

Supplementary materials

Lineage specific evolution and gene flow in *Listeria monocytogenes* is independent of bacteriophages

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Index

- Table S1: Swiss *L. monocytogenes* isolates
- Table S2: Germany and The Netherlands *L. monocytogenes* isolates
- Table S3: *L. monocytogenes* lineage III and IV isolates
- Table S4: *L. monocytogenes* bacteriophages
- Table S5: *L. monocytogenes* isolates with a phage inserted into *comK*
- Figure S1. *L. monocytogenes* core-genome phylogenetic tree.
- Figure S2. Lineage specific evolution in the core and the accessory genome analysed by PopPUNK.
- Figure S3. Recombination regions for the alignment of lineage I inferred by Gubbins.
- Figure S4. Recombination regions for the alignment of lineage II inferred by Gubbins.
- Figure S5. Recombination regions for the alignment of lineage III inferred by Gubbins.
- Figure S6. Distribution of the chunk counts donated from external population lineage to each recipient lineage.
- Figure S7. Distribution of the prophages coverage (donor) in each recipient lineage.
- Figure S8. Inverse correlation between amount of the phage coverage and chunk counts for lineage I and II.
- References

Table S1: Swiss *L. monocytogenes* isolates

Code isolate	ST	CC	Lineages	ENA accession number	Genbank accession number	Source	Isolation source	Collection date	Location	Serotype	Number of contigs	Largest contig	Total length	GC (%)	N50	Reference /PMID
N05-195	31	CC31	II	4421STDY6601872	QYIT000000000	food	meat product	2005-07-06	Switzerland	1/2a	19	797322	3094799	37.84	473830	our study
N11-1218	108	CC121	II	4421STDY6601805	QYIS000000000	food	poultry	2011-07-19	Switzerland	1/2a	38	813399	3190123	37.86	510719	our study
N11-1251	1316	CC59	I	4421STDY6601806	QYIR000000000	food	raw sausage	2011-07-19	Switzerland	1/2b	30	745700	2958277	37.82	482292	our study
N11-1252	1317	CC517	I	4421STDY6601807	QYIQ000000000	food	noodle salad	2011-07-19	Switzerland	1/2b	18	1230510	2922357	37.9	508631	our study
N11-1255	671	ST671	II	4421STDY6601709	QYIP000000000	human	homo sapiens	2011-07-06	Switzerland	1/2a	16	953586	2868909	37.91	272400	our study
N11-1285	1299	CC204	II	4421STDY6601710	QYIO000000000	human	placenta	2011-07-07	Switzerland	1/2a	16	650381	2974668	37.76	478043	our study
N11-1346	8	CC8	II	4421STDY6601711	QYIN000000000	human	blood	2011-07-08	Switzerland	1/2a	18	620467	2956459	37.84	439911	our study
N11-1415	586	CC29	II	4421STDY6601712	QYIM000000000	human	blood	2011-07-09	Switzerland	1/2a	16	1252999	2909256	37.9	543553	our study
N11-1515	29	CC29	II	4421STDY6601808	QYIL000000000	food	milk	2011-08-05	Switzerland	1/2a	14	1253519	2869383	37.93	543409	our study
N11-1546	1294	CC8	II	4421STDY6601713	QYIK000000000	human	blood	2011-07-10	Switzerland	1/2a	17	658707	3000692	37.85	438892	our study
N11-1584	1295	CC8	II	4421STDY6601714	QYIU000000000	human	blood	2011-07-12	Switzerland	1/2a	21	506123	3043240	37.82	330280	our study
N11-1617	8	CC8	II	4421STDY6601809	QYII000000000	food	meat	2011-08-10	Switzerland	1/2a	18	620466	3042486	37.82	439912	our study
N11-1649	743	CC8	II	4421STDY6601810	QYIH000000000	food	meat	2011-08-16	Switzerland	1/2a	17	620466	3042647	37.82	439912	our study
N11-1696	742	CC8	II	4421STDY6601811	QYIG000000000	food	meat	2011-08-18	Switzerland	1/2a	21	620467	3046815	37.84	439912	our study
N11-1698	9	CC9	II	4421STDY6601812	QYIF000000000	food	meat	2011-08-18	Switzerland	1/2c	20	508358	3035575	37.93	435053	our study
N11-1837	9	CC9	II	4421STDY6601715	QYIE000000000	human	blood	2011-07-13	Switzerland	1/2a	14	865904	2967404	37.87	638907	our study
N11-1845	new	CC36	II	4421STDY6601813	QYID000000000	food	milk product	2011-09-07	Switzerland	1/2a	11	1475914	2857624	37.93	1475914	our study
N11-1846	724	CC2	I	4421STDY6601814	QYIC000000000	food	meat	2011-09-07	Switzerland	4b	23	624828	2960702	37.87	308247	our study
N11-1847	415	CC415	II	4421STDY6601815	QYIB000000000	food	meat	2011-09-07	Switzerland	1/2a	17	993021	2891258	37.92	376479	our study
N11-1850	1290	CC217	I	4421STDY6601816	QYIA000000000	food	cheese	2011-09-07	Switzerland	4b	21	1217493	2909147	37.91	500411	our study
N11-1884	2	CC2	I	4421STDY6601817	QYHZ000000000	food	meat	2011-09-07	Switzerland	4b	23	625268	2957625	37.87	305080	our study
N11-1906	204	CC204	II	4421STDY6601818	QYHY000000000	food	meat	2011-09-07	Switzerland	1/2a	16	650381	3012406	37.73	478044	our study
N11-2036	8	CC8	II	4421STDY6601716	QYHX000000000	human	not available	2011-07-14	Switzerland	1/2a	17	620507	2956391	37.84	439912	our study
N11-2037	239	CC155	II	4421STDY6601717	QYHW000000000	human	not available	2011-07-15	Switzerland	1/2a	12	781118	2938521	37.96	542813	our study
N11-2038	1296	CC8	II	4421STDY6601718	QYHV000000000	human	not available	2011-07-16	Switzerland	1/2a	19	620466	3042728	37.82	439912	our study
N11-2039	742	CC8	II	4421STDY6601719	QYHU000000000	human	not available	2011-07-17	Switzerland	1/2a	18	620466	3042416	37.82	439912	our study
N11-2134	1307	CC155	II	4421STDY6601720	QYHT000000000	human	blood	2011-07-18	Switzerland	1/2a	12	783964	2886779	37.91	685740	our study
N11-2183	1319	CC20	II	4421STDY6601819	QYHS000000000	food	mixed salad	2011-10-11	Switzerland	1/2a	24	722473	2985794	37.85	430293	our study
N11-2215	16	CC8	II	4421STDY6601820	QYHR000000000	food	milk product	2011-10-11	Switzerland	1/2a	13	700675	2958444	37.85	580338	our study
N11-2272	20	CC20	II	4421STDY6601821	QYHQ000000000	food	corn	2011-10-13	Switzerland	1/2a	17	994719	3006624	37.83	535530	our study
N11-2292	1	CC1	I	4421STDY6601721	QYHP000000000	human	blood	2011-07-19	Switzerland	4b	28	1243411	2987642	37.84	372569	our study
N11-2345	725	CC21	II	4421STDY6601822	QYHO000000000	food	meat	2011-10-25	Switzerland	1/2a	14	763107	2905584	37.86	443677	our study
N11-2474	1294	CC8	II	4421STDY6601722	QYHN000000000	human	blood	2011-07-20	Switzerland	1/2a	15	658707	2881057	37.89	438892	our study
N11-2509	728	CC37	II	4421STDY6601823	QYHM000000000	food	meat	2011-11-17	Switzerland	1/2a	13	1497904	2891263	37.89	1497904	our study
N11-2538	740	CC177	II	4421STDY6601824	QYHL000000000	food	milk	2011-11-22	Switzerland	1/2a	15	1223337	2873309	37.89	541957	our study
N11-2542	739	CC8	II	4421STDY6601825	QYHK000000000	food	cheese	2011-11-22	Switzerland	1/2a	16	1293463	2942363	37.89	566446	our study
N11-2553	403	CC403	II	4421STDY6601723	QYHJ000000000	human	blood and feces	2011-07-21	Switzerland	1/2a	14	979485	2965024	37.81	571354	our study
N11-2554	738	CC403	II	4421STDY6601826	QYHI000000000	food	meat	2011-11-22	Switzerland	1/2a	13	908032	2931434	37.83	571338	our study
N11-2618	278	CC1	I	4421STDY6601724	QYHH000000000	human	feces	2011-07-22	Switzerland	4b	19	1205969	2929163	37.91	573005	our study
N11-2662	733	CC451	II	4421STDY6601827	QYHG000000000	food	meat	2012-12-06	Switzerland	1/2a	12	1504121	2880224	37.91	1504121	our study
N11-2675	1063	CC5	I	4421STDY6601725	QYHF000000000	human	blood	2011-07-23	Switzerland	1/2b	20	748213	2962020	37.87	477616	our study
N11-2747	1	CC1	I	4421STDY6601726	QYHE000000000	human	blood	2011-07-24	Switzerland	4b	21	729399	2873743	37.93	476747	our study
N11-2801	6	CC6	I	4421STDY6601727	QYHD000000000	human	blood	2011-07-25	Switzerland	4b	20	1218504	2880338	37.92	510158	our study
N12-0036	1314	CC14	II	4421STDY6601728	QYHC000000000	human	liquor	2012-01-04	Switzerland	1/2a	16	1107783	2977701	37.76	541048	our study
N12-0123	8	CC8	II	4421STDY6601729	QYHB000000000	human	liquor	2012-01-17	Switzerland	1/2a	17	587333	3008620	37.83	438892	our study
N12-0151	744	CC415	II	4421STDY6601828	QYHA000000000	food	cheese	2012-01-23	Switzerland	1/2a	18	992930	2945041	37.88	376478	our study
N12-0258	1309	CC101	II	4421STDY6601730	QYGZ000000000	human	blood	2012-02-07	Switzerland	1/2a	17	608749	2999182	37.81	501788	our study
N12-0275	726	CC14	II	4421STDY6601829	QYGY000000000	food	milk	2012-02-10	Switzerland	1/2a	13	1255750	2939085	37.87	581814	our study
N12-0320	4	CC4	I	4421STDY6601731	QYGX000000000	human	blood	2012-02-16	Switzerland	4b	19	1223634	2923957	37.92	501869	our study
N12-0367	121	CC121	II	4421STDY6601733	QYGW000000000	human	blood	2012-02-27	Switzerland	1/2a	19	1222615	2933849	37.99	541815	our study
N12-0486	9	CC9	II	4421STDY6601734	QYGV000000000	human	blood	2012-03-12	Switzerland	1/2c	21	866167	3027269	37.9	541447	our study
N12-0551	456	CC1	I	4421STDY6601735	QYGU000000000	human	placenta	2012-03-27	Switzerland	4b	36	732709	2983963	37.86	377599	our study
N12-0560	1318	CC29	II	4421STDY6601736	QYGT000000000	human	blood	2012-03-28	Switzerland	1/2a	15	1253523	2909250	37.89	583284	our study
N12-0561	754	CC26	II	4421STDY6601831	QYGS000000000	food	cheese	2012-03-28	Switzerland	1/2a	13	1184812	2906553	37.91	547831	our study
N12-0570	252	CC1	I	4421STDY6601737	QYGR000000000	human	blood	2012-03-29	Switzerland	4b	36	733214	2988079	37.86	384493	our study
N12-0571	755	CC121	II	4421STDY6601832	QYGQ000000000	food	meat	2012-03-29	Switzerland	1/2a	21	1262208	3066032	37.83	529174	our study
N12-0575	746	CC1	I	4421STDY6601738	QYGP000000000	human	placenta	2012-03-30	Switzerland	4b	33	732673	2987744	37.85	384493	our study

