

Table I: Demographics on 36 patients that were operated for infective endocarditis in Iceland 1997-2013. Number of patients and % unless mean, standard deviation and range for age, body mass index and EuroScore II.

| | Number | % |
|--------------------------------------|-------------|--------------|
| Male | 28 | 78 |
| Age | 56.3 ± 14.3 | (30-80) |
| Coronary artery disease | 5 | 14 |
| Hypertension | 15 | 43 |
| Hyperlipidemia | 5 | 14 |
| Diabetes (Type I and II) | 5 | 14 |
| Smoking (n=30) | 23 | 77 |
| Active smoking | 13 | 43 |
| Bicuspid aortic valve | 9 | 25 |
| Chronic kidney failure | 7 | 20 |
| Body mass index (kg/m ²) | 27.2 ± 4.8 | (15.46-34.7) |
| Previous heart surgery | 4 | 11 |
| Intravenous drug abuse | 5 | 14 |
| Immunosuppression | 3 | 8 |
| Infected bone implant | 3 | 8 |
| Poor dental status | 1 | 3 |
| Peripheral vascular disease | 1 | 3 |

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|---|-------------|--------------|
| <i>Chronic obstructive lung disease</i> | 3 | 8 |
| <i>Transient ischemic attack</i> | 6 | 17 |
| <i>EuroSCORE II</i> | 14.0 ± 21.0 | (0.77-55.01) |

Table II: Symptoms and diagnostic methods for 36 patients that were operated for infective endocarditis in Iceland 1997-2013. Number and % unless otherwise stated.

| | Number | % |
|----------------------------------|--------|-----|
| <i>Fever (n=33)</i> | 27 | 82 |
| <i>Dyspnea (n=29)</i> | 24 | 86 |
| <i>Weight loss</i> | 10 | 28 |
| <i>Heart failure (n=33)</i> | 26 | 79 |
| <i>NYHA Class IV</i> | 14 | 42 |
| <i>Pulmonary hypertension</i> | 6 | 17 |
| <i>Infected valve vegetation</i> | 16 | 44 |
| <i>Echocardiography</i> | 36 | 100 |
| <i>Transthoracic</i> | 36 | 100 |

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|---|----|----|
| <i>Transesophageal</i> | 31 | 86 |
| <i>Coronary angiography</i> | 22 | 60 |
| <i>Positive blood culture</i> | 29 | 81 |
| <i>Chest computed tomography (CT)</i> | 7 | 19 |
| <i>Chest magnetic resonance imaging (MRI)</i> | 1 | 3 |

Table III: Antibiotic treatment of 36 patients that were operated for infective endocarditis in Iceland 1997-2013. Most patients had more than one antibiotic at a time. Number and % unless otherwise stated.

| <i>Antibiotic</i> | <i>Number</i> | <i>%</i> |
|---|---------------|----------|
| <i>3rd generation cephalosporins</i> | 20 | 56 |
| <i>Penicillin-beta lactam derivatives</i> | 18 | 50 |
| <i>Vancomycin</i> | 15 | 42 |
| <i>Penicillin</i> | 14 | 39 |

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|--|----|----|
| <i>Gentamycin</i> | 13 | 36 |
| <i>Carbapenem</i> | 4 | 11 |
| <i>Fluoroquinolone</i> | 4 | 11 |
| <i>1st generation cephalosporin</i> | 3 | 8 |
| <i>Rifampicin</i> | 3 | 8 |
| <i>Trimetoprim/sulfa</i> | 1 | 3 |
| <i>Daptomycin</i> | 1 | 3 |
| <i>Linezolid</i> | 1 | 3 |
| <i>Tetracyclin</i> | 1 | 3 |

Table IV: Operation acuity, intraoperative information and type of operation performed for patients operated for infective endocarditis in Iceland 1997-2013. Number and % unless otherwise stated. One patient was operated on both aortic and mitral valves.

| | Number | % |
|------------------------|--------|----|
| <i>Acute operation</i> | 12 | 33 |

