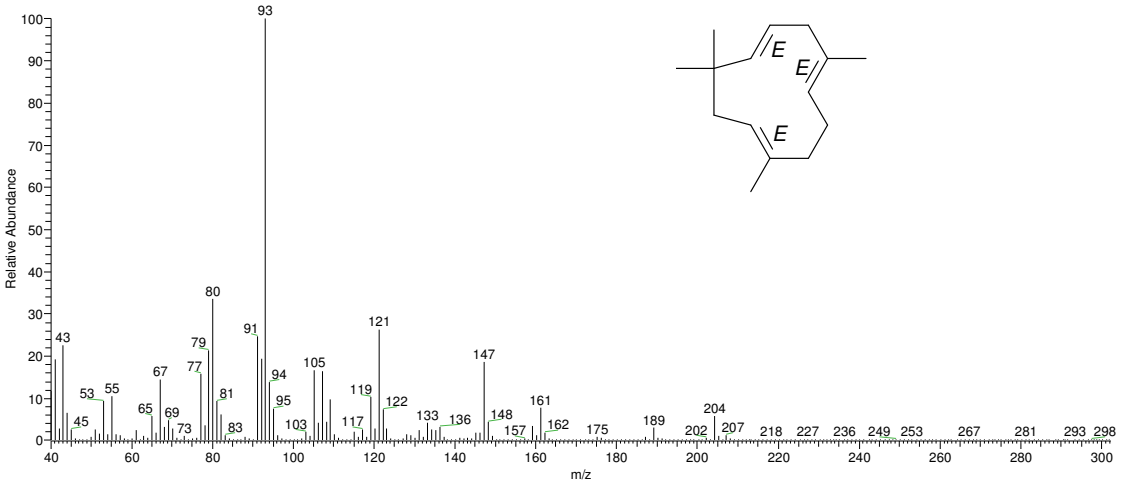


Figure S7. Mass spectrum of α-humulene (t_R 27.81 min).

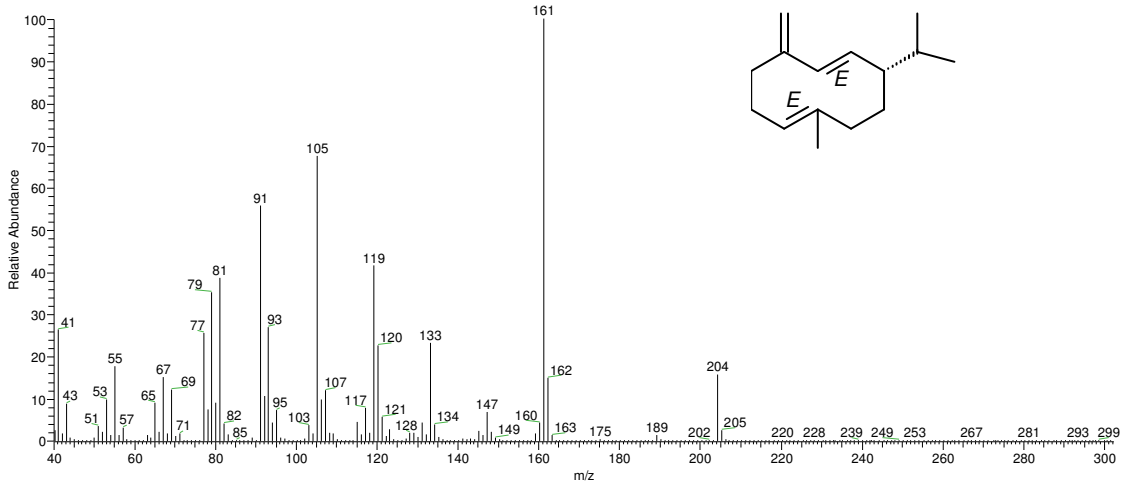


Figure S8. Mass spectrum of germacrene D (t_R 28.67 min).

