CLAIMS

1. A pharmaceutical composition comprising: (a) at least one beta-lactam antibacterial agent or a pharmaceutically acceptable derivative thereof, and (b) an enhancer compound or a pharmaceutically acceptable derivative thereof; wherein the enhancer compound is: trans-(2S,5R)-sulfuric acid mono-[2-(N'-[(R)-piperidin-3-carbonyl]-hydrazino carbonyl)-7-oxo-1,6-diaza-bicyclo[3.2.1]oct-6-yl] ester.

2. A use of a pharmaceutical composition according to Claim 1 for the manufacture of a medicament for treating a bacterial infection.

3. A use of a pharmaceutical composition according to Claim 1 for the manufacture of a medicament for increasing antibacterial effectiveness of the antibacterial agent.

4. The pharmaceutical composition according to Claim 1, wherein the antibacterial agent is selected from a group consisting of carbacephems, penems, carbapenems, cephalosporins, cephamycins, monobactams, or penicillins.

5. The pharmaceutical composition according to Claim 1, wherein the enhancer compound or a pharmaceutically acceptable derivative thereof, is present in an amount from about 0.01 to 10 gm per gram of the beta-lactam antibacterial agent or a pharmaceutically acceptable derivative thereof.

6. The pharmaceutical composition according to Claim 1, wherein the enhancer compound or a pharmaceutically acceptable derivative thereof, is capable of selectively binding to an essential PBP selected from PBP 1a, PBP, 1b, PBP 2 or PBP 3.

7. The pharmaceutical composition according to Claim 1, wherein, the beta-lactam antibacterial agent or a pharmaceutically acceptable derivative thereof, and the enhancer compound or a pharmaceutically acceptable derivative thereof, are complementary PBP binding agents.

8. The pharmaceutical composition according to Claim 1, wherein the enhancer compound or a pharmaceutically acceptable derivative thereof, and the beta-lactam

antibacterial agent or a pharmaceutically acceptable derivative thereof, are present in concentrations lower than their respective minimum inhibitory concentrations.

9. The pharmaceutical composition according to Claim 1, wherein the beta-lactam antibacterial agent or a pharmaceutically acceptable derivative thereof, is present at its minimum filamentation concentration and the enhancer compound or a pharmaceutically acceptable derivative thereof, is present at its minimum spheroplasting concentration.