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		/	/	/	16.2	14.1	13.7	13.2	13.1	13	13.3	13.3	13.9	13.7	14.9	13.1
Air - velocity (m/s)	Before patients	0-0.13	0- 0.05	0-0.01	0	0-0.01	0	0	0	0	0-0.1	0	0-0.01	0- 0.01	0-0.01	0
		0.04	0.02	0.01	0	0.001	0	0	0	0	0.002	0	0.006	0.002	0.002	0
	After patients	/	/	/	0-0.01	0.02- 0.32	0-0.02	0- 0.01	0- 0.01	0-0.02	0	0- 0.01	0-0.01	0- 0.02	0-0.02	0-0.01
		/	/	/	0.001	0.123	0.009	0.002	0.001	0.002	0	0.002	0.002	0.005	0.006	0.005
Air - flow (L/s)	Before patients	0.08- 9.44	0.08- 3.43	0.09- 0.77	0.02- 0.32	0.05- 0.38	0.03-0.3	0.02- 0.16	0.01- 0.22	0.01-0.22	0.01- 0.77	0.04- 0.89	0.04-0.89	0.01- 0.68	0.01- 0.68	0-0.36
		2.81	1.39	0.43	0.12	0.186	0.131	0.069	0.088	0.008	0.173	0.412	0.412	0.208	0.235	0.08
	After patients	/	/	/	0.04- 0.59	0	0.15-0.64	0.02- 0.77	0.01- 0.97	0.02-1.25	0.03- 0.15	1-0.4	0.02-1.03	0.07- 1.38	0.09- 1.71	0.06- 0.77
		/	/	/	0.2	0	0.64	0.193	0.223	0.217	0.086	0.144	0.241	0.34	0.521	0.38
Relative humidity (%)	Before patients	98.5- 100	57.3- 94	93.8- 98.8	60.8- 91	89.7- 96.2	96.2-98.3	72.2- 94	89- 93.5	92.3-95.1	69- 94.4	93.3- 98.3	98-100	68.2- 92.6	92.1- 96.7	94.4- 99.1
		99.7	84.3	96.4	77.4	92.7	97.2	84.6	90.6	93.4	84.3	95.6	99.4	83.3	94.3	97.5
	After patients	/	/	/	59.8- 91.8	91.7- 96.8	97-98.9	100	94- 100	99.4-100	100	100	100	92.7- 98.9	87.1- 93.8	100
		/	/	/	78.8	93.9	97.8	100	98	99.9	100	100	100	95.9	88.7	100

Jed. = Jedilnica; Spal. = Spalnica; Tel. = Telovadnica

Table S2: Bacterial and fungal isolates (MALDI Score ≥ 2.00) from the Jedilnica sampling site in Sežana Hospital Cave. Concentrations (CFU/m³) and percentages (%) of isolates based on total microbial counts.

