

Young Fellow and Best Abstract Presentations

Title: Haplo-Identical HSCT Outcomes From Queen Mary Hospital HK

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OBJECTIVE: Queen Mary Hospital is the only centre in Hong Kong that provides allogeneic haematopoietic stem cell transplantation (HSCT) service for adult patients. We started our Haplo-HSCT programme in 2014. The option is offered to patients with high risk disease, yet lack suitable matched related or unrelated donors. Up till 26/3/2021, a total of 79 haplo-HSCT have been performed in QMH. This study reports the outcomes of the first 68 Haplo HSCT performed in our center.

METHOD: Clinical data of consecutive patients undergoing Haplo-HSCT in our unit were reviewed. Only transplants performed before 31/12/2020 were included in this retrospective study (i.e. had at least 3-months follow-up post-transplant).

RESULTS: Sixty-six patients underwent 68 Haplo-HSCT from Dec-2014 to Dec-2020. Two patients received a second haplo-HSCT after relapse from first haplo-HSCT from an alternative family donor.

The median follow-up was 374 days (86-1811) among surviving patients. Median age at transplant was 45 years (range 20-66). Thirty-two patients were male. Forty-one patients suffered from myeloid malignancies (including AML=28, MDS/MPN=12, CML-AP=1) and twenty-five lymphoid malignancies (ALL=20, NHL=5).

Thirty-six HSCT was performed with myeloablative conditioning. The first four patients used ATG-based modified BuCy as per Beijing protocol, the remaining PTCY-based conditioning. All patients received PBSC grafts except one. Only 27 patients (40%) were in CR1 at time of transplant. Sixty-five (96%) patients achieved neutrophil engraftment at a median of 17 days (11-27).

The cumulative incidence of grade II and grade III acute GVHD was 34% among 65 patients engrafted. None had grade IV acute GVHD. Cumulative incidence of chronic GVHD for patients who survived >100days was 25% among 57 patients surviving \geq 100 days. Post-transplant relapse occurred in 31%. The overall survival and progression free survival was 78% and 65% at 1-year respectively.

Sixteen patients had died at last follow-up, eleven due to relapse, including one from severe aGVHD after therapeutic donor lymphocyte infusion for post-transplant relapse, and five from non-relapse related mortalities (primary graft failure=1, organ failure=4).

CONCLUSION: The review demonstrated that Haplo-HSCT is effective and safe with good tolerability in high risk patients with advanced stage disease but lack matched donors. Incidence of severe aGVHD and cGVHD was low despite PBSC grafts.