|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Random sequence generation (selection bias)  | Allocation concealment (selection bias) | Blinding of participants & personnel (performance bias) | Blinding of outcome assessment (detection bias) | Incomplete outcomes data (attrition bias) | Selective reporting (reporting bias) | Other bias: | Final |
| Bhawna 2012 | + | + | + | ? | ? | + | + | ? |
| Celebi N 2014 | + | + | + | + | ? | + | + | ? |
| Chia YY 2004 | + | + | + | + | + | + | + | + |
| Collard V 2007 | + | - | - | + | + | + | + | - |
| Coloma M 2001 | + | ? | + | + | - | + | + | - |
| Dhir 2015 | + | + | + | + | ? | + | + | ? |
| Elokda 2015 | ? | + | + | + | ? | ? | + | ? |
| Gokce 2009 | + | - | - | + | ? | + | + | - |
| Haghighi 2015 | ? | + | + | + | + | ? | + | ? |
| Hwang WJ 2013 | ? | + | + | + | +  | + | + | ? |
| Kamal 2015 | + | + | - | + | ? | + | + | - |
| Kavak Akelma 2014 | + | + | + | + | + | + | + | + |
| Lee MH 2014 | + | + | + | + | ? | + | + | ? |
| Lee SJ 2010 | ? | ? | ? | + | ? | + | + | ? |
| López-Álvarez S 2012 | + | - | - | + | + | + | + | - |
| Moon YE 2011 | ? | + | + | + | + | + | + | ? |
| Ozturk 2008 | ? | + | + | + | ? | + | + | ? |
| Qureshi 2014 | ? | + | + | ? | ? | + | + | ? |
| Said-Ahmed 2009 | ? | ? | - | + | ? | + | + | - |
| Smith I 1991 | ? | + | + | + | - | + | ? | - |
| Sultan 2015 | + | + | + | + | ? | + | + | ? |
| Valjus 2006 | + | ? | - | - | ? | + | + | - |
| White PF 2003 | ? | ? | + | ? | ? | + | + | ? |

Supplemental Figure 1. Cochrane risk of bias assessment of included esmolol RCT studies. The risk of bias was assessed with the Cochrane Collaboration’s tool for assessing risk of bias [14] in randomized trials. Low risk of bias = +; Unclear risk of bias ?; High risk of bias -.