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<i>Aerococcus viridans</i>	After patients	NP	NP	NP	NP	NP	NP	NP	NP	NP	17 (2.2)
<i>Bacillus licheniformis</i>	After patients	NP	NP	NP	NP	4 (1.7)	NP	NP	NP	NP	NP
<i>Bacillus muralis</i>	before patients	NP	NP	10 (9.8)	NP	NP	NP	NP	NP	NP	NP
<i>Bacillus mycoides</i>	After patients	NP	NP	NP	NP	NP	NP	NP	NP	6 (1.0)	NP
<i>Bacillus simplex</i>	After patients	NP	NP	NP	NP	NP	NP	4 (1.9)	NP	NP	NP
<i>Bacillus weihenstephanensis</i>	Before patients	6 (1.4)	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Brevibacillus borstelensis</i>	After patients	NP	NP	NP	NP	NP	NP	NP	33 (3.7)	NP	NP
<i>Corynebacterium aurimucosum</i>	Before patients	NP	NP	NP	NP	NP	NP	6 (5.7)	NP	NP	NP
<i>Corynebacterium minutissimum</i>	After patients	NP	NP	NP	NP	NP	NP	NP	33 (3.7)	NP	NP
<i>Dietzia maris</i>	Before patients	NP	NP	NP	NP	NP	NP	NP	200 (30.6)	NP	NP
<i>Enterococcus moraviensis</i>	Before patients	NP	NP	NP	NP	NP	NP	NP	NP	NP	17 (11.3)
<i>Exiguobacterium</i> sp.	After patients	NP	NP	NP	NP	NP	NP	NP	NP	NP	17 (2.2)
<i>Kocuria marina</i>	Before patients	NP	NP	NP	NP	NP	NP	6 (5.7)	NP	NP	NP
<i>Kocuria palustris</i>	Before patients	NP	NP	NP	NP	NP	NP	NP	33 (5.1)	NP	NP
<i>Kocuria palustris</i>	After patients	NP	NP	NP	NP	NP	NP	NP	136 (15.3)	NP	NP
<i>Kocuria rosea</i>	Before patients	NP	50 (7.3)	NP	NP	NP	NP	NP	NP	NP	NP
<i>Microbacterium phyllosphaerae</i>	After patients	NP	NP	NP	NP	NP	NP	NP	NP	NP	33 (4.2)
<i>Micrococcus</i> sp.	Before patients	4 (0.9)	17 (2.5)	NP	NP	4 (3.6)	17 (34.0)	NP	NP	NP	NP
<i>Micrococcus</i> sp.	After patients	NP	NP	NP	NP	NP	167 (4.3)	NP	NP	6 (1.0)	NP
<i>Micrococcus flavus</i>	Before patients	NP	NP	10 (9.8)	17 (12.7)	NP	NP	NP	NP	NP	NP
<i>Micrococcus flavus</i>	After patients	NP	NP	50 (14.1)	84 (11.1)	8 (3.4)	NP	NP	NP	NP	33 (4.2)
<i>Micrococcus luteus</i>	Before patients	100 (22.6)	184 (26.9)	10 (9.8)	33 (24.6)	4 (3.6)	NP	12 (11.3)	NP	12 (13.6)	84 (55.6)
<i>Micrococcus luteus</i>	After patients	NP	NP	60 (16.9)	200 (26.4)	24 (10.3)	100 (2.6)	24 (11.2)	167 (18.8)	10 (1.6)	33 (4.2)
<i>Pantoea agglomerans</i>	Before patients	NP	NP	NP	NP	2 (1.8)	NP	NP	NP	NP	NP
<i>Peribacillus simplex</i>	After patients	NP	NP	NP	NP	NP	NP	2 (0.9)	NP	2 (0.3)	
<i>Pseudarthrobacter oxydans</i>	Before patients	NP	NP	NP	NP	NP	NP	6 (5.7)	NP	NP	17 (11.3)
<i>Pseudarthrobacter oxydans</i>	After patients	NP	NP	NP	NP	NP	NP		33 (3.7)	NP	NP
<i>Pseudomonas gessardii</i>	After patients	NP	NP	NP	NP	NP	NP	8 (3.7)	NP	NP	NP

