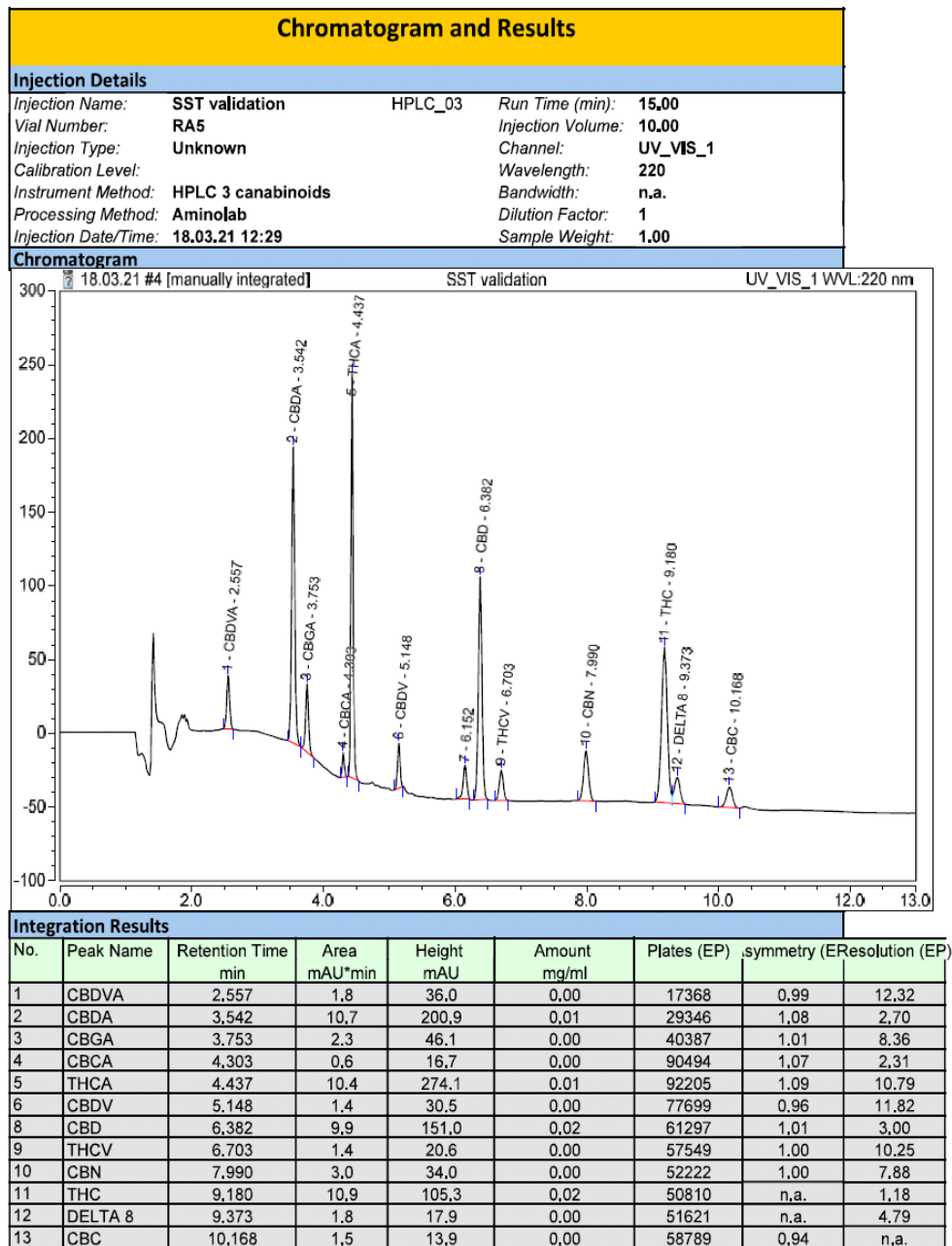


SUPPLEMENTARY ANALYTICAL INFORMATION:

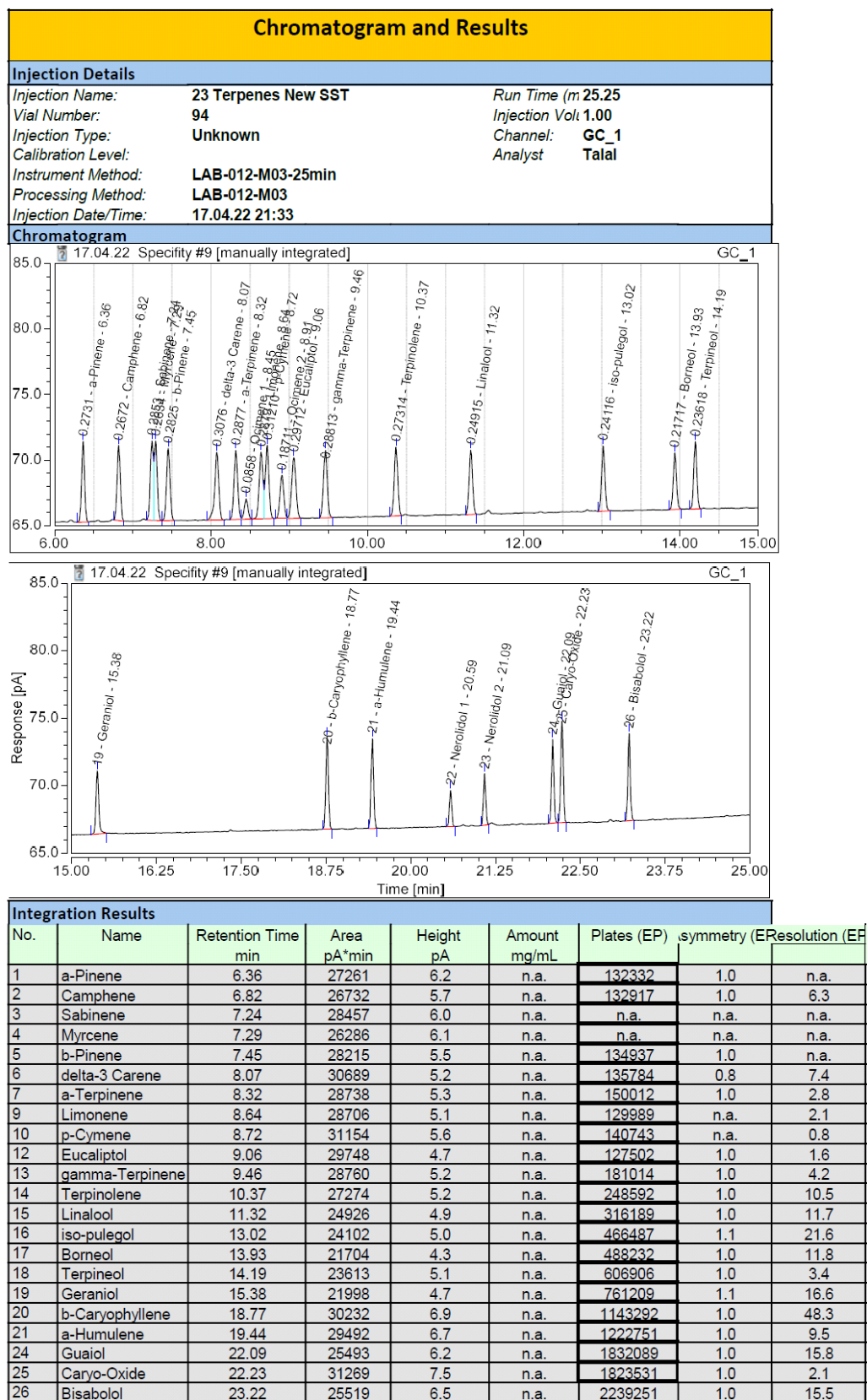
High Performance Liquid Chromatography (HPLC):

Figure S1: HPLC chromatogram – a mixture of cannabinoid standards



Gas Chromatography (GC):

Figure S2: GC chromatogram – Terpene standards



Terpene Standards:

- 1.1 RESTEK Cannabis Terpenes Standard #1, Catalog No.34095 lot.N0#.: A0172649, Exp. date: May 31, 2023 and lot #A0172251 Exp. date: May 31, 2023 , 2500 µg/mL, Isopropanol, 1mL/ampule.
- 1.2 RESTEK Cannabis Terpenes Standard #2 Eucalyptol, Caryophyllene Oxide - (2 components) Catalog No.34095 lot.N0#.: A0172649
- 1.3 MERCK Supelco (+)-Borneol standard solution 2000 µg/mL, Cat. #CRM40901, Lot#LRAD0679, Exp. date:31/10/2024
- 1.4 RESTEK Alpha Terpineol standard solution 2000 µg/mL, Cat. #33912, Lot #A0180139, Exp. date. 09/2024
- 1.5 Sabinene, Phyto Lab cat#82343

SUPPLEMENTARY STATISTICAL INFORMATION:

Statistical analysis

An independent samples t-test analysis was conducted with a significance level of 0.05.

