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Information about the contributions of each person named as having participated in the study

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The guarantors of this manuscript confirm that all persons designated as authors qualify for authorship, and that each author has participated sufficiently in the work to take public responsibility for appropriate portions of the content.

2) Authors who participated in the conception of the study: Tarun K. Garg, Frits van Rhee, Susann M Szmania, Joshua Epstein, Shmuel Yaccoby, Larry J. Suva, Guido Tricot

3) Design & Methods. The following authors were responsible for specific investigations (please detail):

• Tarun K. Garg, Susann M. Szmania, Junaid A. Khan, Paul A. Malbrough, Amberly Moreno-Bost, Amy D. Greenway, Joshuah D. Lingo and Dario Campana were responsible for the development and optimization of NK activation/expansion method.
• Tarun K. Garg, Susann M. Szmania, Junaid A. Khan, Paul A. Malbrough, Amy D. Greenway and Joshuah D. Lingo were responsible for 51Cr release cytotoxicity assays.
• Susann M. Szmania and Amberly Moreno-Bost were responsible for immunophenotyping.
• Tarun K. Garg, Amy D. Greenway, Shmuel Yaccoby were responsible for construction of mice for animal studies.
• Xin Li and Shmuel Yaccoby were responsible for OPM2-Luciferase transfection.
• Tarun K. Garg, Amy D Greenway and Junaid A. Khan were responsible for assessment of tumor burden, bleeding, NK cell therapy, daily IL2 injections, flow cytometry from mice blood, ELISA, IVIS imaging and in vivo expansion of NK cells in mice.
• Tarun K. Garg, Paul A. Malbrough and Junaid A. Khan were responsible for sample preparation for gene expression profiling.
• John D. Shaughnessy Jr was responsible for gene expression profiling data acquisition and analysis.
• William T. Bellamy and Tarun K Garg were responsible for immunohistochemistry.
• Tarun K. Garg, Brian Storrie and Joshua D. Lingo optimized the time lapse microscopy.
• Tarun K. Garg and Larry J. Suva development and optimization of microCT method.
• Dario Campana provided modified K562 stimulator cells which express 41BBL and membrane bound IL15 for NK cell expansion.

4) Results. The following authors were responsible for specific portions of the results, including figures and tables (please indicate the person responsible for each figure and each table):

• Susann M. Szmania and Amberly Moreno-Bost were responsible for Figure 1.
• Tarun K. Garg, Susann M. Szmania, Junaid A. Khan, Paul A. Malbrough, Amberly Moreno-Bost, Amy D. Greenway, Joshuah D. Lingo were responsible for Figure 2.
• Tarun K. Garg, Amy D Greenway and Junaid A. Khan were responsible for Figure 3A & B.
• Tarun K. Garg, Amy D Greenway and Larry J. Suva were responsible for Figure 4.
• Tarun K. Garg, Junaid A. Khan and Amy D Greenway were responsible for Figure 5.
• Tarun K. Garg, Amy D Greenway and Paul A. Malbrough were responsible for Figure 6A & B
• Tarun K. Garg, Amy D Greenway and William T. Bellamy were responsible for Figure 6C.
• Susann M. Szmania and Amberly Moreno-Bost were responsible for Supplementary Table 1.
• Susann M. Szmania and Tarun K Garg were responsible for Supplementary Figure 1.
• Susann M. Szmania and Amberly Moreno-Bost were responsible for Supplementary Figure 2.
• Tarun K. Garg and Junaid A. Khan were responsible for Supplementary Figure 3.
• Susann M. Szmania and Tarun K. Garg were responsible for Supplementary Figure 4.
• Tarun K. Garg and Junaid A. Khan were responsible for Supplementary Figure 5.
• Tarun K. Garg, Brian Storrie and Joshuah D. Lingo were responsible for Supplementary Movie.
• John D. Shaughnessy Jr was responsible for gene expression profiling data acquisition and analysis.
• Antje Hoering was responsible for biostatistical analysis of GEP data
• Guido Tricot, Bijay P. Nair, Bart Barlogie, and Frits van Rhee enrolled subjects on research protocols.
• Shaughnessy GEP data acquisition and analysis

5) Writing the manuscript. The following authors were responsible for writing the manuscript:

• Tarun K. Garg, Susann M. Szmania, Joshua Epstein and Frits van Rhee were responsible for writing the manuscript.

6) Contributors Listed in Acknowledgments:
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