Results of a phase-I/II randomized, masked, placebo-controlled trial of recombinant human interleukin-11 (rhIL-11) in the treatment of subjects with active rheumatoid arthritis

ABSTRACT
During a 12-week trial, rhIL-11 was found to be safe and well-tolerated at various dosages and timings in patients with actively active RA. The only adverse event linked to the administration of the drug was an apparent reaction at the injection site.

INTRODUCTION
Peri-operative parental nutrition is frequently carried out, even when packages containing different nutrients are present. It is essential to have an understanding of the stability of these mixtures, as the infusion of unstable compounds can be dangerous. Since Fujita's animal studies in 1971, it has been accepted that there is a relationship between toxicity and particle size. emulsion particle size appears to be primarily determined by pH, electrolyte concentration, amino acid composition, and the composition of the mixtures with low zeta potential; otherwise, stability is reduced (as indicated by a low value of "energy released by the reaction site") in order to prevent aggregate formation and coalescence of lipid droplets. The objective of this research was to determine the stability of particle size in six parenteral nutrition mixtures that were suitable for different diseases (Table 1). Standard packages with and without medium chain triglycerides (MCT), low volume packages for renal or cardiac insufficiency, with MCT, low lipid, high protein content with the M CT for mechanical ventilation weaning or stress situations, and high calorie, High protein mixtures with both MCATs were tested. The stability of all the formulae in the tested experiments was maintained for 28 days at room temperature and 4°C, plus 24 h.

CONCLUSION
We have developed an algorithm for mapping the positively selected mutations of viral quasispecies using sequence data. This has also been used to map the positive-selected variants (i.e., influenza A HA, HIV-1 RT, and HIV–120) of the human immunodeficiency pathogen hepatitis C virus as well as the FMD virus. The most enlightening application of selection mapping is likely to be in the comparison of viral subpopulations under different selective pressures, such as selection mashing HIV isolates with various cellular tropisms for positive-selected mutations that are positively selected in response to the host cell type. Furthermore, we could use selection mapping to examine HIV breakthrough infections to see if the vaccinations prevented the HIV quasispecies from living in normally favorable regions of the quasiexperimental sequence space. Our proposal is to include the positively selected viral variants in future vaccines that are highly multivalent and designed to compensate for B-cell-selected antigenic drift.