## S2 File. Analysis of the similarity among tested pneumococcal isolates and PMEN strains (highlighted) made by eBURSTv3 software.

eBURST Report - Thu Oct 15 16:56:52 CEST 2015
No. isolates $=168$ | No. STs = 118 | No. re-samplings for bootstrapping $=1000$
No. loci per isolate $=7 \mid$ No. identical loci for group def = $6 \mid$ No. groups $=18$

Group 1: No. Isolates = 9 | No. STs=6 | Predicted Founder=423
Average ST Bootstrap

| ST | FREQ | SLV | DLV | TLV | SAT | Distance | Group Subgrp |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 423 | 4 | 3 | 2 | 0 | 0 | 1.4 | $49 \%$ | $21 \%$ |
| 15 | 1 | 3 | 2 | 0 | 0 | 1.4 | $50 \%$ | $19 \%$ |
| 1815 | 1 | 1 | 3 | 1 | 0 | 2.0 | $0 \%$ | $0 \%$ |
| 721 | 1 | 1 | 3 | 1 | 0 | 2.0 | $0 \%$ | $0 \%$ |
| 9251 | 1 | 1 | 2 | 2 | 0 | 2.2 | $0 \%$ | $0 \%$ |
| 9 | 1 | 1 | 2 | 2 | 0 | 2.2 | $0 \%$ | $0 \%$ |

Group 2: No. Isolates = 6 | No. STs = 4 | Predicted Founder = 87
Average ST Bootstrap

| ST | FREQ | SLV | DLV | TLV | SAT | Distance | Group Subgrp |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 87 |  | 3 | 3 | 0 | 0 | 0 | 1.0 | $74 \%$ | $15 \%$ |
| 10327 | 1 | 1 | 2 | 0 | 0 | 1.66 | $0 \%$ | $0 \%$ |  |
| 9253 |  | 1 | 1 | 2 | 0 | 0 | 1.66 | $0 \%$ | $0 \%$ |
| 9268 | 1 | 1 | 2 | 0 | 0 | 1.66 | $0 \%$ | $0 \%$ |  |

Group 3: No. Isolates = 7 | No. STs=4 | Predicted Founder=156
Average ST Bootstrap

| ST | FREQ | SLV | DLV | TLV | SAT | Distance | Group Subgrp |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 156 |  | 3 | 2 | 1 | 0 | 0 | 1.33 | $26 \%$ | $0 \%$ |
| 3811 |  | 2 | 2 | 1 | 0 | 0 | 1.33 | $29 \%$ | $0 \%$ |
| 9258 | 1 | 1 | 2 | 0 | 0 | 1.66 | $0 \%$ | $0 \%$ |  |
| 9269 | 1 | 1 | 2 | 0 | 0 | 1.66 | $0 \%$ | $0 \%$ |  |

Group 4: No. Isolates = 4 | No. STs=4 | Predicted Founder=439
Average ST Bootstrap

| ST | FREQ | SLV | DLV | TLV | SAT | Distance | Group Subgrp |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 439 | 1 | 3 | 0 | 0 | 0 | 1.0 | $61 \%$ | $14 \%$ |
| 42 | 1 | 2 | 1 | 0 | 0 | 1.33 | $4 \%$ | $0 \%$ |
| 9264 | 1 | 2 | 1 | 0 | 0 | 1.33 | $9 \%$ | $0 \%$ |
| 37 | 1 | 1 | 2 | 0 | 0 | 1.66 | $0 \%$ | $0 \%$ |

Group 5: No. Isolates = 3 | No. STs=3 | Predicted Founder = Multiple Candidates

|  |  |  |  | Average |  | ST Bootstrap |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ST | FREQ | SLV | DLV | TLV | SAT | Distance | Group Subgrp |  |  |
| 9259 | 1 | 2 | 0 | 0 | 0 | 1.0 | $7 \%$ | $0 \%$ |  |
| 9272 |  | 1 | 2 | 0 | 0 | 0 | 1.0 | $10 \%$ | $0 \%$ |
| 433 | 1 | 2 | 0 | 0 | 0 | 1.0 | $15 \%$ | $0 \%$ |  |

Group 6: No. Isolates = 6 | No. STs = 3 | Predicted Founder = 180

| ST | FREQ | SLV | DLV | TLV | SAT | Distance | Group Subgrp |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 180 |  | 4 | 2 | 0 | 0 | 0 | 1.0 | $32 \%$ | $0 \%$ |
| 9254 | 1 | 1 | 1 | 0 | 0 | 1.5 | $0 \%$ | $0 \%$ |  |
| 3794 | 1 | 1 | 1 | 0 | 0 | 1.5 | $0 \%$ | $0 \%$ |  |

