prevenção de IPCS é a implantação de protocolos de profilaxia para os neutropênicos afebris e ou febris. **Conclusão:** o perfil microbiológico e de resistência aos antimicrobianos do paciente onco-hematológico é característico e exige uma maior atenção visto que apresentam um padrão com mais patogenicidade e letalidade devido à alta prevalência de bactérias Gram-Negativas e Leveduras. No entanto vale ressaltar a importância de o paciente ser avaliado como um todo, levando em consideração a evolução clínica e demais exames laboratoriais que possam indicar um manejo seguro do paciente.

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AVALIAÇÃO DO PERFIL INFLAMATÓRIO DA DOENÇA FALCIFORME: NEUTRÓFILOS DE BAIXA DENSIDADE (LDNS) E CD177

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Introdução: Os neutrófilos são células do sistema imunológico essenciais na resposta a infecções e inflamação. Descobriu-se que eles podem ser divididos em subpopulações com funções distintas, como os neutrófilos de baixa densidade (LDNs), relacionados a câncer e doenças inflamatórias como lúpus e artrite reumatoide. É crucial compreender e identificar melhor essas subpopulações de neutrófilos. **Objetivos:** Estudar os neutrófilos de baixa densidade e neutrófilos de densidade normal em pacientes com anemia falciforme quanto à representatividade de cada população e avaliação destas células quanto ao grau de maturação de cada população bem como a expressão da glicoproteína CD177; comparar o perfil de inflamação no grupo de pacientes com anemia falciforme de acordo com a variável de tratamento. **Casística e métodos:** Foram analisadas amostras de 63 indivíduos, divididos em grupo controle (21 participantes) e grupo doença falciforme (42 participantes). As amostras foram separadas usando a metodologia de Ficoll por gradiente de densidade e posteriormente analisadas por citometria de fluxo para a caracterização das populações de LDNs e HDNs quanto a estágio maturativo destas células (utilizando os marcadores CD13, C11b e CD16); e expressão da glicoproteína de membrana CD177, utilizando o marcador desta proteína (CD177). Também foram realizados hemograma para a obtenção dos resultados de hemoglobina, hematócrito, plaquetas, reticulócitos, leucócitos e neutrófilos; e dosagens bioquímicas dos parâmetros, bilirrubina indireta, proteína c reativa e desidrogenase láctica. **Resultados:** Os resultados foram divididos em quatro análises: grupo inteiro de pacientes com anemia falciforme x grupo controle de indivíduos saudáveis; pacientes tratados com hidroxiureia x grupo controle; pacientes tratados com transfusão x grupo controle; pacientes em tratamento expectante x grupo controle. Na avaliação do parâmetro LDNs, observamos resultados aumentados estatisticamente relevantes no grupo de pacientes tratado com hidroxiureia ($p < 0,05$) e no grupo tratado com transfusão

crônica ($p < 0,01$) quando comparados ao grupo controle. Também foi possível observar um aumento não significativo no grupo geral de pacientes com anemia falciforme ($p = 0,12$) e no grupo de pacientes em tratamento expectante ($p = 0,85$) quando comparados ao grupo controle. No parâmetro CD177, ainda que os valores de tendência central estejam aumentados nos diferentes tratamentos: hidroxiureia (47,81%); transfusão (39,4%) e expectante (42,41%), em comparação ao grupo controle (27,3), a análise não apresentou relevância estatística nos dados obtidos. Além disso, observou-se heterogeneidade na maturação dos neutrófilos de baixa densidade, com a presença de neutrófilos maduros e imaturos nesta camada em todos os grupos estudados, porém, embora o valor médio apresentado de neutrófilos, apesar disto, a análise realizada não mostrou diferença estatisticamente relevante nos parâmetros neutrófilos maduros e neutrófilos imaturos nos grupos de pacientes com anemia falciforme quando comparados ao grupo controle. **Conclusão:** Portanto, este estudo destaca a relevância dos LDNs na inflamação da anemia falciforme, uma informação inédita na literatura científica. Esses resultados abrem caminho para futuras pesquisas sobre a função dos LDNs na anemia falciforme e sua potencialidade como alvo terapêutico.

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REAL-WORLD EXPERIENCE WITH FOSTAMATINIB FOR TREATMENT OF IMMUNE THROMBOCYTOPENIA (ITP): PATIENT-REPORTED OUTCOMES

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Background: Data from randomized-controlled trials (RCT) do not necessarily represent expected outcomes in real-world experience due to strict enrollment criteria and protocol-directed allowable treatments. Real-world data (RWD), while less well-controlled and thus less specific to a given patient population, incorporate clinical experience, patient preferences, and real-world issues that are a routine part of clinical practice and thus pertinent to patient care. RWD complement results obtained in an RCT. Fostamatinib is an orally administered spleen tyrosine kinase (SYK) inhibitor indicated for treatment adults with chronic ITP who had an insufficient response to previous therapy. The objective of this analysis was to evaluate real-world patient-reported outcomes from patients with ITP treated with fostamatinib and enrolled in a patient support program (PSP). **Methods:** Patients were included if they had: an ICD10 code consistent with ITP