<i>Pseudomonas koreensis</i>	Before patients	NP	NP	2 (2.0)	NP	NP	NP	NP	NP	NP	NP
<i>Pseudomonas luteola</i>	Before patients	4 (0.9)	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Psychrobacter alimentarius</i>	After patients		NP	4 (3.9)	NP	NP	NP	NP	NP	NP	NP
<i>Rothia dentocariosa</i>	Before patients	4 (0.9)	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Serratia proteamaculans</i>	Before patients	NP	NP	4 (3.9)	17 (12.7)	NP	NP	NP	NP	NP	NP
<i>Serratia proteamaculans</i>	After patients	NP	NP	20 (5.6)	33 (4.4)	NP	NP	NP	NP	NP	17 (2.2)
<i>Staphylococcus capitis</i>	Before patients	4 (0.9)	NP	NP	NP	NP	NP	NP	NP	12 (13.6)	33 (21.9)
<i>Staphylococcus chonii</i>	After patients	NP	NP	NP	NP	NP	NP	NP	NP	NP	33 (4.2)
<i>Staphylococcus epidermidis</i>	Before patients	10 (2.3)	NP	NP	NP	NP	NP	NP	NP	2 (2.3)	NP
<i>Staphylococcus equorum</i>	Before patients	4 (0.9)	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Staphylococcus hominis</i>	Before patients	NP	NP	6 (5.9)	17 (12.7)	NP	NP	NP	NP	4 (4.5)	NP
<i>Staphylococcus hominis</i>	After patients	NP	NP	NP	NP	NP	NP	NP	NP	44 (7.2)	NP
<i>Staphylococcus lugdunensis</i>	After patients	NP	NP	8 (2.3)	NP	NP	NP	14 (6.5)	NP	NP	NP
<i>Staphylococcus pettenkoferi</i>	After patients	NP	NP	NP	NP	NP	NP	NP	NP	NP	17 (2.2)
<i>Staphylococcus petrasii</i>	Before patients	NP	NP	4 (3.9)	NP	NP	NP	NP	NP	NP	NP
<i>Staphylococcus petrasii</i>	After patients	NP	NP	NP	NP	NP	NP	8 (3.7)	NP	NP	NP
<i>Staphylococcus schleiferi</i>	After patients	NP	NP	NP	NP	NP	NP	NP	NP	4 (0.7)	NP
<i>Staphylococcus warneri</i>	Before patients	NP	NP	NP	NP	NP	NP	NP	NP	2 (2.3)	NP
<i>Staphylococcus warneri</i>	After patients	NP	NP	10 (2.8)	33 (4.4)	NP	NP	NP	NP	8 (1.3)	NP
<i>Streptomyces badius</i>	Before patients	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Streptomyces lavendulae</i>	Before patients	8 (1.8)	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Streptomyces violaceoruber</i>	After patients	NP	NP	NP	NP	NP	200 (5.2)	NP	NP	NP	NP
Fungi											
<i>Aspergillus fumigatus</i>	Before patients	NP	NP	NP	NP	NP	NP	2 (1.9)	NP	2 (2.3)	NP
<i>Cutaneotrichosporon curvatum</i>	After patients	NP	NP	12 (3.4)	NP	NP	NP	NP	NP	NP	NP
<i>Meyerozyma guilliermondii</i>	After patients	NP	NP		40 (5.3)	NP	NP	NP	NP	NP	NP
<i>Penicillium brevicompactum</i>	Before patients	10 (2.3)	33 (4.8)	2 (2.0)	NP	NP	NP	NP	NP	NP	NP
<i>Penicillium chrysogenum</i>	After patients	NP	NP	NP	NP	80 (34.5)	NP	NP	NP	NP	334 (42.6)
<i>Penicillium expansum</i>	Before patients	6 (1.4)	33 (4.8)	NP	NP	NP	NP	NP	84 (12.9)	NP	NP

<i>Penicillium italicum</i>	<i>After patients</i>	NP	NP	NP	33 (4.4)	NP	NP	NP	50 (5.6)	NP	NP
Total microorganisms	<i>Before patients</i>	442	684	102	134	112	50	106	653	88	151
Total microorganisms	<i>After patients</i>	0	0	354	757	232	3873	214	886	610	784

SAS - VWR® SAS Super DUO 360 Air Sampler (VWR International, Radnor, PA, USA); Coriolis - Coriolis®µ Cyclonic Air Sampler (Bertin Technologies, Saint Quentin en Yvelines, France); NP – not present

Table S3: Bacterial and fungal isolates (MALDI Score ≥ 2.00) from the Spalnica sampling site in Sežana Hospital Cave. Concentrations (CFU/m³) and percentages (%) of isolates based on total microbial counts.