Zamudio et al., 2020 – Table S1

N12-0588	7	CC7	II	4421STDY6601739	QYGO00000000	human	blood	2012-04-03	Switzerland	1/2a	16	885206	2875350	37.87	609818	our study
N12-0605	727	CC1	I	4421STDY6601833	QYGN00000000	food	raw sausage	2012-04-05	Switzerland	4b	18	1205547	2886073	37.93	529848	our study
N12-0667	1313	CC475	II	4421STDY6601740	QYGH00000000	human	blood	2012-04-18	Switzerland	1/2a	15	1262659	2963871	37.78	540672	our study
N12-0677	752	CC7	II	4421STDY6601834	QYGL00000000	food	scaleded sausage	2012-04-20	Switzerland	1/2a	18	1023319	2962260	37.87	476500	our study
N12-0710	477	CC9	II	4421STDY6601835	QYKG00000000	food	meat	2012-04-26	Switzerland	1/2c	25	604673	3066616	37.88	477029	our study
N12-0711	501	CC26	II	4421STDY6601836	QYGI00000000	food	meat	2012-04-26	Switzerland	1/2a	12	1184806	2902279	37.89	547831	our study
N12-0728	158	CC7	II	4421STDY6601837	QYGI00000000	food	meat	2012-05-02	Switzerland	1/2a	17	1023320	3005848	37.82	524371	our study
N12-0794	4	CC4	I	4421STDY6601741	QYGH00000000	human	blood	2012-05-10	Switzerland	4b	23	1223636	2920551	37.93	538479	our study
N12-0796	7	CC7	II	4421STDY6601839	QYGG00000000	food	meat product	2012-05-11	Switzerland	1/2a	19	1023319	3005979	37.83	524372	our study
N12-0802	725	CC21	II	4421STDY6601742	QYGF00000000	human	blood	2012-05-14	Switzerland	1/2a	15	763178	2899289	37.82	443677	our study
N12-0822	751	CC9	II	4421STDY6601840	QYGE00000000	food	poultry	2012-05-16	Switzerland	1/2c	23	604873	3027207	37.9	477704	our study
N12-0823	26	CC26	II	4421STDY6601841	QYGD00000000	food	vegetables	2012-05-16	Switzerland	1/2a	16	1184811	2938255	37.86	547789	our study
N12-0906	230	CC199	II	4421STDY6601842	RDTB00000000	food	milk	2012-05-30	Switzerland	1/2a	12	1479126	2863335	37.89	1479126	our study
N12-0922	22	CC21	II	4421STDY6601743	QYGC00000000	human	blood	2012-05-30	Switzerland	1/2a	16	805146	2941580	37.8	443696	our study
N12-0935	403	CC403	II	4421STDY6601744	QYGB00000000	human	blood	2012-06-04	Switzerland	1/2a	13	951076	2936207	37.82	571355	our study
N12-0998	3	CC3	I	4421STDY6601844	RDTA00000000	food	meat	2012-06-15	Switzerland	1/2b	19	777975	3006597	37.93	478216	our study
N12-1107	207	CC207	II	4421STDY6601745	QYGA00000000	human	blood	2012-06-29	Switzerland	1/2a	10	1512343	2911829	37.87	1512343	our study
N12-1273	1311	CC31	II	4421STDY6601746	QYFZ00000000	human	blood	2012-07-20	Switzerland	1/2a	23	1282071	2868070	37.83	542560	our study
N12-1338	1287	CC4	I	4421STDY6601747	QYFY00000000	human	blood	2012-07-27	Switzerland	4b	20	1223593	2884119	37.95	501797	our study
N12-1339	746	CC1	I	4421STDY6601845	QYFX00000000	food	meat	2012-07-27	Switzerland	4b	21	1206441	2914499	37.91	556977	our study
N12-1387	6	CC6	I	4421STDY6601748	QYFW00000000	human	blood	2012-08-03	Switzerland	4b	22	1218306	2921433	37.9	551210	our study
N12-1435	21	CC21	II	4421STDY6601846	QYFV00000000	food	milk product	2012-08-08	Switzerland	1/2a	20	763170	3038731	37.77	352471	our study
N12-1436	747	CC37	II	4421STDY6601847	QYFU00000000	food	meat	2012-08-08	Switzerland	1/2a	17	646868	2891007	37.89	450117	our study
N12-1478	750	CC26	II	4421STDY6601848	QYFT00000000	food	milk product	2012-08-14	Switzerland	1/2a	12	1184738	2901127	37.89	587828	our study
N12-1608	224	CC224	I	4421STDY6601749	QYFS00000000	human	blood	2012-08-24	Switzerland	1/2b	20	739366	2880319	37.89	476724	our study
N12-1639	37	CC37	II	4421STDY6601849	QYFR00000000	food	meat	2012-08-28	Switzerland	1/2a	17	646871	2890846	37.89	450045	our study
N12-1655	1286	CC54	I	4421STDY6601750	QYFQ00000000	human	blood	2012-08-29	Switzerland	4b	21	1220540	2896811	37.89	381995	our study
N12-1730	1	CC1	I	4421STDY6601751	QYFP00000000	human	femoral joint	2012-09-06	Switzerland	4b	21	759107	2985005	37.85	480790	our study
N12-1796	1288	CC4	I	4421STDY6601752	QYFO00000000	human	liquor	2012-09-14	Switzerland	4b	20	1223413	2915127	37.9	501898	our study
N12-1872	1300	CC7	II	4421STDY6601753	QYFN00000000	human	blood	2012-09-24	Switzerland	1/2a	15	1019768	2919060	37.88	480489	our study
N12-1917	155	CC155	II	4421STDY6601754	QYFM00000000	human	blood	2012-09-27	Switzerland	1/2a	12	783963	2894862	37.9	685732	our study
N12-1996	1	CC1	I	4421STDY6601850	RDSZ00000000	food	cheese	2012-10-09	Switzerland	4b	17	1469732	2918885	37.91	1469732	our study
N12-2031	1293	CC8	II	4421STDY6601755	QYFL00000000	human	blood	2012-10-12	Switzerland	1/2a	12	658706	2913755	37.88	579593	our study
N12-2082	289	CC8	II	4421STDY6601756	QYFK00000000	human	blood	2012-10-23	n	1/2a	13	701140	2928309	37.85	579590	our study
N12-2169	26	CC26	II	4421STDY6601757	QYFJ00000000	human	liquor	2012-10-31	Switzerland	1/2a	12	1184646	2898561	37.89	585444	our study
N12-2378	1	CC1	I	4421STDY6601758	QYFI00000000	human	blood	2012-12-04	Switzerland	4b	18	1205119	2915923	37.89	520930	our study
N12-2451	3	CC3	I	4421STDY6601851	RDSY00000000	food	cheese	2012-12-12	Switzerland	1/2b	26	573557	3048589	37.82	513365	our study
N12-2532	21	CC21	II	4421STDY6601759	QYFH00000000	human	liquor	2012-12-28	Switzerland	1/2a	14	763188	2939176	37.8	443677	our study
N12-2549	403	CC403	II	4421STDY6601760	QYFG00000000	human	blood	2012-12-31	Switzerland	1/2a	13	951076	2936253	37.82	571350	our study
N13-0001	9	CC9	II	4421STDY6601761	QYFF00000000	human	blood	2013-01-03	Switzerland	1/2c	13	866162	2958604	37.94	581616	our study
N13-0048	1304	CC403	II	4421STDY6601762	QYFE00000000	human	blood	2013-01-09	Switzerland	1/2a	13	951075	2936543	37.82	571358	our study
N13-0119	121	CC121	II	4421STDY6601763	QYFD00000000	human	blood	2013-01-18	Switzerland	1/2a	23	607283	3086056	37.89	482808	our study
N13-0177	54	CC54	I	4421STDY6601764	QYFC00000000	human	blood	2013-01-29	Switzerland	4b	18	1220010	2895022	37.89	382020	our study
N13-0225	1310	CC101	II	4421STDY6601852	QYFB00000000	food	meat	2013-02-08	Switzerland	1/2a	18	944334	3047328	37.79	501890	our study
N13-0228	748	CC31	II	4421STDY6601853	QYFA00000000	food	milk	2013-02-08	Switzerland	1/2a	25	751695	3001631	37.81	431753	our study
N13-0245	91	CC14	II	4421STDY6601854	QYFZ00000000	food	raw sausage	2013-02-12	Switzerland	1/2a	12	1178772	2859428	37.92	583924	our study
N13-0255	325	CC31	II	4421STDY6601855	QYFE00000000	food	milk	2013-02-14	Switzerland	1/2a	28	751695	3006972	37.83	431753	our study
N13-0281	1305	CC403	II	4421STDY6601765	QYEX00000000	human	blood	2013-02-19	Switzerland	1/2a	13	951076	2936748	37.82	571358	our study
N13-0287	16	CC8	II	4421STDY6601766	QYEW00000000	human	liquor	2013-02-21	Switzerland	1/2a	14	700439	2917809	37.88	523095	our study
N13-0341	37	CC37	II	4421STDY6601767	QYEV00000000	human	blood	2013-02-28	Switzerland	1/2a	15	1401415	2923894	37.88	450120	our study
N13-0369	121	CC121	II	4421STDY6601856	RDSX00000000	food	meat	2013-03-07	Switzerland	1/2a	19	1262204	3061661	37.81	529174	our study
N13-0402	5	CC5	I	4421STDY6601857	RDSW00000000	food	meat	2013-03-14	Switzerland	1/2b	23	740387	2934147	37.92	477185	our study
N13-0413	451	CC451	II	4421STDY6601858	QYEU00000000	food	poultry	2013-03-18	Switzerland	1/2a	12	1462641	2838742	37.94	1462641	our study
N13-0437	3	CC3	I	4421STDY6601768	QYET00000000	human	blood	2013-03-20	Switzerland	1/2b	21	749260	3054370	37.9	478659	our study
N13-0500	36	CC36	II	4421STDY6601769	QYES00000000	human	blood	2013-04-05	Switzerland	1/2a	17	1475851	2935699	37.88	1475851	our study
N13-0581	517	CC517	I	4421STDY6601770	QYER00000000	human	blood	2013-04-23	Switzerland	1/2b	19	908404	2879502	37.93	299830	our study
N13-0677	350	CC1	I	4421STDY6601771	QYEQ00000000	human	liquor	2013-05-07	Switzerland	4b	20	1205554	2911577	37.91	517856	our study
N13-0698	1306	CC403	II	4421STDY6601772	QYEP00000000	human	blood	2013-05-10	Switzerland	1/2a	13	983706	2968606	37.81	571353	our study
N13-0703	6	CC6	I	4421STDY6601859	RDSV00000000	food	milk	2013-05-13	Switzerland	4b	20	1218408	2920107	37.9	549999	our study
N13-0714	586	CC29	II	4421STDY6601773	QYEO00000000	human	vaginal fluid	2013-05-14	Switzerland	1/2a	16	1253920	2869811	37.93	543558	our study

