**Evidence Table E-11. Contrast-induced nephropathy outcomes in studies comparing of IV sodium bicarbonate and IV saline placebo that are not included in the meta-analysis**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year** | **Measure** | **SG** | **Intervention** | **Arm** | **Time Point 1**  | **Time point 1 N analyzed** | **n (%) with outcome at time point 1** | **Comparison\* statistics at time point 1** | **Time Point 2**  | **Time point 2 N anlyzed**  | **n (%) with outcome at timepoint 2** | **Comparison statistics at time point 2** |
| Briguori, 2007[22](#_ENREF_22) | increase in serum creatinine >25% from baseline value after administration of contrast media |  | Saline plus NAC | 2 |   | 111 | 11 (9.9) |  |   |   |  |  |
| Briguori, 2007[22](#_ENREF_22) | increase in serum creatinine >25% from baseline value after administration of contrast media |  | Bicarbonate plus NAC | 3 |   | 108 | 2 (1.9) |  |   |   |  |  |
| Briguori, 2007[22](#_ENREF_22) | increase in serum creatinine >25% from baseline value after administration of contrast media |  | Saline plus ascorbic acid plus NAC | 4 |   | 107 | 11 (10.3) |  |   |   |  |  |
| Briguori, 2011[126](#_ENREF_126) | Incidence of CIAKI |   | sodium bicarbonate + NAC | 1 | 48 hours | 146 | 30 (20.5) |

|  |
| --- |
| 0.47 (95% CI: 0.24 to 0.92) |

 |  |  |  |  |
| Briguori, 2011[126](#_ENREF_126)  | Incidence of CIAKI |   | RenalGuard: saline + NAC + RenalGuard System + furosemide | 2 |  | 146 | 16 (11) |  |  |  |  |  |
| Briguori, 2011[126](#_ENREF_126) | Incidence of CIAKI | GFR<30 ml.min.1,73 m^2 | sodium bicarbonate + NAC | 1 | 48 hours | 146 | 20 (29.5) |

|  |
| --- |
| 0.44 (95% CI: 0.19 to 0.98) |

 |  |  |  |  |

**Evidence Table E-11. Contrast-induced nephropathy outcomes in studies comparing of IV sodium bicarbonate and IV saline placebo that are not included in the meta-analysis (continued)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year** | **Measure** | **SG** | **Intervention** | **Arm** | **Time Point 1**  | **Time point 1 N analyzed** | **n (%) with outcome at time point 1** | **Comparison\* statistics at time point 1** | **Time Point 2**  | **Time point 2 N anlyzed**  | **n (%) with outcome at timepoint 2** | **Comparison statistics at time point 2** |
| Briguori, 2011[126](#_ENREF_126) | Incidence of CIAKI | GFR<30 ml.min.1,73 m^2 | RenalGuard: saline + NAC + RenalGuard System + furosemide | 2 |  | 146 | 11 (15) |  |  |  |  |  |
| Briguori, 2011[126](#_ENREF_126) | Increase >0.5 mg/dl |   | sodium bicarbonate + NAC | 1 | 48 hours | 146 | 22  | p=<0.001 |  |  |  |  |
| Briguori, 2011[126](#_ENREF_126) | Increase >0.5 mg/dl |   | RenalGuard: saline + NAC + RenalGuard System + furosemide | 2 |  | 146 | 9  |  |  |  |  |  |
| Briguori, 2011[126](#_ENREF_126) | Increase >25% |   | sodium bicarbonate + NAC | 1 | 48 hours | 146 | 19 (13) | p=<0.001 |  |  |  |  |
| Briguori, 2011[126](#_ENREF_126) | Increase >25% |   | RenalGuard: saline + NAC + RenalGuard System + furosemide | 2 |  | 146 | 4 (2.7) |  |  |  |  |  |
| Briguori, 2011[126](#_ENREF_126) | Increase >50% |   | sodium bicarbonate + NAC | 1 | 48 hours | 146 | 11 (7.5) | p=<0.001 |  |  |  |  |
| Briguori, 2011[126](#_ENREF_126) (continued) | Increase >50% |   | RenalGuard: saline + NAC + RenalGuard System + furosemide | 2 |  | 146 | 1 (0.7) |  |  |  |  |  |
| Briguori, 2011[126](#_ENREF_126),  | Incidence of CIAKI | CIAKI risk score >11 | Bicarbonate plus NAC | 1 | 48 hours | 146 | 11(14) | OR, 0.45 (95% CI: 0.15 to 1.36) |  |  |   |  |