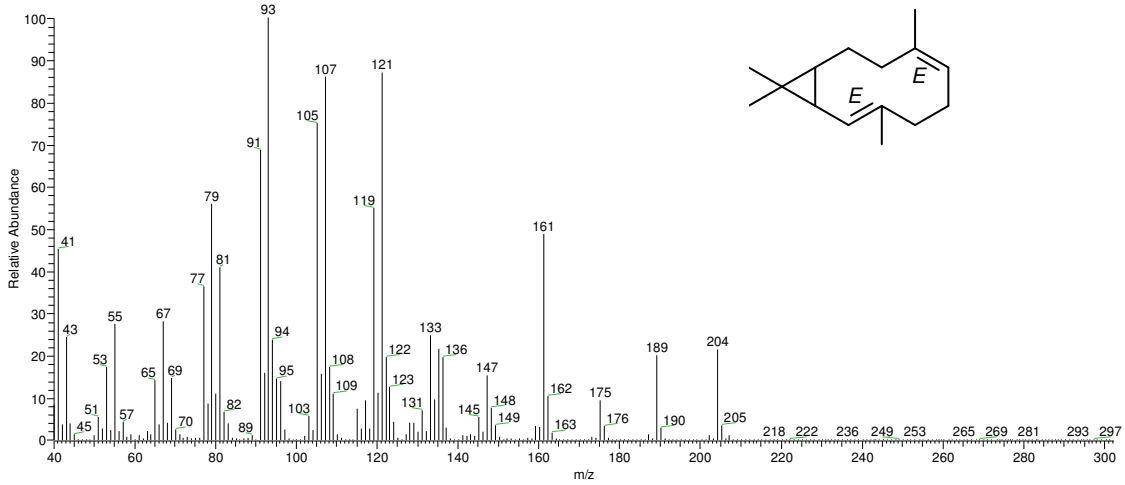


Figure S9. Mass spectrum of bicyclogermacrene (t_R 29.13 min).

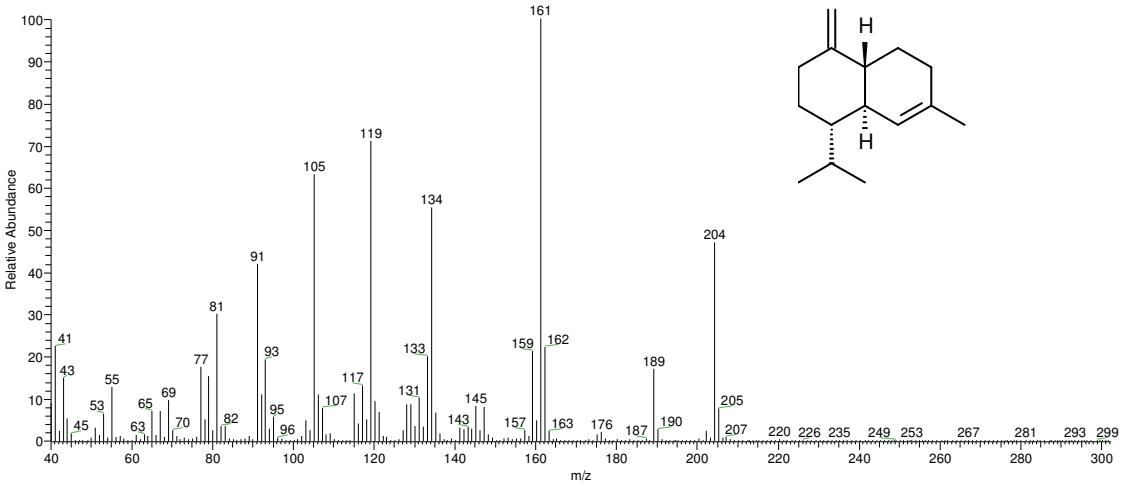


Figure S10. Mass spectrum of δ-cadinene (t_R 29.96 min).

