**Supplement**

Summary of observational data with high risk of bias and very low certainty of evidence based on Table 2.

**POST ROSC no STEMI and all rhythms**

For the critical outcome of **survival to hospital discharge** we identified very-low certainty evidence from 3 observational studies (Garcia 2016; Hollenbeck 2014; Kim 2018) reporting adjusted odds ratios. Two studies (Garcia 2016; Kim 2018) showed no benefit from the use of early coronary angiography when compared to late/no angiography [OR 1.73 (95% CI 0.80 to 3.74) and OR 1.60 (95% CI 0.73 to 3.53) respectively). One study (Hollenbeck 2014) showed benefit with early coronary angiography [OR 2.86 (95% CI 1.43 to 5.56).

For the critical outcome of **survival to hospital discharge** we identified very-low certainty evidence from 7 observational studies (Garcia 2016; Hanuschak 2019; Hollenbeck 2014; Kern 2015; Kim 2018; Kleissner 2015; Vadeboncoer 2018) reportingunadjusted odds ratios. Two studies (Garcia 2016; Kleissner 2015) found no effect of early coronary angiography compared to late/no coronary angiography with OR 1.25 (95% CI 0.67 to 2.34) and 1.80 (95% CI 0,37 to 8.82) respectively. One study found a decrease in survival (Kim 2018) [OR 0.41 (95% CI 0.23 to 0.72)] and 4 studies found increased survival with early coronary angiography (Hanuschak 2019; Hollenbeck 2014; Kern 2015; Vadeboncoer 2018). The effect sizes ranged from a low of OR 2.04 (95% CI 1.24 to 3.34) to a high of OR 7.42 (95% CI 5.44 to 10.12).

For the critical outcome of ***survival at 30 days***, we identified very-low certainty from one study (Bro-Jeppesen 2012) which found no effect of early coronary angiography compared to late/no angiography [ORadj 1.42 (95% CI 1.00 to 2.50) and ORunadj 1.66 (95% CI 0.96 to 2.88).

For the critical outcome of ***survival at 3-6 months***, we identified very-low-certainty evidence from 2 observational studies (Hollenbeck 2014; Krleissner 2015) with unadjusted effect estimates of OR 2.06 (95% CI 1.26 to 3.35) and OR 1.48 (95% CI 0.55 to 3.99) respectively.

For the critical outcome of ***survival at 1-3 years***, we identified very-low-certainty evidence) from 1 observational study (Bro-Jeppesen 2012) which found no effect of early coronary angiography compared to late/no angiography with an adjusted OR 0.97 (95% CI 0.76 to 1.25).

We identified very-low-certainty evidence from 2 observational studies (Bro-Jeppesen 2012; Dankiewicz 2015). One study (Bro-Jeppesen 2012) found increased survival with early coronary angiography [OR 1.92 (95% CI 1.11 to 3.32)] and one study (Dankiewicz 2015) found no effect [OR 1.27 (95% CI 0.91 to 1.79)].

For the critical outcome of survival with ***favourable neurologic outcome at hospital discharge***, we identified very-low-certainty evidence from 2 observational studies (Bro-Jeppesen 2012; Garcia 2016) with adjusted effect estimates. One study (Bro-Jeppesen 2012) found no effect of early coronary angiography compared to late/no angiography [OR 1.50 (95% CI 0.80 to 2.90). One study (Garcia 2016) found an increase in favourable neurologic outcome with early coronary angiography with an OR 2.77 (95% CI 1.31 to 5.85).

We identified very-low-certainty evidence from 5 observational studies (Bro-Jeppesen 2012; Garcia 2016; Hanuschak 2019; Hollenbeck 2014; Kleissner 2015) with unadjusted effect estimates. Two studies (Garcia 2016; Kleissner 2015) found on effect with early coronary angiography [OR 1.70 (95% CI 0.95 to 3.06) and OR 1.28 (95% CI 0.51 to 3.20) respectively)]. Three studies (Bro-Jeppesen 2012; Hanuschuk 2019; Hollenbeck 2014) found increased survival with favourable neurologic outcome with early coronary angiography with a range of effect estimates from a low of OR 1.94 (95% CI 1.19 to 3.17) to a high of OR 8.37 (95% CI 6.18 to 11.35).