**Evidence Table E-11. Contrast-induced nephropathy outcomes in studies comparing of IV sodium bicarbonate and IV saline placebo that are not included in the meta-analysis (continued)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year** | **Measure** | **SG** | **Intervention** | **Arm** | **Time Point 1**  | **Time point 1 N analyzed** | **n (%) with outcome at time point 1** | **Comparison\* statistics at time point 1** | **Time Point 2**  | **Time point 2 N anlyzed**  | **n (%) with outcome at timepoint 2** | **Comparison statistics at time point 2** |
| Briguori, 2011[126](#_ENREF_126),  | Incidence of CIAKI | CIAKI risk score >11 | RenalGuard | 2 |  |  | 146 | 5 (7) |  |  |  |  |
| Cho, 2010[127](#_ENREF_127) | Cr |   | Saline | 1 | 72 hours | 27 | 6  | A1 v A2p=0.78A1 v A3P=0.617A1 v A4P=0.342A2 v A3P=0.835A2 v A4P=0.525A3 vA4P=0.663 |  |  |  |  |
| Cho, 2010[127](#_ENREF_127) | Cr |   | Bicarbonate plus saline | 2 |  | 21 | 2  |  |  |  |  |  |
| Cho, 2010[127](#_ENREF_127) | Cr |   | Oral fluids | 3 |  | 22 | 1  |  |  |  |  |  |
| Cho, 2010[127](#_ENREF_127) | Cr |   | Oral bicarbonates plus fluids | 4 |  | 21 | 1  |  |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Incidence of CI-AKI |   | saline | 2 | 48 hours | 161 | 19 (11.8) |

|  |
| --- |
| p=>0.05 |

 |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Incidence of CI-AKI |   | bicarbonate | 3 |  | 159 | 14 (8.8) |  |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Incidence of CI-AKI | With NAC | saline | 2 | 48 hours | 81 | 8 (9.9) | P=>0 |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Incidence of CI-AKI | With NAC | bicarbonate | 3 |  | 80 | 8 (10) |  |  |  |  |  |

**Evidence Table E-11. Contrast-induced nephropathy outcomes in studies comparing of IV sodium bicarbonate and IV saline placebo that are not included in the meta-analysis (continued)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year** | **Measure** | **SG** | **Intervention** | **Arm** | **Time Point 1**  | **Time point 1 N analyzed** | **n (%) with outcome at time point 1** | **Comparison\* statistics at time point 1** | **Time Point 2**  | **Time point 2 N anlyzed**  | **n (%) with outcome at timepoint 2** | **Comparison statistics at time point 2** |
| Hafiz, 2012[128](#_ENREF_128) | Incidence of CI-AKI | Without NAC | saline | 2 | 48 hours | 80 | 11 (13.8) |

|  |
| --- |
| p=>0.05 |

 |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Incidence of CI-AKI | Without NAC | bicarbonate | 3 |  | 79 | 6 (7.6) |  |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | Age (increasing years) | Saline | 2 | 48 hours |  |  | OR, 1.05 (95% CI: 1.02 to 1.08), p=0.001 |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | Age (increasing years) | Bicarbonate | 3 |  |  |  |  |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | Anemia | Saline | 2 | 48 hours |  |  | OR, 1.97 (95% CI: 0.42 to 9.29), p=0.390 |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | Anemia | Bicarbonate | 3 |  |  |  |  |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | Contrast volume >3ml/kg | Saline | 2 | 48 hours |  |  | OR, 1.10 (95% CI: 1.00 to 1.20), p=0.038 |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) (continued) | Risk factors associated with higher incidence of CI-AKI | Contrast volume >3ml/kg | Bicarbonate | 3 |  |  |  |  |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | Diabetes | Saline | 2 | 48 hours |  |  | OR, 1.57 (95% CI: 0.69 to 3.55), p=0.281 |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | Diabetes | Bicarbonate | 3 |  |  |  |  |  |  |  |  |

