file_path	sentence	ction entities	labels	position_start	position_end	abbreviations	abbreviations_longform abbreviation_st	_start abbreviation_e
22 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/0_front/1_article-meta/16_abstract.xm	Interestingly, opuntiol pretreatment inhibited UVA-induced activation of iNOS, VEGF, TNF- a , and COX-2 proteins and consequent activation of MMP-2, MMP-9, and MMP-12 in the mouse skin.	3S TNF-	CHEMICAL	85	8	9		
3458 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/3_4discussion/3_p.xml	Further, UVA radiation-mediated MAPK signaling activates NF- K B and AP-1 to liberate inflammatory cytokines and mediators such as COX-2, TNF- a, VEGF, INOS, and IL-6 36.	S UVA, TNF-	CHEMICAL, CHEMICAL	9, 138	12, 142			
3460 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/3_4discussion/3_p.xml	In this present work, opuntiol inhibited inflammatory responses by downregulating the expression of COX-2, TNF- a, VEGF, INOS, and IL-6 in UVA-exposed mouse skin.	S TNF-	CHEMICAL	107	11	1		
3461 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/3_4discussion/3_p.xml	We previously reported that a -pinene, a naturally occurring phytochemical, suppresses UVA-induced inflammatory mediators such as COX-2, TNF- a, VEGF, iNOS, and IL-6 in the mouse skin 25.	S -pinene, TNF-	CHEMICAL, CHEMICAL	31, 138	38, 142			
3479 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/3_4discussion/4_p.xml	The photoaging process has specifically been triggered by several proinflammatory mediators such as prostaglandin E2 (PGE2), COX-2, INOS, TNF- α, IL-1 β, and IL-6 receptors 39.	S prostaglandin E2, TNF-	CHEMICAL, CHEMICAL	100, 138	116, 142	PGE2	prostaglandin E2	16
6649 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/3_floats-group/5_fig.xml	(a) The expression pattern of IL-6, TNF- a, COX-2, INOS, and VEGF was analyzed by immunohistochemistry. F	G TNF-	CHEMICAL	36	4	0		
6651 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/3_floats-group/5_fig.xml	Representative photomicrographs (20x) illustrate IL-6, TNF- q, COX-2, iNOS, and VEGF expression in the mouse skin. F	G TNF-	CHEMICAL	55	5	9		
6652 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/3_floats-group/5_fig.xml	(b) Densitometry analysis of IL-6, TNF- a, COX-2, iNOS, and VEGF expression in UVA and/or opuntiol-treated mouse skin. F	G TNF-, UVA	CHEMICAL, CHEMICAL	35, 80	39, 83			
7352 /Users/emanuelfarruda/venv/phytomed100/PMC7646887/sections/3_floats-group/3_fig.xml	(A) mRNA expression levels of IL-19, IL-4, IL-6, TNF-a and MCP-1 were measured via reverse transcription-quantitative PCR. F	G TNF-a	DISEASE	49	5	4		
7353 /Users/emanuelfarruda/venv/phytomed100/PMC7646887/sections/3_floats-group/3_fig.xml	(B) Protein expression levels of IL-16, IL-4, IL-6, TNF-q and MCP-1 were measured using ELISAs in skin tissue homogenate supernatants.	G TNF-a	DISEASE	52	5	7		
7634 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/0_1introduction/3_p.xml	Moreover, tumor necrosis factor- α (TNF- α) and interleukins are critically involved in NF- κ B-dependent inflammatory reaction during UVA radiation-associated photoaging 17.	T tumor necrosis, TNF-, UVA radiation-associated	DISEASE, CHEMICAL, CHEMICAL	10, 37, 137	24, 41, 161			
1187 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/2_3_results/6_3.6opuntiol_p	Opuntiol on UVA-exposed expression of inflammatory proteins such as IL-6, TNF- a, COX-2, INOS, and VEGF was assessed by immunohistochemistry analysis.	ES TNF-	CHEMICAL	74	7	8		
1188 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/2_3_results/6_3.6_opuntiol_p	UVA (100.//cm 2 )-irradiated mouse skin sections clearly show increased expression of IL-6, TNF- a , COX-2, INOS, and VEGF evidenced by higher brown color staining in the skin sections.	ES UVA, TNF-	CHEMICAL, CHEMICAL	0, 92	3, 96			
1188 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/2_3results/6_3.6opuntiol_p	topical treatment prevented the UVA-mediated expression of IL-6, TNF- a, COX-2, INOS, and VEGF proteins in the mouse skin (Figure 6).	ES TNF-	CHEMICAL	65	6	9		
