**Supplementary Table 1: Comparison of the safety and efficacy of human serum albumin for fluid resuscitation in trauma patients.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date and name | Type of study | Cases included | Type of fluid | Results |
| 2004  SAFE trial | RCT | 6997 critically ill patients, 1186 trauma patients, 460 traumatic brain injury patients | 4% human serum albumin *vs*. normal saline | Subgroup analysis of trauma patients showed that the albumin group had a higher mortality rate. After excluding patients with traumatic brain injury, the two groups had similar 28-day mortality rates. |
| 2007  SAFE-TBI trial | RCT | 460 traumatic brain injury patients | 4% human serum albumin *vs*. normal saline | The 2-year mortality rate of patients with traumatic brain injury in the albumin group was significantly higher than that in the normal saline group. |
| 2013  CRISTAL trial | RCT | 2857 critically ill patients,  177 trauma patients | Crystalloids *vs*. colloids (crystalloids included isotonic or hypertonic normal saline and Ringer’s lactate; colloids included 4% or 20% human serum albumin, dextrans, gelatins, and hydroxyethyl starches) | Compared to crystalloids, colloids did not reduce the 28-day mortality rate of patients but reduced the 90-day mortality rate. |

CRISTAL: Colloids Versus Crystalloids for the Resuscitation of the Critically Ill; RCT: Randomized controlled trial; SAFE: Saline versus Albumin Fluid Evaluation; SAFE-TBI: Saline or Albumin for Fluid Resuscitation in Patients with Traumatic Brain Injury.