

**[P776] PHASE 2A, OPEN-LABEL, MULTI-DOSE STUDY OF ANTI-KAPPA MONOCLONAL ANTIBODY, MDX-1097, IN RELAPSED KAPPA-CHAIN RESTRICTED MULTIPLE MYELOMA WITH STABLE MEASURABLE DISEASE**

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MDX-1097 is a monoclonal antibody that binds to a kappa light chain surface antigen (called KMA), on malignant B cells but not normal leucocytes or other cells. A Phase 1 study of single doses of MDX-1097 has been completed in kappa-light-chain restricted multiple myeloma patients. Based on positive safety, pharmacokinetic and efficacy data at a 10mg/kg dose, we now conducted a phase 2a study of repeated dosing of MDX-1097.

This study aimed to test efficacy and safety of MDX-1097 at 10mg/kg weekly x8 in relapsed kappa myeloma patients with stable measurable disease.

We initially enrolled 13 relapsed kappa myeloma patients with stable disease, including patients on maintenance lenalidomide or thalidomide and low-dose steroids. The study followed a Simon 2-stage minimax design, with >1 response needed in the first 13 patients to expand the study. Responses were evaluated by IMWG guidelines (Durie *et al*, 2006). MDX-1097 10mg/kg was given by 90 minute intravenous infusion weekly for 8 weeks. Efficacy and safety data included vital signs, physical examination, ECG, hematology assessments, clinical chemistry, C-reactive protein,  $\beta$ 2 microglobulin, immunoglobulin quantification, urinalysis, and creatinine clearance. This study was performed according to ICH-GCP guidelines.

A total of 19 patients completed the study. Repeated MDX-1097 dosing was well tolerated: 4 patients had Grade 1-2 drug-related infusion reactions; 4 patients had Grade 3 AE's (complete heart block, pneumonia, anaemia and pancreatitis), considered unlikely to relate to MDX-1097. There was no evidence of serum sickness, no alteration of renal function, no evidence of increased immunosuppression and no ECG changes. One patient had a VGPR maintained for 12 months post MDX-1097 therapy. A second patient had PR. A third patient with light-chain-only myeloma had PR. On study, 26% of patients continued IMiD(R) maintenance therapy; with no signs that MDX-1097 affected their safety profile.

Multiple weekly doses of MDX-1097 at 10 mg/kg were safe and well tolerated in patients with relapsed kappa myeloma. Responses to therapy were seen in 3/19 (16%) of patients.

**Session:** Multiple myeloma - Translational and clinical studies 2

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