

PATIENT FACTORS INFLUENCING WAITING TIME TO HEART TRANSPLANT IN THE UK AND REPUBLIC OF IRELAND

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Background: It is important to understand the factors that affect waiting time to transplant to ensure organs are allocated appropriately. This study aimed to identify patient factors that influence a patient's waiting time to first adult cadaveric heart only transplant and to estimate the effect of these factors on waiting time. **Method:** Data were obtained from the National Transplant Database on 2570 adult patients registered onto the national transplant waiting list for a first non-urgent heart only transplant. A multifactorial Cox regression model was developed to identify the factors that influence waiting time. It was stratified by centre to allow for inherent differences. The analysis regarded transplants as events and censored deaths on or removals from the list prior to transplant. Univariate median waiting times were calculated using Kaplan-Meier estimates. **Results:** The chance of receiving a heart transplant for adult patients was significantly affected by their weight, blood group and primary diagnosis at registration. Other factors considered but found to be non-significant were patient age, gender, height, CMV status, body mass index and year of registration. The chance decreased by 2% for every 1kg increase in weight; patients over 81kg waited a median of 271 days to transplant compared with those under 70kg who waited 95 days. Blood groups A and AB patients had more than twice the chance of transplant compared with group O patients; they waited a median of 93, 97 and 230 days, respectively. Patients with cardiomyopathy had an increased chance of transplant compared with those with coronary heart disease while those with diseases other than congenital heart disease had a reduced chance; they waited a median of 127, 166, 251 days, respectively. **Conclusion:** Patient characteristics that influenced waiting time to heart transplants were identified. For adult heart only patients lower median waiting times were associated with lighter patients, blood groups A and AB patients and patients with cardiomyopathy.