Supplemental Figure 1: Serum FGF23, phosphate and 1,25(OH) vitamin D levels in mice and patients. FGF23 serum levels in (A) mice (n=4) and (B) patients (n=8-13). Phosphate serum levels in (C) mice (n=4) and (D) patients (n=8-13). 1,25(OH) vitamin D serum levels in (E) mice (n=4) and (F) patients (n=8-13). * p <0.05, ANOVA plus Bonferroni testing.
Supplemental Figure 2: pan-FGF receptor blockade alleviates pneumonia in CKD mice. Pneumonia was induced in CKD mice and sham-operated mice which received either the pan-FGF receptor antagonist PD173074 or vehicle control. After 24 hours, neutrophil were counted in the BAL (A) and CFUs were analysed in the BAL (B), lung tissue (C) and spleen (D) (n=4). * p <0.05, ANOVA plus Bonferroni testing.
Supplemental Figure 3: Serum creatinine levels in sham and CKD mice. 5/6-nephrectomy or sham-operation was performed in WT mice and serum creatinine levels were analysed after 10 day (n=4). * p <0.05, ANOVA plus Bonferroni testing.
Supplemental Figure 4

(A) Timeline of adoptive transfer experiments.

5/6 nephrectomy

10 days

BM harvest

30 min

reinjection into recipient

90 min

cremaster preparation

30 min

imaging
Supplemental Figure 5: **FGFR2 and PKA knockdown in HL60 cells.** FGFR2 or PKA was knocked down in HL60 cells by lentiviral transfection. (A) FGFR2 knockdown and (B) PKA knockdown was verified by western blotting (exemplary blots from 4 experiments). (C) FGFR2 knockdown in murine neutrophils after retroviral transduction in vivo (exemplary blots from 4 experiments).
Supplemental Figure 6: **FGF23 inhibits integrin activation independent of α-Klotho.** Isolated human neutrophils were pretreated with or without FGF23 (100 ng/ml) and/or D-saccharid acid 1,4-lactone monohydrate (DLAS, 10μM) for 30 minutes and stimulated with IL-8 (100 ng/ml) at 37°C for 5 minutes and binding of the reporter antibody mAb24 was assessed by flow cytometry (n=4). * p <0.05, ANOVA plus Bonferroni testing.
Supplemental Figure 7: **Serum FGF23 levels in CKD mice before and after administration of FGF23-neutralizing antibody.** CKD was induced in WT mice and FGF23 serum levels were measured before and after administration of a FGF23-neutralizing antibody (3 mg/kg body weight, n=4). * p < 0.05, Wilcoxon-test.
Supplemental Figure 8: FGFR2 expression on neutrophils after retroviral transduction. Lethally irradiated WT mice were transplanted with hematopoietic stem cells that had been retrovirally transduced with FGFR2 or scrambled shRNA. FGFR2 expression of CD45<sup>+</sup>/Ly6G<sup>+</sup> neutrophils was analyzed by flow cytometry. Shaded grey histogram represents isotype control, dotted line represents FGFR2 expression of FGFR2 knockdown mice and solid line represents control mice. (n > 5000 cells per condition). * p <0.05