**Evidence Table E-11. Contrast-induced nephropathy outcomes in studies comparing of IV sodium bicarbonate and IV saline placebo that are not included in the meta-analysis (continued)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year** | **Measure** | **SG** | **Intervention** | **Arm** | **Time Point 1**  | **Time point 1 N analyzed** | **n (%) with outcome at time point 1** | **Comparison\* statistics at time point 1** | **Time Point 2**  | **Time point 2 N anlyzed**  | **n (%) with outcome at timepoint 2** | **Comparison statistics at time point 2** |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | Diuretics | Saline | 2 | 48 hours |  |  | OR, 3.4 (95% CI: 1.46 to 7.98), p=0.005 |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | Diuretics | Bicarbonate | 3 |  |  |  |  |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | female | Saline | 2 | 48 hours |  |  | OR, 0.49 (95% CI: 0.21 to 1.13), p=0.095 |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | female | Bicarbonate | 3 |  |  |  |  |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | GFR | Saline | 2 | 48 hours |  |  | OR, 0.99 (95% CI: 0.98 to 1.01), p=0.435 |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | GFR | Bicarbonate | 3 |  |  |  |  |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | Higher baseline creatinine level | Saline | 2 | 48 hours |  |  | OR, 0.64 (95% CI: 0.35 to 1.19), p=0.161 |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | Higher baseline creatinine level | Bicarbonate | 3 |  |  |  |  |  |  |  |  |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | Use of ACE inhibi | Saline | 2 | 48 hours |  |  | OR, 1.12 (95% CI: 0.51 to 2.50), p=0.775 |  |  |  |  |

**Evidence Table E-11. Contrast-induced nephropathy outcomes in studies comparing of IV sodium bicarbonate and IV saline placebo that are not included in the meta-analysis (continued)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year** | **Measure** | **SG** | **Intervention** | **Arm** | **Time Point 1**  | **Time point 1 N analyzed** | **n (%) with outcome at time point 1** | **Comparison\* statistics at time point 1** | **Time Point 2**  | **Time point 2 N anlyzed**  | **n (%) with outcome at timepoint 2** | **Comparison statistics at time point 2** |
| Hafiz, 2012[128](#_ENREF_128) | Risk factors associated with higher incidence of CI-AKI | Use of ACE inhibi | Bicarbonate | 3 |  |  |  |  |  |  |  |  |
| Klima, 2012[129](#_ENREF_129) | Incidence of CIN | Creatinine increase >25% | saline | 1 | 48  | 89 | 1 (1) | p=0.02 |  |  |  |  |
| Klima, 2012[129](#_ENREF_129) | Incidence of CIN | Creatinine increase >25% | long term sodium bicarbonate | 2 |  | 87 | 8 (9) |  |  |  |  |  |
| Klima, 2012[129](#_ENREF_129) | Incidence of CIN | Creatinine increase >25% | short term sodium bicarbonate | 3 |  | 82 | 8 (10) |  |  |  |  |  |
| Klima, 2012[129](#_ENREF_129) | Incidence of CIN | Creatinine increase >44umol/l | saline | 1 | 48 hours | 89 | 1 (1) | p=0.03 |  |  |  |  |
| Klima, 2012[129](#_ENREF_129) | Incidence of CIN | Creatinine increase >44umol/l | long term sodium bicarbonate | 2 |  | 87 | 7 (8) |  |  |  |  |  |
| Klima, 2012[129](#_ENREF_129) | Incidence of CIN | Creatinine increase >44umol/l | short term sodium bicarbonate | 3 |  | 82 | 6 (7) |  |  |  |  |  |
| Maioli, 2008[130](#_ENREF_130) | Absolute increase of at least 0.5mg/dl over baseline serum creatinine within 5 days after administration |  | Saline plus NAC | 2 | 5 days | 252 | 29 (11.5) | p=0.60 |   |   |  |  |
| Maioli, 2008[130](#_ENREF_130) | Absolute increase of at least 0.5mg/dl over baseline serum creatinine within 5 days after administration |  | Bicarbonate plus oral NAC | 3 |   | 250 | 25 (10) |  |   |   |  |  |