Spalnica (CFU/m³ (%))		29.5.2020		7.7.2020		27.11.2021		2.6.2022		10.1.2023	
Bacteria	Before/after patients	SAS	Coriolis	SAS	Coriolis	SAS	Coriolis	SAS	Coriolis	SAS	Coriolis
<i>Achromobacter piechaudii</i>	<i>Before patients</i>	NP	NP	NP	NP	NP	NP	NP	17 (2.1)	NP	NP
<i>Acinetobacter calcoaceticus</i>	<i>Before patients</i>	NP	NP	NP	NP	NP	NP	NP	NP	NP	50 (16.4)
<i>Acinetobacter guillouiae</i>	<i>After patients</i>	NP	NP	NP	NP	NP	NP	NP	NP	6 (4.3)	NP
<i>Acinetobacter lwoffii</i>	<i>Before patients</i>	4 (0.9)	NP	4 (2.8)	NP	NP	NP	NP	NP	NP	NP
<i>Acinetobacter radioresistens</i>	<i>After patients</i>	NP	NP	NP	NP	NP	17 (0.9)	NP	NP	NP	NP
<i>Advenella incenata</i>	<i>Before patients</i>	18 (3.9)	33 (6.4)	NP	NP	NP	NP	NP	NP	NP	NP
<i>Aerococcus viridans</i>	<i>After patients</i>	NP	NP	NP	NP	NP	NP	NP	33 (7.6)	NP	NP
<i>Bacillus idriensis</i>	<i>Before patients</i>	10 (2.2)	17 (3.3)	NP	NP	NP	NP	NP	NP	NP	NP
<i>Bacillus indicus</i>	<i>Before patients</i>	6 (1.3)	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Bacillus pumilus</i>	<i>Before patients</i>	2 (0.4)	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Corynebacterium amycolatum</i>	<i>Before patients</i>	4 (0.9)	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Kocuria marina</i>	<i>Before patients</i>	10 (2.2)	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Kocuria palustris</i>	<i>Before patients</i>	6 (1.3)	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Kocuria rhizophila</i>	<i>After patients</i>	NP	NP	NP	NP	NP	NP	NP	NP	4 (7.4)	NP
<i>Kocuria rosea</i>	<i>Before patients</i>	12 (2.6)	NP	NP	NP	NP	NP	2 (3.1)	NP	NP	NP
<i>Massilia timonae</i>	<i>Before patients</i>	6 (1.3)	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Microbacterium murale</i>	<i>After patients</i>	NP	NP	NP	NP	NP	NP	NP	17 (3.9)	NP	NP
<i>Micrococcus sp.</i>	<i>Before patients</i>	6 (1.3)	33 (6.4)	NP	NP	NP	17 (9.2)	8 (12.5)	NP	NP	NP
<i>Micrococcus flavus</i>	<i>Before patients</i>	NP	NP	10 (6.9)	17 (7.8)	NP	NP	NP	NP	NP	NP

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<i>Meyerozyma guilliermondii</i>	Before patients	NP	NP	4 (2.8)	NP	NP	NP	NP	NP	NP	
<i>Meyerozyma guilliermondii</i>	After patients	NP	NP	NP	NP	NP	NP	NP	NP	NP	100 (10.5)
<i>Penicillium brevicompactum</i>	Before patients	14 (3.0)	50 (9.7)	NP	NP	NP	NP	NP	NP	NP	33 (10.6)
<i>Penicillium camemberti</i>	Before patients	10 (2.2)	NP	NP	NP	NP	NP	NP	NP	NP	
<i>Penicillium commune</i>	Before patients	12 (2.6)	NP	NP	NP	NP	NP	NP	NP	NP	33 (10.6)
<i>Penicillium digitatum</i>	Before patients	NP	NP	NP	NP	NP	NP	NP	NP	2 (3.7)	NP
<i>Penicillium expansum</i>	Before patients	6 (1.3)	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Penicillium italicum</i>	Before patients	6 (1.3)	NP	NP	NP	NP	NP	NP	NP	2 (3.7)	NP
Total microorganisms	Before patients	464	517	144	217	143	185	64	818	54	304
Total microorganisms	After patients	0	0	163	518	185	1820	218	435	138	951

SAS - VWR® SAS Super DUO 360 Air Sampler (VWR International, Radnor, PA, USA); Coriolis - Coriolis® Cyclonic Air Sampler (Bertin Technologies, Saint Quentin en Yvelines, France); NP – not present

Table S4: Bacterial and fungal isolates (MALDI Score ≥ 2.00) from the Telovadnica sampling site in Sežana Hospital Cave. Concentrations (CFU/m³) and percentages (%) of isolates based on total microbial counts.

Telovadnica (CFU/m ³ (%))		29.5.2020		7.7.2020		27.11.2021		2.6.2022		10.1.2023	
Bacteria	Before/after patients	SAS	Coriolis	SAS	Coriolis	SAS	Coriolis	SAS	Coriolis	SAS	Coriolis
<i>Acinetobacter guillouiae</i>	Before patients	NP	NP	NP	NP	NP	NP	NP	NP	4 (4.2)	NP
<i>Acinetobacter johnsonii</i>	After patients	NP	NP	NP	NP	NP	NP	NP	NP	4 (0.6)	NP
<i>Bacillus cereus</i>	Before patients	NP	NP	NP	NP	NP	NP	8 (5.3)	NP	NP	NP
<i>Bacillus cereus</i>	After patients	NP	NP	NP	NP	2 (1.4)	NP	NP	NP	NP	NP
<i>Bacillus megaterium</i>	After patients	NP	NP	NP	NP	NP	NP	2 (1.1)	NP	NP	NP
<i>Bacillus muralis</i>	before patients	NP	NP	20 (11.8)	NP		NP	NP	NP	NP	NP
<i>Bacillus subtilis</i>	Before patients	NP	NP	NP	NP	50 (24.8)	NP	NP	NP	NP	NP
<i>Brachybacterium conglomeratum</i>	Before patients	NP	17 (5.4)	NP	NP	NP	NP	NP	NP	NP	NP
<i>Brevundimonas diminuta</i>	Before patients	NP	NP	33 (19.5)	NP	NP	NP	NP	NP	NP	NP

