**Supplementary 2**

**S2 Table 1:** Phenotypic profile of antimicrobial resistance of sows and piglets for G1, G2, G3 and G4:

|  |  |  |
| --- | --- | --- |
| **Group** | **Animal** | **Phenotypic profile** |
| **G1 / G2** | Sow | AMP, CHL, FFC, TET |
| **G1 / G2** | Sow | AMP, CIP, CHL, FFC, NAL, TET |
| **G1 / G2** | Sow | AMP, NAL, SUL, TET |
| **G1 / G2** | Sow | Susceptible to all tested antimicrobials |
| **G1 / G2** | Sow | Susceptible to all tested antimicrobials |
| **G1 / G2** | Sow | NAL, SUL, TET |
| **G1** | Piglet | AMP, CIP, NAL, SUL |
| **G1** | Piglet | Susceptible to all tested antimicrobials |
| **G1** | Piglet | AMP, CTX, CIP, NAL, SUL, TET |
| **G1** | Piglet | AMP, CTX, CIP, NAL |
| **G1** | Piglet | CIP, GEN, NAL, TET |
| **G1** | Piglet | AMP, CTX, CIP, NAL, SUL, TET |
| **G1** | Piglet | AMP, CHL, FFC, NAL, SUL |
| **G1** | Piglet | NAL, SUL, TET |
| **G1** | Piglet | AMP, SUL, TET |
| **G1** | Piglet | Susceptible to all tested antimicrobials |
| **G1** | Piglet | AMP, CTX, SUL |
| **G1** | Piglet | AMP, NAL, SUL, TET |
| **G2** | Piglet | Susceptible to all tested antimicrobials |
| **G2** | Piglet | Susceptible to all tested antimicrobials |
| **G2** | Piglet | AMP, CTX, CIP, GEN, CHL, FFC, NAL, SUL |
| **G2** | Piglet | Susceptible to all tested antimicrobials |
| **G2** | Piglet | NAL, SUL |
| **G2** | Piglet | AMP, CIP, GEN, CHL, FFC, NAL, SUL |
| **G2** | Piglet | NAL, SUL, TET |
| **G2** | Piglet | NAL, SUL, TET |
| **G2** | Piglet | Susceptible to all tested antimicrobials |
| **G2** | Piglet | Susceptible to all tested antimicrobials |
| **G2** | Piglet | AMP, SUL, TET |
| **G2** | Piglet | Susceptible to all tested antimicrobials |
| **G3** | Sow | AMP, GEN, CHL, FFC, NAL, SUL, TET |
| **G3** | Sow | AMP, NAL, SUL, TET |
| **G3** | Sow | TET |
| **G3** | Sow | NAL, TET |
| **G3** | Sow | AMP, CHL, FFC, NAL, SUL, TET |
| **G3** | Sow | SUL, TET |
| **G3** | Piglet | AMP, NAL, TET |
| **G3** | Piglet | AMP, SUL, TET |
| **G3** | Piglet | AMP, CIP, NAL, TET |
| **G3** | Piglet | CHL, FFC, NAL, SUL, TET |
| **G3** | Piglet | NAL, TET |
| **G3** | Piglet | Susceptible to all tested antimicrobials |
| **G3** | Piglet | GEN, NAL, SUL, TET |
| **G3** | Piglet | GEN, NAL, SUL, TET |
| **G3** | Piglet | TET |
| **G3** | Piglet | AMP, CHL, FFC, NAL, SUL, TET |
| **G3** | Piglet | Susceptible to all tested antimicrobials |
| **G3** | Piglet | CHL, FFC, NAL, SUL, TET |
| **G4** | Sow | AMP, CTX, FFC, SUL, TET |
| **G4** | Sow | AMP, CHL, FFC, NAL, SUL, TET |
| **G4** | Sow | AMP, CHL, FFC, NAL, SUL, TET |
| **G4** | Sow | Susceptible to all tested antimicrobials |
| **G4** | Sow | CHL, FFC, TET |
| **G4** | Sow | Susceptible to all tested antimicrobials |
| **G4** | Piglet | AMP, CTX, CAZ, CIP, GEN, CHL, NAL, SUL, TET |
| **G4** | Piglet | AMP, CTX, CIP, CHL, FFC, NAL, SUL, TET |
| **G4** | Piglet | AMP, CTX, CAZ, CIP, GEN, CHL, NAL, SUL, TET |
| **G4** | Piglet | AMP, CTX, CAZ, CIP, GEN, CHL, NAL, SUL, TET |
| **G4** | Piglet | AMP, CTX, CHL, NAL, SUL, TET |
| **G4** | Piglet | AMP, CHL, NAL, SUL, TET |
| **G4** | Piglet | AMP, CTX, CIP, NAL, SUL, TET |
| **G4** | Piglet | AMP, CTX, NAL, SUL, TET |
| **G4** | Piglet | AMP, CTX, CIP, NAL, SUL, TET |
| **G4** | Piglet | AMP, CTX, CIP, GEN, NAL, SUL, TET |
| **G4** | Piglet | AMP, CHL, FFC, NAL, SUL, TET |
| **G4** | Piglet | AMP, CTX, CAZ, CIP, GEN, CHL, NAL, SUL, TET |

Note: sow and piglets’ samples were not tested for colistin MIC.

