

## **SUPPLEMENTARY APPENDIX:**

- List of contaminants: *Actinomyces bovis*, *Actinomyces denticolens*, *Actinomyces europaeus*, *Actinomyces funkei*, *Actinomyces georgiae*, *Actinomyces gerencseriae*, *Actinomyces graevenitzii*, *Actinomyces hordeovulneris*, *Actinomyces howellii*, *Actinomyces hyovaginalis*, *Actinomyces israelii*, *Actinomyces meyeri*, *Actinomyces naeslundii*, *Actinomyces neuii*, *Actinomyces odontolyticus*, *Actinomyces oris*, *Actinomyces propionica*, *Actinomyces radingae*, *Actinomyces slackii*, *Actinomyces species*, *Actinomyces turicensis*, *Actinomyces urogenitalis*, *Actinomyces viscosus*, *Anaerococcus hydrogenalis*, *Anaerococcus murdochii*, *Anaerococcus prevotii*, *Anaerococcus species*, *Anaerococcus tetradius*, *Anaerovorax odorimutans*, *Atopobium minutum*, *Atopobium parvulum*, *Atopobium rimae* *Atopobium species* *Atopobium vaginae*, *Bacillus amyloliquefaciens*, *Bacillus anthracis*, *Bacillus badius*, *Bacillus cereus*, *Bacillus circulans*, *Bacillus coagulans*, *Bacillus cohnii*, *Bacillus fastidiosus*, *Bacillus firmus*, *Bacillus insolitus*, *Bacillus lentus*, *Bacillus licheniformis*, *Bacillus megaterium*, *Bacillus mucilaginosus*, *Bacillus mycoides*, *Bacillus naganoensis*, *Bacillus pumilus*, *Bacillus simplex*, *Bacillus species*, *Bacillus sphaericus*, *Bacillus subtilis*, *Bacillus thermoamylovorans*, *Bacillus thuringiensis*, *Bifidobacterium adolescentis*, *Bifidobacterium animalis*, *Bifidobacterium bifidum*, *Bifidobacterium breve*, *Bifidobacterium catenulatum*, *Bifidobacterium dentium*, *Bifidobacterium gallicum*, *Bifidobacterium infantis*, *Bifidobacterium longum*, *Bifidobacterium pseudolongum*, *Bifidobacterium species*, *Clostridium acetobutylicum*, *Clostridium aldrichii*, *Clostridium baratii*, *Clostridium beijerinckii*, *Clostridium bifermentans*, *Clostridium botulinum*, *Clostridium bryantii*, *Clostridium butyricum*, *Clostridium cadaveris*, *Clostridium celerecrescens*, *Clostridium chauvoei*, *Clostridium clostridioforme*, *Clostridium difficile*, *Clostridium fallax*, *Clostridium ghonii*, *Clostridium glycolicum*, *Clostridium haemolyticum*, *Clostridium hastiforme*, *Clostridium hathewayi*, *Clostridium histolyticum*, *Clostridium indolis*, *Clostridium innocuum*, *Clostridium limosum*, *Clostridium methylpentosum*, *Clostridium novyi*, *Clostridium oxalicum*, *Clostridium paraputrificum*, *Clostridium perfringens*, *Clostridium putrefaciens*, *Clostridium putrificum*, *Clostridium ramosum*, *Clostridium rectum*, *Clostridium septicum*, *Clostridium sordellii*, *Clostridium species*, *Clostridium sphenoides*, *Clostridium sporogenes*, *Clostridium subterminale*. *Clostridium symbiosum*, *Clostridium tertium*, *Clostridium tetani*, *Clostridium thermopalmarium*, *Clostridium tyrobutyricum*, *Collinsella aerofaciens*, *Corynebacterium accolens*, *Corynebacterium afermentans*, *Corynebacterium ammoniagenes*, *Corynebacterium amycolatum*, *Corynebacterium appendicis*, *Corynebacterium argentoratense*, *Corynebacterium asperum*, *Corynebacterium aurimucosum*, *Corynebacterium auris*, *Corynebacterium bovis*, *Corynebacterium confusum*, *Corynebacterium coyleae*, *Corynebacterium cystitidis*, *Corynebacterium diphtheria*, *Corynebacterium durum*, *Corynebacterium falsenii*, *Corynebacterium fascians*, *Corynebacterium flavescens*, *Corynebacterium glucuronolyticum*, *Corynebacterium imitans*, *Corynebacterium jeikeium*, *Corynebacterium kroppenstedtii*, *Corynebacterium kutscheri*, *Corynebacterium lipophiloflavum*, *Corynebacterium macginleyi*, *Corynebacterium mastitidis*, *Corynebacterium matruchotii*, *Corynebacterium minutissimum*, *Corynebacterium mucifaciens*, *Corynebacterium mycetoides*, *Corynebacterium pilosum*, *Corynebacterium propinquum*, *Corynebacterium pseudodiphtheriticum*, *Corynebacterium pseudogenitalium*, *Corynebacterium pseudotuberculosis*, *Corynebacterium*