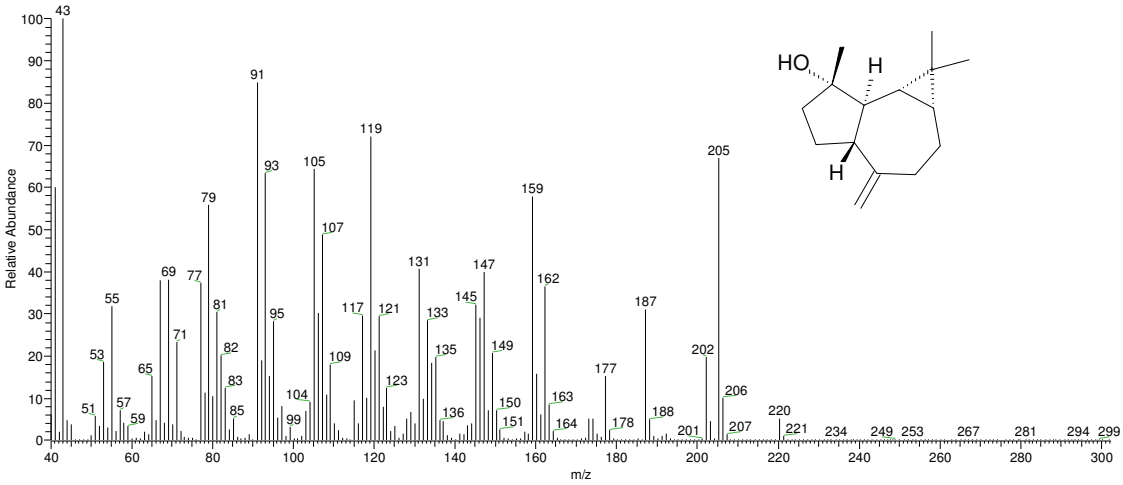


Figure S11. Mass spectrum of spathulenol (t_R 31.51 min).

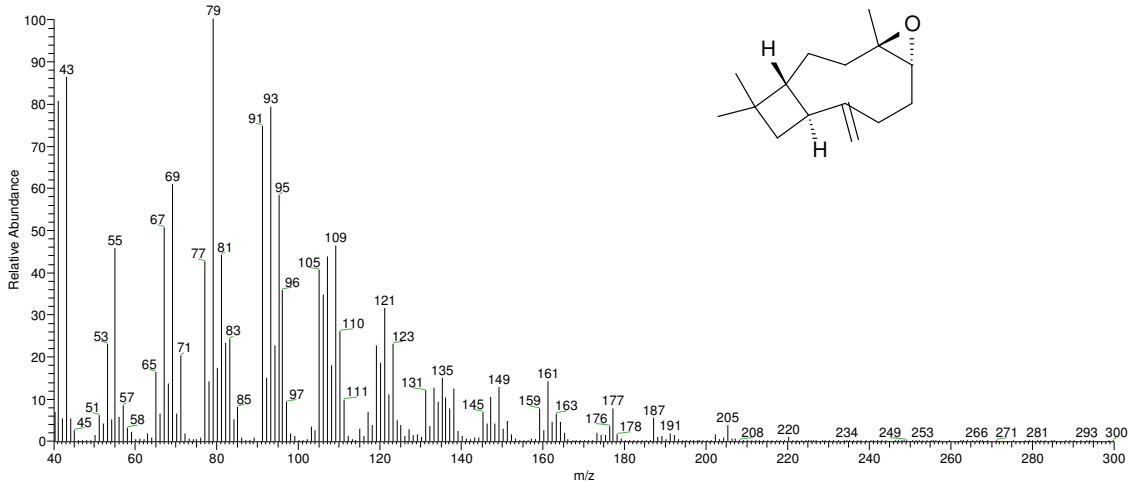


Figure S12. Mass spectrum of caryophyllene oxide (t_R 31.64 min).

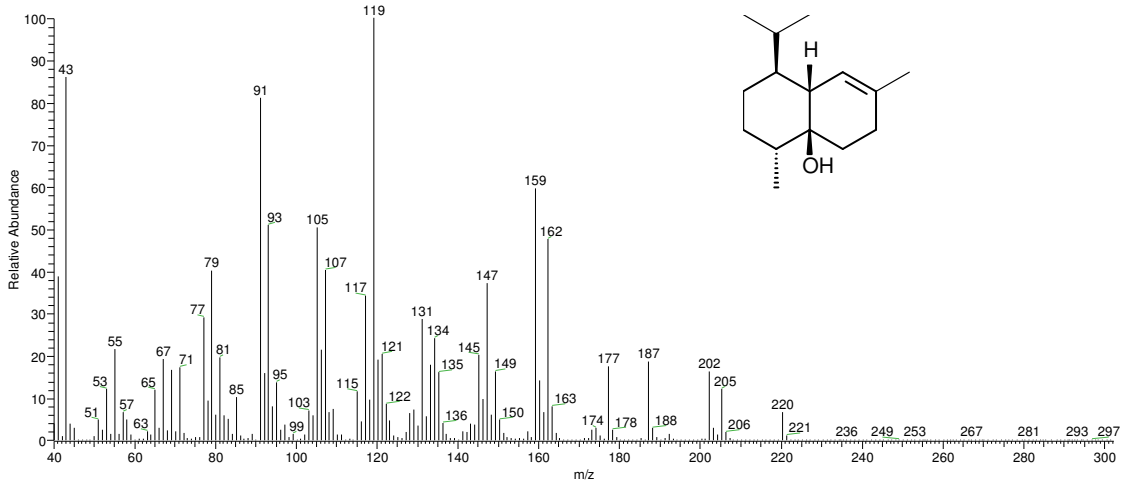


Figure S13. Mass spectrum of 1-*epi*-cubenol (t_R 32.98 min).

