

Supplemental Figure 1. LXR α and β in human MM cell lines. Expression was determined by quantitative RT-PCR relative to β -actin expression levels. Values represent the mean \pm SEM of 3 separate experiments.



Supplemental Figure 2. Induction of LXR target genes by the non-steroidal LXR agonists T0901317 and GW3965. KMS12, NCI-H929, and U266 MM cells were treated with T0901317 (T0) or GW3965 for 48 hours followed by the examination of ABCA1, ABCG1, and SREBP1-c expression by qPCR. Values represent the mean \pm SEM of 3 separate experiments.



Supplemental Figure 3. Effects of 22R and GW3965 on clonogenic MM growth. KMS12, NCI-H929, and U266 MM cells were treated with SHh conditioned media (SHh) with or without 22R (1uM) or GW3965 (1uM) for 96 hours followed by plating in methylcellulose to quantify tumor colony formation. Values represent the mean \pm SEM of 3 separate experiments.



Supplemental Figure 4. Effects of T0901317 on MM growth and survival. KMS12, NCI-H929, and U266 MM cells were treated with T0901317 for 48 or 96 hours followed by the quantification of (A) total cell numbers or (B) cell viability assessed by Annexin V staining. Values represent the mean \pm SEM of 3 separate experiments.



Supplemental Figure 5. Dose-response of T0901317. U266 cells were treated with varying concentrations of T0901317 and examined for (A) ABCA1 and (B) GLI1 expression by qPCR and (C) colony formation in methylcellulose. Values are relative to vehicle-treated control cells and represent the mean \pm SEM of 3 separate experiments.



Supplemental Figure 6. Gene knock-down by siRNA. siRNA against each gene or a scrambled control were transfected into U266 cells followed by quantification of expression by qPCR following 24 hours. Values represent the mean \pm SEM of 3 separate experiments.



Supplemental Figure 7. Impact of LXR activation on MM TICs. KMS12, NCI-H929, and U266 MM cells were treated with 22R for 96 hours followed by the quantification of (A) CD138^{neg} or (B) ALDH⁺ MM TICs. (C) Isolated CD138^{neg} U266 cells were treated with vehicle control or T0901317 (1uM) or cyclopamine (5uM) for 24 hours followed by quantification of CD138⁺ cells by flow cytometry. Values represent the mean \pm SEM of 3 separate experiments.



Supplemental Figure 8. *In vivo* effects of T0901317. Mice receiving feed containing T0901317 or vehicle control were sacrificed and the expression of ABCA1, ABCG1, and SREBP1-c in bone marrow cells was examined by qPCR. Values represent the mean \pm SEM of 3 separate animals.