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<i>Cutaneotrichosporon dermatis</i>	After patients	NP	NP	NP	NP	NP	NP	NP	NP	4 (0.6)	NP
<i>Debaryomyces hansenii</i>	before patients	NP	NP	NP	33 (28.8)	NP	NP	NP	NP	NP	NP
<i>Meyerozyma guilliermondii</i>	After patients	NP	NP	40 (20.2)	NP	NP	NP	NP	NP	NP	33 (3.5)
<i>Penicillium brevicompactum</i>	Before patients	8 (2.4)	33 (10.4)	4 (2.4)	17 (14.5)	NP	NP	NP	NP	2 (2.1)	NP
Total microorganisms	Before patients	334	317	169	117	202	2370	152	501	96	317
Total microorganisms	After patients	NP	NP	198	469	148	4558	190	301	650	934

SAS - VWR® SAS Super DUO 360 Air Sampler (VWR International, Radnor, PA, USA); Coriolis - Coriolis® Cyclonic Air Sampler (Bertin Technologies, Saint Quentin en Yvelines, France); NP – not present

Table S5: Bacterial isolates (MALDI Score ≥ 2.00) from the Jedilnica, Spalnica and Telovadnica sampling sites in the Sežana Hospital Cave, their risk group assignment and typical habitat [29,31]. Concentrations (CFU/m³) and percentages (%) of isolates based on the total microbial count per sampling site.

Bacterial isolates	Jedilnica		Spalnica		Telovadnica		Risk Group	Typical Habitat
	Bacteria (CFU/m ³ (%))		Bacteria (CFU/m ³ (%))		Bacteria (CFU/m ³ (%))			
	Before patients	After patients	Before patients	After patients	Before patients	After patients		
<i>Acinetobacter calcoaceticus</i>	NP	NP	NP	NP	50 (16.3)	NP	2 (AU, CH, DE)	Water, soil, animals, humans (intestine)
<i>Acinetobacter guillouiae</i>	NP	NP	NP	6 (4.3)	4 (4.2)	NP	-	Ubiquitous, gasworks, humans (skin)
<i>Acinetobacter johnsonii</i>	NP	NP	NP	NP	NP	4 (0.6)	2 (AU, C, DE)	Humans (skin), animals, activated sludge, food
<i>Acinetobacter lwoffii</i>		8 (1.3)	4 (2.8)	NP	NP	NP	2 (AU, CH, DE)	Ubiquitous, soil, food, humans (skin)
<i>Acinetobacter radioresistens</i>	NP	NP	NP	17 (0.9)	NP	NP	-	Animals, soil, food
<i>Advenella incenata</i>	NP	NP	33 (6.9)	NP	NP	NP	-	Animals, humans
<i>Achromobacter piechaudii</i>	NP	NP	17 (2.1)	NP	NP	NP	2 (CH)	Soil, plants (tomatoes)
<i>Aerococcus viridans</i>		17 (2.2)	NP	33 (7.6)	NP	NP	2 (BE, CH, DE)	Humans (urinary tract, skin), animals (lobsters), seawater
<i>Bacillus cereus</i>	NP	NP	NP	NP	8 (5.3)	2 (1.4)	2 (AU, CH, DE, UK)	Humans, soil, food