**Evidence Table E-11. Contrast-induced nephropathy outcomes in studies comparing of IV sodium bicarbonate and IV saline placebo that are not included in the meta-analysis (continued)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year** | **Measure** | **SG** | **Intervention** | **Arm** | **Time Point 1**  | **Time point 1 N analyzed** | **n (%) with outcome at time point 1** | **Comparison\* statistics at time point 1** | **Time Point 2**  | **Time point 2 N anlyzed**  | **n (%) with outcome at timepoint 2** | **Comparison statistics at time point 2** |
| Maioli, 2011[131](#_ENREF_131) (continued) | Incidence of CI-AKI | >75 years | Late hydration | 2 |   | 36 | 15 (41.7) |  |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | >75 years | Early hydration | 3 |   | 38 | 8 (21.1) |  |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | anterior myocardial infarction | No hydration | 1 | 3 days | 65 | 22 (33.8) | All armsp=0.07 |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | anterior myocardial infarction | Late hydration | 2 |   | 63 | 16 (25.4) |  |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | anterior myocardial infarction | Early hydration | 3 |   | 61 | 12 (19.7) |  |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | Diabetes mellitus | No hydration | 1 | 3 days | 34 | 10 (29.4) | p=0.24 all arms |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | Diabetes mellitus | Late hydration | 2 |   | 31 | 11 (35.5) |  |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | Diabetes mellitus | Early hydration | 3 |   | 31 | 5 (16.1) |  |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | eGFR <60ml/min | No hydration | 1 | 3 days | 34 | 10 (29.4) | All armsp=0.14 |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | eGFR <60ml/min | Late hydration | 2 |   | 46 | 12 (26.1) |  |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | eGFR <60ml/min | Early hydration | 3 |   | 40 | 6 (15.0) |  |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | High CIN risk | No hydration | 1 | 3 days | 52 | 18 (34.6) | All armsp=0.28 |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | High CIN risk | Late hydration | 2 |   | 46 | 14 (26.1) |  |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) (continued) | Incidence of CI-AKI | High CIN risk | Early hydration | 3 |   | 45 | 11 (24.4) |  |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | Left ventricular ejection fraction <40% | No hydration  | 1 | 3 days | 61 | 24 (39.3) | All armsp=0.04 |  |  |   |  |

**Evidence Table E-11. Contrast-induced nephropathy outcomes in studies comparing of IV sodium bicarbonate and IV saline placebo that are not included in the meta-analysis (continued)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year** | **Measure** | **SG** | **Intervention** | **Arm** | **Time Point 1**  | **Time point 1 N analyzed** | **n (%) with outcome at time point 1** | **Comparison\* statistics at time point 1** | **Time Point 2**  | **Time point 2 N anlyzed**  | **n (%) with outcome at timepoint 2** | **Comparison statistics at time point 2** |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | Left ventricular ejection fraction <40% | Late hydration | 2 |   | 58 | 20 (34.5) |  |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | Left ventricular ejection fraction <40% | Early hydration | 3 |   | 56 | 12 (21.4) |  |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | Volume of contrast media to eGFR ratio >3.7% | No hydration | 1 | 3 days | 50 | 15 (30.0) | All armsp=0.20 |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI | Volume of contrast media to eGFR ratio >3.7% | Late hydration | 2 |   | 55 | 15 (27.3) |  |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) (continued) | Incidence of CI-AKI | Volume of contrast media to eGFR ratio >3.7% | Early hydration | 3 |   | 48 | 9 (18.8) |  |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI, whole population |  | No hydration | 1 | 3 days | 150 | 41 (27.3) | p=0.001 all arms |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI, whole population |   | Late hydration | 2 |   | 150 | 34 (22.7) |  |  |  |   |  |
| Maioli, 2011[131](#_ENREF_131) | Incidence of CI-AKI, whole population |   | Early hydration | 3 |   | 150 | 18 (12.0) |  |  |  |   |  |
| Pakfetrat, 2009[132](#_ENREF_132) | Development of CIN associated kidney injury using rifles criteria |  | Saline | 1 | 48 hours | 96 | 16 (16.6) | All armsp=0.4 |   |   |  |  |
| Pakfetrat, 2009[132](#_ENREF_132) | Development of CIN associated kidney injury using rifles criteria |  | Bicarbonate plus saline | 2 |   | 96 | 4 (4.2) |  |   |   |  |  |
| Pakfetrat, 2009[132](#_ENREF_132) | Development of CIN associated kidney injury using rifles criteria |  | Saline plus acetazolamide | 3 |   | 94 | 5 (5.3) |  |   |   |  |  |

**Evidence Table E-11. Contrast-induced nephropathy outcomes in studies comparing of IV sodium bicarbonate and IV saline placebo that are not included in the meta-analysis (continued)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year** | **Measure** | **SG** | **Intervention** | **Arm** | **Time Point 1**  | **Time point 1 N analyzed** | **n (%) with outcome at time point 1** | **Comparison\* statistics at time point 1** | **Time Point 2**  | **Time point 2 N anlyzed**  | **n (%) with outcome at timepoint 2** | **Comparison statistics at time point 2** |
| Schmidt, 2007[133](#_ENREF_133) | impairment of renal function occurring within 72 hours of administering contrast media, indicated by an absolute increase in the serum creatinine level of 0.5 mg/dL or more. |  | NAC plus bicarbonate | 2 |  72 hours | 47 | 7 (14.9) | p=0.71 |   |   |  |  |
| Schmidt, 2007[133](#_ENREF_133) | impairment of renal function occurring within 72 hours of administering contrast media, indicated by an absolute increase in the serum creatinine level of 0.5 mg/dL or more. |  | NAC plus saline | 3 |   | 49 | 6 (12.2) |  |   |   |  |  |
| Tamura, 2009[124](#_ENREF_124) | increase >25% or >0.5 mg/dl in serum Cr within the first 3 days after the procedure compared to baseline value |  | Normal Saline | 1 | 3 days | 72 | 9 (12.5) | p=0.17 |   |   |  |  |