For the critical outcome of survival with ***favourable neurologic outcome at 30 days***, we identified very-low-certainty evidence from 1 study (Kim 2018) with adjusted effect size which found no effect with early coronary angiography with an OR 1.92 (95% CI 0.95 to 3.85)

We identified very-low-certainty evidence from 2 observational studies (Kim 2018; Kern 2015) with unadjusted effect estimates. One study (Kern 2015) found an increase in survival with favourable neurologic outcome at 30 days with early coronary angiography [OR 2.77 (95% CI 1.92 to 4.00)] and one study (Kim 2018) found a decrease with early coronary angiography [OR 0.45 (95% CI 0.26 to 0.77)].

For the critical outcome of survival with ***favourable neurologic outcome at 3-6 months***, we identified very-low-certainty evidence from one observational study (Dankiewicz 2015) with adjusted effect estimate which found no effect of early coronary angiography OR 0.92 (95% CI 0.69 to 1.18).

We identified very-low certainty evidence from 3 studies (Dankiewicz 2015; Hollenbeck 2014; Kleissner 2015) with unadjusted effect estimates. Two studies (Dankiewicz 2015; Kleissner 2015) found no benefit with early coronary angiography [OR 1.36 (95% CI 0.97 to 1.91) and OR 2.01 (95% CI 0.77 to 5.24) respectively]. One study (Hollenbeck 2014) found increased favourable neurologic outcome at 3-6 months with early angiography [OR 2.12 (95% CI 1.30 to 3.45)].

Table 1: Studies examining post-ROSC coronary angiography in patients with no ST elevation on ECG and all ECG rhythms

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Survival** |  |  |  |  |  |  |  |  |
|  | **Adjusted** | | | | **Unadjusted** | | | |
| Author | Hospital Discharge | 30-Day Survival | 3-6 Month  Survival | 1-3 Year  Survival | Hospital Discharge | 30-Day Survival | 3-6 Month Survival | 1-3 Year  Survival |
| Bro-Jeppesen 2012 |  | 1.42  (1.00, 2.50) |  |  |  | 1.66  (0.96, 2.88) |  | 1.92  (1.11, 3.32) |
| Dankiewicz 2015 |  |  |  | 0.97  (0.76, 1.25) |  |  |  | 1.27  (0.91, 1.79) |
| Garcia 2016 | 1.73  (0.80, 3.74) |  |  |  | 1.25  (0.67, 2.34) |  |  |  |
| Hanuschak 2019 |  |  |  |  | 7.42  (5.44, 10.12) |  |  |  |
| Hollenbeck 2014 | 2.86  (1.43, 5.56) |  |  |  | 2.04  (1.24, 3.34) |  | 2.06  (1.26, 3.35) |  |
| Kern 2015 |  |  |  |  | 2.80  (1.94, 4.04) |  |  |  |
| Kim 2018 | 1.60  (0.73, 3.53) |  |  |  | 0.41  (0.23, 0.72) |  |  |  |
| Kleissner 2015 |  |  |  |  | 1.80  (0.37, 8.82) |  | 1.48  (0.55, 3.99) |  |
| Vadeboncoer 2018 |  |  |  |  | 3.26  (2.51, 4.23) |  |  |  |
| **Favourable Neurologic Outcome** | | | | | | | | |
|  | **Adjusted** | | | | **Unadjusted** | | | |
| Author | Hospital Discharge | 30-Day Survival | 3-6 Month  Survival | 1-3 Year  Survival | Hospital Discharge | 30-Day Survival | 3-6 Month Survival | 1-3 Year  Survival |
| Bro-Jeppesen 2012 | 1.50  (0.80, 2.90) |  |  |  | 1.98  (1.14, 3.43) |  |  |  |
| Dankiewicz 2015 |  |  | 0.92  (0.69, 1.18) |  |  |  | 1.36  (0.97, 1.91) |  |
| Garcia 2016 | 2.77  (1.31, 5.85) |  |  |  | 1.70  (0.95, 3.06) |  |  |  |
| Hanuschak 2019 |  |  |  |  | 8.37  (6.18, 11.35) |  |  |  |
| Hollenbeck 2014 |  |  |  |  | 1.94  (1.19, 3.17) |  | 2.12  (1.30, 3.45) |  |
| Kern 2015 |  |  |  |  |  | 2.77  (1.92, 4.00) |  |  |
| Kim 2018 |  | 1.92  (0.95, 3.85) |  |  |  | 0.45  (0.26, 0.77) |  |  |
| Kleissner 2015 |  |  |  |  | 1.28  (0.51, 3.20) |  | 2.01  (0.77, 5.25) |  |

