**Title: USING 2 DIFFERENT DOSING SCHEDULES OF ROXADUSTAT FOR THE CORRECTION OF ANEMIA IN MHD PATIENTS (50mg versus 100mg)**

**Authors:** 1,2 **Iqbal M M**, 1 Shahnoor KA,1 Ripa RA, 3 Naher KUMS, Alam MB

**Affiliations**: 1Nephrology, NIKDU; 2KDRG and 3Sandors; Bangladesh

**Background**: Roxadustat *,* [HIF prolyl-hydroxylase inhibitor](https://en.wikipedia.org/wiki/HIF_prolyl-hydroxylase_inhibitor) , a different type of ESA is now being used for correction of anemia in dialysis population.

**Aim:** In this studyresponse to Roxadustat for correction of anemia with 2 dosing schedules (50 mg vs. 100mg) among red cell transfusion (RCT) dependent MHD patients was compared.

**Methods:** This was a randomized open label parallel group study conducted in Dialysis Unit of NIKDU, Bangladesh. MHD subjects who were dependent on only blood transfusion for anemia correction were included here. They were divided in 2 groups. Group-1: for Roxadustat 50 mg and Group-2: 100 mg orally 3times/wk. Study was conducted for 3 months per patient to see the response to Hb increase.

**Result:** Primarily 84 MHD patients were recruited from which 65 are included in final analysis. Both gr1 (n=32) and gr2 (n=33) were matched at baseline for Hb (8.9±1.5 vs. 8.8±1.2, g%), ferritin (1416±977 vs. 1610±780,micg/l) and urea clearance (65±17 vs. 65±12); (P=NS). Changes of Hb after therapy with study drug in gr1 at 4,8 and 12 weeks was 8.8±1.6, 9.1±1.3 & 9.1±1.5, g% (P=NS) and in gr2 9.3±1.5, 9.5±2.3 & 9.5±1.5, g% (P<0.05) respectively. RCT was required only by 30% of all the subjects during trial period and this came down from 1.1±0.3 unit/month at starting of trial to 0.5.0±0.2, unit/month at study end (p<0.02).

**Conclusion:** Administering 100 mg Roxadustat showed a significant and early increase of hemoglobin level in MHD patients. Also the use of Roxadustat significantly reduced the requirement of blood transfusion for anemia correction to half in all.