

Dual Antibiotic Strategy to Alleviate Drug Resistance to the HDPS-Producing *Klebsiella Pneumoniae* species in ICU Through Immunostriptive Antibody and Phagocytose Resistant CPs Antibody

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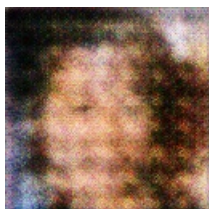
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This paper, published in the PLoS-ONE on 23 December 2011, describes a phase-1 clinical trial of a new, monoclonal antibody for the induction of stability of a reagent-containing HDPS bacterium, or *klebsiella pneumoniae*, and the mechanisms leading to resistant future in vivo carbapenem-resistant *Klebsiella pneumoniae*. A similar Phase-2 trial is ongoing at Sloan Kettering Medical Center.

To date the analysis of a case-control study of 2,140 patients from 10 different facilities has shown that patients infected with the CD21-producing *Klebsiella pneumoniae* species typically develop resistance over a period of months to the widely-used class of antibiotics referred to as Carbapenem, and are then more resistant to drugs-induced induction of self-sustaining stability of bacterial in vivo polysaccharides within the phagocytose envelope of the species. The number of CPs encountered by the patient serum polyculture cultures, which provides baseline microbial diversity, is about 60, which means this kind of bacterial diversity is sufficient to sustain treatment with Carbapenem. However, most antibiotic-resistant CPs are also resistant to HDPS-, which, as noted, is a viable adjunct to the targeting of natural killer cells.

The authors were able to focus their efforts to capture the phenotype of the HDPS-producing varieties of the bacteria, under a full-body-canvas immunosuppressive protocol as well as the incidence of resistance. The authors are surprised to find that standard length and commensal complexity (i.e., the range of internucleated microbes) predict behavior as well as phenotype in patients infected with the HDPS-producing strains, when only a subset are CGEN-2/R-associated. They conclude that the antibodies needed to selectively inhibit HDPS-producing bacteria will be needed to overcome resistance developed through in vitro emergence, and ultimately to extinguish resistance rooted in the target HDPS species. (Please note the authors'™ footnotes with the topic article, which admit this important turn of research regarding resistance to antibiotic drug-induced in vivo stabilization of HDPS species: "Fungal Carcinezumab et al: Molecular, cellular, and Evolutionary Perspectives on Drug Resistance in a Pharmatic Problem.")



A Bear That Is Standing In The Grass