

Supplementary file 1. The details of the search strategy

Search by PubMed performed on June 3, 2020

| | Search terms | Number |
|-----|----------------------------------------------|-----------|
| #1 | pneumococcal infections[mh] | 20,513 |
| #2 | "Pneumonia, Pneumococcal"[mh] | 5,098 |
| #3 | streptococcus pneumonia* [tiab] | 24,663 |
| #4 | #1 OR #2 OR #3 | 36,152 |
| #5 | "Antigens"[Mesh] | 1,047,961 |
| #6 | antigen[tiab] | 452,063 |
| #7 | #5 OR #6 | 1,241,294 |
| #8 | urine[mh] | 37,170 |
| #9 | urin*[tiab] | 487,503 |
| #10 | #8 OR #9 | 495,249 |
| #11 | #7 AND #10 | 18,163 |
| #12 | "Sputum"[Mesh] | 21,271 |
| #13 | "Blood Culture"[Mesh] | 859 |
| #14 | "Polymerase Chain Reaction"[Mesh] | 446,802 |
| #15 | #11 OR #12 OR #13 OR #14 | 484,920 |
| #16 | #4 AND #15 | 2,253 |
| #17 | animals[mh] NOT (animals[mh] AND humans[mh]) | 4,704,796 |
| #18 | #16 NOT #17 | 2,152 |

Search by CENTRAL performed on June 3rd, 2020

| | Search terms | Number |
|-----|--------------------------------|--------|
| #1 | [mh "pneumococcal infections"] | 188 |
| #2 | [mh "Pneumonia, Pneumococcal"] | 163 |
| #3 | streptococcus pneumonia*:ti,ab | 1382 |
| #4 | penumococcal:ti,ab | 3 |
| #5 | #1 OR #2 OR #3 OR #4 | 1557 |
| #6 | [mh Antigens] | 14056 |
| #7 | antigen*:ti,ab | 16332 |
| #8 | #6 OR #7 | 26376 |
| #9 | [mh Urine] | 639 |
| #10 | urin*:ti,ab | 58834 |

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|-----|-------------------------------------------------|-------|
| #11 | #9 OR #10 | 58991 |
| #12 | #8 AND #11 | 1382 |
| #13 | #5 AND #12 | 27 |
| #14 | [mh animals] NOT ([mh animals] AND [mh humans]) | 6797 |
| #15 | #13 NOT #14 | 27 |