Supplementary Table: Summary of results

(A) *Cannabis* extracts

Reference	Form of extracts	Bacterial strains	Effects
Sangkanu et al. [12]	Pressed *Hemp* seed oil, ethanolic and hexanoic extract of the marc from two Thai and two foreign *Hemp* species	*Staphylococcus aureus* (ATCC 29523), *Staphylococcus epidermidis* (TISTR 517), *Cutibacterium acnes* (DMST 14916), methicillin-resistant *S. aureus* (MRSA: DMST 20654), *Pseudomonas aeruginosa* (ATCC 27853), *Escherichia coli* (ATCC 25922)	- MICs of 128-256 μg/mL of oil against Gram-positive strains - ethanolic and hexanoic marc extracts with MICs from 128 to >2048 μg/mL against Gram-positive strains - MBCs mostly >2048 μg/mL, except for *C. acnes* with MBCs equal to (marc extracts) or two-fold higher (oil) than MICs - No effects on Gram-negative strains
Vozza Berardo et al. [13]	*Cannabis sativa* resins	*Bacillus thurigensis* H14, *Micrococcus luteus*, *E. coli* (RP437), *Pseudomonas protegens*	- significantly high reduction of growth rates of Gram-positive strains (1-4 μg/mL) - moderately reduced growth rates of *E. coli* at 2-4 μg/mL - no significant effects against *Pseudomonas protegens*
Chakraborty et al. [14]	Ethanolic extract of dried leaves	Ten clinical and ten non-clinical MRSA isolates	- greater zones of inhibition than common antibiotics in some strains - enhanced effect when combined with extracts of *Thuja orientalis* and *Psidium guajava*
Zengin et al. [15]	*Hemp* essential oils	*S. aureus* (ATCC 29213), *S. aureus* 101, *S. aureus* 104, *S. aureus* 105; all clinical isolates	MICs at 8 mg/mL and MBCs of 16 mg/mL for all strains, MBECs of 16 to 24 mg/mL
Armassa et al. [16]	Ethanolic leaf and stem extracts	*Enterococcus faecalis, Burkholderia pseudomallei, Proteus mirabilis, Acinetobacter baumannii,* MDR *Klebsiella pneumoniae, Stenotrophomonas maltophilia, Pseudomonas aeruginosa* 101	- Leaf extract with MICs of 1.56 mg/mL (*S. maltophilia),* 3.12 mg/mL (*P. mirabilis*), 12.5 mg/mL (*B. pseudomallei*) and 6.25 mg/mL (others). - MBCs mostly two-fold higher - all MICs and MBCs of stem extracts equal to or two-fold higher than for leaf extracts, except for *S. maltophilia* (MIC of 0.78 mg/mL)
Muscarà et al. [17]	Acetic acid / hexane extract of dried flowering tops	*P. aeruginosa* (ATCC 9027), *E. coli* (ATCC 10536) *S. aureus* (ATCC 6538), 19 clinical MRSA isolates	- *S. aureus* (ATCC 6538): MIC of 39.06 μg/mL and MBCs of 39.06-78.12 μg/mL -MRSA isolates presented a MIC_{50} value at 19.53 μg/mL and a MIC_{90} equal to the *S. aureus* MIC - Gram-negative strains not affected (MICs >2500 μg/mL)

Malikova et al. [18]	Ethanolic *Cannabis* extracts across the whole vegetation cycle and under various nutritional treatments	*S. aureus* (ATCC 29213 and ATCC 43300)	- no significant difference between *S. aureus* strains upon exposure to differentially nutriated *Cannabis* strains - strongest activity between 5th and 11th week of cultivation with MICs of 32-64 μg/mL - activity shown in every maturity state with max MICs of 256 μg/mL

