



## Heart Failure and Cardiomyopathies

### PRE-TRANSPLANT CHEMOTHERAPY DOES NOT AFFECT POST TRANSPLANT OUTCOME IN PATIENTS UNDERGOING OHT FOR AL CARDIOMYOPATHY

Poster Contributions

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**Background:** Light-chain (AL) cardiac amyloidosis can be treated with cardiac transplantation (HT) followed by high dose melphalan chemotherapy and autologous stem cell transplant. We hypothesized that chemotherapy (CTX) prior to HT targeting clonal plasma cell light chain production may lead to improved survival after HT.

**Methods:** We utilized a multinational database from seven cardiac transplant centers, which includes demographic, clinical, hemodynamic and therapeutic strategies for patients with heart failure due to AL cardiac amyloidosis.

**Results:** Of 103 patients, 89 (86%) were waitlisted for HT and 56 (64%) survived to HT. 39 (44%) of the waitlisted patients received plasma cell targeted chemotherapy with bortezomib, lenalidomide, melphalan, or cyclophosphamide. Chemotherapy use did not differ in waitlisted patients that survived to HT (45%) and those that died prior to HT (42%,  $p=1.0$ ). There were no differences in baseline characteristics between patients receiving chemotherapy (+CTX) and those who did not (-CTX). Post HT infection rates were similar in +CTX (21%) and -CTX (14%,  $p=0.72$ ), while renal replacement therapy tended to be less frequent in +CTX patients (29% vs. 8%,  $p=0.08$ ). Post HT survival was similar in +CTX and -CTX patients (Figure).

**Conclusion:** Chemotherapy prior to HT in cardiac amyloid patients with a high plasma light chain burden did not increase post-operative infections. Pre and post HT survival was similar in patients receiving chemotherapy to those who did not.

