

**NARRATIVE REVIEW PERBANDINGAN PERUBAHAN KADAR
HEMOGLOBIN ANTARA TERAPI EPOETIN ALFA “X” DENGAN
EPOETIN ALFA “Z” SECARA SUBKUTAN**

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ABSTRAK

Penyakit Ginjal Kronik adalah kerusakan ginjal atau penurunan fungsi Laju Filtrasi Glomerulus (*LFG*) <60 ml/menit/ $1,73\text{ m}^2$ yang terjadi selama >3 bulan. Penyakit ginjal kronik dibagi menjadi 5 stadium, apabila telah memasuki stage/ tahap ke 5 maka diperlukan terapi pengganti ginjal antara lain hemodialisis (HD). Pada tahap ini muncul komplikasi berupa anemia, yang diperparah dengan pecahnya sel darah merah saat HD. Anemia renal adalah anemia pada PGK yang terutama disebabkan penurunan kapasitas produksi eritropoietin. Terapi anemia renal pada penderita PGK yang dapat menggantikan kekurangan eritropoietin yaitu *Erythropoietin Stimulating Agent* (ESA). *Narrative review* studi ini bertujuan untuk mengetahui perbandingan perubahan kadar Hemoglobin antara terapi epoetin alfa “X” dengan epoetin alfa “Z” secara subkutan pada pasien yang menjalani HD. Penelusuran pustaka menggunakan basis data Pubmed menghasilkan 6 pustaka, namun 2 pustaka dieksklusi karena berbeda protocol pemberian obatnya. Dari 4 artikel yang diperoleh terdapat beberapa perbandingan mengenai khasiat dan keamanan terapi epoetin alfa “X” dan epoetin alfa “Z” yang diberikan secara subkutan. Berdasarkan hasil kajian *narrative review*, dapat disimpulkan bahwa perbandingan perubahan kadar hemoglobin setelah pemberian epoetin alfa uji dan pembanding seluruhnya sesuai target, dengan perubahan kadar hemoglobin epoetin alfa pembanding/ originator (Eprex) lebih tinggi dari pada semua jenis epoetin alfa uji.

Kata Kunci: Hemodialisis, Penyakit Ginjal Kronik, Eritropoietin alfa, Subkutan

NARRATIVE REVIEW COMPARISON OF CHANGES IN HEMOGLOBIN LEVELS BETWEEN TWO DIFFERENT SUBCUTANEOUS EPOETIN ALFA THERAPIES

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ABSTRACT

Chronic kidney disease is kidney damage or decreased function of Glomerular Filtration Rate (GFR) $<60 \text{ ml / minute} / 1.73 \text{ m}^2$ that occurs for > 3 months. Chronic kidney disease is divided into 5 stages, if it has entered the 5th stage, kidney replacement therapy is needed, including hemodialysis (HD). At this stage complications arise in the form of anemia, which is exacerbated by the rupture of red blood cells during HD. Renal anemia is anemia in CKD which is mainly caused by a decrease in erythropoietin production capacity. Treatment of renal anemia in patients with CKD that can replace erythropoietin deficiency is Erythropoietin Stimulating Agent (ESA). Narrative review of this study aims to compare changes in hemoglobin levels between epoetin alfa "X" and subcutaneous epoetin alfa "Z" therapy in patients undergoing HD. A literature search using the Pubmed database yielded 6 libraries, but 2 libraries were excluded because of different drug administration protocols. From the 4 articles obtained there were several comparisons regarding the efficacy and safety of epoetin alfa "X" and epoetin alfa "Z" therapy given subcutaneously. Based on the results of the narrative review, it can be concluded that the comparison of changes in hemoglobin levels after giving the epoetin alfa test and the comparators are all according to the expected target, with changes in the hemoglobin levels of the comparator / originator epoetin alfa (Eprex) higher than all types of epoetin alfa tests.

Keywords: *Hemodialysis, chronic kidney disease, erythropoietin alfa, subcutaneous*