**POST ROSC no STEMI and shockable initial rhythm**

For the critical outcome of ***survival to hospital discharge*** we identified very-low certainty evidence from two observational studies (Garcia 2016; Hollenbeck 2014) which reported adjusted effect estimates for early coronary angiography compared to late/no angiography. One studies (Hollenbeck 2014) identified benefit from early angiography [OR 2.86 (95% CI 1.43 to 5.56)]. A single study (Garcia 2016) found no effect of early angiography [OR 1.60 (95% CI 0.83 to 3.08)].

We also identified very-low certainty evidence from one study (Hollenbeck 2014) reporting unadjusted effect estimates for early coronary angiography compared to late/no angiography which identified benefit with early angiography with an OR 2.04 (95% CI 1.24, 3.34).

For the critical outcome of ***survival at 30 days*** we identified very-low certainty evidence from one study (Elfwen 2018) which reported an adjusted effect estimate of OR 1.42 (95% CI 1.00 to 2.02).

We also identified very-low certainty evidence from one study (Elfwen 2018) reporting unadjusted effect estimates with an OR 1.73 (95% CI 1.28 to 2.34).

For the critical outcome of ***survival at 1-3 years*** we identified very-low certainty evidence from a single study (Elfwen 2018) which reported adjusted effect estimates and found benefit with early angiography with an OR 1.35 (95% CI 1.04 to 1.77).

We identified very-low certainty evidence from 2 studies (Elfwen 2018; Hollenbeck 2014) which reported unadjusted effect estimates. Both studies found benefit with early angiography with effect estimates ranging from a low of OR 1.77 (95% CI 1.32 to 2.39) to a high of OR 3.48 (95% CI 2.36.to 5.14).

For the critical outcome of ***favourable*** ***neurologic outcome at hospital discharge*** we identified very-low certainty evidence from one observational studies (Garcia 2016) identifying benefit with the use of early angiography compared to late/no angiography with an adjusted OR 1.99 (95% CI 1.07 to 3.72).

We also identified very-low certainty evidence from one observational studies (Hollenbeck 2014) which reported unadjusted effect estimates for early coronary angiography compared to late/no angiography which found benefit with early coronary angiography [OR 1.94 (95 %CI 1.19 to 3.17).

For the critical outcome of survival with ***favourable neurologic outcome at 1-3 years*** we identified very-low certainty evidence from 1 study (Hollenbeck 2014) reporting unadjusted effect estimates with an OR 2.11 (95% CI 1.30 to 3.45).

Table 2: Studies examining post-ROSC coronary angiography in patients with no ST elevation on ECG and initial shockable rhythms

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Survival** | | | | | | | | |
|  | **Adjusted** | | | | **Unadjusted** | | | |
| Author | Hospital Discharge | 30-Day Survival | 3-6 Month  Survival | 1-3 Year  Survival | Hospital Discharge | 30-Day Survival | 3-6 Month Survival | 1-3 Year  Survival |
| Garcia 2016 | 1.60  (0.83, 3.08) |  |  |  |  |  |  |  |
| Elfwen 2018 |  | 1.42  (1.00, 2.02) |  | 1.35  (1.04, 1.77) |  | 1.73  (1.28, 2.34) |  | 1.77  (1.32, 2.39) |
| Hollenbeck 2014 | 2.86  (1.43, 5.56) |  |  |  | 2.04  (1.24, 3.34) |  |  | 2.06  (1.26, 3.35) |
| **Favourable Neurologic Outcome** | | | | | | | | |
|  | **Adjusted** | | | | **Unadjusted** | | | |
| Author | Hospital Discharge | 30-Day Survival | 3-6 Month  Survival | 1-3 Year  Survival | Hospital Discharge | 30-Day Survival | 3-6 Month Survival | 1-3 Year  Survival |
| Garcia 2016 | 1.99 (1.07, 3.72) |  |  |  |  |  |  |  |
| Hollenbeck 2014 |  |  |  |  | 1.94 (1.19, 3.17) |  |  | 2.11 (1.30, 3.45) |

