

多發性骨髓瘤的治療

Treatment for multiple myeloma

林耘曲

臺大醫院癌醫中心分院血液腫瘤部

Multiple myeloma (MM) is a hematologic malignancy originated from bone marrow plasma cells. Despite the tremendous advances in current therapy, MM remains largely incurable and definitely becomes relapse and refractory. Triplet combination therapy with proteasome inhibitor (Pi) (*bortezomib*), immunomodulatory drug (IMiD) (*thalidomide/lenalidomide*) and steroid still stands for the cornerstone of induction therapy of newly-diagnosed MM. Incorporating anti-CD38 monoclonal antibody (*daratumumab*) into induction therapy as quadruplet regimens is now emerging as guideline in Western world in order to achieve deeper response and prolong the progression-free survival. High dose *melphalan* followed by autologous stem cell transplant (ASCT) remains the standard consolidation therapy for the fitness patient. Although post-ASCT maintenance therapy with *lenalidomide* until disease progression was the worldwide consensus, the optimal strategy has not been established while considering minimal residual disease (MRD) status and high risk cytogenetics.

Once relapse, physician encounter the greatest challenge in the drug of choice and sequencing, including monoclonal antibodies (*daratumumab, isatuximab, elotuzumab*), second generation PIs (*carfilzomib, ixazomib*) and IMiDs (*lenalidomide, pomalidomide*). In recent years, B-cell maturation antigen (BCMA)-targeting therapy has become the mainstay of relapse MM patients who are triple-class refractory, which contains chimeric antigen receptor T-cell therapy (CAR-T) (*idecabtagene vicleucel, ciltacabtagene autoleucel*), bispecific antibodies (bsAbs) (*teclistamab*) and antibody-drug conjugates (ADCs) (*belantamab mafodotin*). Another drug of mechanism XPO-1 inhibitor (*selinexor*) is also available now. The outlook and outcome of MM patients had been changed in the past decade, and will keep getting better in the future!