formulations elicited any significant microscopic lesions in the organs of infected mice at tested doses. Each nanoparticle formulation was analyzed physicochemically for size, zeta potential, amount of drug load, minimum inhibitory concentration (MIC) and stability. Both the AMK and CLA polymeric nanoparticles were below 200 nm in size and had a slightly negative overall surface charge, aerogel nanoparticles were somewhat larger in size. The amount of drug load varied between all three nanoparticles and is largely dependent on the chemical structure and interactions between the nanoparticle and drug. The AMK and CLA nanoparticles were relatively stable under varying environmental conditions and time points and had MIC ranges equivalent to the respective free drugs.