**POST ROSC With ST-segment elevation on ECG**

For the critical outcome of ***survival at hospital discharge*** we identified very-low certainty evidence from one study (Garcia 2016) which reported adjusted effect estimates for early coronary angiography compared to late/no coronary angiography for patients with ROSC after out-of-hospital cardiac arrest. The study found no effect with early angiography [OR 1.89 (95% CI 0.48 to 7.40)].

We also identified very-low certainty evidence from 4 studies (Garcia 2016; Hanuschack 2019; Kern 2015; Pleskot 2008) which reported unadjusted effect estimates for early coronary angiography compared to late/no angiography. Two studies (Hanuschak 2019; Pleskot 2008) identified benefit from early angiography with OR 4.07 (95% CI 2.85 to 5.82) and OR 11.67 (95% CI 1.11 to 122.38) respectively. Two other studies (Garcia 2016; Kern 2015) found no benefit with early angiography with OR 1.65 (95% CI 0.45 to 6.09) and OR 0.85 (95% CI 0.31 to 2.32).

For the critical outcome of ***survival at 1-3 years*** we identified very-low certainty evidence from one study (Pleskot 2008) which reported unadjusted effect estimates with an OR 11.67 (95% CI 1.11 to 122.38).

For the critical outcome of survival with ***favourable neurologic outcome at hospital discharge***, we identified very-low-certainty evidence from 2 observational study (Garcia 2016; Weiser 2013) with adjusted effect estimates which found no difference in favourable neurologic outcome with early coronary angiography with an OR 1.12 (95% CI 0.30 to 4.19) and OR 1.17 (95% CI 0.45 to 3.04) respectively.

We also identified very-low certainty evidence from 4 studies (Garcia 2016; Hanuschack 2019; Pleskot 2008; Weiseer 2013) which reported unadjusted effect estimates for early coronary angiography compared to late/no angiography. Two studies (Hanuschak 2019; Weiser 2013) identified benefit from early angiography with OR 4.05 (95% CI 2.82 to 5.83) and OR 1.94 (95% CI 1.05 to 3.59) respectively. Two other studies (Garcia 2016; Pleskot 2008) found no benefit with early angiography with OR 1.03 (95% CI 0.28 to 3.76) and OR 7.50 (95% CI 0.73 to 76.77).

For the critical outcome of ***survival at 1-3 years*** we identified very-low certainty evidence from one study (Pleskot 2008) which reported unadjusted effect estimates with an OR 11.67 (95% CI 1.11 to 122.38).

Table 3: Studies examining post-ROSC coronary angiography in patients with ST elevation on ECG

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Survival** | | | | | | | | |
|  | **Adjusted** | | | | **Unadjusted** | | | |
| Author | Hospital Discharge | 30-Day Survival | 3-6 Month  Survival | 1-3 Year  Survival | Hospital Discharge | 30-Day Survival | 3-6 Month Survival | 1-3 Year  Survival |
| Garcia 2016 | 1.89  (0.48, 7.40) |  |  |  | 1.65  (0.49, 6.09) |  |  |  |
| Hanuschak 2019 |  |  |  |  | 4.07  (2.85, 5.82) |  |  |  |
| Kern 2015 |  |  |  |  | 0.85  (0.31, 2.32) |  |  |  |
| Pleskot 2008 |  |  |  |  | 11.67  (1.11, 122.38) |  |  | 11.67  (1.11, 122.38) |
| **Favourable Neurologic Outcome** | | | | | | | | |
|  | **Adjusted** | | | | **Unadjusted** | | | |
| Author | Hospital Discharge | 30-Day Survival | 3-6 Month  Survival | 1-3 Year  Survival | Hospital Discharge | 30-Day Survival | 3-6 Month Survival | 1-3 Year  Survival |
| Garcia 2016 | 1.12  (0.30, 4.19) |  |  |  | 1.03  (0.28, 3.76) |  |  |  |
| Hanuschak 2019 |  |  |  |  | 4.05  (2.82, 5.83) |  |  |  |
| Pleskot 2008 |  |  |  |  | 7.50  (0.73, 76.77) |  |  | 11.67  (1.11, 122.38) |
| Weiser 2013 | 1.17  (0.45, 3.04) |  |  |  | 1.94  (1.05, 3.59) |  |  |  |