<i>Bacillus idriensis</i>	NP	NP	17 (3.3)	NP	NP	NP	-	Soil, plants
<i>Bacillus indicus</i>	NP	NP	6 (1.3)	NP	NP	NP	-	Food (probiotic blends)
<i>Bacillus licheniformis</i>	NP	4 (1.7)	NP	NP	NP	NP	-	Soil, food, animals (birds)
<i>Bacillus megaterium</i>	NP	NP	NP	NP	NP	2 (1.1)	-	Soil, seawater, food, animals (insects)
<i>Bacillus mycoides</i>	NP	6 (1.0)	NP	NP	NP	NP	-	Soil, water, animals (fish, birds)
<i>Bacillus muralis</i>	10 (9.8)	NP	NP	NP	20 (11.8)	NP	-	Soil. plants. wall paintings
<i>Bacillus pumilus</i>	NP	NP	2 (0.4)	NP		NP	-	Soil, animals, food (milk)
<i>Bacillus simplex</i>	NP	4 (1.9)		NP		NP	-	Soil, plants
<i>Bacillus subtilis</i>	NP	NP	NP	NP	50 (24.8)	NP	-	Soil, plants, animals and humans (intestine)
<i>Bacillus weihenstephanensis</i>	6 (1.4)	NP	NP	NP		NP	-	Soil, water, food (milk, eggs)
<i>Brachybacterium conglomeratum</i>	NP	NP	NP	NP	17 (5.4)	NP	-	Water, seawater, humans (vagina)
<i>Brevibacillus borstelensis</i>	NP	33 (3.7)	NP	NP		NP	-	Water, hot springs, decomposes plastics
<i>Brevundimonas diminuta</i>	NP	NP	NP	NP	33 (19.5)	NP	-	Ubiquitous, seawater
<i>Corynebacterium amycolatum</i>	4 (0.9)	NP	NP	NP		NP	2 (CH, DE)	Humans (skin)
<i>Corynebacterium aurimucosum</i>	6 (5.7)	NP	NP	NP	12 (3.4)	NP	-	Humans (skin, vagina)
<i>Dietzia maris</i>	200 (30.6)	NP	NP	NP	NP	NP	-	Humans, animals, seawater
<i>Enterococcus moraviensis</i>	17 (11.3)	NP	NP	NP	NP	NP	-	Animals (horses, geese, foxes). humans (intestine)
<i>Exiguobacterium</i> sp.		17 (2.2)	NP	NP	NP	NP	-	Water, plants, soil
<i>Kocuria marina</i>	6 (5.7)		10 (2.2)	NP	NP	NP	-	Soil, sand, human and animal skin
<i>Kocuria palustris</i>	33 (5.1)	136 (15.3)	6 (1.3)	NP	NP	NP	-	Soil, sand, human and animal skin
<i>Kocuria rhizophila</i>	NP	NP	NP	4 (7.4)	NP	NP	-	Soil, sand, human and animal skin
<i>Kocuria rosea</i>	50 (7.3)	NP	2 (3.1)	NP	6 (3.9)		-	Soil, sand, human and animal skin
<i>Massilia timonae</i>	NP	NP	6 (1.3)	NP	10 (3.0)		-	Plants (maize), humans

