

Supplementary Appendix

Azithromycin and Major Adverse Kidney Events in Critically Ill Patients with Sepsis-Associated Acute Kidney Injury

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eTable 1. Sensitivity Analysis Using 50% Reduction in eGFR for MAKE definition

| Variable | Odds Ratio (95% Confidence Interval) | p-value |
|---|--------------------------------------|---------|
| Azithromycin | 0.52 (0.34-0.80) | 0.003 |
| Age (years) | 1.01 (1.00-1.03) | 0.077 |
| Sex (male vs. female) | 1.53 (1.09-2.15) | 0.013 |
| Baseline eGFR (ml/min/1.73 m ²) | 0.99 (0.98-1.00) | 0.094 |
| Diabetes | 0.73 (0.50-1.05) | 0.087 |
| Hypertension | 0.65 (0.44-0.97) | 0.033 |
| Heart failure | 1.11 (0.76-1.63) | 0.594 |
| Liver disease | 1.97 (1.37-2.83) | <0.001 |
| Chronic kidney disease | 1.86 (1.22-2.84) | 0.004 |
| KDIGO AKI stage (vs. stage 1) | | |
| Stage 2 | 0.88 (0.58-1.32) | 0.531 |
| Stage 3 | 1.30 (0.87-1.94) | 0.198 |
| Lactate (mmol/l) | 1.01 (0.97-1.05) | 0.721 |
| SOFA | 1.14 (1.09-1.19) | <0.001 |
| Anti-pseudomonal antibiotic coverage | 0.72 (0.49-1.05) | 0.090 |

eGFR=estimated glomerular filtration rate; KDIGO=Kidney Disease Improving Global Outcomes; SOFA=Sequential Organ Failure Assessment score

eTable 2. Sensitivity Analysis Using Only Patients with Documented Baseline Serum Creatinine (n=345)

| Variable | Odds Ratio (95% Confidence Interval) | p-value |
|---|--------------------------------------|---------|
| Azithromycin | 0.79 (0.42-1.48) | 0.463 |
| Age (years) | 1.00 (0.98-1.02) | 0.939 |
| Sex (male vs. female) | 1.52 (0.94-2.45) | 0.087 |
| Baseline eGFR (ml/min/1.73 m ²) | 0.99 (0.98-1.00) | 0.150 |
| Diabetes | 0.70 (0.43-1.16) | 0.172 |
| Hypertension | 0.79 (0.44-1.43) | 0.438 |
| Heart failure | 0.99 (0.58-1.69) | 0.963 |
| Liver disease | 2.46 (1.47-4.11) | 0.001 |
| Chronic kidney disease | 1.88 (1.01-3.51) | 0.047 |
| KDIGO AKI stage (vs. stage 1) | | |
| Stage 2 | 0.61 (0.34-1.11) | 0.107 |
| Stage 3 | 0.84 (0.47-1.50) | 0.546 |
| Lactate (mmol/l) | 1.06 (0.99-1.13) | 0.094 |
| SOFA | 1.08 (1.02-1.15) | 0.008 |
| Anti-pseudomonal antibiotic coverage | 0.72 (0.41-1.25) | 0.239 |

eGFR=estimated glomerular filtration rate; KDIGO=Kidney Disease Improving Global Outcomes; SOFA=Sequential Organ Failure Assessment score

eTable 3. Sensitivity Analysis for Composite Outcome of Death or KRT at Discharge

| Variable | Odds Ratio (95% Confidence Interval) | p-value |
|---|--------------------------------------|---------|
| Azithromycin | 0.59 (0.38-0.91) | 0.018 |
| Age (years) | 1.03 (1.01-1.04) | 0.001 |
| Sex (male vs. female) | 1.51 (1.06-2.15) | 0.023 |
| Baseline eGFR (ml/min/1.73 m ²) | 0.99 (0.98-1.00) | 0.020 |
| Diabetes | 0.74 (0.50-1.08) | 0.123 |
| Hypertension | 0.47 (0.31-0.71) | <0.001 |
| Heart failure | 1.00 (0.67-1.50) | 0.982 |
| Liver disease | 2.04 (1.41-2.97) | <0.001 |
| Chronic kidney disease | 1.16 (0.75-1.80) | 0.491 |
| KDIGO AKI stage (vs. stage 1) | | |
| Stage 2 | 0.91 (0.59-1.40) | 0.661 |
| Stage 3 | 0.93 (0.61-1.41) | 0.734 |
| Lactate (mmol/l) | 1.02 (0.98-1.07) | 0.263 |
| SOFA | 1.14 (1.09-1.19) | <0.001 |
| Anti-pseudomonal antibiotic coverage | 0.80 (0.54-1.19) | 0.276 |

eGFR=estimated glomerular filtration rate; KDIGO=Kidney Disease Improving Global Outcomes; SOFA=Sequential Organ Failure Assessment score

eTable 4. Sensitivity Analysis for Primary Outcome Using Only KDIGO Stage 2 and 3 AKI (n=422)

| Variable | Odds Ratio (95% Confidence Interval) | p-value |
|---|--------------------------------------|---------|
| Azithromycin | 0.64 (0.36-1.13) | 0.126 |
| Age (years) | 1.01 (1.00-1.03) | 0.120 |
| Sex (male vs. female) | 1.26 (0.83-1.90) | 0.280 |
| Baseline eGFR (ml/min/1.73 m ²) | 1.00 (0.99-1.01) | 0.954 |
| Diabetes | 0.79 (0.50-1.24) | 0.307 |
| Hypertension | 0.71 (0.43-1.15) | 0.162 |
| Heart failure | 1.24 (0.75-2.06) | 0.401 |
| Liver disease | 1.78 (1.12-2.83) | 0.016 |
| Chronic kidney disease | 2.41 (1.40-4.14) | 0.001 |
| KDIGO AKI stage (stage 3 vs. stage 2) | 1.40 (0.93-2.12) | 0.107 |
| Lactate (mmol/l) | 1.02 (0.98-1.07) | 0.344 |
| SOFA | 1.04 (0.99-1.10) | 0.080 |
| Anti-pseudomonal antibiotic coverage | 0.78 (0.47-1.29) | 0.328 |

eGFR=estimated glomerular filtration rate; KDIGO=Kidney Disease Improving Global Outcomes; SOFA=Sequential Organ Failure Assessment score

eFigure 1. Range of Joint Relationships Capable of Explaining Away the Observed Effect of Azithromycin (E-value)