1209 /Users/emanuelfarruda/venv/phytomed100/PMC7703918/sections/1_body/2_3_results/3_3.3effect_of_	TNF-a levels in G2-G5 were: 83.55 ± 4.313, 76.95 ± 13.22, 60.50 ± 4.384, and 99.25 ± 0.91 pg/mL.	ES TNF-α	DISEASE	C		5		
1373 /Users/emanuelfarruda/venv/phytomed100/PMC9230602/sections/4_floats-group/17_table-wrap/3_table.	Yang (2017) 116 Dictarmi Radicis Cortex -DNFB-induced CD mice Fraxinellone -Reducing the levels of TNF-o, IFN-y, and IL-6 in inflamed tissues -Inhibiting enlargement of dorsal skin and prevented epidermal hyperplasia, T	B Fraxinellone, hyperkeratosis, spongiotic, petechiae, erythema, nitric oxide, interleukin-6, tumor	r CHEMICAL, DISEASE, DISEASE, DISEASE, DISEASE, CHEMICAL, CHE	N 66, 222, 242, 348, 371, 742, 765,	7 78, 236, 252, 357, 379, 754, 778,	, 7 IкB	inhibitor of KB	158
1476 /Users/emanuelfarruda/venv/phytomed100/PMC9369191/sections/2_body/1_2results_and_discussion/8	LC-MS Metabolomics of Psoriasis Patients Reveals Disease Severity Dependent Increases in Circulating Amino Acids That Are Ameliorated by Anti-TNFa Treatment. T	B Psoriasis, Anti-TNFα	DISEASE, DISEASE	22, 137	31, 146			
1527 /Users/emanuelfarruda/venv/phytomed100/PMC9218575/sections/2_body/3_meta-analysis_of_curcumin	(27) MS and its components, NAFLD, and coronary vascular artery Systematic review and meta-analysis, 15 RCTs were included IL-6   * hscrp   * MDA   * TNF-alpha SOD Fasting plasma glucose   Significant Significant \$	B NAFLD, MDA, TNF-alpha, glucose	DISEASE, CHEMICAL, CHEMICAL, CHEMICAL	30, 144, 152, 181	35, 147, 161, 188			
1529 /Users/emanuelfarruda/venv/phytomed100/PMC9218575/sections/2_body/3_meta-analysis_of_curcumin	TNF-a * Significant 12 >50%, P < 0.05 • Bio-enhanced curcuminoids led to the greatest reduction of TNF-a compared to bio-enhanced curcumin Gorabi et al. T	B TNF-α, curcumin	DISEASE, CHEMICAL	103, 134	108, 142			
1529 /Users/emanuelfarruda/venv/phytomed100/PMC9218575/sections/2_body/2_preclinical_studies/2_table-	Compound Model Dose Mechanism of action References Curcumin 3T3-L1 preadipocytes High dose: >30 µM High dose curcumin generates preadipocyte apoptosis in a time- and dose-dependent manner and c	B Curcumin, curcumin, curcumin, Curcumin, curcumin, curcumin, cardiac injury, inflammation, cu	Ir CHEMICAL, CHEMICAL, CHEMICAL, CHEMICAL, CHEMICAL, CHEMIC	A 71, 129, 289, 559, 617, 661, 695,	7 79, 137, 297, 567, 625, 669, 709,	, 7 C/EBP, UCP, elF	2 CCAAT/enhancer-binding protein, Uncoupling Protein, eukaryotic translation initiation facto 77, 140, 207	78, 141, 208
1529 /Users/emanuelfarruda/venv/phytomed100/PMC9218575/sections/2_body/2_preclinical_studies/2_table-	(60) Curcumin Skeletal muscle C2C12 cells 5, 20, and 40 µM Curcumin exhibits anti-inflammatory activity in C2C12 cells via suppressing the JNK and NF-KB pathways and reducing oxidative stress (61) Curcumin PCOS T	B Curcumin, Curcumin, Curcumin PCOS, Curcumin, Curcumin, Curcumin, weight loss, malondia	CHEMICAL, CHEMIC	A 7, 61, 203, 256, 333, 414, 559, 68	9 15, 69, 216, 264, 341, 422, 570,	704, 779, 805, 844,	886, 942, 964, 986, 1052, 1077, 1185, 1233	
1532 /Users/emanuelfarruda/venv/phytomed100/PMC9516400/sections/2_body/2_results/43_table-wrap/2_tab	2002 🕨 ) Anti-apoptotic effect Rat 20, 50 or 100 mg/kg; per oral Naringin protected kidney function, reversed the decrease in the activity of antioxidant enzymes, and suppress increases in nitrite, TNF-a and TBARS levels.	B Naringin, nitrite, TNF-a	CHEMICAL, CHEMICAL, DISEASE	66, 190, 199	74, 197, 204			
1636 /Users/emanuelfarruda/venv/phytomed100/PMC9002489/sections/4_floats-group/10_table-wrap/3_table	and PLSN induced pain in mice 1 mechanical and thermal hyperalgesia 1 gliosis, † IL-10, 1 TNF-a. 79 a-Bisabolol 25 or 50 mg/kg, p.o 1 h before the local injection of inducing agents Formalin (20 µL of 2% s.c.), capsaicin T.	B pain, hyperalgesia, p.o, capsaicin, glutamate, pleurisy, orofacial pain, TNF-α	DISEASE, DISEASE, CHEMICAL, CHEMICAL, CHEMICAL, DISEASE, DI	5 17, 55, 132, 215, 252, 370, 389, 4	0 21. 67. 135. 224. 261. 378. 403.	411		