<i>Microbacterium foliorum</i>	NP	NP	NP	NP		10 (5.1)	-	Plants (grass)
<i>Microbacterium murale</i>	NP	NP	NP	17 (3.9)		NP	-	Indoor walls
<i>Microbacterium oxydans</i>	NP	NP	NP	NP	14 (14.6)	NP	-	Wetland, animals (hamsters – oral mucosa)
<i>Microbacterium phyllosphaerae</i>	NP	33 (4.2)	NP	NP	NP	17 (1.8)	-	Plants (grass)
<i>Micrococcus flavus</i>	14 (12.7)	50 (14.1)	17 (7.8)	33(6.3)	NP	NP	-	Plants, soil, sludge
<i>Micrococcus luteus</i>	84 (55.6)	200 (26.4)	28 (51.9)	72 (52.2)	30 (31.3)	85 (18.1)	2 (BE, CH, DE, NIH)	Soil, water, air, human and animal skin
<i>Mixta calida</i>	NP	NP	33 (4.0)	NP	NP	NP		Ubiquitous, plants, food
<i>Paenibacillus pabuli</i>	2 (0.4)	NP	NP	NP	NP	NP		Surfaces (gloves), animals, alcohol
<i>Pantoea agglomerans</i>	2 (1.8)	NP	NP	NP	2 (2.1)	NP	2 (CH)	Plants, animals (insects), dust
<i>Peribacillus simplex</i>	NP	2 (0.9)	NP	NP	NP	NP	-	Soil, plants, water
<i>Pseudarthrobacter oxydans</i>	17 (11.3)	33 (3.7)	NP	NP	NP	NP	-	Ubiquitous, plants, water, humans
<i>Pseudarthrobacter sulfonivorans</i>	NP	NP	NP	33 (17.8)	NP	NP	-	Soil, plants
<i>Pseudomonas cedrina</i>	NP	NP	17 (2.1)	NP	NP	NP	2 (AU)	Water, plants
<i>Pseudomonas gessardii</i>	NP	8 (3.7)	NP	NP	NP	NP	2 (AU)	Mineral water, seawater
<i>Pseudomonas fluorescens</i>	NP	NP	NP	NP	50 (10.0)	NP	2 (AU)	Soil, plants, human, animals
<i>Pseudomonas koreensis</i>	2 (2.2)	NP	2 (1.4)	NP	NP	NP	2 (AU)	Soil, plants
<i>Pseudomonas lutea</i>		NP		4 (2.0)	NP	NP	2 (AU)	Plants, soil
<i>Pseudomonas luteola</i>	4 (0.9)	NP		NP	NP	NP	2 (AU, BE, CH, DE)	Soil, water, damp environments
<i>Pseudomonas synxantha</i>	NP	NP	17 (7.8)	2 (1.2)	NP	NP	2 (AU)	Soil, plants, humans, animals
<i>Pseudomonas tolaasii</i>	NP	NP	2 (1.4)	NP	NP	NP	2 (AU)	Mushrooms
<i>Psychrobacter alimentarius</i>	NP	NP	NP	4 (3.9)	NP	NP	-	Animals (squid), fermented seafood
<i>Rahnella aquatilis</i>	NP	NP	NP	NP	17 (5.4)	NP	-	Aquatic, plants
<i>Rothia dentocariosa</i>	4 (0.9)	NP	NP	NP		NP	-	Humans (oral mucosa and cavities)
<i>Serratia proteamaculans</i>		NP	17 (12.7)	33 (4.4)	84 (10.3)	NP	2 (CH, DE)	Soil, water, seafood
<i>Staphylococcus capitis</i>	33 (21.9)	NP	4 (7.4)	NP	4 (4.2)	NP	-	Animals, humans (skin, scalp)

<i>Staphylococcus cohnii</i>	NP	33 (4.2)	NP	NP	NP	17 (5.6)	-	Food (milk), animals (cattle), humans (skin)
<i>Staphylococcus epidermidis</i>	10 (2.3)	NP	17 (5.6)	16 (11.6)	NP	NP	2 (BE, CH, DE)	Animals, humans (skin, nasopharynx), fermented sausages
<i>Staphylococcus equorum</i>	4 (0.9)	NP	NP	8 (4.9)	17 (5.4)	17 (3.6)	-	Fermented food, animals (horses, cattle)
<i>Staphylococcus haemolyticus</i>	NP	NP	NP	17 (3.9)	4 (2.6)		2 (CH, DE)	Fermented food, milk, animals (horses, cattle, cats), humans (skin)
<i>Staphylococcus hominis</i>	17 (12.7)	44 (7.2)	17 (11.9)	16 (11.6)	33 (6.6)	33 (7.0)	-	Fermented food, goat milk, animals (cats, dogs, goats), humans (skin)
<i>Staphylococcus lugdunensis</i>	NP	14 (6.5)	4 (6.3)	85 (16.4)	NP	NP	2 (BE, CH, DE)	Animals (cats, dogs), humans (skin)
<i>Staphylococcus pettenkoferi</i>	NP	17 (2.2)	NP	NP	NP	NP	-	Humans (skin, urinary tract)
<i>Staphylococcus petrasii</i>	4 (3.9)	8 (3.7)	NP	NP	NP	NP	-	Humans (skin)
<i>Staphylococcus saprophyticus</i>	NP	NP	4 (2.8)	NP	NP	NP	2 (BE, CA, CH, DE)	Animals (horses, cattle), humans (skin)
<i>Staphylococcus schleiferi</i>	NP	4 (0.7)	NP	NP	NP	NP	2 (BE, CH, DE)	Animals (dogs, cats), humans (skin)
<i>Staphylococcus warneri</i>	2 (2.3)	33 (4.4)	NP	10 (5.4)	NP	NP	-	Fermented food, animals (cats, dogs, horses), humans (skin)
<i>Stenotrophomonas maltophilia</i>	NP	NP	17 (5.6)	NP	NP	NP	2 (AU, CH, DE)	Ubiquitous, water, soil, plants
<i>Stenotrophomonas rhizophila</i>	NP	NP	NP	NP	NP	2 (0.3)	-	Plants, soil
<i>Streptomyces anulatus</i>	NP	NP	NP	NP	17 (5.4)	NP	-	Plants, soil
<i>Streptomyces badius</i>	NP	NP	17 (5.6)	NP	NP	NP	-	Plants, soil, lake sediments
<i>Streptomyces lavendulae</i>	8 (1.8)	NP	NP	NP	NP	NP	-	Soil
<i>Streptomyces violaceoruber</i>	NP	200 (5.2)	NP	NP	NP	NP	-	Plants, soil