**POST ROSC all ECGs (undifferentiated) all initial rhythms**

For the critical outcome of ***survival to hospital discharge*** we identified very-low certainty evidence from four studies (Bougouin 2018; Shin 2017; Stub 2011; Zanuttini 2012) which reported adjusted effect estimates for early coronary angiography compared to late/no coronary angiography. Two studies (Shin 2017; Zanuttini 2012) identified benefit with early angiography with effect estimates of OR 2.70 (95% CI 1.60 to 4.60) and OR 2.32 (95% CI 1.23 to 4.38). Two studies (Bougouin 2018; Stub 2011) found no benefit with early angiography [OR 1.20 (95% CI 0.80 to 1.90) to OR 4.30 (95% CI 0.97 to 19.00)].

We also identified very-low certainty evidence from 21 studies (Study Citations) which reported unadjusted effect estimates for early angiography compared to late/no angiography in patients with ROSC after out-of-hospital cardiac arrest. Seventeen studies (Study Citations) identified benefit of early coronary angiography with unadjusted effect estimates ranging from a low of OR 1.73 (95% CI 1.34 to 2.23) to a high of OR 7.60 (95% CI 3.20 to 17.50). Four studies (Study Citations) found no benefit with the use of early angiography with effect estimates ranging from a low of OR 1.20 (95% CI 0.50 to 2.90) to a high of OR 2.46 (95% CI 1.00 to 6.04).

For the critical outcome of ***survival at 30-days*** we identified very-low certainty evidence from three studies (Casella 2014; Jaeger 2018; Waldo 2013) reporting adjusted effect estimates for the use of early coronary angiography compared to late/no angiography in patients with ROSC after out-of-hospital cardiac arrest. All three studies (Casella 2015; Jaeger 2018; Waldo 2013) identified benefit with the use of early angiography with adjusted effect estimates ranging from a low of OR 1.52 (95% CI 1.33 to 1.72) to a high of OR 2.38 (1.06, 5.26).

We identified very-low certainty evidence from four observational studies (Bro-Jeppesen 2012; Casella 2015; Jaeger 2018; Winther-Jensen 2018) reporting unadjusted effect estimates for early coronary angiography compared to late/no angiography for patients with ROSC after out-of-hospital cardiac arrest. All four studies (Bro-Jeppesen 2012; Casella 2015; Jaeger 2018; Winther-Jensen 2018) identified benefit with early angiography with effect estimates ranging from a low of OR 1.61 (95% CI 1.05 to 2.47) to a high of OR 2.59 (95% CI 1.24 to 5.43).

For the critical outcome of ***survival at 1-3 years*** we identified very-low certainty evidence from one observational studies (Casella 2015) reporting adjusted effect estimates for early coronary angiography compared to late/no angiography which showed benefit with early coronary angiography with an OR 3.57 (95% CI 1.32 to 10.00).

We also identified very-low certainty evidence from four studies (Bergman 2016; Bro-Jeppesen 2012; Casella 2015; Geri 2015) which reported unadjusted effect estimates for early coronary angiography compared to late/no angiography. All four studies (Bergman 2016; Bro-Jeppesen 2012; Casella 2015; Geri 2015) identified benefit with early angiography with effect estimates ranging from a low of OR 1.84 (95% CI 1.20 to 2.81) to a high of OR 4.51 (95% CI 2.07 to 9.87).