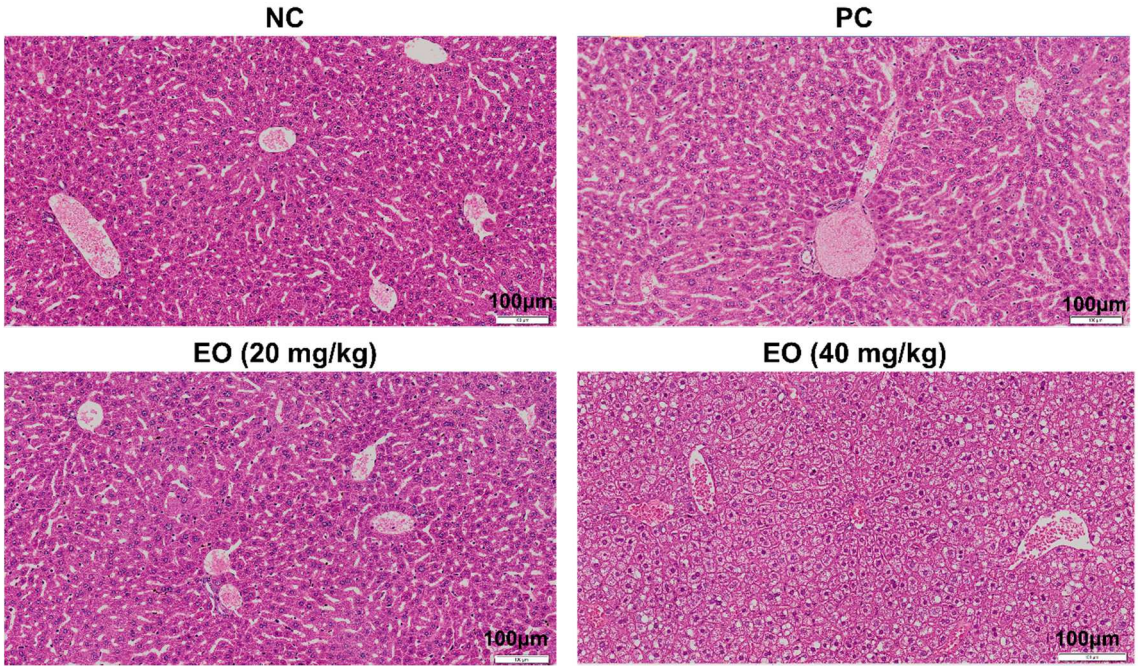


Figure S14. Representative photomicrographs of the livers of the C.B-17 SCID mice with HepgG2 cell xenografts treated with *G. olivacea* leaf EO. Negative control (**NC**) was treated with vehicle (5% DMSO) used for diluting EO, and doxorubicin (0.8 mg/kg) was used as positive control (**PC**).