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|--|----------|--------------------|
| <i>Subacute operation</i> | 13 | 36 |
| <i>Urgent operation</i> | 11 | 31 |
| <i>Time from diagnosis to operation</i> | 12 ± 80 | (Range: 0-593) |
| <i>Aortic valve (n=26)</i> | 26 | 72 |
| <i>Biological prosthesis</i> | 16 | 62 |
| <i>Mechanical prosthesis</i> | 10 | 38 |
| <i>Concomitant CABG</i> | 5 | 19 |
| <i>Another valve repaired concomitantly</i> | 5 | 19 |
| <i>Cardiopulmonary bypass time (min)</i> | 163 ± 77 | (Range: 73-382) |
| <i>Cross-clamp time (minutes)</i> | 119 ± 56 | (Range: 57-273) |
| <i>Mitral valve (n=10)</i> | 10 | 28 |
| <i>Biological prosthesis</i> | 4 | 40 |
| <i>Mechanical prosthesis</i> | 4 | 40 |
| <i>Valvuloplasty</i> | 2 | 20 |
| <i>Concomitant CABG</i> | 2 | 20 |
| <i>Another valve repaired concomitantly</i> | 1 | 10 |
| <i>Cardiopulmonary bypass time (minutes)</i> | 153 ± 44 | (Range: 103 - 215) |

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|--|----------|------------------|
| <i>Cross-clamp time (minutes)</i> | 109 ± 38 | (Range: 62 -163) |
| <i>Tricuspid valve</i> | 1 | 3 |
| <i>Biological prosthesis (n=1)</i> | 1 | 100 |
| <i>Cardiopulmonary bypass time (minutes)</i> | 74 | |
| <i>Cross-clamp time (minutes)</i> | 51 | |

Table V: Bleeding and the use of blood products on patients that were operated for infective endocarditis in Iceland 1997-2013.

| | <i>Median</i> | <i>Range</i> |
|---------------------------------------|---------------|--------------|
| <i>Total bleeding (mL)</i> | 870 ± 3730 | 230 - 20865 |
| <i>Packed red blood cells (units)</i> | 4.0 ± 13.6 | 1- 65 |
| <i>Fresh frozen plasma (units)</i> | 4.0 ± 22.8 | 0 - 9 |
| <i>Platelets (units)</i> | 2.5 ± 2.2 | 0 - 117 |

Table VI: Major and minor postoperative complications for 36 patients who were operated for infective endocarditis in Iceland 1997-2013. Number and % unless otherwise stated.

| | Number | % |
|---|--------|----|
| <i>Major complications</i> | | |
| <i>Reoperation for bleeding (n=35)</i> | 9 | 26 |
| <i>Perioperative myocardial infarction (n=34)</i> | 12 | 35 |
| <i>Respiratory failure (n=35)</i> | 15 | 43 |
| <i>Tracheostomy (n=35)</i> | 8 | 23 |
| <i>Renal replacement therapy (n=35)</i> | 6 | 17 |
| <i>Stroke (n=35)</i> | 5 | 14 |
| <i>Mediastinitis</i> | 0 | |
| <i>Reoperation due to endocarditis</i> | 1 | 3 |
| <i>Multiorgan failure (N=35)</i> | 7 | 20 |
| <i>Major complications total</i> | 22 | 61 |
| <i>Minor complications</i> | | |
| <i>New atrial fibrillation/flutter</i> | 20 | 56 |
| <i>Pneumonia (n=35)</i> | 10 | 29 |
| <i>Pleurocentesis (n=35)</i> | 8 | 23 |
| <i>Renal replacement therapy (n=35)</i> | 8 | 23 |

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|---|----|----|
| <i>Intensive care neuropathy (n=35)</i> | 3 | 9 |
| <i>Urinary tract infection (n=35)</i> | 4 | 11 |
| <i>Superficial wound infection</i> | 1 | 3 |
| <i>Minor complications total</i> | 23 | 64 |
| <i>Intraoperative death</i> | 1 | 3 |
| <i>Operative mortality (< 30 days)</i> | 4 | 11 |

