**Supplementary Table S2. Details of all patients’ characteristics, treatments and outcomes**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Cases** | **Age** | **Sex** | **Clinical symptoms** | **Comorbidities** | **Infection site** | **Serotype** | **MLST** | **Virulence genes** | **Treatment** | **Duration (days)** | **Outcome**  |
| 1 | 1 | Male | Sepsis | None | CSF | 1/2a | ST8 | *plca, prfa, inla, inlj, iap, hly, acta, plcb* | Ceftriaxone, meropenem | 10 | improved |
| 2 | 41 | Male | Sepsis, respiratory failure | Symptomatic epilepsy | Blood | 4b | ST1 | *plca, prfa, inla, inlj, inlb, iap, hly, acta, plcb* | Meropenem | 8 | death |
| 3 | 65 | Male | Sepsis, bacterial meningitis | None | Blood, CSF | 1/2a | ST7 | *plca, prfa, inla, inlj, inlb, iap, hly, acta, plcb* | Meropenem | 20 | cure |
| 4 | 39 | Male | Bacterial meningitis | None | CSF | 1/2a | ST3 | *plca, prfa, inla, inlj, inlb, iap, hly, acta* | Ampicillin | 10 | cure |
| 5 | 70 | Female | Sepsis | Liver cirrhosis, connective tissue diseases, pneumonia | Blood | 1/2a | ST8 | *plca, prfa, inla, inlj, inlb, iap, hly, acta* | Cefazoline, ceftazidime, piperacillin-tazobactam | 5 | death |
| 6 | 52 | Male | Sepsis, bacterial meningitis, respiratory failure, cerebral hernia | None | Blood | 1/2b | ST87 | *plca, prfa, inla, inlj, inlb, iap, hly, acta, plcb* | Ceftriaxone, meropenem, penicillin, vancomycin, sulfamethoxazole | 4 | death |
| 7 | 45 | Male | Multiple myeloma | Hypertension, multiple myeloma | Blood | 1/2b | ST3 | *plca, prfa, inla, inlj, inlb, iap* | Ampicillin, gentamicin | 5 | cure |
| 8 | 35 | Female | Sepsis | SLE | Blood | 1/2a | ST3 | *plca, prfa, inla, inlj, inlb*  | Piperacillin-tazobactam | 7 | cure |
| 9 | 9 | Female | Bacterial meningitis | None | CSF | 1/2a | ST155 | *plca, prfa, inla, inlj, inlb, iap* | Ampicillin | 8 | cure |
| 10 | 8M | Female | Sepsis, bacterial meningitis | None | CSF | 1/2a | ST8 | *plca, prfa, inla, inlj, inlb, iap, hly, acta, plcb* | Ceftriaxone, meropenem | 12 | cure |
| 11 | 58 | Male | Sepsis, bacterial meningitis | Hypertension, type 2 DM, coronary heart disease | Blood, CSF | 1/2a | ST8 | *plca, prfa, inla, inlj, inlb, iap, hly, acta, plcb* | Meropenem, vancomycin | 11 | cure |
| 12 | 68 | Male | Sepsis | Hypertension, DM | Blood | 4b | ST1 | *plca, prfa, inla, inlj, inlb* | Ceftriaxone, meropenem | 6 | improved |
| 13 | 79 | Male | Sepsis | Hypertension, DM, COPD | Blood, CSF | 1/2b | ST87 | *plca, prfa, inla, inlj, iap, hly, acta, plcb, inlc* | Ceftriaxone, meropenem, sulfamethoxazole | 9 | improved |
| 14 | 56 | Female | Sepsis | Rectal cancer, breast cancer | Blood | 1/2a | ST8 | *plca, prfa, inla, inlj, inlb*  | Ceftriaxone, ampicillin | 7 | cure |
| 15 | 56 | Male | Sepsis | DM, hepatitis E | Blood | 1/2b | ST87 | *plca, prfa, inla, inlj, iap, hly, acta* | Linezolid, biapenem | 1 | improved |
| 16 | 80 | Female | Infection caused by the right artificial knee prosthesis | None | Joint fluid | 1/2a | ST7 | *plca, prfa, inla, inlj, inlb, iap, hly, acta, plcb, inlc* | Meropenem, vancomycin, amikacin | 10 | improved |
| 17 | 66 | Female | Bacterial meningitis | Cerebral infarction, hypertension | CSF | 1/2a | ST8 | *plca, prfa, inla, inlj, inlb* | Meropenem | 11 | cure |
| 18 | 68 | Female | Non-Hodgkin’s lymphoma | Non-Hodgkin’s lymphoma | Blood | 1/2b | ST5 | *plca, prfa, inla, inlj* | Piperacillin-tazobactam | 13 | cure |
| 19 | 51 | Female | Bacterial meningitis | Hypertension | CSF | 1/2a | ST8 | *plca, prfa, inla, inlj, inlb, iap, hly, acta, plcb* | Ampicillin | 8 | cure |
| 20 | 75 | Female | Liver cirrhosis | Hepatitis B | Ascites | 1/2a | ST121 | *plca, prfa, inla, inlj, inlb* | Imipenem-cilastatin | 6 | death |
| 21 | 74 | Female | Bacterial meningitis, respiratory failure | Coronary atherosclerosis | Blood, CSF | 1/2a | ST155 | *plca, prfa, inla, inlj, inlb, iap, hly, acta, plcb, inlc* | Ceftriaxone, penicillin | 3 | death |
| 22 | 54 | Male | Septic shock | Hypopharyngeal carcinoma | Blood | 1/2b | ST87 | *plca, prfa, inla, inlj, inlb*  | Imipenem-cilastatin | 1 | death |
| 23 | 11M | Male | Sepsis, bacterial meningitis | None | CSF | 1/2a | ST8 | *plca, prfa, inla, inlj, iap, hly, acta, plcb, inlc* | Ceftizoxime, meropenem, vancomycin, penicillin, linezolid | 13 | improved |
| 24 | 56 | Female | Sepsis, bacterial meningitis | SLE, CRF, lupus nephritis, hypertension, cerebral infarction, hypothyroidism | Blood | 1/2a | ST8 | *plca, prfa, inla, inlj, inlb, iap, hly, acta, plcb, inlc* | None | 0 | withdrawing treatment |
| 25 | 60 | Female | Sepsis | Leukemia, hypertension, type 2 DM, pulmonary nodule, fatty liver, renal cyst | Blood | 1/2a | ST8 | *plca, prfa, inla, inlj, inlb* | Meropenem, linezolid | 7 | improved |
| 26 | 82 | Female | Infectious abdominal aortic aneurysm | Hypertension, type 2 DM | Blood | 1/2a | ST7 | *plca, prfa, inla, inlj, inlb* | Cefoperazone-sulbactam, amoxicillin-clavulanate, minocycline | 10 | improved |
| 27 | 3 | Female | Sepsis | None | CSF | 1/2b | ST169 | *plca, prfa, inla, inlj, inlb* | Ceftazidime, azithromycin, penicillin, meropenem | 11 | improved |

SLE, Systemic lupus erythematosus; CSF, Cerebrospinal fluid; DM, diabetes mellitus; COPD, chronic obstructive pulmonary disease; CRF, chronic renal failure