Zamudio et al., 2020 – Table S1

N13-0739	8	CC8	II	4421STDY6601774	QYEN00000000	human	blood	2013-05-17	Switzerland Liechtenstei	1/2a	17	699772	3009549	37.83	579591	our study
N13-0762	683	CC415	II	4421STDY6601775	QYEM00000000	human	blood	2013-05-21	n	1/2a	17	992930	2972890	37.88	376627	our study
N13-0771	155	CC155	II	4421STDY6601776	QYEL00000000	human	blood	2013-05-22	Switzerland	1/2a	12	783963	2855093	37.93	685732	our study
N13-0772	4	CC4	I	4421STDY6601777	QYEK00000000	human	blood	2013-05-22	Switzerland	4b	20	1223135	2884073	37.95	501867	our study
N13-0796	1303	CC21	II	4421STDY6601778	QYEI00000000	human	feces	2013-05-24	Switzerland	1/2a	14	805147	2941624	37.79	443696	our study
N13-0836	121	CC121	II	4421STDY6601860	RDSU00000000	food	meat	2013-05-30	Switzerland	1/2b	23	778997	3060375	37.81	482471	our study
N13-0863	1289	CC4	I	4421STDY6601779	QYEI00000000	human	blood	2013-06-05	Switzerland	4b	20	1223514	2883967	37.95	501901	our study
N13-0904	26	CC26	II	4421STDY6601780	QYEH00000000	human	blood	2013-06-12	Switzerland	1/2a	28	1184821	2932112	37.87	547831	our study
N13-0974	204	CC204	II	4421STDY6601861	QYEG00000000	food	scaled sausage	2013-06-25	Switzerland	1/2a	16	650380	3012076	37.73	478043	our study
N13-0987	1	CC1	I	4421STDY6601781	QYEF00000000	human	blood	2013-06-26	Switzerland	4b	17	1205545	2929329	37.91	533625	our study
N13-1028	1302	CC21	II	4421STDY6601782	QYEE00000000	human	not available	2013-07-02	Switzerland	1/2a	14	805147	2941805	37.8	443654	our study
N13-1054	1285	CC2	I	4421STDY6601783	QYED00000000	human	blood	2013-07-04	Switzerland	4b	23	630348	2931411	37.88	308196	our study
N13-1079	1	CC1	I	4421STDY6601784	QYEC00000000	human	blood	2013-07-10	Switzerland	4b	24	759620	2957155	37.87	409381	our study
N13-1155	59	CC59	I	4421STDY6601785	QYEB00000000	human	blood	2013-07-23	Switzerland	1/2b	23	646029	2831327	37.87	506352	our study
N13-1158	375	ST375	II	4421STDY6601862	QYEA00000000	food	salad	2013-07-24	Switzerland	1/2a	9	1548830	2984373	37.76	1548830	our study
N13-1187	155	CC155	II	4421STDY6601863	QYDZ00000000	food	meat	2013-07-29	Switzerland	1/2a	12	783962	2886764	37.91	685730	our study
N13-1261	1291	CC1	I	4421STDY6601786	QYDY00000000	human	blood	2013-08-08	Switzerland	4b	18	1206055	2873299	37.93	517195	our study
N13-1271	6	CC6	I	4421STDY6601787	QYDX00000000	human	blood	2013-08-09	Switzerland	4b	20	1218505	2880195	37.92	510174	our study
N13-1282	336	CC21	II	4421STDY6601788	QYDW00000000	human	blood	2013-08-12	Switzerland	1/2a	14	763170	2902271	37.87	443677	our study
N13-1356	727	CC1	I	4421STDY6601789	QYDV00000000	human	liquor	2013-08-19	Switzerland	4b	20	1206432	2914844	37.91	557410	our study
N13-1404	1308	CC398	II	4421STDY6601790	QYDU00000000	human	blood	2013-08-21	Switzerland	1/2a	10	1456910	2872104	37.89	1456910	our study
N13-1407	1315	CC199	II	4421STDY6601791	QYDT00000000	human	blood	2013-08-22	Switzerland	1/2a	12	1510166	2993584	37.82	1510166	our study
N13-1418	1297	CC8	II	4421STDY6601792	QYDS00000000	human	blood	2013-08-23	Switzerland	1/2a	12	700500	2923066	37.85	579592	our study
N13-1507	6	CC6	I	4421STDY6601793	QYDR00000000	human	blood	2013-09-02	Switzerland	4b	19	1218054	2879957	37.92	510374	our study
N13-1528	37	CC37	II	4421STDY6601794	QYDQ00000000	human	blood	2013-09-03	Switzerland	1/2a	16	1250405	2891706	37.89	450121	our study
N13-1590	8	CC8	II	4421STDY6601795	QYDP00000000	human	liquor	2013-09-11	Switzerland	1/2a	12	700444	2923113	37.85	579592	our study
N13-1637	1298	CC8	II	4421STDY6601796	QYDO00000000	human	blood	2013-09-17	Switzerland	1/2a	30	505355	2960325	37.81	408742	our study
N13-1664	2	CC2	I	4421STDY6601864	QYDN00000000	food	cheese	2013-09-19	Switzerland	4b	23	663070	2958237	37.84	308243	our study
N13-1702	1312	CC31	II	4421STDY6601797	RDSU00000000	human	homo sapiens	2013-09-24	Switzerland	1/2a	24	1228069	2908828	37.81	583365	our study
N13-2046	155	CC155	II	4421STDY6601865	QYDM00000000	food	poultry	2013-11-07	Switzerland	1/2c	12	816419	2931494	37.87	729124	our study
N13-2107	4	CC4	I	4421STDY6601866	QYDL00000000	food	meat	2013-11-18	Switzerland	4b	20	1223600	2884209	37.95	501820	our study
N13-2179	226	ST226	II	4421STDY6601867	QYDK00000000	food	butter	2013-11-26	Switzerland	1/2a	9	1453311	2834776	37.92	1453311	our study
N14-0152	307	CC307	II	4421STDY6601868	QYDJ00000000	food	vegetables	2014-01-22	Switzerland	1/2a	12	1415943	2938399	37.82	540222	our study
N14-0205	121	CC121	II	4421STDY6601869	QYDI00000000	food	meat	2014-02-04	Switzerland	1/2a	27	1263868	3060992	37.81	537932	our study
N14-0322	121	CC121	II	4421STDY6601870	QYDH00000000	food	environment	2014-02-24	Switzerland	3c	27	1222617	3023333	37.87	537920	our study
N14-0358	9	CC9	II	4421STDY6601871	QYDG00000000	food	dried meat	2014-02-27	Switzerland	1/2a	21	604872	3023486	37.91	477701	our study
N16-0211	new	CC4	I	4421STDY6601873	QYDF00000000	human	homo sapiens	2016-02-01	Switzerland	4d	17	1223561	2882147	37.95	501868	our study
N16-0254	121	CC121	II	4421STDY6601874	QYDE00000000	food	food	2016-02-05	Switzerland	3a	43	571994	3165966	37.77	465449	our study
N16-0479	2	CC2	I	4421STDY6601875	QYDD00000000	unknown	unknown	2016-03-10	Switzerland	4d	22	625269	2962121	37.87	308242	our study
N16-0734	121	CC121	II	4421STDY6601876	QYDC00000000	ent	environment	2016-04-22	Switzerland	3a	50	571995	3170214	37.76	465449	our study
N16-2061	3	CC3	I	4421STDY6601877	QYDB00000000	human	homo sapiens	2016-09-07	Switzerland	3b	15	744478	2972524	37.97	479020	our study
N16-2501	130	CC69	III	4421STDY6601878	QYDA00000000	unknown	unknown	2016-10-21	Switzerland	4c	13	961336	2949882	38.08	537264	our study
N16-2502	71	CC131	III	4421STDY6601879	RDSU00000000	unknown	unknown	2016-10-21	Switzerland	4a	12	1450731	2816307	38.15	1450731	our study
LL195	1	CC1	I	ASM31805v1	HF558398	human	homo sapiens	1983-1987	Switzerland	4b	1	2904662	2904662	38.04	2904662	23405339
Lm3136	18	CC18	II	-	CP013722	human	homo sapiens	2005	Switzerland	1/2a	1	2905347	2905347	38.04	2905347	26966206
Lm3163	26	CC26	II	-	CP013723	human	homo sapiens	2005	Switzerland	1/2a	1	2927751	2927751	38	2927751	26966206
					CP013724,											
					plasmid:											
N1546	8	CC8	II	ASM148344v1	CP013725	human	homo sapiens	2011	Switzerland	1/2a	2	2952608	3039224	37.93	2952608	26966206
N16-0044	6	CC6	I		Pending	human	homo sapiens	2016	Switzerland	4b	1	2908718	2908718	38.03	2908718	-
N2306	4	CC4	I	ASM95077v1	CP011004	human	homo sapiens	2013-2014	Switzerland	4b	1	2911639	2911639	38.06	2911639	26021930

Table S2: Germany and The Netherlands *L. monocytogenes* isolates

Isolate ID	Country	ST	CC	Lineage	Study accession	Sample accession	Reference
07-00066	Germany	2	CC2	I	PRJEB24496	SAMEA104485042	Halbedel et al. 2018
08-00118-1	Germany	2	CC2	I	PRJEB24496	SAMEA104485043	Halbedel et al. 2018
08-01520	Germany	8	CC8	II	PRJEB24496	SAMEA104485044	Halbedel et al. 2018
08-04774	Germany	5	CC5	I	PRJEB24496	SAMEA104485045	Halbedel et al. 2018
09-02927	Germany	2	CC2	I	PRJEB24496	SAMEA104485046	Halbedel et al. 2018
09-06548	Germany	777	CC403	II	PRJEB24496	SAMEA104485047	Halbedel et al. 2018
09-08026	Germany	403	CC403	II	PRJEB24496	SAMEA104485048	Halbedel et al. 2018
10-02966	Germany	2	CC2	I	PRJEB24496	SAMEA104485049	Halbedel et al. 2018
10-03323	Germany	14	CC14	II	PRJEB24496	SAMEA104485050	Halbedel et al. 2018
10-03324	Germany	551		II	PRJEB24496	SAMEA104485051	Halbedel et al. 2018
10-03443	Germany	9	CC9	II	PRJEB24496	SAMEA104485052	Halbedel et al. 2018
10-04286	Germany	1	CC1	I	PRJEB24496	SAMEA104485053	Halbedel et al. 2018
10-05308	Germany	1	CC1	I	PRJEB24496	SAMEA104485054	Halbedel et al. 2018
10-05402	Germany	2	CC2	I	PRJEB24496	SAMEA104485055	Halbedel et al. 2018
10-05403	Germany	1	CC1	I	PRJEB24496	SAMEA104485056	Halbedel et al. 2018
10-05404	Germany	5	CC5	I	PRJEB24496	SAMEA104485057	Halbedel et al. 2018
10-06027	Germany	5	CC5	I	PRJEB24496	SAMEA104485058	Halbedel et al. 2018
11-01480	Germany	5	CC5	I	PRJEB24496	SAMEA104485059	Halbedel et al. 2018
11-04121	Germany	217	CC217	I	PRJEB24496	SAMEA104485060	Halbedel et al. 2018
11-04488	Germany	403	CC403	II	PRJEB24496	SAMEA104485061	Halbedel et al. 2018
11-04732	Germany	1	CC1	I	PRJEB24496	SAMEA104485062	Halbedel et al. 2018
11-04868	Germany	18	CC18	II	PRJEB24496	SAMEA104485063	Halbedel et al. 2018
11-04869	Germany	6	CC6	I	PRJEB24496	SAMEA104485064	Halbedel et al. 2018
11-07879	Germany	403	CC403	II	PRJEB24496	SAMEA104485065	Halbedel et al. 2018
12-00164	Germany	5	CC5	I	PRJEB24496	SAMEA104485066	Halbedel et al. 2018
12-00600	Germany	5	CC5	I	PRJEB24496	SAMEA104485067	Halbedel et al. 2018
12-00802	Germany	403	CC403	II	PRJEB24496	SAMEA104485068	Halbedel et al. 2018
12-04914	Germany	403	CC403	II	PRJEB24496	SAMEA104485069	Halbedel et al. 2018
12-04917	Germany	403	CC403	II	PRJEB24496	SAMEA104485070	Halbedel et al. 2018
12-05002	Germany	5	CC5	I	PRJEB24496	SAMEA104485071	Halbedel et al. 2018
12-05460	Germany	8	CC8	II	PRJEB24496	SAMEA104485072	Halbedel et al. 2018
12-05492	Germany	403	CC403	II	PRJEB24496	SAMEA104485073	Halbedel et al. 2018
13-00023	Germany	403	CC403	II	PRJEB24496	SAMEA104485074	Halbedel et al. 2018
13-00128	Germany	403	CC403	II	PRJEB24496	SAMEA104485075	Halbedel et al. 2018
13-00745	Germany	403	CC403	II	PRJEB24496	SAMEA104485076	Halbedel et al. 2018
13-01075	Germany	8	CC8	II	PRJEB24496	SAMEA104485077	Halbedel et al. 2018
13-02266	Germany	2	CC2	I	PRJEB24496	SAMEA104485078	Halbedel et al. 2018
13-02706	Germany	5	CC5	I	PRJEB24496	SAMEA104485079	Halbedel et al. 2018
13-03594	Germany	6	CC6	I	PRJEB24496	SAMEA104485080	Halbedel et al. 2018
13-04560	Germany	8	CC8	II	PRJEB24496	SAMEA104485081	Halbedel et al. 2018
13-05603	Germany	8	CC8	II	PRJEB24496	SAMEA104485082	Halbedel et al. 2018
13-05655	Germany	403	CC403	II	PRJEB24496	SAMEA104485083	Halbedel et al. 2018
13-05675	Germany	8	CC8	II	PRJEB24496	SAMEA104485084	Halbedel et al. 2018
13-05934	Germany	8	CC8	II	PRJEB24496	SAMEA104485085	Halbedel et al. 2018
13-05955	Germany	8	CC8	II	PRJEB24496	SAMEA104485086	Halbedel et al. 2018
14-00122	Germany	6	CC6	I	PRJEB24496	SAMEA104485087	Halbedel et al. 2018
14-00182	Germany	8	CC8	II	PRJEB24496	SAMEA104485088	Halbedel et al. 2018
14-00250	Germany	1	CC1	I	PRJEB24496	SAMEA104485089	Halbedel et al. 2018
14-01104	Germany	8	CC8	II	PRJEB24496	SAMEA104485090	Halbedel et al. 2018
14-01124	Germany	403	CC403	II	PRJEB24496	SAMEA104485091	Halbedel et al. 2018
14-01996	Germany	8	CC8	II	PRJEB24496	SAMEA104485092	Halbedel et al. 2018
14-02065	Germany	403	CC403	II	PRJEB24496	SAMEA104485093	Halbedel et al. 2018
14-02242	Germany	5	CC5	I	PRJEB24496	SAMEA104485094	Halbedel et al. 2018
14-02669	Germany	8	CC8	II	PRJEB24496	SAMEA104485095	Halbedel et al. 2018
14-02772	Germany	8	CC8	II	PRJEB24496	SAMEA104485096	Halbedel et al. 2018
14-03077	Germany	5	CC5	I	PRJEB24496	SAMEA104485097	Halbedel et al. 2018
14-03633	Germany	5	CC5	I	PRJEB24496	SAMEA104485098	Halbedel et al. 2018
14-03634	Germany	8	CC8	II	PRJEB24496	SAMEA104485099	Halbedel et al. 2018
14-03876	Germany	5	CC5	I	PRJEB24496	SAMEA104485100	Halbedel et al. 2018
14-03952	Germany	8	CC8	II	PRJEB24496	SAMEA104485101	Halbedel et al. 2018
14-04024	Germany	5	CC5	I	PRJEB24496	SAMEA104485102	Halbedel et al. 2018
14-04253	Germany	5	CC5	I	PRJEB24496	SAMEA104485103	Halbedel et al. 2018
14-04788	Germany	8	CC8	II	PRJEB24496	SAMEA104485104	Halbedel et al. 2018
14-04789	Germany	5	CC5	I	PRJEB24496	SAMEA104485105	Halbedel et al. 2018
14-04959	Germany	8	CC8	II	PRJEB24496	SAMEA104485106	Halbedel et al. 2018
14-04961	Germany	5	CC5	I	PRJEB24496	SAMEA104485107	Halbedel et al. 2018
14-05083	Germany	5	CC5	I	PRJEB24496	SAMEA104485108	Halbedel et al. 2018
14-05358	Germany	8	CC8	II	PRJEB24496	SAMEA104485109	Halbedel et al. 2018

