

I Claim:

1. Compositions and formulations made of polybasic drugs for reducing multi organ toxicities in mammals, by forming supramolecular cationic complex without chemical cross linking, wherein such complexes comprise of:
 - (a) a polybasic/ cationic drug selected from a group of aminoglycoside or polymyxins antibiotics;
 - (b) a cationic compound selected from group of ethoxylated amines, quaternary ammonium compounds, amino acids wherein the said amino acid is selected from L-arginine, L-lysine, histidine;
 - (c) a macromolecule for scaffold base;

wherein the said macromolecule is selected from a group of natural polysaccharide such as dextran, polysialic acid, pullulans, dextrin, hyaluronic acid, chitosan, and heparin,

wherein the said macromolecule is a low molecular weight dextran without chemical modification;

wherein the said complex is formed by cationic electrostatic interactions in specified charge molecular weight relationship;

wherein the ratio of said cationic drug : cationic amino acid: low molecular weight dextran is 1:0.1: 0.1 to 1: 3: 1;
- (d) wherein the said complex is administered to a subject in need by parenteral route.
2. Composition of claim1, wherein the said cationic amino acid is L arginine.
3. Composition of claim1, wherein the said low molecular weight dextran is dextran 40KDa.
4. Compositions of claim1 and formulations made thereof,

wherein the said supra molecular cationic complex is formed due to physical connections involving electrostatic interactions, without any conjugation, covalent bond or micelle formulation;

wherein the ratio of said drug to said macromolecule is 1: 0.1 to 1:1;

wherein the ratio of said arginine to said drug is between 0.1:1 to 3:1;

wherein the said supramolecular cationic complex maintains homeostasis when administered parenterally to mammals to reduce multi organ toxicity.

5. Composition of claim 1, wherein the said cationic drug is polymyxin B or a pharmaceutical salt thereof which is electrostatically combined with cationic amino acid L arginine along with low molecular weight dextran D40 providing scaffold for physical entrapment;
wherein the ratio of said drug: cationic amino acid: dextran is 1:1.4: 0.2 to 1:2.5: 0.5.
6. Composition of claim 1, wherein the said cationic drug is polymyxin E or a pharmaceutical salt thereof which is electrostatically combined with cationic amino acid L arginine along with low molecular weight dextran D40 providing scaffold for physical entrapment;
wherein the ratio of said drug: cationic amino acid: dextran is 1: 0.5:0.1 to 1:2:0.25.
7. Composition of claim 1, wherein the said cationic drug is amikacin or a pharmaceutical salt thereof which is electrostatically combined with cationic amino acid L arginine along with low molecular weight dextran D40 providing scaffold for physical entrapment;
wherein the ratio of said drug: cationic amino acid: dextran is 1: 0.2:0.3 to 1:0.5:0.75.
8. Composition of claim 1, wherein the said cationic drug is apramycin or a pharmaceutical salt thereof which is electrostatically combined with cationic amino acid L arginine along with low molecular weight dextran D40 providing scaffold for physical entrapment;

wherein the ratio of said drug: cationic amino acid: dextran is 1: 0.1:0.2 to 1:0.5:0.75.

9. Composition of claim 1, wherein the said supramolecular complex is formed by altering pH of arginine with simultaneous complex formation;
wherein the ratio of said cationic amino acid to said macromolecule in supramolecular cationic complex formation of aminoglycoside polybasic drugs is between 0.25:1 to 1:1.
10. Composition of claim 1, wherein the said supramolecular complex is formed by cation- π interaction;
wherein the ratio of cationic amino acid to macromolecule in supramolecular cationic complex formation of polymyxin polybasic drugs is between 7.5:1 to 2.5:1.