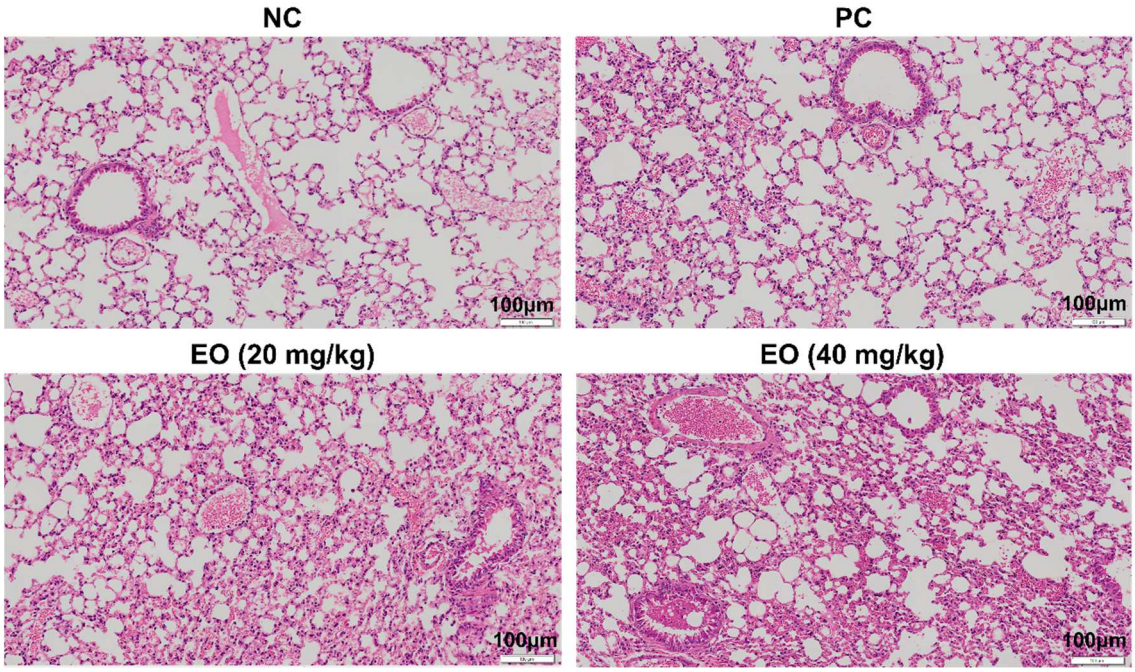


Figure S15. Representative photomicrographs of the lungs of the C.B-17 SCID mice with HepgG2 cell xenografts treated with *G. olivacea* leaf EO. Negative control (**NC**) was treated with vehicle (5% DMSO) used for diluting EO, and doxorubicin (0.8 mg/kg) was used as positive control (**PC**).

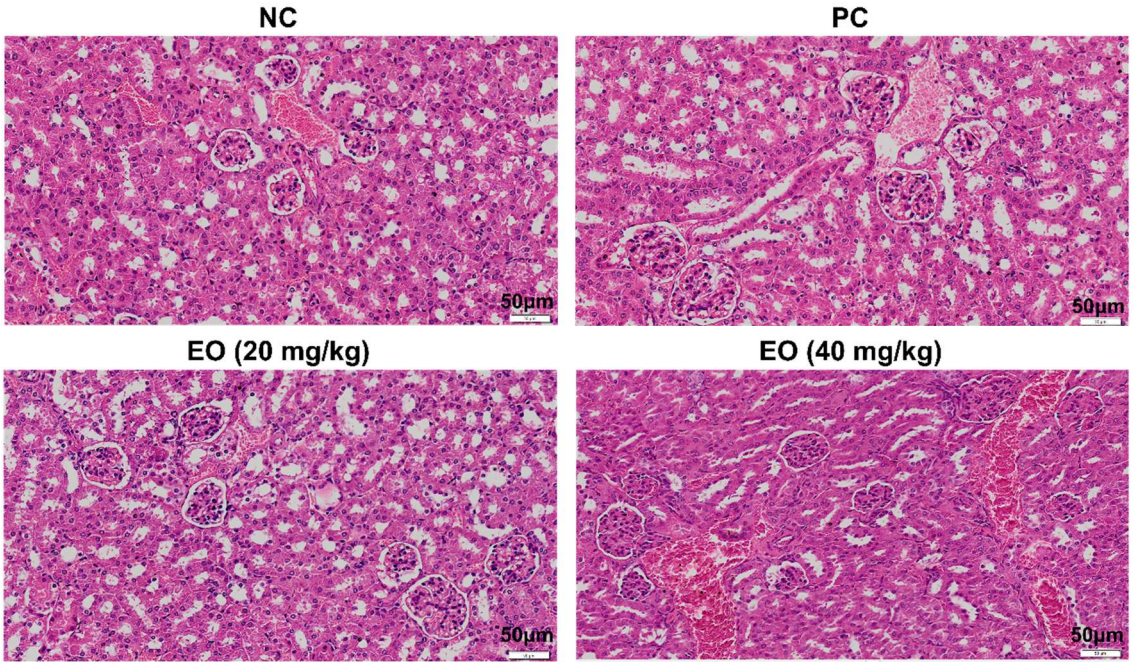


Figure S16. Representative photomicrographs of the kidneys of the C.B-17 SCID mice with HepgG2 cell xenografts treated with *G. olivacea* leaf EO. Negative control (**NC**) was treated with vehicle (5% DMSO) used for diluting EO, and doxorubicin (0.8 mg/kg) was used as positive control (**PC**).