14-05511	Germany	8	CC8	II	PRJEB24496	SAMEA104485110	Halbedel et al. 2018
14-05577	Germany	8	CC8	II	PRJEB24496	SAMEA104485111	Halbedel et al. 2018
14-05685	Germany	403	CC403	II	PRJEB24496	SAMEA104485112	Halbedel et al. 2018
14-05759	Germany	2	CC2	I	PRJEB24496	SAMEA104485113	Halbedel et al. 2018
14-05822	Germany	403	CC403	II	PRJEB24496	SAMEA104485114	Halbedel et al. 2018
14-05969	Germany	403	CC403	II	PRJEB24496	SAMEA104485115	Halbedel et al. 2018
14-06143	Germany	403	CC403	II	PRJEB24496	SAMEA104485116	Halbedel et al. 2018
14-06239	Germany	403	CC403	II	PRJEB24496	SAMEA104485117	Halbedel et al. 2018
14-06478	Germany	2	CC2	I	PRJEB24496	SAMEA104485118	Halbedel et al. 2018
14-06483	Germany	8	CC8	II	PRJEB24496	SAMEA104485119	Halbedel et al. 2018
15-00108	Germany	1	CC1	I	PRJEB24496	SAMEA104485120	Halbedel et al. 2018
15-00148	Germany	8	CC8	II	PRJEB24496	SAMEA104485121	Halbedel et al. 2018
15-00154	Germany	8	CC8	II	PRJEB24496	SAMEA104485122	Halbedel et al. 2018
15-00189	Germany	8	CC8	II	PRJEB24496	SAMEA104485123	Halbedel et al. 2018
15-00190	Germany	1	CC1	I	PRJEB24496	SAMEA104485124	Halbedel et al. 2018
15-00191	Germany	1	CC1	I	PRJEB24496	SAMEA104485125	Halbedel et al. 2018
15-00245	Germany	8	CC8	II	PRJEB24496	SAMEA104485126	Halbedel et al. 2018
15-00254	Germany	1	CC1	I	PRJEB24496	SAMEA104485127	Halbedel et al. 2018
15-00390	Germany	8	CC8	II	PRJEB24496	SAMEA104485128	Halbedel et al. 2018
15-00451	Germany	8	CC8	II	PRJEB24496	SAMEA104485129	Halbedel et al. 2018
15-00455	Germany	8	CC8	II	PRJEB24496	SAMEA104485130	Halbedel et al. 2018
15-00469	Germany	1	CC1	I	PRJEB24496	SAMEA104485131	Halbedel et al. 2018
15-00553	Germany	1	CC1	I	PRJEB24496	SAMEA104485132	Halbedel et al. 2018
15-00607	Germany	8	CC8	II	PRJEB24496	SAMEA104485133	Halbedel et al. 2018
15-00617	Germany	8	CC8	II	PRJEB24496	SAMEA104485134	Halbedel et al. 2018
15-00753	Germany	1	CC1	I	PRJEB24496	SAMEA104485135	Halbedel et al. 2018
15-00840	Germany	8	CC8	II	PRJEB24496	SAMEA104485136	Halbedel et al. 2018
15-00844	Germany	8	CC8	II	PRJEB24496	SAMEA104485137	Halbedel et al. 2018
15-00845	Germany	new		I	PRJEB24496	SAMEA104485138	Halbedel et al. 2018
15-00909	Germany	8	CC8	II	PRJEB24496	SAMEA104485139	Halbedel et al. 2018
15-01121	Germany	2	CC2	I	PRJEB24496	SAMEA104485140	Halbedel et al. 2018
15-01123	Germany	403	CC403	II	PRJEB24496	SAMEA104485141	Halbedel et al. 2018
15-01128	Germany	2	CC2	I	PRJEB24496	SAMEA104485142	Halbedel et al. 2018
15-01129	Germany	2	CC2	I	PRJEB24496	SAMEA104485143	Halbedel et al. 2018
15-01130	Germany	2	CC2	I	PRJEB24496	SAMEA104485144	Halbedel et al. 2018
15-01131	Germany	2	CC2	I	PRJEB24496	SAMEA104485145	Halbedel et al. 2018
15-01132	Germany	2	CC2	I	PRJEB24496	SAMEA104485146	Halbedel et al. 2018
15-01133	Germany	8	CC8	II	PRJEB24496	SAMEA104485147	Halbedel et al. 2018
15-01137	Germany	1	CC1	I	PRJEB24496	SAMEA104485148	Halbedel et al. 2018
15-01190	Germany	8	CC8	II	PRJEB24496	SAMEA104485149	Halbedel et al. 2018
15-01239	Germany	1	CC1	I	PRJEB24496	SAMEA104485150	Halbedel et al. 2018
15-01331	Germany	2	CC2	I	PRJEB24496	SAMEA104485151	Halbedel et al. 2018
15-01352	Germany	1	CC1	I	PRJEB24496	SAMEA104485152	Halbedel et al. 2018
15-01384	Germany	1	CC1	I	PRJEB24496	SAMEA104485153	Halbedel et al. 2018
15-01385	Germany	8	CC8	II	PRJEB24496	SAMEA104485154	Halbedel et al. 2018
15-01393	Germany	2	CC2	I	PRJEB24496	SAMEA104485155	Halbedel et al. 2018
15-01424	Germany	2	CC2	I	PRJEB24496	SAMEA104485156	Halbedel et al. 2018
15-01429	Germany	2	CC2	I	PRJEB24496	SAMEA104485157	Halbedel et al. 2018
15-01430	Germany	1	CC1	I	PRJEB24496	SAMEA104485158	Halbedel et al. 2018
15-01431	Germany	1	CC1	I	PRJEB24496	SAMEA104485159	Halbedel et al. 2018
15-01500	Germany	2	CC2	I	PRJEB24496	SAMEA104485160	Halbedel et al. 2018
15-01527	Germany	2	CC2	I	PRJEB24496	SAMEA104485161	Halbedel et al. 2018
15-01528	Germany	2	CC2	I	PRJEB24496	SAMEA104485162	Halbedel et al. 2018
15-01530	Germany	8	CC8	II	PRJEB24496	SAMEA104485163	Halbedel et al. 2018
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16-04180	Germany	5	CC5	I	PRJEB24496	SAMEA104485393	Halbedel et al. 2018
16-04181	Germany	5	CC5	I	PRJEB24496	SAMEA104485394	Halbedel et al. 2018
16-04235	Germany	5	CC5	I	PRJEB24496	SAMEA104485395	Halbedel et al. 2018
16-04236	Germany	6	CC6	I	PRJEB24496	SAMEA104485396	Halbedel et al. 2018
16-04237	Germany	8	CC8	II	PRJEB24496	SAMEA104485397	Halbedel et al. 2018
16-04260	Germany	6	CC6	I	PRJEB24496	SAMEA104485398	Halbedel et al. 2018
16-04261	Germany	451	CC451	II	PRJEB24496	SAMEA104485399	Halbedel et al. 2018
16-04262	Germany	1	CC1	I	PRJEB24496	SAMEA104485400	Halbedel et al. 2018
16-04263	Germany	1	CC1	I	PRJEB24496	SAMEA104485401	Halbedel et al. 2018
16-04288	Germany	451	CC451	II	PRJEB24496	SAMEA104485402	Halbedel et al. 2018
16-04311	Germany	6	CC6	I	PRJEB24496	SAMEA104485403	Halbedel et al. 2018

16-04331	Germany	1	CC1	I	PRJEB24496	SAMEA104485404	Halbedel et al. 2018
16-04332	Germany	6	CC6	I	PRJEB24496	SAMEA104485405	Halbedel et al. 2018
16-04337	Germany	2	CC2	I	PRJEB24496	SAMEA104485406	Halbedel et al. 2018
16-04359	Germany	8	CC8	II	PRJEB24496	SAMEA104485407	Halbedel et al. 2018
16-04399	Germany	6	CC6	I	PRJEB24496	SAMEA104485408	Halbedel et al. 2018
16-04427	Germany	21	CC21	II	PRJEB24496	SAMEA104485409	Halbedel et al. 2018
16-04476	Germany	2	CC2	I	PRJEB24496	SAMEA104485410	Halbedel et al. 2018
16-04491	Germany	6	CC6	I	PRJEB24496	SAMEA104485411	Halbedel et al. 2018
16-04493	Germany	6	CC6	I	PRJEB24496	SAMEA104485412	Halbedel et al. 2018
16-04572	Germany	37	CC37	II	PRJEB24496	SAMEA104485413	Halbedel et al. 2018
16-04610	Germany	6	CC6	I	PRJEB24496	SAMEA104485414	Halbedel et al. 2018
16-04624	Germany	403	CC403	II	PRJEB24496	SAMEA104485415	Halbedel et al. 2018
16-04660	Germany	6	CC6	I	PRJEB24496	SAMEA104485416	Halbedel et al. 2018
16-04663	Germany	399		II	PRJEB24496	SAMEA104485417	Halbedel et al. 2018
16-04680	Germany	6	CC6	I	PRJEB24496	SAMEA104485418	Halbedel et al. 2018
16-04719	Germany	8	CC8	II	PRJEB24496	SAMEA104485419	Halbedel et al. 2018
16-04720	Germany	1	CC1	I	PRJEB24496	SAMEA104485420	Halbedel et al. 2018
16-04721	Germany	6	CC6	I	PRJEB24496	SAMEA104485421	Halbedel et al. 2018
16-04799	Germany	6	CC6	I	PRJEB24496	SAMEA104485422	Halbedel et al. 2018
16-04800	Germany	6	CC6	I	PRJEB24496	SAMEA104485423	Halbedel et al. 2018
16-04838	Germany	6	CC6	I	PRJEB24496	SAMEA104485424	Halbedel et al. 2018
16-04922	Germany	6	CC6	I	PRJEB24496	SAMEA104485425	Halbedel et al. 2018
16-04923	Germany	6	CC6	I	PRJEB24496	SAMEA104485426	Halbedel et al. 2018
16-04970	Germany	1	CC1	I	PRJEB24496	SAMEA104485427	Halbedel et al. 2018
16-04971	Germany	8	CC8	II	PRJEB24496	SAMEA104485428	Halbedel et al. 2018
16-04972	Germany	6	CC6	I	PRJEB24496	SAMEA104485429	Halbedel et al. 2018
16-05014	Germany	6	CC6	I	PRJEB24496	SAMEA104485430	Halbedel et al. 2018
16-05095	Germany	6	CC6	I	PRJEB24496	SAMEA104485431	Halbedel et al. 2018
16-05164	Germany	7	CC7	II	PRJEB24496	SAMEA104485432	Halbedel et al. 2018
16-05256	Germany	6	CC6	I	PRJEB24496	SAMEA104485433	Halbedel et al. 2018
16-05275	Germany	155	CC155	II	PRJEB24496	SAMEA104485434	Halbedel et al. 2018
16-05318	Germany	6	CC6	I	PRJEB24496	SAMEA104485435	Halbedel et al. 2018
16-05319	Germany	2	CC2	I	PRJEB24496	SAMEA104485436	Halbedel et al. 2018
16-05370	Germany	403	CC403	II	PRJEB24496	SAMEA104485437	Halbedel et al. 2018
16-05371	Germany	1	CC1	I	PRJEB24496	SAMEA104485438	Halbedel et al. 2018
16-05408	Germany	6	CC6	I	PRJEB24496	SAMEA104485439	Halbedel et al. 2018
17-00017	Germany	7	CC7	II	PRJEB24496	SAMEA104485440	Halbedel et al. 2018
17-00048	Germany	8	CC8	II	PRJEB24496	SAMEA104485441	Halbedel et al. 2018
17-00086	Germany	1	CC1	I	PRJEB24496	SAMEA104485442	Halbedel et al. 2018
17-00157	Germany	173		II	PRJEB24496	SAMEA104485443	Halbedel et al. 2018
17-00169	Germany	173		II	PRJEB24496	SAMEA104485444	Halbedel et al. 2018
17-00223	Germany	6	CC6	I	PRJEB24496	SAMEA104485445	Halbedel et al. 2018
17-00224	Germany	1	CC1	I	PRJEB24496	SAMEA104485446	Halbedel et al. 2018
17-00225	Germany	403	CC403	II	PRJEB24496	SAMEA104485447	Halbedel et al. 2018
17-00264	Germany	8	CC8	II	PRJEB24496	SAMEA104485448	Halbedel et al. 2018
17-00305	Germany	155	CC155	II	PRJEB24496	SAMEA104485449	Halbedel et al. 2018
17-00306	Germany	8	CC8	II	PRJEB24496	SAMEA104485450	Halbedel et al. 2018
17-00307	Germany	1	CC1	I	PRJEB24496	SAMEA104485451	Halbedel et al. 2018
17-00380	Germany	6	CC6	I	PRJEB24496	SAMEA104485452	Halbedel et al. 2018
17-00400	Germany	6	CC6	I	PRJEB24496	SAMEA104485453	Halbedel et al. 2018
17-00401	Germany	2	CC2	I	PRJEB24496	SAMEA104485454	Halbedel et al. 2018
17-00417	Germany	16	CC8	II	PRJEB24496	SAMEA104485455	Halbedel et al. 2018
17-00438	Germany	399		II	PRJEB24496	SAMEA104485456	Halbedel et al. 2018
17-00451	Germany	8	CC8	II	PRJEB24496	SAMEA104485457	Halbedel et al. 2018
17-00454	Germany	6	CC6	I	PRJEB24496	SAMEA104485458	Halbedel et al. 2018
17-00455	Germany	6	CC6	I	PRJEB24496	SAMEA104485459	Halbedel et al. 2018
17-00470	Germany	6	CC6	I	PRJEB24496	SAMEA104485460	Halbedel et al. 2018
17-00472	Germany	5	CC5	I	PRJEB24496	SAMEA104485461	Halbedel et al. 2018
17-00473	Germany	2	CC2	I	PRJEB24496	SAMEA104485462	Halbedel et al. 2018
17-00474	Germany	155	CC155	II	PRJEB24496	SAMEA104485463	Halbedel et al. 2018
17-00515	Germany	8	CC8	II	PRJEB24496	SAMEA104485464	Halbedel et al. 2018
17-00539	Germany	451	CC451	II	PRJEB24496	SAMEA104485465	Halbedel et al. 2018
12673_8-24	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383402	Kremer et al. 2017
12673_8-26	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383404	Kremer et al. 2017
12673_8-27	The Netherlands	5	CC5	I	PRJEB4909	SAMEA2383405	Kremer et al. 2017
12673_8-28	The Netherlands	54	CC54	I	PRJEB4909	SAMEA2383406	Kremer et al. 2017
12673_8-29	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383407	Kremer et al. 2017
12673_8-31	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383409	Kremer et al. 2017
12673_8-32	The Netherlands	330		I	PRJEB4909	SAMEA2383410	Kremer et al. 2017
12673_8-34	The Netherlands	87		I	PRJEB4909	SAMEA2383412	Kremer et al. 2017
12673_8-36	The Netherlands	1	CC1	I	PRJEB4909	SAMEA2383414	Kremer et al. 2017