Statistical analyses were performed with SPSS 20.0 software (IBM Corp., Armonk, N.Y.).

Terpene content in commercial medical cannabis inflorescences and olive-diluted cannabis extracts (Data presented in Figure 3). An independent samples t-test was performed on three variables: total MONO terpenes, total SESQUI terpenes and total terpenes with one between-subjects variable – type of product (cannabis inflorescences and cannabis diluted extracts).

Terpene content in inflorescences and decarboxylated extracts produced from them (Data presented in Figure 4). An independent samples t-test was performed on 30 variables: 27 individual terpenes, total MONO terpenes, total SESQUI terpenes and total terpenes, with one between-subjects variable – type of product (cannabis inflorescences and cannabis decarboxylated extract). For the purpose of statistical analysis, cases having terpene content of below quantification limit (<200 ppm) were treated as having terpene content of 190 ppm; Terpenes with RT shorter than the RT of β -caryophyllene were regarded within the Total MONO (monoterpenes and monoterpenoids) group, terpenes with RT similar to or longer than that of β -caryophyllene were regarded within the Total SESQUI (sesquiterpenes and sesquiterpenoids) group.

Table S1: Comparisons between individual terpene content in ten inflorescences and decarboxylated extracts produced from them.

	<u>Inflorescences</u>		<u>Decarboxylated extracts</u>		df	t	p	Cohen's d
	M	SD	M	SD				
α -Pinene	1.07	1.61	0.05	0.29	9.01	2.01	p>0.05	0.90
Camphene	0.13	0.28	0.05	0.45	18.00	4.83	p<0.001	2.16
Sabinene	0.13	0.28	0.05	0.45	18.00	4.83	p<0.001	2.16
β -Pinene	0.38	0.34	0.11	0.19	18.00	2.17	p<0.05	0.27
Myrcene	1.51	1.20	0.20	0.52	12.23	3.18	p<0.01	0.97
Carene	0.13	0.28	0.05	0.45	18.00	4.83	p<0.001	2.16
Ocimene	0.13	0.33	0.05	0.45	18.00	4.37	p<0.001	1.96
Limonene	0.78	0.05	0.10	0.15	9.66	2.78	p<0.05	1.24
Terpinolene	0.13	0.28	0.05	0.05	18.00	4.69	p<0.001	2.10
Linalool	0.24	0.16	0.27	0.14	18.00	-0.46	p>0.05	-0.20
RT 13.0*	0.23	0.11	0.18	0.14	18.00	0.79	p>0.05	0.36
RT 14.7*	0.15	0.06	0.11	0.08	18.00	1.41	p>0.05	0.63
Terpineol	0.17	0.09	0.10	0.08	18.00	1.82	p>0.05	0.81
Geraniol	0.14	0.28	0.05	0.45	18.00	4.86	p<0.001	2.16
RT19.1*	0.15	0.05	0.07	0.05	18.00	3.28	p<0.01	1.47
β -Caryophyllene	1.72	1.02	1.34	0.45	12.32	1.09	p>0.05	0.49
α -Humulene	0.48	0.27	0.39	0.13	12.92	0.96	p>0.05	0.43
RT 20.2*	0.26	0.40	0.25	0.35	18.00	0.04	p>0.05	0.02
RT 20.4*	0.20	0.11	0.14	0.07	18.00	1.33	p>0.05	0.60
RT 20.7*	0.14	0.03	0.12	0.04	18.00	1.22	p>0.05	0.55
RT 20.8*	0.16	0.10	0.09	0.05	18.00	1.87	p>0.05	0.23
RT 20.9*	0.29	0.16	0.29	0.20	18.00	-0.12	p>0.05	0.83
RT 21.0*	0.39	0.41	0.33	0.32	18.00	0.37	p>0.05	0.06
Nerolidol	0.16	0.06	0.09	0.06	18.00	2.15	p>0.05	0.17
Guaiol	0.25	0.17	0.02	0.21	18.00	0.31	p>0.05	0.14
Eudesmol*	0.26	0.18	0.24	0.23	18.00	0.23	p>0.05	0.10
Bisabolol	0.86	0.46	0.79	0.56	18.00	0.28	p>0.05	0.13

Data for *Total Terpenes*, *Total MONO* and *Total SESQUI* is presented in the main text.