Group 7: No. Isolates = 3 | No. STs=3 | Predicted Founder = 8991
Average ST Bootstrap
ST FREQ SLV DLV TLV SAT Distance Group Subgrp
$8991 \quad 1 \quad 2 \quad 0 \quad 0 \quad 0 \quad 1.0 \quad 31 \% ~ 0 \%$

| 9273 | 1 | 1 | 1 | 0 | 0 | 1.5 | $0 \%$ | $0 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 9270 | 1 | 1 | 1 | 0 | 0 | 1.5 | $0 \%$ | $0 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Group 8: No. Isolates = 10 | No. STs = 3 | Predicted Founder=81
Average ST Bootstrap

| ST | FREQ | SLV | DLV | TLV | SAT | Distance | Group Subgrp |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 81 |  | 8 | 2 | 0 | 0 | 0 | 1.0 | $32 \%$ | $0 \%$ |
| 2033 | 1 | 1 | 1 | 0 | 0 | 1.5 | $0 \%$ | $0 \%$ |  |
| 932 |  | 1 | 1 | 1 | 0 | 0 | 1.5 | $0 \%$ | $0 \%$ |

Group 9: No. Isolates = 3 | No. STs = 3 | Predicted Founder = Multiple Candidates

|  |  |  |  | Average |  | ST Bootstrap |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ST | FREQ | SLV | DLV | TLV | SAT | Distance |  | Group Subgrp |
| 4576 |  | 1 | 2 | 0 | 0 | 0 | 1.0 | $7 \%$ |
| 143 |  | 2 | 2 | 0 | 0 | 0 | 1.0 | $8 \%$ |
| 10336 |  | 1 | 2 | 0 | 0 | 0 | 1.0 | $17 \%$ |
| $10 \%$ |  |  |  |  |  |  |  |  |

Group 10: No. Isolates=3 | No. STs=3 | Predicted Founder=446
Average ST Bootstrap
ST FREQ SLV DLV TLV SAT Distance Group Subgrp
446
9271
$\begin{array}{lllllllll}4052 & 1 & 1 & 1 & 0 & 0 & 1.5 & 0 \% & 0 \%\end{array}$
Group 11: No. Isolates $=8$ | No. STs = 2 | Predicted Founder= None

| ST | FREQ | SLV | DLV | TLV | SAT | Distance |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 320 | 7 | 1 | 0 | 0 | 0 | 1.0 |  |
| 2477 |  | 1 | 1 | 0 | 0 | 0 | 1.0 |

Group 12: No. Isolates = 11 | No. STs = 2 | Predicted Founder = None

| ST | FREQ | SLV | DLV | TLV | SAT | Distance |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 135 |  | 10 | 1 | 0 | 0 | 0 | 1.0 |
| 9255 |  | 1 | 1 | 0 | 0 | 0 | 1.0 |

Group 13: No. Isolates = 3 | No. STs = 2 | Predicted Founder = None

| ST | FREQ | SLV | DLV | TLV | SAT | Distance |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2049 |  | 2 | 1 | 0 | 0 | 0 | 1.0 |
| 505 |  | 1 | 1 | 0 | 0 | 0 | 1.0 |

Group 14: No. Isolates = 3 | No. STs = 2 | Predicted Founder = None

| ST | FREQ | SLV | DLV | TLV | SAT | Distance |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 124 | 2 | 1 | 0 | 0 | 0 | 1.0 |  |
| 10335 |  | 2 | 1 | 0 | 0 | 0 | 1.0 |

Group 15: No. Isolates = 3 | No. STs = 2 | Predicted Founder= None

| ST | FREQ | SLV | DLV | TLV | SAT | Distance |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 319 | 2 | 1 | 0 | 0 | 0 | 1.0 |  |
| 230 |  | 1 | 1 | 0 | 0 | 0 | 1.0 |

Group 16: No. Isolates = 5 | No. STs = 2 | Predicted Founder= None

| ST | FREQ | SLV | DLV | TLV | SAT | Distance |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 410 | 4 | 1 | 0 | 0 | 0 | 1.0 |  |
| 193 |  | 1 | 1 | 0 | 0 | 0 | 1.0 |

Group 17: No. Isolates = 4 | No. STs = 2 | Predicted Founder= None

| ST | FREQ | SLV | DLV | TLV | SAT | Distance |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 62 |  | 3 | 1 | 0 | 0 | 0 | 1.0 |
| 4478 |  | 1 | 1 | 0 | 0 | 0 | 1.0 |

Group 18: No. Isolates = 3 | No. STs = 2 | Predicted Founder= None

| ST | FREQ | SLV | DLV | TLV | SAT | Distance |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 393 | 2 | 1 | 0 | 0 | 0 | 1.0 |  |
| 10331 |  | 1 | 1 | 0 | 0 | 0 | 1.0 |

Singletons: size 66
10329
9257
384
9256
289
10321
9252
615
185
53
315
10318
377
218
10316
376
217
10315
273
113
177

