CLAIMS:

1. A pharmaceutical composition comprising a VIP peptide comprising (i) the amino acid sequence of SEQ ID No. 13 with the N-terminal His at position 2, and (ii) an N-terminal methionine increasing the preference of the VIP peptide for VPAC2 versus VPAC1, and having an elastin-like peptide (ELP) at the C-terminus prolonging the absorption phase from an injection site and extending the circulatory half-life, the ELP having from 75 to 130 units of VPGXG (SEQ ID NO: 3) where the composition of X is Val, Ala, and Gly in a ratio of 5:2:3.

2. The pharmaceutical composition of claim 1, wherein the VIP peptide has a relative binding preference for VPAC2 over VPAC1 of at least about 2:1 or at least about 50:1.

3. The pharmaceutical composition of claim 1 or claim 2, wherein the composition is formulated for parenteral administration.

4. The composition of claim 3, wherein the composition is formulated for subcutaneous, intramuscular, or intravenous administration.

5. The composition of claim 3 or claim 4 for use in a method of treating hypertension, heart failure, myocardial fibrosis or reducing inflammatory responses in a subject, the method comprising administering to the subject a therapeutically effective amount of the composition.

6. The composition for use in treating hypertension according to claim 5, wherein the subject has hypertension selected from pulmonary hypertension, uncontrolled essential hypertension, and resistant hypertension.

7. The composition for use in treating inflammatory responses according to claim 5, wherein the subject has an inflammatory response selected from delayed-type hypersensitivity responses, development of autoreactive T -cells, and a condition defined by TH1-type inflammation or TH1 autoimmunity.

8. The composition for use according to claim 7, wherein the subject has a condition defined by TH1-type inflammation or TH1 autoimmunity selected from arthritis, inflammatory bowel disease, Crohn's disease, type 1 diabetes, multiple sclerosis, transplantation rejection, Sjogren's syndrome, pancreatitis, uveoretinitis, keratitis, and septic shock.

9. The composition for use according to any one of claims 5 to 8, wherein in the method the composition is administered from one to three times weekly, or is administered about daily.

10. The pharmaceutical composition of claim 3 or claim 4 for use as a medicament.