**Evidence Table I-7. Summary of all outcomes reported in studies comparing sodium bicarbonate versus other interventions for the prevention of contrast-induced nephropathy**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year** | **Comparison** | **Incidence of**  **CIN, n/N (%)** | **Incidence of CIN: subgroups,**  **n/N (%)** | **Mortality, n/N (%)\*** | **Need**  **for RRT,**  **n/N (%)** | **Length of**  **hospital stay, mean days (SD)** | **Cardiac events,**  **n/N (%)** |
| Cho, 2010[15](#_ENREF_15) | Arm1: IV Normal Saline  Arm2: IV Normal Saline + NaHCO3  Arm3: Oral fluids  Arm4: Oral fluids + NaHCO3 | SrCr ≥25% or ≥ 0.5 mg/dl  At 72 hours  Arm1: 6/27 (22)  Arm2: 2/21 (9.5)  Arm3: 1/22 (4.5)  Arm4: 1/21 (4.8)  Arm1 vs. Arm2 p=0.784  Arm1 vs. Arm3 p=0.617    Arm1 vs. Arm4 p=0.342  Arm2 vs. Arm3 p=0.835  Arm2 vs. Arm4 p=0.525 | NR | At 72 hours  Arm1: 0/27 (0)  Arm2: 0/21 (0)  Arm3: 0/22 (0)  Arm4: 0/21 (0)  p=NR | NR | Arm1: 4.18  Arm2: 4.09  Arm3: 4.36  Arm4: 6.9  p=0.657 | NR |
| Klima, 2012[30](#_ENREF_30) | Arm1: IV Normal Saline  Arm2: LT NaHCO3  Arm3: ST NaHCO3 | SrCr ≥ 0.5 mg/dl  At 48 hours  Arm1: 1/89 (1)  Arm2: 7/87 (8)  Arm3: 6/82 (7)  p=0.03  SrCr ≥25%  At 48 hours  Arm1: 1/89 (1)  Arm2: 8/87 (9)  Arm3: 8/82 (10)  p=0.02 | NR | NR | NR | NR | NR |

**Evidence Table I-7. Summary of all outcomes reported in studies comparing sodium bicarbonate versus other interventions for the prevention of contrast-induced nephropathy (continued)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year** | **Comparison** | **Incidence of**  **CIN, n/N (%)** | **Incidence of CIN: subgroups,**  **n/N (%)** | **Mortality, n/N (%)\*** | **Need**  **for RRT,**  **n/N (%)** | **Length of**  **hospital stay, mean days (SD)** | **Cardiac events,**  **n/N (%)** |
| Kooiman, 2014[33](#_ENREF_33) | Arm1: No hydration  Arm2: IV 1.4% NaHCO3 | SrCr ≥25% or ≥ 0.5 mg/dl  At 48-96 hours  Arm1: 6/65 (9.2)  Arm2: 5/70 (7.1)  p<0.001  RR: 1.29 (95% CI: 0.41-4.03)  p=NR | NR | NR | Need for Dialysis  At 2 months  Arm1: 0/65 (0)  Arm2: 0/70 (0)  p=NR | NR | NR |
| Pakfetrat, 2009[53](#_ENREF_53) | Arm1: IV Normal Saline  Arm2: IV NaHCO3 + dextrose  Arm3: IV Normal Saline + Acetazolamide | Rifle criteria  At 48 hours  Arm1: 16/96 (16.6)  Arm2: 4/96 (4.2)  Arm3: 5/94 (5.3)  p=0.04 | NR | NR | NR | NR | At 48 hours  Arm1: 0/96 (0)  Arm2: 0/96 (0)  Arm3: 0/94 (0)  p=NR |

%=percent; CI=confidence interval; CIN=contrast induced nephropathy; IV=intravenous; IVF=intravenous fluid; LT=long term; Mg/dl=milligram per deciliter; N=sample size; NaHCO3=sodium bicarbonate; NR=not reported;; P=P-value; RR=relative risk; RRT=renal replacement therapy; SD=standard deviation; SrCr=serum creatinine; ST=short term; Umol/l=micomole per liter

\*n/N refers to number of events divided by number at risk.