**Supplementary Table 1**. New South Wales isolate metadata, genotyping and phylogenetic information

| **Strain ID** | **Specimen type** | **Age grouping** | **Collection (Month/Year)** | **Patient with >1 sample** | **MLST\*** | **NG-MAST\*** | **POR** | **TBPB** | **Cluster assigned in phylogeny** | **Strains sharing identical core SNPs\*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| AU2012-573 | cervical/vaginal | 25-34 | 05/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2014-654 | cervical/vaginal | 18-24 | 04/2014 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2012-646 | cervical/vaginal | 25-34 | 05/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2012-768 | throat | 18-24 | 06/2012 |  | 7359 | 15344 | 8931 | 241 | Not assigned |  |
| AU2012-574 | cervical/vaginal | 25-34 | 06/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2012-511 | cervical/vaginal | 18-24 | 06/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2012-336 | throat | 35-44 | 02/2012 |  | 7359 | 4186 | 2569 | 241 | C1 |  |
| AU2012-249 | throat | 25-34 | 02/2012 |  | 7359 | 4186 | 2569 | 241 | C1 |  |
| AU2012-63 | throat | 35-44 | 01/2012 |  | 7359 | 4186 | 2569 | 241 | C1 | G1 |
| AU2012-57 | cervical/vaginal | 45-54 | 01/2012 |  | 7359 | 4186 | 2569 | 241 | C1 | G1 |
| AU2012-65 | throat | 18-24 | 01/2012 |  | 7359 | 4186 | 2569 | 241 | C1 |  |
| AU2012-341 | cervical/vaginal | 25-34 | 02/2012 |  | 7359 | 4186 | 2569 | 241 | C1 |  |
| AU2014-637 | cervical/vaginal | 18-24 | 03/2014 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2012-161 | cervical/vaginal | 25-34 | 01/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2014-661 | cervical/vaginal | 18-24 | 04/2014 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2012-70 | cervical/vaginal | 18-24 | 01/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2012-62 | cervical/vaginal | 45-54 | 01/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2012-167 | cervical/vaginal | 25-34 | 01/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2012-237 | throat | 45-54 | 02/2012 |  | 7359 | 4186 | 2569 | 241 | C2 | G2 |
| AU2012-425 | throat | 45-54 | 03/2012 |  | 7359 | 15348 | 8935 | 241 | C2 | G2 |
| AU2012-250 | cervical/vaginal | 25-34 | 05/2012 |  | 7359 | 6767 | 4059 | 241 | C2 |  |
| AU2012-338 | throat | 35-44 | 02/2012 |  | 7359 | 4186 | 2569 | 241 | C2 |  |
| AU2012-416 | throat | 45-54 | 04/2012 |  | 7359 | 4186 | 2569 | 241 | C2 |  |
| AU2012-510 | cervical/vaginal | 45-54 | 05/2012 |  | 7359 | 4186 | 2569 | 241 | C2 |  |
| AU2012-248 | cervical/vaginal | 55 and over | 01/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2014-622 | throat | 55 and over | 02/2014 |  | 7359 | 4186 | 2569 | 241 | C3 |  |
| AU2014-595 | rectal | 25-34 | 01/2014 | PD | 7359 | 4186 | 2569 | 241 | C3 |  |
| AU2014-596 | throat | 25-34 | 01/2014 | PD | 7359 | 4186 | 2569 | 241 | C3 |  |
| AU2014-594 | cervical/vaginal | 25-34 | 01/2014 | PD | 7359 | 4186 | 2569 | 241 | C3 |  |
| AU2014-665 | cervical/vaginal | 55 and over | 04/2014 |  | 7359 | 4186 | 2569 | 241 | C3 |  |
| AU2014-634 | cervical/vaginal | 18-24 | 02/2014 |  | 7359 | 4186 | 2569 | 241 | C3 |  |
| AU2014-607 | cervical/vaginal | 18-24 | 01/2014 |  | 7359 | 4186 | 2569 | 241 | C3 |  |
| AU2012-758 | throat | 25-34 | 06/2012 |  | 7359 | 4186 | 2569 | 241 | C3 |  |
| AU2014-647 | cervical/vaginal | 18-24 | 03/2014 |  | 7359 | 4186 | 2569 | 241 | C3 |  |
| AU2014-579 | cervical/vaginal | 18-24 | 01/2014 |  | 7359 | 4186 | 2569 | 241 | C3 |  |
| AU2012-500 | cervical/vaginal | 18-24 | 05/2012 |  | 7359 | 4186 | 2569 | 241 | C3 |  |
| AU2014-612 | throat | 18-24 | 02/2014 | PE | 7359 | 4186 | 2569 | 241 | C3 |  |
| AU2014-602 | throat | 25-34 | 01/2014 |  | 7359 | 4186 | 2569 | 241 | C3 |  |
| AU2014-606 | cervical/vaginal | 18-24 | 01/2014 | PE | 7359 | 4186 | 2569 | 241 | C3 |  |