diagnosis; ≥ 1 pre-treatment platelet counts reported by the provider +/- patient; ≥ 1 post-fostamatinib initiation platelet counts reported by the patient; ≥ 3 months of drug supply with ≤ 60 -day gap during the treatment period; and signed a written consent to share data. Patients were registered by their physician for the manufacturer-sponsored PSP. The PSP registration document includes a form to collect baseline demographic and ITP-specific data. A PSP nurse navigator then calls patients every two weeks (or as agreed upon) to provide support and resources to patients regarding insurance coverage, medication adherence, and how/when to contact their provider. Information on affordability and access to programs such as copay/coinsurance assistance and free drug supply in cases where patients meet the program criteria are also discussed. During the calls, the nurse navigator collects any platelet counts reported by the patient. Pre-specified study endpoints include median post-treatment platelet counts and the proportion of patients who achieved 1) platelet counts of $\geq 30,000/\mu\text{L}$ or $\geq 50,000/\mu\text{L}$, 2) platelet counts of $\geq 30,000/\mu\text{L}$ or $\geq 50,000/\mu\text{L}$ on $\geq 50\%$ of post-treatment readings) ≥ 1 post-treatment doubling of platelet count from the pre-treatment median. **Results:** As of the data cutoff date (10 March 2022), 318 patients were included: 108 (34%) patients remained on 100 mg BID, and 210 patients (66%) had increased their dose to 150 mg BID at some point during treatment. The median age was 67 (range 19-100), and mean duration of fostamatinib therapy was 11 months. The median pre-treatment platelet counts ($32,000/\mu\text{L}$) were higher than those in the RCT ($16,000/\mu\text{L}$), possibly due to patients receiving rescue treatment or switching from other maintenance therapies without the washout period required in the clinical trials. Most patients (85%) achieved platelet counts of $\geq 30,000/\mu\text{L}$ at least once (compared with 70% in the RCT), and 75% had at least half their counts $\geq 30,000/\mu\text{L}$. This RWD also demonstrated a higher proportion of patients (77%) with counts $\geq 50,000/\mu\text{L}$ (compared with 54% in the RCT), and 63% had at least half their counts $\geq 50,000/\mu\text{L}$. Most patients (65%) demonstrated a doubling of their median pre-treatment platelet count. **Conclusion:** In this analysis of RWD from patients supported by Rigel OneCare[®], fostamatinib demonstrated substantial efficacy in clinical practice. These results complement and amplify those of the clinical trial program. They further support the use of fostamatinib for management of ITP.

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LONG-TERM SAFETY PROFILE OF THE ORAL SPLEEN TYROSINE KINASE INHIBITOR FOSTAMATINIB IN IMMUNE THROMBOCYTOPENIA (ITP) AND OTHER DISEASES

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Introduction: Fostamatinib is an oral, potent inhibitor of spleen tyrosine kinase (SYK) with proven efficacy and a manageable safety profile for the treatment of ITP. Long-term safety data on fostamatinib at various dosing regimens (up to 150 mg BID) has been collected in >4000 patients with ITP, rheumatoid arthritis (RA), and other autoimmune, allergic and neoplastic disorders. The safety and tolerability of fostamatinib were consistent across different patient populations. We present a summary analysis of the fostamatinib safety data from the ITP and RA studies. **Methods:** Fostamatinib safety data from 2 randomized, double-blind, placebo-controlled, phase 3 studies and the long-term, open-label, extension (OLE) study in ITP were pooled and are based on a starting dose of 200 mg/day, which was increased to 300 mg/day after 4 weeks in 88% of patients. Fostamatinib safety data from 13 phase 2/3 studies in RA were pooled and are based on a dosing regimen of 100-150 mg/day (n = 1232) or 200-300 mg/day (n = 2205). **Results:** The pooled data set for ITP included 146 patients. The mean duration of fostamatinib treatment was 19 months (range <1 -62 months), representing 229 patient exposure years. Adverse events (AEs) were reported in 87% of patients, and 63% were mild to moderate. Serious AEs were reported in 31% of patients. The incidence of diarrhea, hypertension, alanine aminotransferase increase (ALT), and aspartate aminotransferase (AST) increase was evaluated in 58 patients who received fostamatinib for ≥ 1 year. This enabled a comparison of the incidence of these AEs in quartiles over the first year to assess the cumulative effects of fostamatinib. The AEs were reported with decreasing frequency during the second, third, and fourth quarters of fostamatinib treatment compared with the first quarter of the initial year of treatment in the 58 patients. In the same 58 patients, the use of rescue therapy decreased while median platelet counts increased each quarter of the first year. The pooled data set for RA included 3437 patients who received fostamatinib. The mean duration of treatment was 18 months (range <1 -81) representing 5134 patient exposure years. AEs were reported in 86% of RA patients and were mild to moderate in 73%. Serious AEs occurred in 14%. In the placebo-controlled RA studies, 2414 patients received fostamatinib with 823 patient exposure years and 1169 received placebo with 367 patient exposure years. Despite a two-fold (125%) increase in exposure with fostamatinib vs placebo (823 vs 367 patient exposure years), there was only a 26% increase in AEs with fostamatinib vs placebo (68% vs 54%). The most common events in the ITP and RA studies were diarrhea (36% and 24%), hypertension (22% and 19%) and nausea (19% and 8%), apart from disease-related AEs. Epistaxis (19% and 0.5%), petechiae (15% and 0.3%), contusion (12% and 2%), and fatigue (10% and 2%) are associated with ITP and were uncommon in the RA population. Some AEs may be dose-related, and one-third of the RA patients were on lower dosages (100-150 mg/day) than were generally given in the ITP trials (200-300 mg/day).