**Table Vs – Survival outcomes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SURVIVAL OUTCOMES** | | |  |  |
| **Strong Outcomes** | | |  |  |
| **30-day mortality** | | |  |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (%)** |  |  |
| Mastroianni [4] 2016 | 14 | 35,70% |  |  |
| Bernhardt [12]2019 | 22 | 9,09% |  |  |
| Griffith [6] 2013 | 16 | 6% |  |  |
| Gaudard [7] 2015 | 40 | 35% |  |  |
| **Survival to discharge or 30-day** | | | |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (pts)** | **%** |  |
| Lima [2] 2016 | 40 | 27 | 68% |  |
| Hall [8] 2018 | 58 | 34 | 59% |  |
| David [13] 2019 | 29 | 17 | 59% |  |
| Boll [14] 2019 | 22 | // | 45% |  |
| Chung [9] 2019 | 100 | 64 | 64% |  |
| Chung[9] 2019 | 100 | 69 | 69% |  |
| Bansal [11] 2016 | 24 | 16 | 67% |  |
| Bansal [11] 2016 | 24 | 15 | 63% |  |
| Schibilsky [10] 2016 | 8 | 4 | 50% |  |
| Griffith [6] 2013 | 16 | - | 94% |  |
| Bernhardt [12] 2019 | 22 | 15 | 68,2% |  |
| Engstrom [16] 2013 | 46 | - | 39,5% |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 pts. (%)** | **Impella 2.5 pts. (%)** | **Impella 2.5 Upgraded to 5.0 (%)** |
| Engstrom [1] 2011 | 34 | 3/9 (33%) | 6/25 (24%) | 38% |
| **In-hospital mortality** | | |  |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (%)** |  |  |
| Esposito [17] 2018 | 19 | 47% |  |  |
| **Soft Outcomes** | | |  |  |
| **6-month mortality** | | |  | |
| **First Author, Year** | **Sample size** | **Impella 2.5 (%)** | **Impella 5.0 (%)** | **Impella CP (%)** |
| Ouweneel [3] 2018 | 112 | 70% | 40% | 61,50% |
| Hazard ratio |  | reference | 0,46(0,21-1,00) | 0,84 (0,51-1,39) |
| **First Author, Year** | **Sample size** | **Impella 5.0 (%)** | **%** |  |
| Mastroianni [4] 2016 | 14 | 42,8% | - | - |
| Gaudard [7] 2015 | 40 | 20 | 50% | - |
| **6-month survival** | | |  |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (%)** |  |  |
| Chung [9] 2019 | 100 | 60,0% |  |  |
| Griffith [6] 2013 | 16 | 81,0% |  |  |
| **1-year mortality** | | |  |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (%)** |  |  |
| Mastroianni [4] 2016 | 14 | 42,8% |  |  |
| **1-year survival** | | | |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (pts)** | **%** |  |
| David [13] 2019 | 29 | 15 | 52% |  |
| Chung [9] 2019 | 100 | 54 | 54 |  |
| Bernhardt [12] 2019 | 22 | 12 | 54,5% |  |
| Griffith [6] 2013 | 16 | - | 75% |  |
| **2-year mortality** | | |  |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (%)** |  |  |
| Mastroianni [4] 2016 | 14 | 42,8% |  |  |
| **Death on Impella support** | | | |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (pts)** | **%** |  |
| Mastroianni [4] 2016 | 13 | 4 | 31% |  |
| Hall [8] 2018 | 58 | 19 | 33% |  |
| Gaudard [7] 2015 | 40 | 12 | 30% |  |
| **Survival to Impella 5.0 explant** | | | |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (pts)** | **%** |  |
| David [13] 2019 | 29 | 22 | 75,80% |  |
| **Total LOS** | | | | |
| **First Author, Year** | **Sample size** | **Impella 5.0 (days ± SD)** | **min** | **max** |
| Mastroianni [4] 2016 | 14 | 97±84 | 22 | 138 |
| David [13] 2019 | 29 | 25±17 | - | - |
| **ICU LOS [lenght of Stay]** | | | | |
| **First Author, Year** | **Sample size** | **Impella 5.0 (days ± SD)** | **min** | **max** |
| Mastroianni [4] 2016 | 14 | 26±16 | 1 | 58 |
| David [13] 2019 | 29 | 24±20 | - | - |
| Schibilsky [10] 2016 | 8 | - | 13 | 52 |
| Gaudard [7] 2015 | 40 | 20 | 8 | 32 |
| **Death** | | | |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (pts)** | **%** |  |
| Boll [14] 2019 | 22 | 20 | 90,90% |  |
| Bansal [11] 2016 | 24 | 7 | 29,20% |  |
| **Survival to last follow-up** | | | |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (pts)** | **%** |  |
| Bernhardt [12] 2019 | 22 | 19 | 86,4% |  |
| **6-hour survival** | | | |  |
| **First Author, Year** | **Sample size** | **Impella 2.5 pts. (%)** | **Impella 5.0 pts. (%)** | **p-value** |
| Engstrom [1] 2011 | 34 | 20 (80%) | 9 (100%) | p=0,146 |
| Gaudard [7] 2015 | 40 | - | 39 (98%) | - |
| **24-hour survival** | | | |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (pts)** | **%** |  |
| Gaudard [7] 2015 | 40 | 3800% | 95% |  |
| **48-hour survival** | | | | |
| **First Author, Year** | **Sample size** | **Impella 2.5 pts. (%)** | **Impella 5.0 pts. (%)** | **p-value** |
| Engstrom [1] 2011 | 34 | 14 (56%) | 8 (89%) |  |
| **First Author, Year** | **Sample size** | - | **Impella 5.0 pts. (%)** | - |
| Gaudard [7] 2015 | 40 | - | 37 (93%) | - |
| **Death during follow-up** | | | |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (pts)** | **%** |  |
| Mastroianni [4] 2016 | 14 | 6 | 42,9% |  |
| **Death after weaning** | | | |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (pts)** | **%** |  |
| Bertoglio [15] 2019 |  | 3 | 33% |  |
| **Survival to ICU return** | | | |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (pts)** | **%** |  |
| Gaudard [7] 2015 | 40 | 40 | 100% |  |
| **Mortality at ICU discharge** | | | |  |
| **First Author, Year** | **Sample size** | **Impella 5.0 (pts)** | **%** |  |
| Gaudard [7] 2015 | 40 | 17 | 43% |  |