

Haematologica  
HAEMATOL/2019/217927  
Version 4

Microhomology-mediated end joining drives complex rearrangements and over expression of MYC and PVT1 in multiple myeloma

Aneta Mikulasova, Cody Ashby, Ruslana G. Tytarenko, Pingping Qu, Adam Rosenthal, Judith A. Dent, Katie R. Ryan, Michael A. Bauer, Christopher P. Wardell, Antje Hoering, Konstantinos Mavrommatis, Matthew Trotter, Shayu Deshpande, Shmuel Yaccoby, Erming Tian, Jonathan Keats, Daniel Auclair, Graham H. Jackson, Faith E. Davies, Anjan Thakurta, Gareth J. Morgan, and Brian A. Walker

Disclosures: Celgene Corporation: Employment, Equity Ownership: KM, MT, AT. Funding for data processing and storage was provided by Celgene Corporation. Other authors declare no competing interests.

Contributions: AM, CA, FED, GJM and BAW conceived and designed the study; AM, CA, PQ, AR, AH and AT collected clinical data, sequencing data and performed statistical testing; JK, DA and AT were responsible for collection and availability of CoMMpass study related data; JAD, KRR, SY and FED developed and maintained mouse models; RGT, SD and ET processed the samples and performed laboratory protocols; AM, CA, ET, JK, DA, GHJ, GJM and BAW analyzed and interpreted data; CA, MAB, CPW, KM and MT performed the bioinformatics of the sequencing data; All authors discussed the results, wrote, reviewed and approved the manuscript.