**Evidence Table E-11. Contrast-induced nephropathy outcomes in studies comparing of IV sodium bicarbonate and IV saline placebo that are not included in the meta-analysis (continued)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year** | **Measure** | **SG** | **Intervention** | **Arm** | **Time Point 1**  | **Time point 1 N analyzed** | **n (%) with outcome at time point 1** | **Comparison\* statistics at time point 1** | **Time Point 2**  | **Time point 2 N anlyzed**  | **n (%) with outcome at timepoint 2** | **Comparison statistics at time point 2** |
| Tamura, 2009[124](#_ENREF_124) | increase >25% or >0.5 mg/dl in serum Cr within the first 3 days after the procedure compared to baseline value |  | Normal Saline + Bicarbonate | 2 |   | 72 | 1 (1.4) |  |   |   |  |  |
| Vasheghani-Farahani, 2009[125](#_ENREF_125) | absolute ( 0.5 mg/dL) or relative ( 25%) increase over baseline creatinine level 48 hours after expo- sure to a contrast agent. |  | saline | 1 | 2 days | 130 | 7 (5.9) | OR NR (95% CI: 0.45 to 3.5)p=0.6 | 5 days | 130 | 8 (6.6) | OR NR (95% CI: 0.4-4.2)p=0.60 |
| Vasheghani-Farahani, 2009[125](#_ENREF_125) | absolute ( 0.5 mg/dL) or relative ( 25%) increase over baseline creatinine level 48 hours after expo- sure to a contrast agent. |  | Saline+bicarbonate | 2 |   | 135 | 9 (7.4) |  |   | 135 | 11 (8.5) |  |
| Vasheghani-Farahani, 2009[125](#_ENREF_125) | at least a 25% decrease in baseline eGFR 48 hours after contrast exposure |  | saline | 1 | 2 days | 130 | 3 (2.6) | OR 1.26(95% CI: 0.6 to 9.3)p=0.3 | 5 days | 130 | 5 (4.2) | OR1.30(95% CI: 0.4 to 4.2)p=0.60 |
| Vasheghani-Farahani, 2009[125](#_ENREF_125) | at least a 25% decrease in baseline eGFR 48 hours after contrast exposure |  | Bicarbonate plus saline | 2 |   | 135 | 7 (5.9) |  |   | 135 | 7 (5.5) |  |

**Evidence Table E-11. Contrast-induced nephropathy outcomes in studies comparing of IV sodium bicarbonate and IV saline placebo that are not included in the meta-analysis (continued)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year** | **Measure** | **SG** | **Intervention** | **Arm** | **Time Point 1**  | **Time point 1 N analyzed** | **n (%) with outcome at time point 1** | **Comparison\* statistics at time point 1** | **Time Point 2**  | **Time point 2 N anlyzed**  | **n (%) with outcome at timepoint 2** | **Comparison statistics at time point 2** |
| Yeganehkhah, 2014[117](#_ENREF_117) | Incidence of CIN | IV NS | 1 | 48 hrs | 50 | 7 | P=0.944 |  |  |  |  |  |
| Yeganehkhah, 2014[117](#_ENREF_117) | Incidence of CIN | NaHCO3 + IV NS | 2 |  | 50 | 20 |  |  |  |  |  |  |

%=percent; A1=arm 1; A2=arm 2; A3=arm 3; A4=arm 4; ACE inhibi= angiotensin converting enzyme inhibitor; CI=confidence interval; CIAKI=contrast induced acute kidney injury; CIN=contrast induced nephropathy; CKD=chronic kidney disease; Cr=creatinine; CrCl=creatinine clearance; eGFR=estimated glomerular filtration rate; GFR=glomerular filtration rate; H=hour; HD=hemodialysis; Kg=kilogram; LVEF=left ventricular ejection fraction; Mg/dl=milligram per deciliter; ml/min/1.73m2=milliliter per minute per 1.73m squared; ml=milliliter; Mmol/l=millimole per liter; N=sample size; NAC=N-acetylcysteine; NS=non-significant; OR=odds ratio; P=p-value; RR=relative risk; SCr=serum creatinine ; SG=subgroup; Umol/l=micromole per liter;