G1: pigs without in-feed antimicrobial administration; G2: pigs that received a total average dose of 6,018 mg antimicrobials/pig; G3: pigs that received a total average dose of 8,127 mg antimicrobials/pig; G4: pigs that received a total average dose of 15,678 mg antimicrobials/pig.

AMP: ampicillin; CTX: cefotaxime; CAZ: ceftazidime; CIP: ciprofloxacin; CHL: chloramphenicol; FFC: florfenicol; GEN: gentamicin; NAL: nalidixic acid; SUL: sulphonamide; TET: tetracycline.

**Supplementary 2**

**S2 Table 1:** Phenotypic profile of antimicrobial resistance of sows and piglets for G1, G2, G3 and G4:

|  |  |
| --- | --- |
| **Group 1** | |
| **Sow** | **Piglets** |
| **AMP, CHL, FFC, TET** | AMP, CIP, NAL, SUL |
| Susceptible to all tested antimicrobials |
| **AMP, CIP, CHL, FFC, NAL, TET** | AMP, CTX, CIP, NAL, SUL, TET |
| AMP, CTX, CIP, NAL |
| **AMP, NAL, SUL, TET** | CIP, GEN, NAL, TET |
| AMP, CTX, CIP, NAL, SUL, TET |
| **Susceptible to all tested antimicrobials** | AMP, CHL, FFC, NAL, SUL |
| NAL, SUL, TET |
| **Susceptible to all tested antimicrobials** | AMP, SUL, TET |
| Susceptible to all tested antimicrobials |
| **NAL, SUL, TET** | AMP, CTX, SUL |
| AMP, NAL, SUL, TET |
|  |  |
| **Group 2** | |
| **Sow** | **Piglets** |
| **AMP, CHL, FFC, TET** | Susceptible to all tested antimicrobials |
| Susceptible to all tested antimicrobials |
| **AMP, CIP, CHL, FFC, NAL, TET** | AMP, CTX, CIP, GEN, CHL, FFC, NAL, SUL |
| Susceptible to all tested antimicrobials |
| **AMP, NAL, SUL, TET** | NAL, SUL |
| AMP, CIP, GEN, CHL, FFC, NAL, SUL |
| **Susceptible to all tested antimicrobials** | NAL, SUL, TET |
| NAL, SUL, TET |
| **Susceptible to all tested antimicrobials** | Susceptible to all tested antimicrobials |
| Susceptible to all tested antimicrobials |
| **NAL, SUL, TET** | AMP, SUL, TET |
| Susceptible to all tested antimicrobials |
|  |  |
| **Group 3** | |
| **Sow** | **Piglets** |
| **AMP, GEN, CHL, FFC, NAL, SUL, TET** | AMP, NAL, TET |
| AMP, SUL, TET |
| **AMP, NAL, SUL, TET** | AMP, CIP, NAL, TET |
| CHL, FFC, NAL, SUL, TET |
| **TET** | NAL, TET |
| Susceptible to all tested antimicrobials |
| **NAL, TET** | GEN, NAL, SUL, TET |
| GEN, NAL, SUL, TET |
| **AMP, CHL, FFC, NAL, SUL, TET** | TET |
| AMP, CHL, FFC, NAL, SUL, TET |
| **SUL, TET** | Susceptible to all tested antimicrobials |
| CHL, FFC, NAL, SUL, TET |
|  |  |
| **Group 4** | |
| **Sow** | **Piglets** |
| **AMP, CTX, FFC, SUL, TET** | AMP, CTX, CAZ, CIP, GEN, CHL, NAL, SUL, TET |
| AMP, CTX, CIP, CHL, FFC, NAL, SUL, TET |
| **AMP, CHL, FFC, NAL, SUL, TET** | AMP, CTX, CAZ, CIP, GEN, CHL, NAL, SUL, TET |
| AMP, CTX, CAZ, CIP, GEN, CHL, NAL, SUL, TET |
| **AMP, CHL, FFC, NAL, SUL, TET** | AMP, CTX, CHL, NAL, SUL, TET |
| AMP, CHL, NAL, SUL, TET |
| **Susceptible to all tested antimicrobials** | AMP, CTX, CIP, NAL, SUL, TET |
| AMP, CTX, NAL, SUL, TET |
| **CHL, FFC, TET** | AMP, CTX, CIP, NAL, SUL, TET |
| AMP, CTX, CIP, GEN, NAL, SUL, TET |
| **Susceptible to all tested antimicrobials** | AMP, CHL, FFC, NAL, SUL, TET |
| AMP, CTX, CAZ, CIP, GEN, CHL, NAL, SUL, TET |

Note: sow and piglets’ samples were not tested for colistin MIC.

G1: pigs without in-feed antimicrobial administration; G2: pigs that received a total average dose of 6,018 mg antimicrobials/pig; G3: pigs that received a total average dose of 8,127 mg antimicrobials/pig; G4: pigs that received a total average dose of 15,678 mg antimicrobials/pig.

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