12673_8-37	The Netherlands	4	CC4	I	PRJEB4909	SAMEA2383415	Kremer et al. 2017
12673_8-39	The Netherlands	120	CC121	II	PRJEB4909	SAMEA2383417	Kremer et al. 2017
12673_8-41	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383419	Kremer et al. 2017
12673_8-42	The Netherlands	new	CC1	I	PRJEB4909	SAMEA2383420	Kremer et al. 2017
12673_8-43	The Netherlands	2	CC2	I	PRJEB4909	SAMEA2383421	Kremer et al. 2017
12754_4-66	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383276	Kremer et al. 2017
12754_4-68	The Netherlands	1	CC1	I	PRJEB4909	SAMEA2383278	Kremer et al. 2017
12754_4-70	The Netherlands	1	CC1	I	PRJEB4909	SAMEA2383280	Kremer et al. 2017
12754_4-71	The Netherlands	412	CC31	II	PRJEB4909	SAMEA2383281	Kremer et al. 2017
12754_4-73	The Netherlands	59	CC59	I	PRJEB4909	SAMEA2383283	Kremer et al. 2017
12754_4-74	The Netherlands	59	CC59	I	PRJEB4909	SAMEA2383284	Kremer et al. 2017
12754_4-75	The Netherlands	1	CC1	I	PRJEB4909	SAMEA2383285	Kremer et al. 2017
12754_4-77	The Netherlands	2	CC2	I	PRJEB4909	SAMEA2383287	Kremer et al. 2017
12754_4-78	The Netherlands	14	CC14	II	PRJEB4909	SAMEA2383288	Kremer et al. 2017
12754_4-79	The Netherlands	11		II	PRJEB4909	SAMEA2383289	Kremer et al. 2017
12754_4-80	The Netherlands	5	CC5	I	PRJEB4909	SAMEA2383290	Kremer et al. 2017
12754_4-81	The Netherlands	9	CC9	II	PRJEB4909	SAMEA2383291	Kremer et al. 2017
12754_4-82	The Netherlands	2	CC2	I	PRJEB4909	SAMEA2383292	Kremer et al. 2017
12754_4-84	The Netherlands	8	CC8	II	PRJEB4909	SAMEA2383294	Kremer et al. 2017
12754_4-85	The Netherlands	616	CC6	I	PRJEB4909	SAMEA2383295	Kremer et al. 2017
12754_4-87	The Netherlands	412	CC31	II	PRJEB4909	SAMEA2383297	Kremer et al. 2017
12754_4-88	The Netherlands	3	CC3	I	PRJEB4909	SAMEA2383298	Kremer et al. 2017
12754_4-89	The Netherlands	8	CC8	II	PRJEB4909	SAMEA2383299	Kremer et al. 2017
12754_4-90	The Netherlands	29	CC29	II	PRJEB4909	SAMEA2383300	Kremer et al. 2017
12754_4-92	The Netherlands	155	CC155	II	PRJEB4909	SAMEA2383302	Kremer et al. 2017
12754_4-94	The Netherlands	8	CC8	II	PRJEB4909	SAMEA2383304	Kremer et al. 2017
12754_4-95	The Netherlands	2	CC2	I	PRJEB4909	SAMEA2383305	Kremer et al. 2017
12754_5-11	The Netherlands	2	CC2	I	PRJEB4909	SAMEA2383316	Kremer et al. 2017
12754_5-12	The Netherlands	37	CC37	II	PRJEB4909	SAMEA2383317	Kremer et al. 2017
12754_5-13	The Netherlands	2	CC2	I	PRJEB4909	SAMEA2383318	Kremer et al. 2017
12754_5-14	The Netherlands	391		II	PRJEB4909	SAMEA2383319	Kremer et al. 2017
12754_5-16	The Netherlands	8	CC8	II	PRJEB4909	SAMEA2383321	Kremer et al. 2017
12754_5-18	The Netherlands	1	CC1	I	PRJEB4909	SAMEA2383323	Kremer et al. 2017
12754_5-19	The Netherlands	91	CC14	II	PRJEB4909	SAMEA2383324	Kremer et al. 2017
12754_5-2	The Netherlands	101	CC101	II	PRJEB4909	SAMEA2383307	Kremer et al. 2017
12754_5-20	The Netherlands	8	CC8	II	PRJEB4909	SAMEA2383325	Kremer et al. 2017
12754_5-22	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383327	Kremer et al. 2017
12754_5-24	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383329	Kremer et al. 2017
12754_5-26	The Netherlands	1	CC1	I	PRJEB4909	SAMEA2383331	Kremer et al. 2017
12754_5-28	The Netherlands	3	CC3	I	PRJEB4909	SAMEA2383333	Kremer et al. 2017
12754_5-3	The Netherlands	2	CC2	I	PRJEB4909	SAMEA2383308	Kremer et al. 2017
12754_5-30	The Netherlands	9	CC9	II	PRJEB4909	SAMEA2383335	Kremer et al. 2017
12754_5-32	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383337	Kremer et al. 2017
12754_5-33	The Netherlands	2	CC2	I	PRJEB4909	SAMEA2383338	Kremer et al. 2017
12754_5-35	The Netherlands	204	CC204	II	PRJEB4909	SAMEA2383340	Kremer et al. 2017
12754_5-36	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383341	Kremer et al. 2017
12754_5-37	The Netherlands	91	CC14	II	PRJEB4909	SAMEA2383342	Kremer et al. 2017
12754_5-39	The Netherlands	18	CC18	II	PRJEB4909	SAMEA2383344	Kremer et al. 2017
12754_5-40	The Netherlands	2	CC2	I	PRJEB4909	SAMEA2383345	Kremer et al. 2017
12754_5-42	The Netherlands	391		II	PRJEB4909	SAMEA2383347	Kremer et al. 2017
12754_5-43	The Netherlands	2	CC2	I	PRJEB4909	SAMEA2383348	Kremer et al. 2017
12754_5-45	The Netherlands	1	CC1	I	PRJEB4909	SAMEA2383350	Kremer et al. 2017
12754_5-46	The Netherlands	121	CC121	II	PRJEB4909	SAMEA2383351	Kremer et al. 2017
12754_5-47	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383352	Kremer et al. 2017
12754_5-49	The Netherlands	391		II	PRJEB4909	SAMEA2383354	Kremer et al. 2017
12754_5-5	The Netherlands	8	CC8	II	PRJEB4909	SAMEA2383310	Kremer et al. 2017
12754_5-51	The Netherlands	1	CC1	I	PRJEB4909	SAMEA2383356	Kremer et al. 2017
12754_5-52	The Netherlands	14	CC14	II	PRJEB4909	SAMEA2383357	Kremer et al. 2017
12754_5-53	The Netherlands	1	CC1	I	PRJEB4909	SAMEA2383358	Kremer et al. 2017
12754_5-55	The Netherlands	224	CC224	I	PRJEB4909	SAMEA2383360	Kremer et al. 2017
12754_5-57	The Netherlands	194		I	PRJEB4909	SAMEA2383362	Kremer et al. 2017
12754_5-59	The Netherlands	224	CC224	I	PRJEB4909	SAMEA2383364	Kremer et al. 2017
12754_5-6	The Netherlands	59	CC59	I	PRJEB4909	SAMEA2383311	Kremer et al. 2017
12754_5-61	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383366	Kremer et al. 2017
12754_5-62	The Netherlands	101	CC101	II	PRJEB4909	SAMEA2383367	Kremer et al. 2017
12754_5-64	The Netherlands	613	CC1	I	PRJEB4909	SAMEA2383369	Kremer et al. 2017
12754_5-66	The Netherlands	29	CC29	II	PRJEB4909	SAMEA2383371	Kremer et al. 2017
12754_5-68	The Netherlands	2	CC2	I	PRJEB4909	SAMEA2383373	Kremer et al. 2017
12754_5-70	The Netherlands	2	CC2	I	PRJEB4909	SAMEA2383375	Kremer et al. 2017
12754_5-71	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383376	Kremer et al. 2017
12754_5-72	The Netherlands	155	CC155	II	PRJEB4909	SAMEA2383377	Kremer et al. 2017