For the critical outcome of survival with ***favourable neurologic outcome at hospital discharge***, we identified very-low-certainty evidence from five observational study (Bougouin 2017; Casella 2015; May 2020; Reynolds 2014; Shin 2017) with adjusted effect estimates. All five studies found improved outcomes with early coronary angiography with effect estimates ranging from a low of OR 1.43 (95% CI 1.02 to 2.00) to a high of OR 36.36 (95% CI 2.13 to 631.14).

We identified very-low-certainty evidence from 11 observational studies (Bro-Jeppesen 2012; Callaway 2014; Casella 2015; Chelvanathan 2016; Hanuschak 2019; Jentzer 2018; Mooney 2011; Reynolds 2014; Shin 2017; Tomte 2011; Vadeboncoer 2018) with unadjusted effect estimates. All 11 studies found benefit with early coronary angiography with effect estimates ranging from a low of OR 1.83 (95% CI 1.20 to 2.80) to a high of OR 10.54 (95% CI 6.68 to 16.62).

For the critical outcome of survival with ***favourable neurologic outcome at 3-6 months*** we identified very-low certainty evidence from one observational study (Nielsen 2009) which identified improved outcome with early coronary angiography compared to late/no coronary angiography with a reported unadjusted OR 3.11 (95% CI, 2.40 to 4.04).

**Table 4:** Studies examining post-ROSC coronary angiography in patients without ST elevation on ECG and any initial rhythm

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Survival** | | | | | | | | |
|  | **Adjusted** | | | | **Unadjusted** | | | |
| **Author** | **Hospital Discharge** | **30-Day Survival** | **3-6 Month Survival** | **1-3 Year Survival** | **Hospital Discharge** | **30-Day Survival** | **3-6 Month Survival** | **1-3 Year Survival** |
| Aurore 2010 |  |  |  |  | 2.74  (1.57, 4.76) |  |  |  |
| Bergman 2016 |  |  |  |  | 2.50  (1.70, 3.67) |  |  | 3.48  (2.36, 5.14) |
| Bougouin 2018 | 1.20  (0.80, 1.90) |  |  |  | 3.92  (2.89, 5.34) |  |  |  |
| Bougouin  2017 |  |  |  |  |  |  |  |  |
| Bro-Jeppesen 2012 |  |  |  |  |  | 1.61  (1.05, 2.47) |  | 1.84  (1.20, 2.81) |
| Callaway 2014 |  |  |  |  | 4.93  (4.17, 5.83) |  |  |  |
| Casella 2015 |  | 2.38  (1.06, 5.26) |  | 3.57  (1.32, 10.00) |  | 2.59  (1.24, 5.43) |  | 4.51  (2.07, 9.87) |
| Chelvanathan 2016 |  |  |  |  | 3.81  (1.96, 7.38) |  |  |  |
| Geri 2015 |  |  |  |  | 2.40  (1.91, 3.02) |  |  | 2.88  (2.19, 3.79) |
| Hanuschak 2019 |  |  |  |  | 5.12  (4.29, 6.10) |  |  |  |
| Jaeger 2018 |  | 1.52  (1.33, 1.72) |  |  |  | 2.56  (2.32, 2.83) |  |  |
| Jentzer 2018 |  |  |  |  | 2.85  (2.04, 3.99) |  |  |  |
| Kern 2015 |  |  |  |  | 2.49  (1.85, 3.35) |  |  |  |
| Kroupa 2017 |  |  |  |  | 1.20  (0.50, 2.90) |  |  |  |
| Lam 2018 |  |  |  |  | 3.00  (1.69, 5.28) |  |  |  |
| Mooney 2011 |  |  |  |  | 2.65  (1.24, 5.67) |  |  |  |
| Nadar 2018 |  |  |  |  | 2.12  (0.69, 6.49) |  |  |  |
| Nielsen 2009 |  |  |  |  | 1.73  (1.34, 2.23) |  |  |  |
| Reynolds 2014 |  |  |  |  | 2.26  (1.70, 3.01) |  |  |  |
| Shin 2017 | 2.70  (1.60, 4.60) |  |  |  | 6.80  (4.49, 10.28) |  |  |  |
| Stub 2011 | 4.30  (0.97, 19.00) |  |  |  | 7.60  (3.20, 17.50) |  |  |  |
| Vadeboncoer 2018 |  |  |  |  | 2.31  (1.90, 2.79) |  |  |  |
| Waldo 2013 |  | 2.29  (1.19, 4.41) |  |  | 2.46  (1.00, 6.04) |  |  |  |
| Wijesekera 2014 |  |  |  |  | 4.41  (1.36, 14.32) |  |  |  |
| Winther-Jensen 2018 |  |  |  |  |  | 1.74  (1.11, 2.63) |  |  |
| Zanuttini 2012 | 2.32  (1.23, 4.38) |  |  |  | 1.74  (0.77, 3.97) |  |  |  |
| **Functional Neurologic Outcome** | | | | | | | | |
|  | **Adjusted** | | | | **Unadjusted** | | | |
| **Author** | **Hospital Discharge** | **30-Day Survival** | **3-6 Month Survival** | **1-3 Year Survival** | **Hospital Discharge** | **30-Day Survival** | **3-6 Month Survival** | **1-3 year Survival** |
| Bougouin 2017 | 1.43  (1.02, 2.00) |  |  |  |  |  |  |  |
| Bro-Jeppesen 2012 |  |  |  |  | 1.83  (1.20, 2.80) |  |  |  |
| Callaway 2014 |  |  |  |  | 5.20  (4.40, 6.15) |  |  |  |
| Casella 2015 | 36.36  (2.13, 631.1) |  |  |  | 5.42  (2.28, 12.86) |  |  |  |
| Chelvanathan 2016 |  |  |  |  | 9.41  (4.19, 21.15) |  |  |  |
| Hanuschak 2019 |  |  |  |  | 5.66  (4.74, 6.77) |  |  |  |
| Jentzer 2018 |  |  |  |  | 3.16  (2.05, 4.89) |  |  |  |
| May 2020 | 1.45  (1.02, 2.09) |  |  |  |  |  |  |  |
| Mooney 2011 |  |  |  |  | 3.29  (1.50, 7.24) |  |  |  |
| Nielsen 2009 |  |  |  |  |  |  | 3.11  (2.40, 4.04) |  |
| Reynolds 2014 | 1.92  (1.20, 3.07) |  |  |  | 3.32  (2.47, 4.47) |  |  |  |
| Shin 2017 | 2.30  (1.60, 3.10) |  |  |  | 10.54  (6.68, 16.62) |  |  |  |
| Tomte 2011 |  |  |  |  | 2.45  (1.04, 5.74) |  |  |  |
| Vadeboncoer 2018 |  |  |  |  | 4.19  (3.45, 5.08) |  |  |  |

