

Lenalidomide, an immunomodulatory drug (IMiD) maintenance therapy until progression after autologous hematopoietic stem cell transplant for newly diagnosed multiple myeloma patients receiving induction therapy remains the standard. We do not know the optimal length of time for maintenance, but shorter durations have not been compared to maintenance until progression in randomized trials. Challenges for the future are comparing newer agents for maintenance such as more potent derivatives of IMiDs, or adding agents to lenalidomide maintenance such as proteasome inhibitors and/or monoclonal antibodies. Tolerability and ease of administration to improve PFS and ideally OS remain the goals of maintenance after autologous hematopoietic stem cell rescue following high dose melphalan.