Zamudio et al., 2020 – Table S2

12754_5-73	The Netherlands	14	CC14	II	PRJEB4909	SAMEA2383378	Kremer et al. 2017
12754_5-74	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383379	Kremer et al. 2017
12754_5-76	The Netherlands	1	CC1	I	PRJEB4909	SAMEA2383381	Kremer et al. 2017
12754_5-78	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383383	Kremer et al. 2017
12754_5-8	The Netherlands	1	CC1	I	PRJEB4909	SAMEA2383313	Kremer et al. 2017
12754_5-80	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383385	Kremer et al. 2017
12754_5-82	The Netherlands	7	CC7	II	PRJEB4909	SAMEA2383387	Kremer et al. 2017
12754_5-84	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383389	Kremer et al. 2017
12754_5-86	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383391	Kremer et al. 2017
12754_5-88	The Netherlands	8	CC8	II	PRJEB4909	SAMEA2383393	Kremer et al. 2017
12754_5-89	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383394	Kremer et al. 2017
12754_5-9	The Netherlands	2	CC2	I	PRJEB4909	SAMEA2383314	Kremer et al. 2017
12754_5-90	The Netherlands	1	CC1	I	PRJEB4909	SAMEA2383395	Kremer et al. 2017
12754_5-92	The Netherlands	1	CC1	I	PRJEB4909	SAMEA2383397	Kremer et al. 2017
12754_5-94	The Netherlands	121	CC121	II	PRJEB4909	SAMEA2383399	Kremer et al. 2017
12754_5-95	The Netherlands	6	CC6	I	PRJEB4909	SAMEA2383400	Kremer et al. 2017
19183_4-48	The Netherlands	37	CC37	II	PRJEB4909	SAMEA3709822	Lees et al. 2019
19183_4-49	The Netherlands	6	CC6	I	PRJEB4909	SAMEA3709823	Lees et al. 2019
19183_4-50	The Netherlands	894		I	PRJEB4909	SAMEA3709824	Lees et al. 2019
19183_4-51	The Netherlands	9	CC9	II	PRJEB4909	SAMEA3709825	Lees et al. 2019
19183_4-52	The Netherlands	2	CC2	I	PRJEB4909	SAMEA3709826	Lees et al. 2019
19183_4-53	The Netherlands	2	CC2	I	PRJEB4909	SAMEA3709827	Lees et al. 2019
19183_4-54	The Netherlands	1	CC1	I	PRJEB4909	SAMEA3709828	Lees et al. 2019
19183_4-55	The Netherlands	8	CC8	II	PRJEB4909	SAMEA3709829	Lees et al. 2019
19183_4-56	The Netherlands	379		I	PRJEB4909	SAMEA3709830	Lees et al. 2019
19183_4-57	The Netherlands	6	CC6	I	PRJEB4909	SAMEA3709831	Lees et al. 2019
19183_4-58	The Netherlands	4	CC4	I	PRJEB4909	SAMEA3709832	Lees et al. 2019
19183_4-59	The Netherlands	101	CC101	II	PRJEB4909	SAMEA3709833	Lees et al. 2019
19183_4-60	The Netherlands	6	CC6	I	PRJEB4909	SAMEA3709834	Lees et al. 2019
19183_4-61	The Netherlands	6	CC6	I	PRJEB4909	SAMEA3709835	Lees et al. 2019
19183_4-62	The Netherlands	155	CC155	II	PRJEB4909	SAMEA3709836	Lees et al. 2019
19183_4-63	The Netherlands	155	CC155	II	PRJEB4909	SAMEA3709837	Lees et al. 2019
19183_4-64	The Netherlands	3	CC3	I	PRJEB4909	SAMEA3709838	Lees et al. 2019
19183_4-65	The Netherlands	21	CC21	II	PRJEB4909	SAMEA3709839	Lees et al. 2019
19183_4-66	The Netherlands	392		I	PRJEB4909	SAMEA3709840	Lees et al. 2019
19183_4-67	The Netherlands	4	CC4	I	PRJEB4909	SAMEA3709841	Lees et al. 2019
19183_4-68	The Netherlands	7	CC7	II	PRJEB4909	SAMEA3709842	Lees et al. 2019
19183_4-69	The Netherlands	2	CC2	I	PRJEB4909	SAMEA3709843	Lees et al. 2019
19183_4-70	The Netherlands	155	CC155	II	PRJEB4909	SAMEA3709844	Lees et al. 2019
19183_4-71	The Netherlands	194		I	PRJEB4909	SAMEA3709845	Lees et al. 2019
19183_4-72	The Netherlands	218		I	PRJEB4909	SAMEA3709846	Lees et al. 2019
19183_4-73	The Netherlands	6	CC6	I	PRJEB4909	SAMEA3709847	Lees et al. 2019
19183_4-74	The Netherlands	412	CC31	II	PRJEB4909	SAMEA3709848	Lees et al. 2019
19183_4-75	The Netherlands	8	CC8	II	PRJEB4909	SAMEA3709849	Lees et al. 2019
19183_4-76	The Netherlands	155	CC155	II	PRJEB4909	SAMEA3709850	Lees et al. 2019
19183_4-77	The Netherlands	1	CC1	I	PRJEB4909	SAMEA3709851	Lees et al. 2019
19183_4-78	The Netherlands	6	CC6	I	PRJEB4909	SAMEA3709852	Lees et al. 2019
19183_4-79	The Netherlands	6	CC6	I	PRJEB4909	SAMEA3709853	Lees et al. 2019

Table S3: *L. monocytogenes* lineage III and IV isolates

Code	ST	CC	Lineage	ENA accession number	Genbank accession number	Source	Isolation source	Collection data	Location	Serotype	Reference	PMID
NRRL B-33092	262	262	III	SRR1805498	MKMH00000000	animal	bovine	unknown	unknown	unknown	FDA/CFSAN, MD, USA	-
NRRL B-33181	264	ST264	III	SRR1805388	MKMS00000000	animal	ovine	1998	unknown	unknown	FDA/CFSAN, MD, USA	-
NRRL B-33183	265	265	III	SRR1805535	MKMU00000000	animal	equine lung, liver, kidney	1998	unknown	unknown	FDA/CFSAN, MD, USA	-
NRRL B-33185	266	ST266	III	SRR1805523	MKMW00000000	animal	bovine	unknown	unknown	unknown	FDA/CFSAN, MD, USA	-
NRRL B-33187	267	267	III	SRR1805351	MKMY00000000	animal	bovine brain	unknown	unknown	unknown	FDA/CFSAN, MD, USA	-
NRRL B-33188	1067	265	III	SRR1805485	MKMZ00000000	animal	bovine brain	unknown	unknown	unknown	FDA/CFSAN, MD, USA	-
NRRL B-33191	269	269	III	SRR1805373	MKNC00000000	animal	bovine lung, liver, spleen	2001	unknown	unknown	FDA/CFSAN, MD, USA	-
NRRL B-33368	856	ST856	III	SRR1805502	MKNL00000000	animal	equine, lung, liver and kidney	2003	unknown	unknown	FDA/CFSAN, MD, USA	-
ARS-CC9236	1002	ST1002	III	SRR3191427	-	dairy farm	Bulk tank milk	2002	USA	4b	Kim et al., PLoS One. 2018;13(5):e0197053	29742151
ARS-CC9249	998	ST998	III	SRR3215330	-	dairy farm	Bulk tank milk	2002	USA	4b	Kim et al., PLoS One. 2018;13(5):e0197053	29742151
ARS-CC9284	1003	ST1003	III	SRR3372258	-	dairy farm	Bulk tank milk filter	2014	USA	unknown	Kim et al., PLoS One. 2018;13(5):e0197053	29742151
CIP105457	202	ST1003	III	ERS482548	-	Animal	unknown	1931	New Zealand	4a	Ruppish et al., J Clin Microbiol. 2015;53(9):2869-76	26135865
CIP78-39	71	CC131	III	ERS482555	-	Food	unknown	unknown	United Kingdom	4c	Ruppish et al., J Clin Microbiol. 2015;53(9):2869-76	26135865
HCC23	201	CC69	III	-	NC_011660	Animal	unknown	unknown	USA	4a	Steele et al., J Bacteriol. 2011;193(14):3679-80	21602330
FSL J1-208	569	ST569	IV	-	NZ_CM001469-70	Animal	unknown	unknown	USA	unknown	Den Bakker et al., Appl Environ Microbiol. 2012;78(6):1876-89	22247147
L99	201	CC69	III	-	NC_017529	Food	cheese	1950	unknown	4a	Hain et al., BMC Genomics. 2012;13:144	22530965
M7	201	CC69	III	-	NC_017537	unknown	unknown	unknown	unknown	4a	Chen et al., J Bacteriol. 2011;193(18):5019-20	21742872
SRR1005722	863	ST863	IV	SRR1005722	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR1030275	868	ST868	III	SRR1030275	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR1030277	869	ST869	III	SRR1030277	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR1033765	856	ST856	III	SRR1033765	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR1033771	870	ST870	III	SRR1033771	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR1033773	871	ST871	III	SRR1033773	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR1041524	853	ST853	III	SRR1041524	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR1101481	406	ST406	III	SRR1101481	-	Food	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR1112044	654	CC434	III	SRR1112044	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR1112134	873	ST873	III	SRR1112134	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR1112216	800	ST800	III	SRR1112216	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR1193832	874	ST874	IV	SRR1193832	-	Human	unknown	2014	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR945182	851	CC640	III	SRR945182	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR974861	857	ST857	III	SRR974861	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR974873	880	ST880	III	SRR974873	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR974874	858	ST858	III	SRR974874	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR974885	854	ST854	III	SRR974885	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR988727	859	ST859	III	SRR988727	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR988739	882	ST882	III	SRR988739	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SRR988752	654	CC434	III	SRR988752	-	Human	unknown	2013	USA	unknown	CDC, Atlanta, Georgia, USA	-
SLCC2376	71	CC131	III	-	NC_018590	poultry	unknown	unknown	unknown	4c	Kuene et al., BMC Genomics. 2013;14:47	23339658
SLCC4771	467	-	IV	ERR664786	-	unknown	unknown	unknown	unknown	unknown	University Hospital Muenster, Germany	-
SLCC85	623	CC131	III	ERR1100977	CYXE00000000	unknown	unknown	unknown	unknown	unknown	Institut Pasteur, Paris, France	-

FDA/CFSAN Food and Drug Administration Centre for Food Safety and Applied Nutrition

CDC Centres for Disease Control and Prevention, Atlanta, Georgia, USA

Table S4: *Listeria monocytogenes* bacteriophages

Accession	Description	Classification	Genome Length(bp)	molGC
NC_009815	A006	Listeria phage A006 Siphoviridae Caudovirales dsDNA viruses, no RNA stage Viruses	38124	35.5
NC_003216	A118	Listeria phage A118 Siphoviridae Caudovirales dsDNA viruses, no RNA stage Viruses	40834	36.1
NC_009810	A500	Listeria phage A500 Siphoviridae Caudovirales dsDNA viruses, no RNA stage Viruses	38867	36.7
NC_009812	B025	Listeria phage B025 Siphoviridae Caudovirales dsDNA viruses, no RNA stage Viruses	42653	35.1
NC_021539	LP-030-2	Listeria phage LP-030-2 Psavirus Siphoviridae Caudovirales dsDNA viruses, no RNA stage Viruses	38275	34.8
NC_024384	LP-030-3	Listeria phage LP-030-3 Siphoviridae Caudovirales dsDNA viruses, no RNA stage Viruses	41156	36.6
NC_024387	LP-101	Listeria phage LP-101 Siphoviridae Caudovirales dsDNA viruses, no RNA stage Viruses	43767	35.5
CP011103	LWP01	Listeria phage LWP01 Siphoviridae Caudovirales dsDNA viruses, no RNA stage Viruses	41913	45.5
NC_003291	PSA	Listeria phage PSA Psavirus Siphoviridae Caudovirales dsDNA viruses, no RNA stage Viruses	37618	34.7
MH341451	PSU-VKH-LP019	Listeria phage PSU-VKH-LP019 unclassified bacterial viruses Viruses	38601	35.7
MH341452	PSU-VKH-LP040	Listeria phage PSU-VKH-LP040 unclassified bacterial viruses Viruses	39585	37.1
NC_028871	vB_LmoS_188	Listeria phage vB_LmoS_188 Siphoviridae Caudovirales dsDNA viruses, no RNA stage Viruses	38392	35.9
NC_028929	vB_LmoS_293	Listeria phage vB_LmoS_293 Siphoviridae Caudovirales dsDNA viruses, no RNA stage Viruses	40759	36.9

Table S5: *L. monocytogenes* isolates with a phage inserted into *comK*

Isolate	ST	CC	Lineage
N12-2451	3	CC3	I
12754_4-73	59	CC59	I
10-03443	9	CC9	II
11-04868	18	CC18	II
N05-195	31	CC31	II
N13-0245	91	CC14	II
12754_5-35	204	CC204	II
16-03886	691	CC7	II
N11-2345	725	CC21	II
N11-2542	739	CC8	II
N13-1404	1308	CC398	II
N11-2183	1319	CC20	II
B-33368	856	ST856	III
R1193832	874	ST874	IV