| AU2012-155 | throat | 45-54 | 01/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2012-331 | cervical/vaginal | 45-54 | 02/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2012-168 | throat | 35-44 | 01/2012 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-698 | throat | 55 and over | 02/2012 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-701 | cervical/vaginal | 25-34 | 03/2012 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-648 | cervical/vaginal | 25-34 | 03/2012 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-497 | throat | 25-34 | 05/2012 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2014-686 | cervical/vaginal | 25-34 | 06/2014 | PF | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2014-694 | cervical/vaginal | 25-34 | 06/2014 | PF | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2014-653 | throat | 25-34 | 04/2014 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2014-682 | cervical/vaginal | 25-34 | 05/2014 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-166 | throat | 35-44 | 01/2012 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-325 | cervical/vaginal | 25-34 | 03/2012 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-340 | throat | 35-44 | 03/2012 | PC | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-319 | throat | 35-44 | 03/2012 | PC | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-241 | cervical/vaginal | 55 and over | 02/2012 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-323 | cervical/vaginal | 45-54 | 03/2012 |  | 7359 | 4186 | 2569 | 241 | C4 | G6 |
| AU2012-332 | cervical/vaginal | 55 and over | 02/2012 |  | 7359 | 4186 | 2569 | 241 | C4 | G6 |
| AU2012-329 | cervical/vaginal | 18-24 | 03/2012 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-73 | cervical/vaginal | 25-34 | 01/2012 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2014-645 | cervical/vaginal | 18-24 | 03/2014 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2014-651 | cervical/vaginal | 55 and over | 03/2014 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-649 | cervical/vaginal | 35-44 | 05/2012 |  | 7359 | 4186 | 2569 | 241 | C4 | G3 |
| AU2012-420 | throat | 35-44 | 03/2012 |  | 7359 | 4186 | 2569 | 241 | C4 | G3 |
| AU2012-807 | cervical/vaginal | 18-24 | 05/2012 |  | 7359 | 4186 | 2569 | 241 | C4 | G3 |
| AU2012-75 | cervical/vaginal | 25-34 | 01/2012 | PA | 7359 | 4186 | 2569 | 241 | C4 | G4 |
| AU2012-74 | throat | 25-34 | 01/2012 | PA | 7359 | 4186 | 2569 | 241 | C4 | G4 |
| AU2012-61 | cervical/vaginal | 55 and over | 01/2012 | PB | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-162 | cervical/vaginal | 55 and over | 01/2012 | PB | 7359 | 6767 | 4059 | 241 | C4 |  |
| AU2012-165 | throat | 35-44 | 01/2012 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-240 | cervical/vaginal | 25-34 | 02/2012 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-767 | throat | 25-34 | 06/2012 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2014-574 | cervical/vaginal | 18-24 | 01/2014 |  | 7359 | 4186 | 2569 | 241 | C4 | G5 |
| AU2014-593 | cervical/vaginal | 18-24 | 01/2014 |  | 7359 | 4186 | 2569 | 241 | C4 | G5 |
| AU2014-580 | cervical/vaginal | 25-34 | 01/2014 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-572 | throat | 35-44 | 05/2012 |  | 7359 | 4186 | 2569 | 241 | C4 |  |
| AU2012-502 | throat | 25-34 | 05/2012 |  | 7359 | 15609 | 9143 | 241 | Not assigned |  |
| AU2012-418 | cervical/vaginal | 18-24 | 03/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2014-589 | cervical/vaginal | 18-24 | 01/2014 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2012-68 | cervical/vaginal | 45-54 | 02/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2012-700 | cervical/vaginal | 25-34 | 04/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2012-60 | cervical/vaginal | 35-44 | 02/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |
| AU2012-501 | cervical/vaginal | 25-34 | 05/2012 |  | 7359 | 4186 | 2569 | 241 | C5 |  |
| AU2012-417 | cervical/vaginal | 55 and over | 03/2012 |  | 7359 | 4186 | 2569 | 241 | C5 |  |
| AU2014-613 | throat | 18-24 | 02/2014 |  | 7359 | 4186 | 2569 | 241 | C5 |  |
| AU2014-635 | throat | 25-34 | 03/2014 |  | 7359 | 6759 | 4057 | 241 | C5 |  |
| AU2014-663 | cervical/vaginal | 18-24 | 04/2014 |  | 7359 | 15344 | 8931 | 241 | C5 |  |
| AU2014-586 | cervical/vaginal | 18-24 | 01/2014 |  | 7359 | 4186 | 2569 | 241 | C5 |  |
| AU2014-690 | throat | 18-24 | 06/2014 |  | 7359 | 6759 | 4057 | 241 | C5 |  |
| AU2014-693 | cervical/vaginal | 18-24 | 06/2014 |  | 7359 | 4186 | 2569 | 241 | C5 |  |
| AU2014-680 | throat | 35-44 | 05/2014 |  | 7359 | 4186 | 2569 | 241 | C5 |  |
| AU2014-620 | throat | 18-24 | 02/2014 |  | 7359 | 4186 | 2569 | 241 | C5 |  |
| AU2014-697 | cervical/vaginal | 25-34 | 06/2014 |  | 7359 | 4186 | 2569 | 241 | C5 |  |
| AU2014-684 | cervical/vaginal | 35-44 | 05/2014 |  | 7359 | 4186 | 2569 | 241 | C5 |  |
| AU2012-238 | eye | 18-24 | 02/2012 |  | 7359 | 4186 | 2569 | 241 | Not assigned |  |

\*MLST, multilocus sequence type; NG-MAST, *Neisseria gonorrhoeae* multi-antigen sequence type; SNPs, single nucleotide polymorphisms.