*pyruviciproducens, Corynebacterium renale, Corynebacterium resistens, Corynebacterium riegliei, Corynebacterium  
seminale, Corynebacterium simulans, Corynebacterium singular, Corynebacterium species, Corynebacterium striatum,  
Corynebacterium sundsvallense, Corynebacterium tuberculostearicum, Corynebacterium ulcerans, Corynebacterium  
urealyticum, Corynebacterium ureicelerivorans, Corynebacterium xerosis, Eggerthella lenta, Eubacterium brachy,  
Eubacterium budayi, Eubacterium combesii, Eubacterium contortum, Eubacterium cylindroides, Eubacterium dolichum,  
Eubacterium limosum, Eubacterium moniliforme, Eubacterium moorei, Eubacterium nitritogenes, Eubacterium nodatum,  
Eubacterium plautii, Eubacterium rectale, Eubacterium saburreum, Eubacterium species, Eubacterium sulci, Eubacterium  
tenue, Eubacterium tortuosum, Eubacterium ventriosum, Eubacterium yurii, Finegoldia magna, Finegoldia species,  
Holdemania species, Lactobacillus acidophilus, Lactobacillus agilis, Lactobacillus alimentarius, Lactobacillus amylophilus,  
Lactobacillus amylovorus, Lactobacillus animalis, Lactobacillus bif fermentans, Lactobacillus brevis, Lactobacillus buchneri,  
Lactobacillus casei, Lactobacillus catenaformis, Lactobacillus collinoides, Lactobacillus coryniformis, Lactobacillus crispatus,  
Lactobacillus curvatus, Lactobacillus delbrueckii, Lactobacillus farciminis, Lactobacillus fermentum, Lactobacillus  
fructivorans, Lactobacillus gasseri, Lactobacillus helveticus, Lactobacillus hilgardii, Lactobacillus homohiochii, Lactobacillus  
intestinalis, Lactobacillus jensenii, Lactobacillus kefir, Lactobacillus lindneri, Lactobacillus malefermentans, Lactobacillus  
mali, Lactobacillus murinus, Lactobacillus parabuchneri, Lactobacillus paracasei, Lactobacillus pentosus, Lactobacillus  
plantarum, Lactobacillus rennanqilfy, Lactobacillus reuteri, Lactobacillus ruminis, Lactobacillus sakei, Lactobacillus salivarius,  
Lactobacillus sanfranciscensis, Lactobacillus sharpeae, Lactobacillus species, Lactobacillus suebicus, Lactobacillus  
vaccinostercus, Lactobacillus vitulinus, Micromonas micros, Mobiluncus curtisii, Mobiluncus mulieris, Mobiluncus species,  
Mogibacterium timidum, Peptococcus niger, Peptococcus species, Peptoniphilus asaccharolyticus, Peptoniphilus indolicus,  
Peptostreptococcus anaerobius, Peptostreptococcus species, Peptostreptococcus stomatis, Propionibacterium acnes,  
Propionibacterium avidum, Propionibacterium freudenreichii, Propionibacterium granulosum, Propionibacterium  
lymphophilum, Propionibacterium propionicus, Propionibacterium species, Pseudoramibacter alactolyticus, Ruminococcus  
gnavus, Ruminococcus hansenii, Ruminococcus productus, Ruminococcus species, Staphylococcus arlettae, Staphylococcus  
auricularis, Staphylococcus capitis, Staphylococcus caprae, Staphylococcus carnosus, Staphylococcus chromogenes,  
Staphylococcus cohnii, Staphylococcus condiment, Staphylococcus delphini, Staphylococcus epidermidis, Staphylococcus  
equorum, Staphylococcus felis, Staphylococcus fleurettii, Staphylococcus gallinarum, Staphylococcus haemolyticus,  
Staphylococcus hominis, Staphylococcus hyicus, Staphylococcus intermedius, Staphylococcus kloosii, Staphylococcus lentus,  
Staphylococcus lugdunensis, Staphylococcus pasteurii, Staphylococcus pseudintermedius, Staphylococcus saccharolyticus,  
Staphylococcus saprophyticus, Staphylococcus schleiferi, Staphylococcus sciuri, Staphylococcus simulans, Staphylococcus  
warneri, Staphylococcus xylosum, Staphylococcus coagulase-negative, Staphylococcus coagulase-negative not saprophyticus,  
Streptococcus alactolyticus, Streptococcus anginosus, Streptococcus bovis, Streptococcus bovis group, Streptococcus  
constellatus, Streptococcus cremoris, Streptococcus equinus, Streptococcus gordonii, Streptococcus intermedius,*

*Streptococcus milleri group, Streptococcus mitis, Streptococcus mitis group, Streptococcus mutans, Streptococcus oralis, Streptococcus parasanguinis, Streptococcus salivarius, Streptococcus sanguinis, Streptococcus vestibularis, Streptococcus viridans group, Veillonella parvula, Veillonella species, Weissella confusa, Weissella halotolerans, Weissella kandleri, Weissella minor, Weissella paramesenteroides, Weissella viridescens.*

Incidence (pro 100'000 population) by age group (Table A):

	2008	2009	2010	2011	2012	2013	2014
0-4y	7	6	6	5	6	7	7
5-19y	5	4	4	4	4	4	5
20-39y	15	18	16	16	15	17	16
40-64y	65	62	66	71	65	68	68
≥65*y	119	117	117	127	126	133	143

Footnote: \*p-value for time-trend significant at the 5% level, y: years