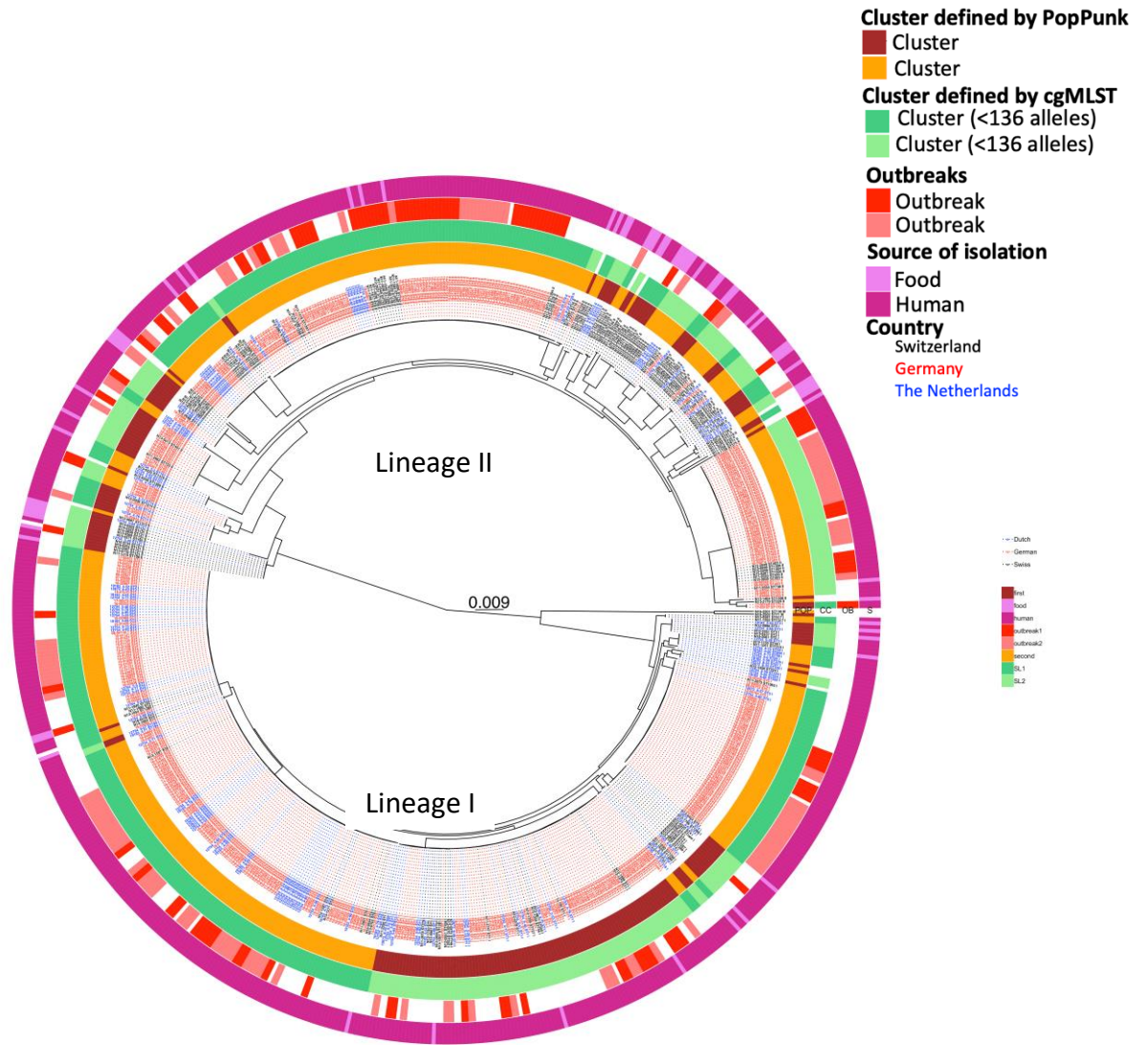
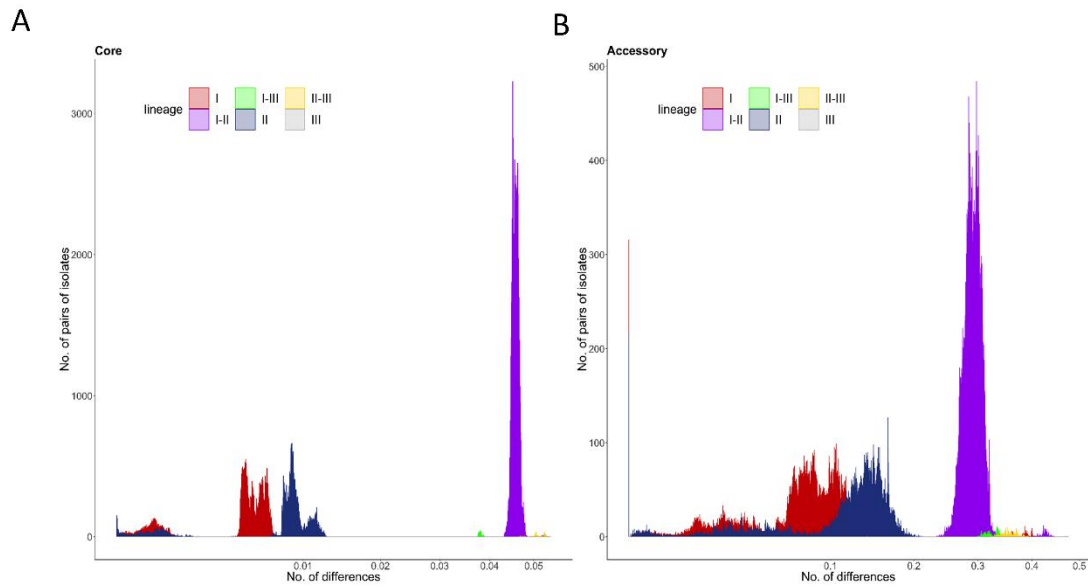


Figure S1. *L. monocytogenes* core-genome phylogenetic tree. A phylogenetic SNP tree was constructed using 1596 core genes with the genome sequences of 166 Swiss isolates (Tasara et al. 2015, 2016; Weinmaier et al. 2013) and our study) (black isolate name), 414 isolates from Germany (Halbedel et al. 2018) (red isolate name) and 128 Dutch isolates (Kremer et al. 2017; Lees et al. 2019) (blue isolate name). The circles surrounding the radial tree show, from inside out, the isolates clusters as defined by PopPUNK (dark and light brown shading), sublineages with less than ≤ 136 cgMLST allele differences (dark and light green), outbreaks with ≤ 12 cgMLST differences (dark and light red) and the origin of the isolates (food - light purple, human - dark purple, other - white). The sequence type and lineage information is concatenated to the isolate name.

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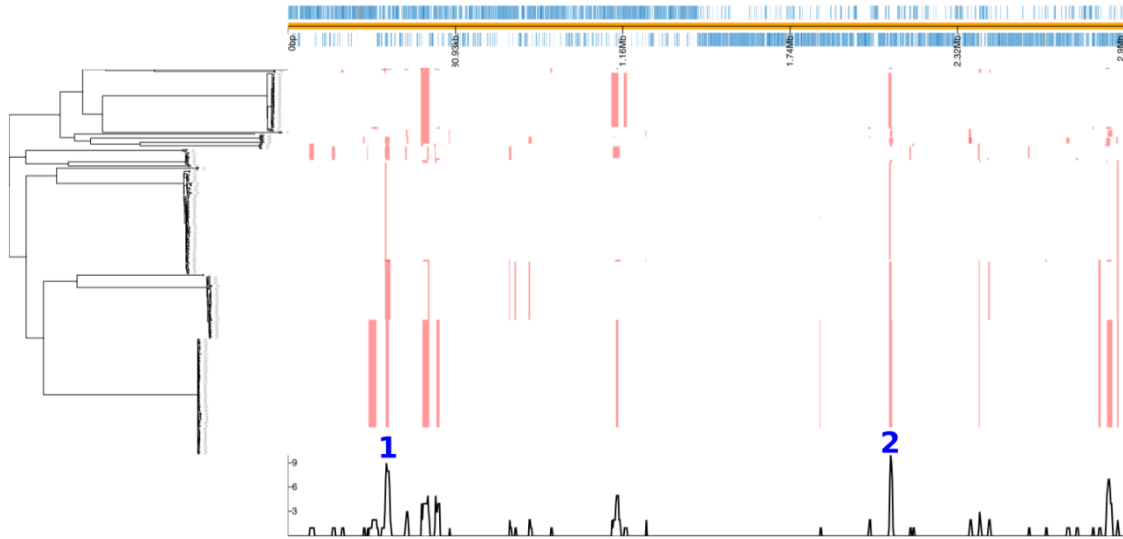


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83 **Figure S2. Lineage specific evolution in the core and the accessory genome.** The
 84 distribution of the pairwise distances obtained by PopPUNK between and within lineages in
 85 both the core (A) and accessory genome (B) have been plotted. The different colours refer to
 86 the different pairwise analyses with differences within lineage I (red), within lineage II (blue),
 87 within lineage III (grey), between lineage I and II (violet), between lineage III and III (green)
 88 and between lineage II and III (yellow). The genomes analysed were the 370 lineage I and
 89 336 lineage II isolates from Switzerland (Tasara et al. 2015, 2016; Weinmaier et al. 2013) and
 90 our study), Germany (Halbedel et al. 2018) and the Netherlands (Kremer et al. 2017; Lees et
 91 al. 2019), and 2 lineage III genomes from Switzerland (this study).

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93

94 **Figure S3. Recombination regions for the alignment of lineage I inferred by**95 **Gubbins.** The figure shows a maximum likelihood phylogeny of 370 isolates from Switzerland

96 (Tasara et al. 2015, 2016; Weinmaier et al. 2013) and our study), Germany (Halbedel et al.

97 2018) and the Netherlands (Kremer et al. 2017; Lees et al. 2019) on the left. On the right, for

98 each isolate, blocks represent the regions identified as recombination: blue blocks are unique

99 recombination events mapped into terminal node of a single isolate, while red blocks are

100 recombination events mapped onto internal nodes, which are shared by multiple isolates. The

101 line graph displayed below the heatmap summarises the recombination profile of the dataset.

102 On the top of the heatmap was displayed the position in the reference genome LL195

103 (HF558398). The most prominent recombination hotspots were designated with a 1 and a 2

104 and map respectively to the published hotspot 9 (Imo2025-2028; EGD-e numbering) and

105 hotspot 4 (Imo0296-315) (Kuenne et al. 2013).

106

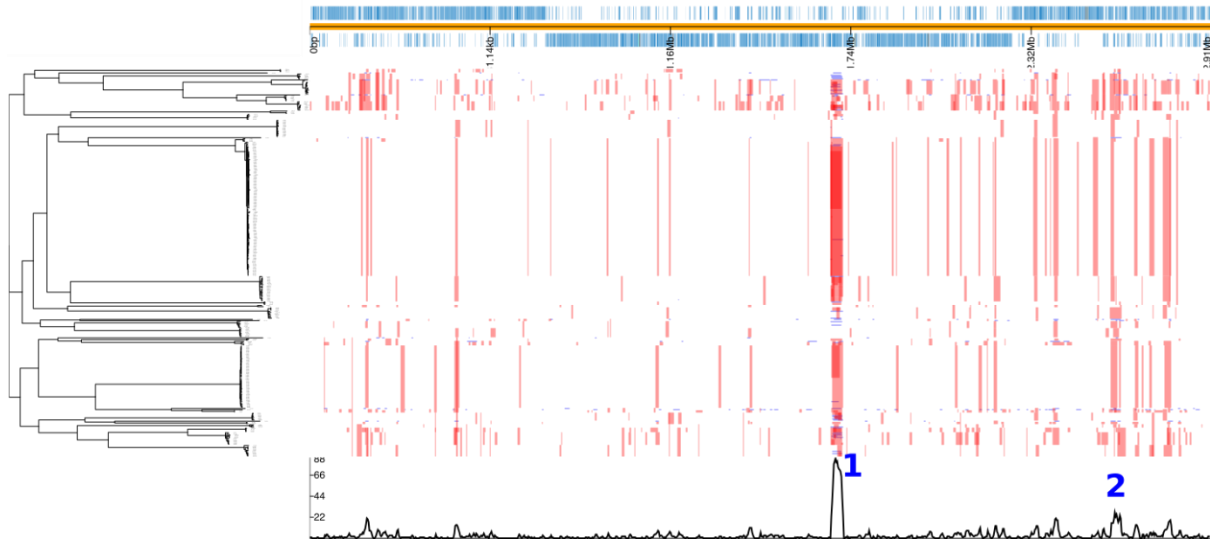


Figure S4. Recombination regions for the alignment of lineage II inferred by Gubbins. The figure shows a maximum likelihood phylogeny of 336 isolates from Switzerland (Tasara et al. 2015, 2016; Weinmaier et al. 2013 and our study), Germany (Halbedel et al. 2018) and the Netherlands (Kremer et al. 2017; Lees et al. 2019) on the left. On the right, for each isolate, blocks represent the regions identified as recombination: blue blocks are unique recombination events mapped into terminal node of a single isolate, and while red blocks are recombination events mapped onto internal nodes, which are shared by multiple isolates. The line graph displayed below the heat map summarises the recombination profile of the dataset. On the top of the heatmap was displayed the position in the reference genome Lm3136 (CP013723). The most prominent recombination hotspots were designated with a 1 and a 2 and map respectively to the frequent phage target *comK* lmo2270 (EGD-e numbering) and hotspot 4 (lmo0296-315; EGD-e numbering) (Kuenne et al. 2013), also detected in Figure S2.