**POST ROSC all ECGs (undifferentiated) initial shockable rhythm**

For the critical outcome of ***survival at hospital discharge*** we identified very-low certainty evidence from 3 studies (Aissaoui 2018; Bergman 2016; Garcia 2016) reporting adjusted effect estimates comparing early coronary angiography to late/no coronary angiography in comatose post-cardiac arrest patients. Two studies (Aissaoui 2018; Bergman 2016) found benefit with early coronary angiography with effect estimates of OR 7.01 (95% CI 4.80 to 10.23) and OR 2.86 (95% CI 1.43 to 5.56) respectively. A single study (Garcia 2016) found no benefit with an OR 1.60 (95% CI 0.83 to 3.08).

We also identified very-low certainty evidence from 4 studies (Bergman 2016; Cronier 2014; Nanjayya 2012; Strote 2012) reporting unadjusted effect estimates. Three studies (Bergman 2016; Cronier 2014; Strote 2012) found benefit with early coronary angiography with effect estimates ranging from a low of OR 2.50 (95% CI 1.70 to 3.67) to a high of OR 3.41 (95% CI 1.20 to 9.67). A single study (Nanjayya 2012) found no benefit with an OR 2.03 (95% CI 0.78 to 5.31).

For the critical outcome of ***survival at 30-days*** we identified very-low certainty evidence from a single study (Jaeger 2018) comparing early coronary angiography to late/no coronary angiography which reported adjusted effect estimates which found improved survival with early coronary angiography [OR 1.74 (95% CI 1.37 to 2.21)].

