LETTER TO THE EDITOR

Efficacy of combined low-dose ruxolitinib and cyclosporine in murine immune bone marrow failure

Authors

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Letter to Editor

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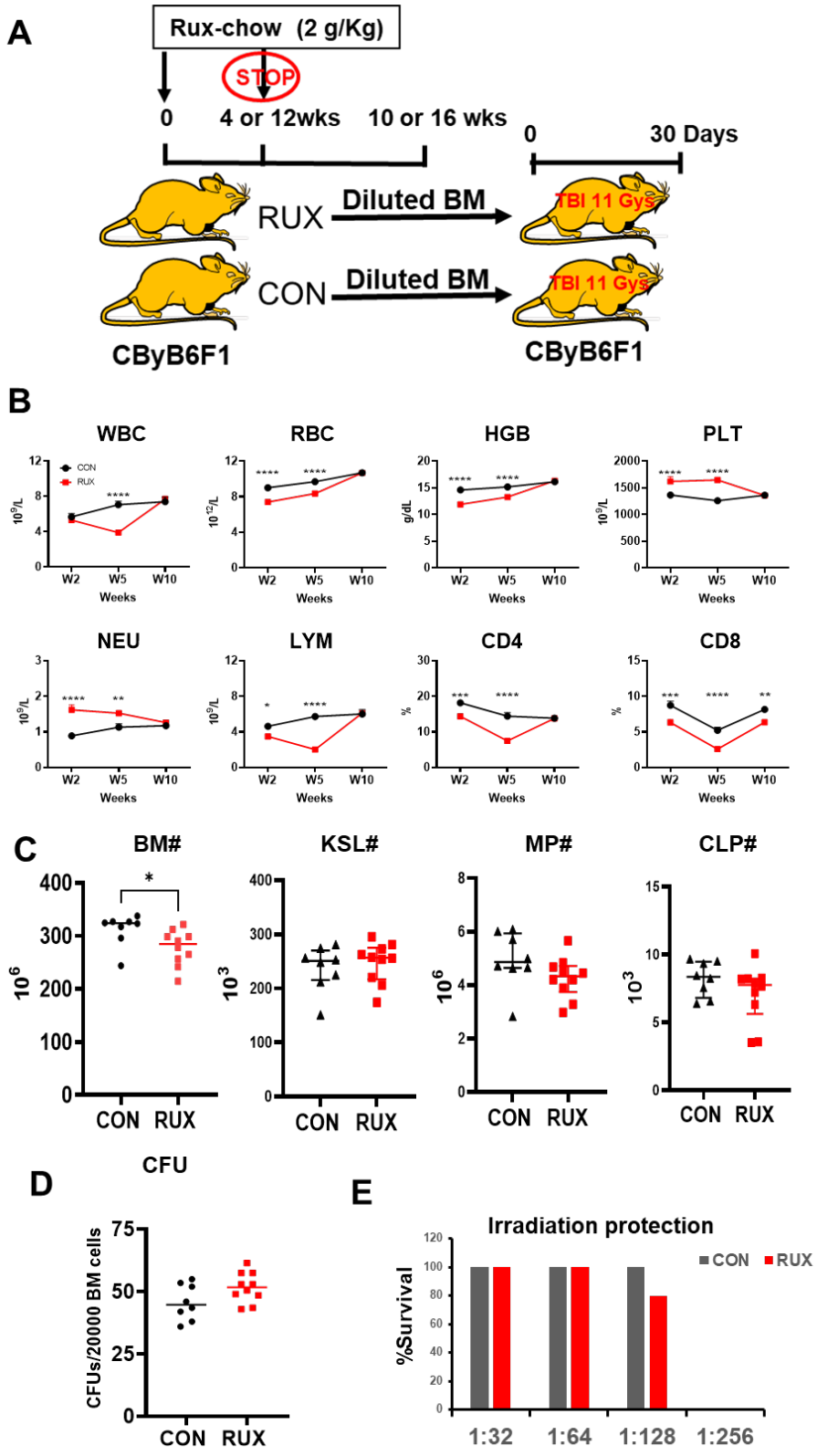
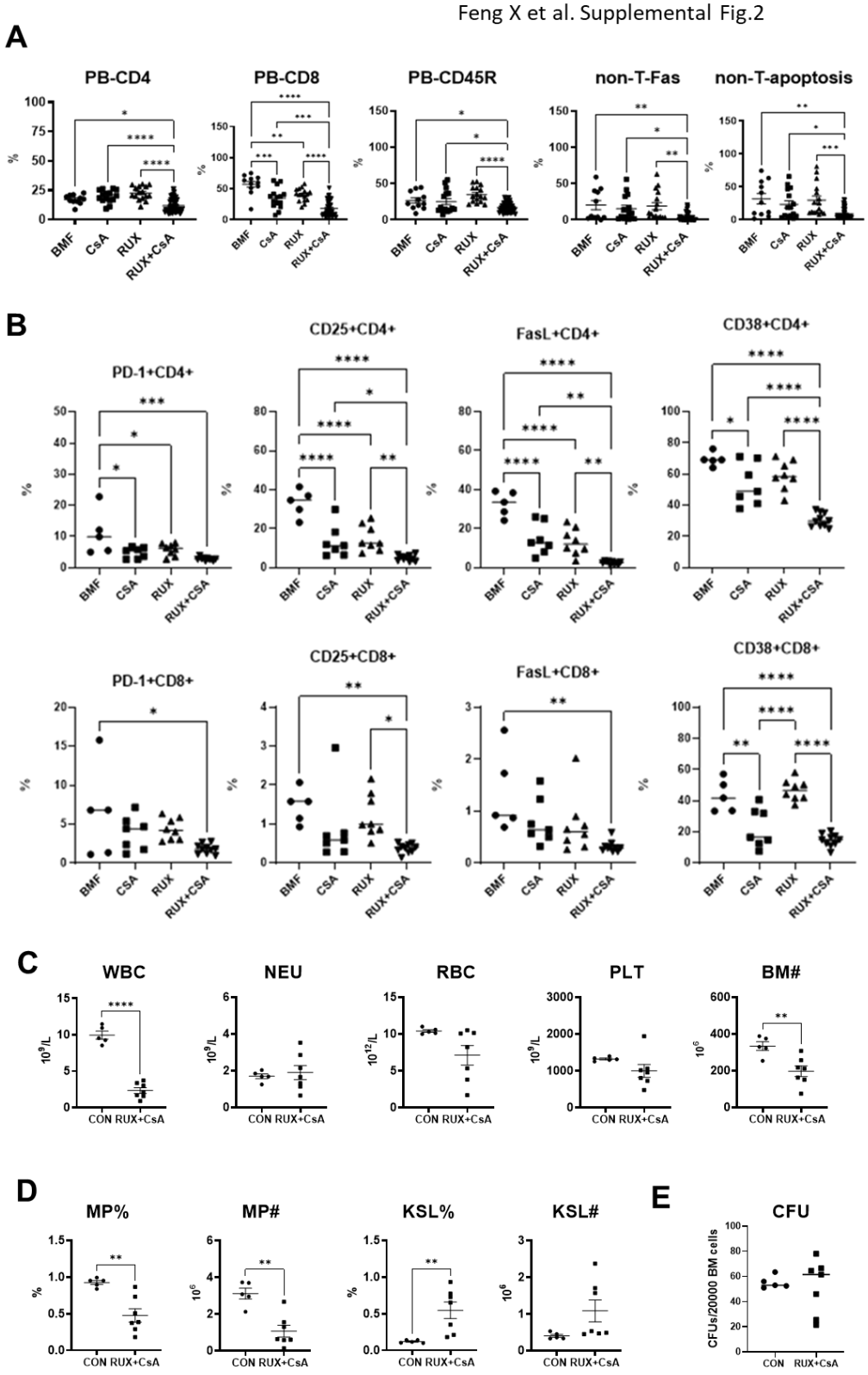
Supplemental figures