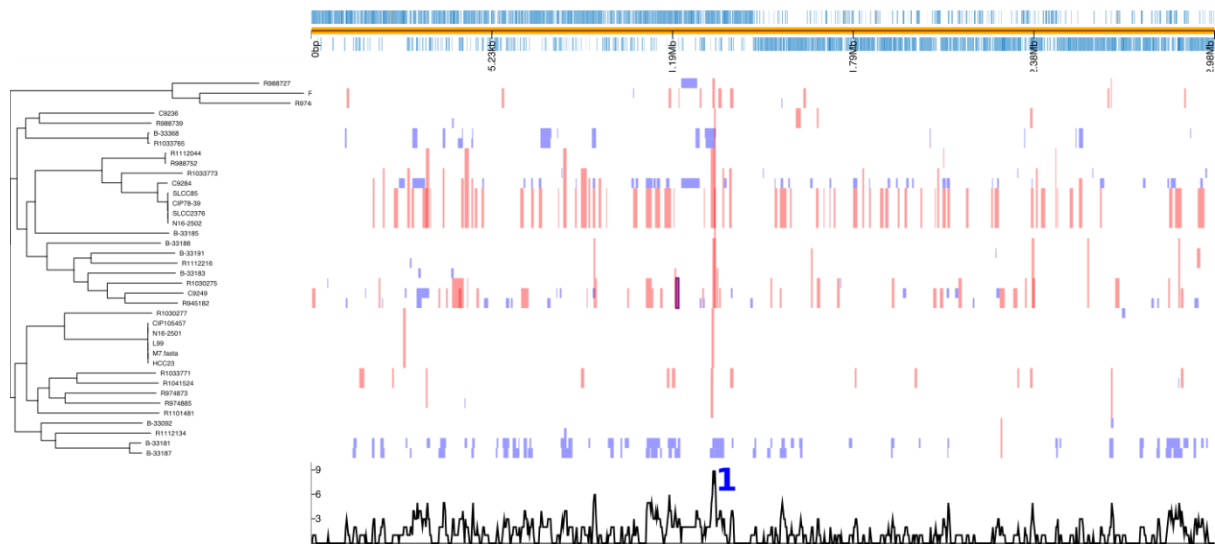


Figure S5. Recombination regions for the alignment of lineage III inferred by Gubbins. The figure shows on the left a maximum likelihood phylogeny of 36 published lineage III genomes and 2 from Switzerland (this study). On the right, for each isolate, blocks represent the regions identified as recombination: blue blocks are unique recombination events mapped into terminal node of a single isolate, and while red blocks are recombination events mapped onto internal nodes, which are shared by multiple isolates. The line graph displayed below the heatmap summarises the recombination profile of the dataset. On the top of the heatmap was displayed the position in the reference genome M7 (CP002816). The most prominent recombination hotspot was designated with a 1 and corresponds to a region of integration of leucine rich repeat internalin family genes at Imo1288-9 (EGD-e numbering).

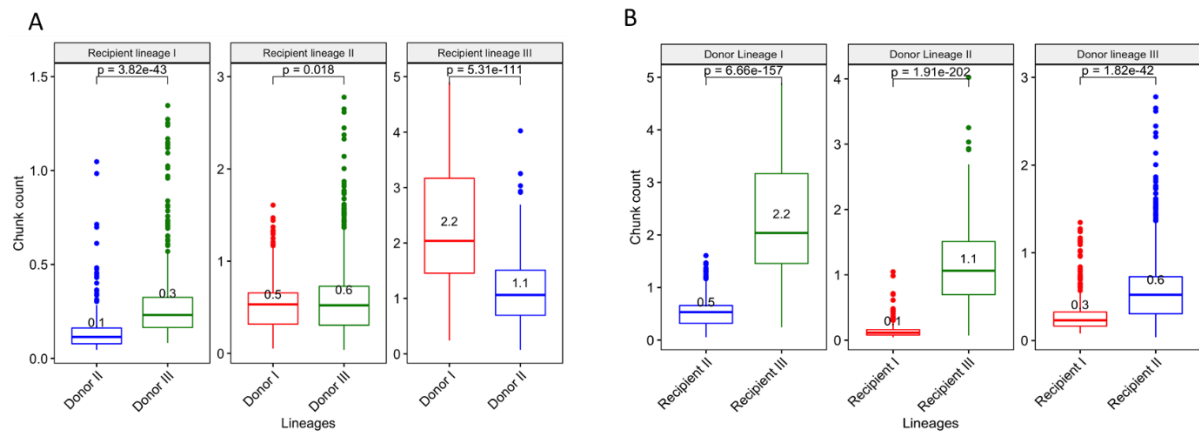


Figure S6. Distribution of the chunk counts donated from external population lineage to each recipient lineage. A) Distribution of the chunk counts that each lineage I, II and III receive from the external donor lineage I, II and III. B) Distribution of the chunk counts that each lineage I, II and III donate to the recipient lineage I, II and III. The t-test was applied to compare the mean of the chunk counts between groups by using the stats R package (<https://www.r-project.org/>). The mean of chunk count in each group is written in the boxplot. The color of the boxplot is linked to the lineages, where lineage I is in red, lineage II in blue and lineage III in green.

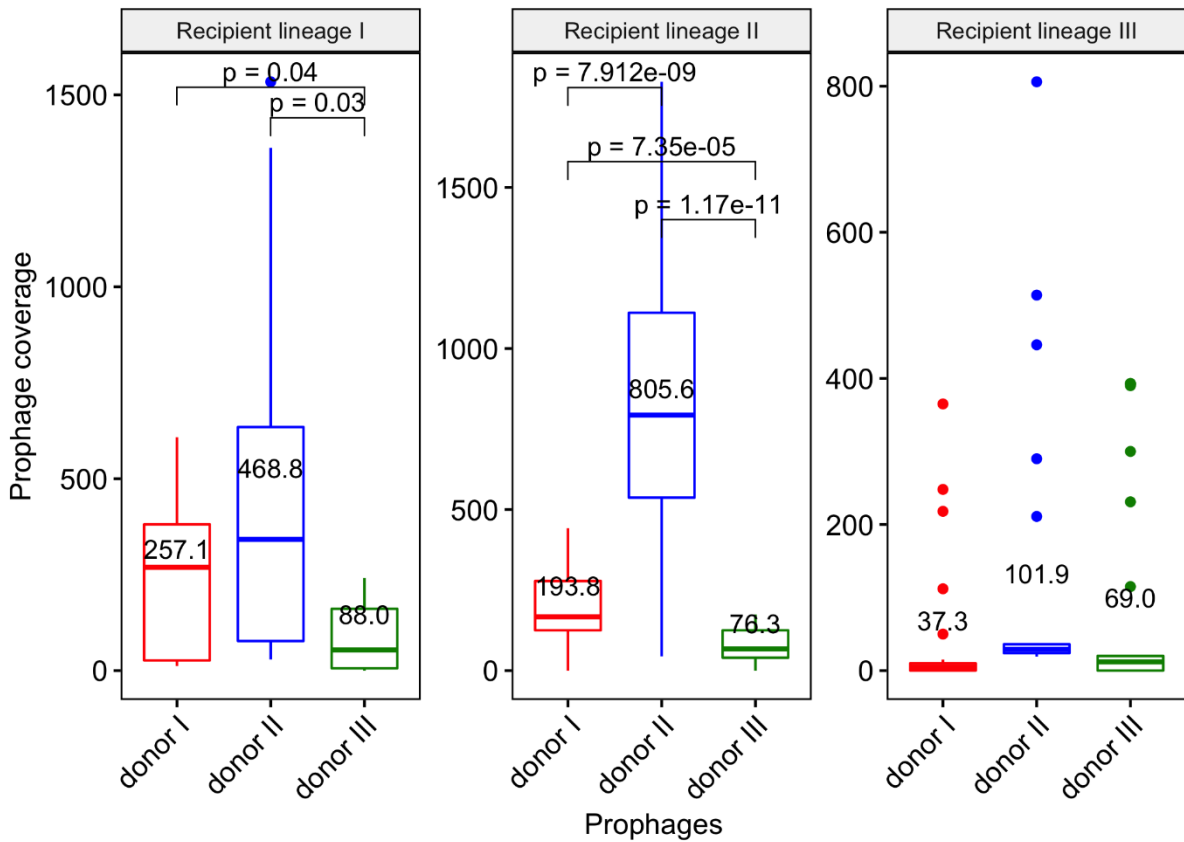


Figure S7. Distribution of the prophages coverage (donor) in each recipient lineage. The prophage coverage (donor) of each lineage is plotted as boxplot to each recipient lineage I, II and III. The t-test was applied to compare the mean of the prophage coverage between groups. The pairwise comparison in each group was adjusted by using the Bonferroni correction from stats R package (<https://www.r-project.org/>). The mean of prophage coverage in each group is written in the boxplot. The color of the boxplot is linked to the lineages, where lineage I is in red, lineage II in blue and lineage III in green.

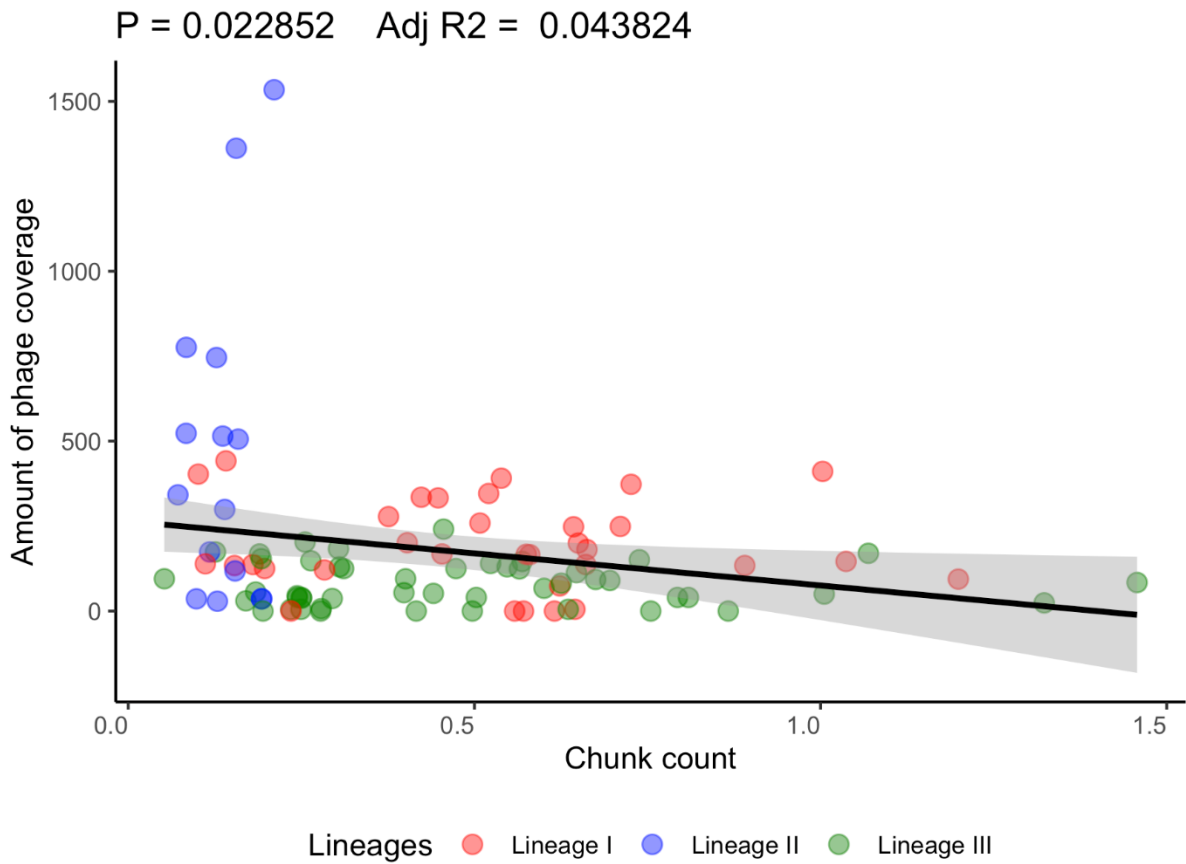


Figure S8. Inverse correlation between amount of the phage coverage and chunk counts for lineage I and II. The chunk counts and the phage coverage donated from the external lineage population to lineage I and II are plotted as scatterplot. The Pearson correlation coefficients are show in the top of the figure, and the fitted line with their confidence intervals are show in the figure. The color of the dots are linked to the lineages, where lineage I is in red, lineage II in blue and lineage III in green.

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