(B) Cannabinoids

Reference	Examined cannabinoids	Bacterial strains	Effects
Van Klingeren and Ten Ham [19]	Δ9-THC, CBD	*S. aureus* (ATCC 6538), laboratory strains of *Streptococcus pyogenes, Streptococcus milleri, Enterococcus faecalis),* *E. coli, Salmonella* Typhi, *P. vulgaris*	- no effect on Gram-negative strains (MICs >100 μg/mL) - MICs of 1-5 μg/mL for CBD and 2-5 μg/mL for Δ9-THC on Gram-positive strains - MICs of 20-50 μg/mL on horse blood agar against Gram-positive strains for both substances - 10-times less bactericidal efficacy when 4% horse serum added
Blaskovich et al. [20]	CBD	*S. aureus* (ATCC 25923 MSSA, ATCC 43300 MRSA, NRS-1 MRSA VISA, VRS1 VRSA), *S. epidermidis* (ATCC 12228, NRS-60 VISE), *Streptococcus pneumoniae* (ATCC 33400, ATCC 700677 MDR), *Streptococcus pyogenes* (ATCC 12344), *Enterococcus faecium* (ATCC 35667, ATCC 700221, ATCC 19434, MMX 485 VRE), *Enterococcus faecalis* (ATCC 29212, MMX 486 VRE, clinical isolate), *C. acnes* (ATCC 6919), *Clostridioides difficile* (M7404 human ribotype 027) *E. coli* (ATCC 25922), *Klebsiella pneumoniae* (ATCC 700603 ESBL), *P. aeruginosa* (ATCC 27853), *Acinetobacter baumannii (ATCC 19606), Serratia marcescens* (MMX 6462), *Stenotrophomonas maltophilia* (MMX 4746), *Burkholderia cepacia* (MMX 547), *Proteus mirabilis* (MMX 6442), *Salmonella* Typhimurium (ATCC 35987), *Shigella dysenteriaev* (ATCC 29026), *Haemophilus influenzae* (ATCC 49247), *Moraxella catarrhalis* (MMX 3782), *Neisseria gonorrhoeae* (ATCC 49226), *Neisseria meningitidis* (ATCC 13090), *Legionella pneumophila* (MMX 7515)	- Effective against all Gram-positive strains, MICs of 1-4 μg/mL, except the VISE strain of *S. epidermidis* (4-8 μg/mL) - no effect against most Gram-negative species (MIC >64 μg/mL) - the last four listed Gram-negative strains were susceptible with MICs of 0.25-1 μg/mL - co-treatment with sub-MICs of membrane disrupting antibiotics lowered the MIC of CBD against some Gram-negative strains to 4-16 μg/mL - biofilms of *S. aureus* penetrated and eradicated with MBECs equal to MICs - formulation-dependent effectiveness of CBD on silicon-based vehicles in pig skin models (*S. aureus)* - no systemic effect in mice models (*S. aureus)* - adding 50% human serum increased the CBD MIC against MRSA to >256 μg/mL

Gildea et al. [21]	CBD	*Salmonella* Typhimurium, *Salmonella* Newington	- MICs after 6h of exposure: 0.125 μg/mL for *S.* Typhimuriu*m* and 0.0125 μg/mL for *S.* Newington - membrane degradation shown by fluorescence visualization of released DNA - resistance to CBD induced by exposure to sub-MIC concentrations - biofilm eradication
Martinenghi et al. [22]	CBD, CBDA	*S. aureus* (ATCC 25923, MRSA USA300), *S. epidermidis* (CA#71, ATCC 51625) *E. coli* (ATCC 25922), *P. aeruginosa* (PA01)	- no effect on Gram-negative strains (MICs > 64 μg/mL) for both substances - CBD with MICs of 1μg/mL against *S. aureus* strains and 2 μg/mL against *S. epidermidis* strains - two-fold higher MICs with CBDA - MBCs of CBD against MRSA 2x MIC – 4x MIC - no synergy or antagonism to common antibiotics described
Gildea et al. [23]	CBD combined with ampicillin, kanamycin or polymyxin B	*Salmonella* Typhimurium LT2 strain MS1868	- indifferent final inhibitory concentration index for CBD plus kanamycin (possible antagonism) - synergy in CBD combined with polymyxin B or ampicillin - less resistances developed after co-treatment
Radwan et al. [24]	Nine newly discovered cannabinoids	MRSA (ATCC 33591), *S. aureus* (ATCC 29213), *E. coli* (36218), *P. aeruginosa* (ATCC 27853), *Mycobacterium intracellulare* (ATCC 23068)	- two compounds with mild anti-staphylococcal activity - one compound with good anti-staphylococcal activity (IC_{50} of 3.5 μM) - one compound with moderate activity against *M. intracellulare*
Appendino et al. [25]	Δ9-THC, CBD, CBN, CBG and their acidic derivates CBC and some modified derivates of those cannabinoids	*S. aureus* (SA-1199B, RN-4220, XU212, ATTC25923, EMRSA-15, EMRSA,16)	- MICs of 0.5-2 μg/mL for all decarboxylated cannabinoids on all strains - at least two-fold higher MICs for acidic derivates - highly increased MICs in further polarized or more lipophilic modified derivates
Ahmed et al. [26]	Four tetrahydrocannabinol, four hexahydrocannabinol and one hydroxylated cannabinol	MRSA (ATCC 23068), *E. coli* (ATCC 35218), *P. aeruginosa* (ATCC 27853), *Mycobacterium intracellulare* (ATCC 23068)	- only the hydroxylated cannabinol showed moderate antibacterial activity on MRSA (IC_{50} of 10 μg/mL)
Farha et al. [27]	Δ9-THC, CBD, CBN, CBG and their acids, CBC, some other less	*S. aureus* (MRSA USA300, NTML), *Bacillus subtilis* (168, CRISPRi collection), *P. aeruginosa* (PA01), *E. coli* (ML35, ML35pBR322, K-12 BW25113), *A. baumannii* (ATCC19606, ATCC19606-LOS$^-$)	- all five major cannabinoids active against MRSA (MICs of 2 μg/mL, except CBC with 8 μg/mL) - acids less active, except CBC-acid (2 μg/mL)

	common cannabinoids		- major cannabinoids inhibit biofilm formation and are active against persistent MRSA cells - CBG highest efficacy (¼ MIC reduces biofilm formation by 50%, 5 μg/mL inhibited "persister" subpopulations) - no resistance in MRSA to CBG detected - Mice trials showed significant reduction of bacterial load (2.8 log_{10}-fold) by intraperitoneal application