Online Supplementary Data

Item S1: Search Strategy

Database: Ovid, MEDLINE, Cochrane Database of Systematic Reviews, Cochrane

Central Register of Controlled Trials

1. exp.aspirin/
2. aspirin$.mp.
3. 1 or 2
4. exp.transplantation/
5. transplantation$.mp.
6. 4 or 5
7. kidney$.mp.
8. renal$.mp.
9. 7 or 8
10. 6 and 9
11. 3 and 10
12. limit 24 to all adult
13. limit 25 to humans
Item S2: Outline of our search methodology.

Potentially relevant articles identified from search of MEDLINE, EMBASE, Cochrane Database of Systematic Reviews and Cochrane Central Register of Controlled Trials

(n=2,225)

Title and abstract reviewed for screening.

2,117 articles were excluded based on title and abstract for clearly not fulfilling inclusion criteria on basis of type of article, study design, population or outcome of interest.

108 potentially relevant articles included for full-length article review.

87 articles were excluded because they did not report the outcomes of interest.
12 articles were excluded because they were not observational studies or RCTs

9 articles were identified for the meta-analysis of the effects of aspirin on kidney transplant outcomes
**Figure S1:** Forest plot of all included studies comparing DGF risk in recipients who received aspirin and those who did not; square data markers represent risk ratios (RRs); horizontal lines, the 95% CIs with marker size reflecting the statistical weight of the study using random-effects meta-analysis. A diamond data marker represents the overall RR and 95% CI for the outcome of interest.

| Study or Subgroup | log(Risk Ratio) | SE    | Weight | Risk Ratio IV, Random, 95% CI | Risk Ratio IV, Random, 95% CI |
|-------------------|----------------|-------|--------|-----------------------------|-----------------------------|
| Esfandiar et al   | 0.364643       | 0.541088 | 22.0%  | 1.44 [0.50, 4.16]           |                             |
| Murphy et al      | 0.165514       | 0.267762 | 78.0%  | 1.18 [0.67, 2.07]           |                             |
| Total (95% CI)    |                |        | 100.0% | 1.23 [0.75, 2.03]           |                             |
| Heterogeneity: Tau² = 0.00; Chi² = 0.11, df = 1 (P = 0.75); I² = 0% |
| Test for overall effect: Z = 0.82 (P = 0.41) |

**Figure S2:** Forest plot of all included studies comparing risk of acute/chronic allograft rejection in recipients who received aspirin and those who did not; square data markers represent risk ratios (RRs); horizontal lines, the 95% CIs with marker size reflecting the statistical weight of the study using random-effects meta-analysis. A diamond data marker represents the overall RR and 95% CI for the outcome of interest.

| Study or Subgroup | log(Risk Ratio) | SE    | Weight | Risk Ratio IV, Random, 95% CI | Risk Ratio IV, Random, 95% CI |
|-------------------|----------------|-------|--------|-----------------------------|-----------------------------|
| Abendroth et al   | 0.500775       | 0.304317 | 33.5%  | 1.65 [0.91, 3.00]           |                             |
| Murphy et al      | -0.34249       | 0.262324 | 34.9%  | 0.71 [0.41, 1.23]           |                             |
| Taha et al        | -0.61619       | 0.334741 | 31.6%  | 0.54 [0.28, 1.04]           |                             |
| Total (95% CI)    |                |        | 100.0% | 0.86 [0.45, 1.65]           |                             |
| Heterogeneity: Tau² = 0.23; Chi² = 6.97, df = 2 (P = 0.03); I² = 71% |
| Test for overall effect: Z = 0.44 (P = 0.66) |
**Figure S3:** Forest plot of all included studies comparing risk of MACE or mortality in recipients who received aspirin and those who did not; square data markers represent risk ratios (RRs); horizontal lines, the 95% CIs with marker size reflecting the statistical weight of the study using random-effects meta-analysis. A diamond data marker represents the overall RR and 95% CI for the outcome of interest.

| Study or Subgroup | log(Risk Ratio) | SE   | Weight | Risk Ratio IV, Random, 95% CI | Risk Ratio IV, Random, 95% CI |
|------------------|----------------|------|--------|-----------------------------|-------------------------------|
| Abendroth et al  | -0.73397       | 0.627757 | 12.9% | 0.48 [0.14, 1.64]          |                               |
| Oien et al       | 0.307485       | 0.264004 | 35.3% | 1.36 [0.81, 2.28]          |                               |
| Pilmore et al    | -0.31471074    | 0.100585 | 51.8% | 0.73 [0.60, 0.89]          |                               |
| Total (95% CI)   |                |       | 100.9%| 0.86 [0.52, 1.43]          |                               |

Heterogeneity: $\hat{\tau}^2 = 5.47$, $df = 2$ ($P = 0.07$), $I^2 = 63$
Test for overall effect: $Z = 0.58$ ($P = 0.56$)

**Figure S4:** Forest plot of all included studies limited only to the studies with adjusted analysis comparing risk of MACE or mortality in recipients who received aspirin and those who did not; square data markers represent risk ratios (RRs); horizontal lines, the 95% CIs with marker size reflecting the statistical weight of the study using random-effects meta-analysis. A diamond data marker represents the overall RR and 95% CI for the outcome of interest.

| Study or Subgroup | log(Risk Ratio) | SE   | Weight | Risk Ratio IV, Random, 95% CI | Risk Ratio IV, Random, 95% CI |
|------------------|----------------|------|--------|-----------------------------|-------------------------------|
| Abendroth et al  | -0.73397       | 0.627757 | 2.5%  | 0.48 [0.14, 1.64]          |                               |
| Pilmore et al    | -0.31471074    | 0.100585 | 97.5% | 0.73 [0.60, 0.89]          |                               |
| Total (95% CI)   |                |       | 100.9%| 0.72 [0.59, 0.88]          |                               |

Heterogeneity: $\hat{\tau}^2 = 0.43$, $df = 1$ ($P = 0.51$), $I^2 = 0$
Test for overall effect: $Z = 3.27$ ($P = 0.001$)
**Figure S5:** Funnel plot of included studies in the meta-analysis for risk of renal allograft failure in patients who received aspirin. RR = risk ratio, SE = standard error.

**Figure S6:** Funnel plot of included studies in the meta-analysis for risk of MACE or mortality in patients who received aspirin. RR = risk ratio, SE = standard error.