Feng X et al. Supplemental Fig.1



Supplemental Figure 1. Hematoxicity of ruxolitinib (RUX) in normal mice. A) Normal CByB6F1 mice were fed with standard Purina 5002 Rodent chow without (CON) or the addition of 2000 mg/Kg of INCB01842 (RUX, Incyte Corporation, Wilmington, DE; composed by Research Diets, Inc, New Brunswick, NJ) for 4 weeks [N=8 for normal control mice (CON), N=10 for RUX-chow feeding mice (RUX)] or 12 weeks (N=15 for CON, N=15 for RUX) respectively in 2 separate experiments, and then switched back to standard chow until animals were bled and euthanized at 10 weeks or 16 weeks to evaluate RUX toxicity. BM cells from RUX-treated or CON mice at different dilutions were used for BM transplant into lethally irradiated (11 Gys) CByB6F1 recipient mice, the survival was recorded at 30 days. **B)** Peripheral white blood cell (WBC), neutrophil (NEU), red blood cell (RBC), hemoglobin (HGB), platelet (PLT), lymphocyte (LYM) counts and CD4 and CD8 percentages during 10 weeks. **C**) Total BM cell numbers, Lin^- $Sca\text{-}1^+CD117^+$ (KSL), myeloid progenitor (MP), and common lymphoid progenitor cell (CLP) numbers in the BM at 10 weeks. **D)** Colony forming unit (CFU) assay with BM cells at 10 weeks. **E)** Irradiation protection assay with RUX-treated or CON donor BM cells at 10 weeks at different dilutions to transplant into lethally irradiated CByB6F1 recipient mice. Survival of recipients was monitored and recorded for 30 days. *, $P<0.05$; **, $P<0.01$; ***, $P<0.001$, ****, $P<0.0001$.

Feng X et al. Supplemental Fig.2



Supplemental Figure 2. Therapeutic effects of low-dose ruxolitinib (RUX), cyclosporine A (CsA), and RUX+CsA combination on murine immune bone marrow failure (BMF). A) Proportions of peripheral blood $CD4^+$, $CD8^+$, and $CD45R^+$ lymphocytes, as well as Fas expression and apoptosis in blood non-T cells at day 14 after BMF initiation. **B)** PD-1, FasL, CD25, and CD38 on BM $CD4^+$ and $CD8^+$ T cells at day 14 after BMF initiation. **C-D:** Survival study. At the end of 12-week observation, survived RUX+CsA-treated mice (N=7) were bled and euthanized and were compared with normal mice (CON, N=5) to examine hematopoietic recovery: complete blood counts (WBC, NEU, RBC, and PLT) and total BM cells **(C)**; Hematopoietic stem and progenitor cells including $Lin^-Sca\text{-}1^+CD117^+$ (KSL) and myeloid progenitor (MP) cells **(D)**; Colony-forming unit (CFU) assay with BM cells from survived RUX+CsA-treated BMF mice and normal CON mice **(E)**. *, $P<0.05$; **, $P<0.01$; ***, $P<0.001$, ****, $P<0.0001$.