

A real-world experience of Desidustat in Chronic Kidney Disease-anemia patients: A single centre experience

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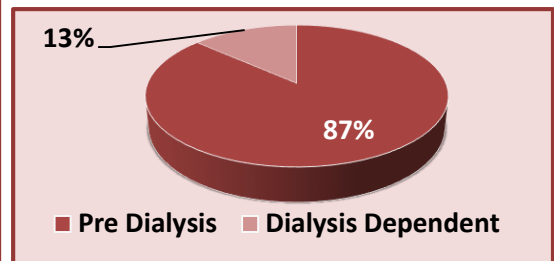
Introduction:

- Desidustat, an oral HIF-PHI agent which helps in endogenous erythropoietin production approved for management anemia associated with CKD.
- This study was aimed to see the effects of Desidustat (Oxemia™) therapy in real-world setup.

Material and Method:

- A real world, single centered, retrospective study
- 52 Patients with CKD anemia, with or without erythropoietin therapy were given Desidustat (Oxemia™) .
- As part of CKD Anemia treatment, patients were also receiving IV Iron (n=20, 38.46%), and Erythropoietin (n=13, 25%).
- Monthly follow up was done to track the Hb changes.
- Dose adjustment was done according to the Hb level

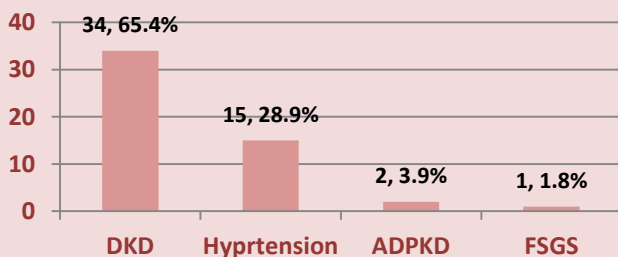
Desidustat Dose (thrice weekly dosing)	Subjects (n, %)
50 mg	10, 19.23%
100 mg	41, 78.85%
150 mg	1, 1.92 %



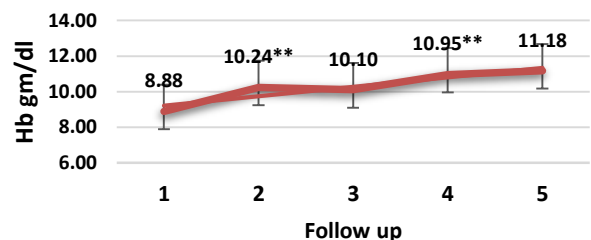
Result:

- Study shown significant and stable improvement in Hb level post baseline 1.19 gm/dl ($p < 0.05$, paired *t* Test), with Desidustat.
- Majority of patients remain stable with 100 mg dose, 17.3% required dose adjustments.
- Tolerability to the Desidustat therapy is very good (n=49, 94.23%),
- No adverse events observed, except 1 had constipation and throat pain.
- Lack of rigorous follow-up is a limitation of this study.

Cause of CKD (n=52)



Change in Hb (**, $p < 0.05$, Paired *t* Test)



Conclusion:

- Desidustat significantly increase the Hb in CKD Anemia without causing severe adverse drug reaction.
- More studies are required to assess the long term efficacy and safety of Desidustat in DD- CKD patients.

References:

- Dhillon S. Desidustat: First Approval. *Drugs*. 2022 Jul;82(11):1207-1212. doi: 10.1007/s40265-022-01744-w. PMID: 35834123; PMCID: PMC9281218
- Joharapurkar AA, Patel VJ, Kshirsagar SG, Patel MS, Savsani HH, Kajavadara C, Valani D, Jain MR. Prolyl hydroxylase inhibitor desidustat improves anemia in erythropoietin hyporesponsive state. *Curr Res Pharmacol Drug Discov*. 2022 Apr 30;3:100102. doi: 10.1016/j.crphar.2022.100102. PMID: 35570856; PMCID: PMC9096675