For the critical outcome of ***survival at 1-3 years*** we identified very-low certainty evidence from a single study (Bergman 2016) reporting unadjusted effect estimates for early coronary angiography compared to late/no coronary angiography which found improved survival with early coronary angiography [OR 3.48 (95% CI 2.36 to 5.14)].

For the critical outcome of ***favourable neurologic outcome at hospital discharge*** we identified very-low certainty evidence from 2 studies (Aissaoui 2018; Garcia 2016) which reported adjusted effect estimates

For the critical outcome of ***favourable neurologic outcome at hospital discharge*** we identified very-low certainty evidence from 2 studies (Aissaoui 2018; Garcia 2016) which reported adjusted effect estimates for early coronary angiography compared to late/no coronary angiography for comatose post-cardiac arrest patients. Both studies found improved outcome with early coronary angiography with effect estimates of OR 6.40 (95% CI 3.90 to 10.50) and OR 1.99 (95% CI 1.07 to 3.72) respectively.

We also identified very-low certainty evidence from three studies (Nanjayya 2012; Strote 2012; Vyas 2015) which reported unadjusted effect estimates for early coronary angiography compared to late/no coronary angiography. Two studies (Strote 2012; Vyas 2015) found improved outcome with early coronary angiography with effect estimates of OR 2.16 (95% CI 1.20 to 3.89) and OR 2.29 (95% CI 2.01 to 2.60) respectively. One study (Nanjayya 2012) found no benefit with early coronary angiography [OR 1.45 (95% CI 0.54 to 3.89)].

For the critical outcome of ***favourable neurologic outcome at 30 days*** we identified very-low certainty evidence from a single study (Jaeger 2018) which reported adjusted effect estimates for early coronary angiography compared to late/no coronary angiography for comatose post-cardiac arrest patients which found improved outcome with early coronary angiography [OR 1.57 (95% CI 1.23 to 2.01)].

Table 5: Studies examining post-ROSC coronary angiography in patients with undifferentiated ECG and initial shockable rhythm

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Survival** | | | | | | | | |
|  | **Adjusted** | | | | **Unadjusted** | | | |
| **Author** | **Hospital Discharge** | **30-Day Survival** | **3-6 Month Survival** | **1-3 Year Survival** | **Hospital Discharge** | **30-Day Survival** | **3-6 Month Survival** | **1-3 Year Survival** |
| Aissaoui 2018 | 7.01  (4.80, 10.23) |  |  |  |  |  |  |  |
| Bergman 2016 | 2.86  (1.43, 5.56) |  |  |  | 2.50  (1.70, 3.67) |  |  | 3.48  (2.36, 5.14) |
| Cronier 2014 |  |  |  |  | 3.41  (1.20, 9.67) |  |  |  |
| Garcia 2016 | 1.60  (0.83, 3.08) |  |  |  |  |  |  |  |
| Jaeger 2018 |  | 1.74  (1.37, 2.21) |  |  |  |  |  |  |
| Nanjayya 2012 |  |  |  |  | 2.03  (0.78, 5.31) |  |  |  |
| Strote 2012 |  |  |  |  | 2.74  (1.46, 5.15) |  |  |  |
| **Favourable Neurologic Outcome** | | | | | | | | |
|  | **Adjusted** | | | | **Unadjusted** | | | |
| **Author** | **Hospital Discharge** | **30-Day Survival** | **3-6 Month Survival** | **1-3 Year Survival** | **Hospital Discharge** | **30-Day Survival** | **3-6 Month Survival** | **1-3 Year Survival** |
| Aissaoui 2018 | 6.40  (3.90, 10.50) |  |  |  |  |  |  |  |
| Garcia 2016 | 1.99  (1.07, 3.72) |  |  |  |  |  |  |  |
| Jaeger 2018 |  | 1.57  (1.23, 2.01) |  |  |  |  |  |  |
| Nanjayya 2012 |  |  |  |  | 1.45  (0.54, 3.89) |  |  |  |
| Strote 2012 |  |  |  |  | 2.16  (1.20, 3.89) |  |  |  |
| Vyas 2015 |  |  |  |  | 2.29  (2.01, 2.60) |  |  |  |