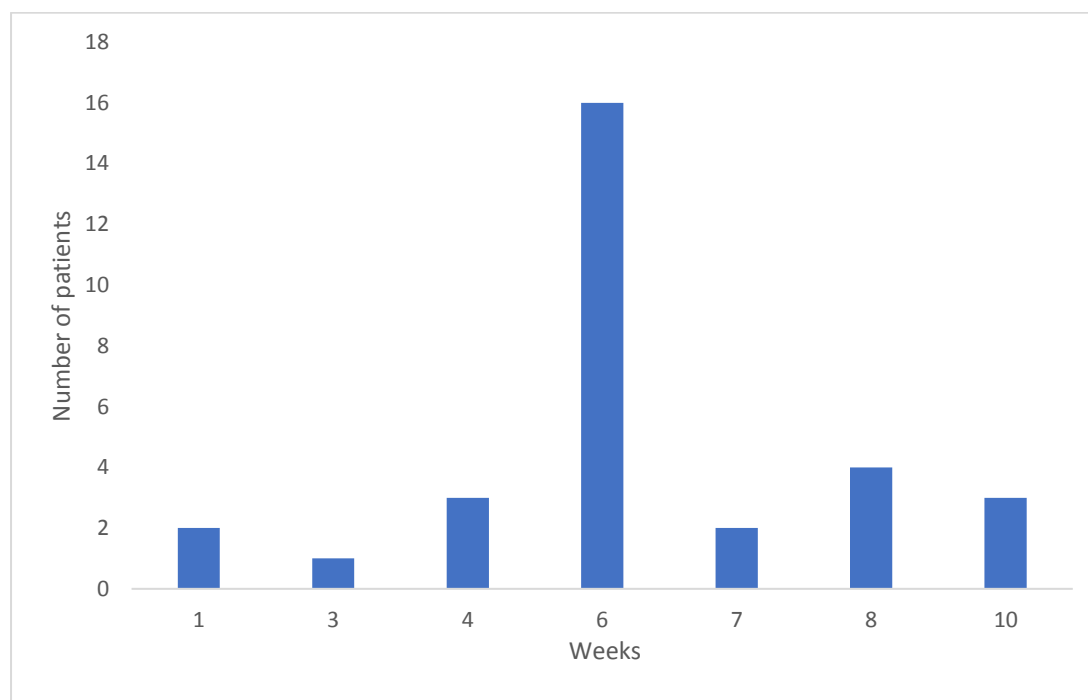


Figure 1: Length of antibiotic treatment in weeks for patients that were operated for infective endocarditis in Iceland 1997-2013. Number of patients is shown.

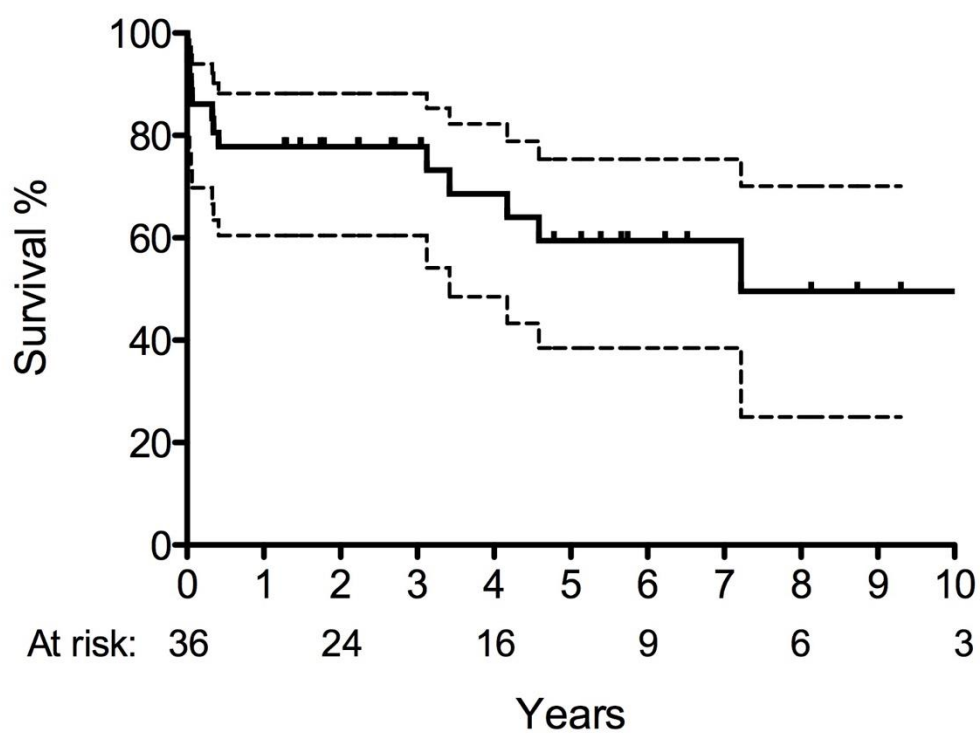


Figure 2: Survival of 36 patients that were operated for infective endocarditis in Iceland 1997-2013. Broken lines show 95% confidence intervals and number of patients at risk at any given time is indicated below.