AU – Australia; BE – Belgium; CA – Canada; CH – Switzerland; DE – Germany; NIH – National Institutes of Health; UK – United Kingdom; NP – not present

Table S6: Fungal isolates (MALDI Score ≥ 2.00) from the Jedilnica, Spalnica and Telovadnica sampling sites in the Sežana Hospital Cave, their risk group assignment and typical habitat [27-29,31]. Concentrations (CFU/m³) and percentages (%) of isolates based on the total microbial count per sampling site.

Fungal isolates	Jedilnica		Telovadnica		Spalnica		Risk Group	Typical habitat
	Fungi (CFU/m³ (%))		Fungi (CFU/m³ (%))		Fungi (CFU/m³ (%))			
	Before patients	After patients	Before patients	After patients	Before patients	After patients		
<i>Alternaria alternata</i> *	NP	NP	NP	NP	66 (30.4)	NP	-	Plants, cereals
<i>Aspergillus fumigatus</i> *	2 (2.3)	NP	NP	NP	NP	NP	2 (AU, CA, CH, DE, EU)	Ubiquitous, air, dust, plants
<i>Aspergillus versicolor</i> *	NP	NP	NP	NP	NP	33 (7.6)	2 (UK)	Ubiquitous, air, dust, plants
<i>Aureobasidium pullulans</i>	NP	NP	NP	NP	NP	NP	-	Ubiquitous, plants
<i>Cladosporium</i> sp,*	42 (37.5)	30 (28.3)	10 (9.8)	NP	10 (9.3)20	NP	-	Plants, air
<i>Cutaneotrichosporon curvatum</i>	NP	12 (3.4)	NP	NP	NP	NP	-	Air, water, wood, food
<i>Cutaneotrichosporon dermatis</i>	NP	NP	NP	33 (3.5)	NP	4 (0.6)		Animals, humans
<i>Debaryomyces hansenii</i>	NP	NP	NP	NP	33 (28.8)	NP	-	Seawater, fermented food
<i>Meyerozyma guilliermondii</i>	NP	40 (5.3)	4 (2.8)	100 (10.5)	NP	40 (20.2)	2 (EU, UK)	Seawater, leather, animals, humans (skin, feces)
<i>Penicillium brevicompactum</i> *	33 (4.8)	NP	33 (10.6)	NP	17 (14.5)	NP	-	Plants, food (fruit), indoor air
<i>Penicillium camemberti</i> *	NP	NP	10 (2.2)	NP	NP	NP	-	Food (cheese, sausages)
<i>Penicillium chrysogenum</i> *	NP	334 (42.6)	NP	NP	NP	NP	-	Dust, indoor air, damp environments, salted foods
<i>Penicillium commune</i> *	NP	NP	33 (10.6)	NP	NP	NP	-	Dust, indoor air, food (cheese, nuts, margarine)
<i>Penicillium digitatum</i> *	NP	NP	2 (3.7)	NP	NP	NP	-	Soil, food (citrus fruits)

<i>Penicillium expansum</i> *	84 (12.9)	NP	6 (1.3)	NP	NP	NP	-	Plants, food (fruit)
<i>Penicillium italicum</i> *	NP	50 (5.6)	2 (3.7)	NP	NP	NP	-	Soil, food (citrus fruits)

AU – Australia; BE – Belgium; CA – Canada; CH – Switzerland; DE – Germany; EU – European Union; UK – United Kingdom; NP – not present

* Identification is confirmed by the morphological characteristics of the isolates habitat [27,28].