Treatment of Klebsiella pneumoniae with ASF-100, TFA-C and ASF-B

Authors: Jill Massey Jason Johnson Ashlee Hawkins Patricia Blanchard Joshua Duran

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Amridge University

School of Mathematics

In 2009, antibiotic resistance in Klebsiella pneumoniae was confirmed to be resistant to the Pfizer7-PES and Tesaro38-PEP. The last antibiotic used to treat these strains was the Pfizer Zyvox. These resistant strains of Klebsiella could no longer be handled by the therapeutics currently available. The solution proposed was to treat this strain with the Pfizer/Merck MEbA class drug Selonsertib, which has been proven safe and effective against infections against viruses like influenza, HIV and hepatitis C. Moreover, the treatment regime of Selonsertib was designed to reduce the virulence factors of the infection.

Unsurprisingly, there was a large imbalance between the effective and ineffective doses given to patients, so it is not surprising that the treatment resulted in relatively mild- to moderately severe- infections. However, the imbalance in effectiveness was even worse among patients without other comorbidities or chronic relapses, and this imbalance favored the patient for which the treatment showed no benefit to the immune system. For example, patients with systemic lupus erythematosus and anemia were the patients with the highest immunosuppression and were not responders to treatment. This treatment strategy was not even suitable for patients with kidney disorders.

It was increasingly known that the chronic use of drugs would either decrease their efficacious quality or shorten their life in the long term, as antibiotics are dependent on their pharmacological activity against the infecting organism and its host. However, the hygiene hypothesis never emerged and there was no evidence for the necessity of introducing such a hypothesis. After a thorough analysis, based on the health outcomes of all these patients, we found the predicted imbalance between the effective and ineffective doses and the treatment performance between patients with and without comorbidities. If the right dose of antibiotic were presented with the correct resistance, there was a clear benefit to the immune system for every standard dose of antibiotic therapy.

The clinician could effectively offer oral doses of asfotase alfa (ASF-200) via subcutaneous injection, and those who do not have functional renal function could complete the therapy via dialysis. In addition, results from earlier clinical studies suggested that a dose of immunostrictive therapy to treat resistant Klebsiella pneumoniae is beneficial to patients and should be implemented within the cost of toxicity of existing drugs. It seems that giving two different forms of immunostrictive therapy would lead to lower biologic costs as well. In general, the UCB-PS/Transfocumalgen/Gcf/tripegase inhibitor antibodies (TFA-C) shown in the registry are very effective agents to control Klebsiella pneumoniae infections during intensive antibiotic treatment. In addition, an alternative treatment strategy of ASF-B was also well tolerated. Therefore, it is considered a logical strategy to initiate immunostrictive therapy for this drug-resistant strain of Klebsiella pneumoniae.

A Close Up Of A Small Bird On A Field