WHAT IS CLAIMED IS:

1. A stable solution ~~formulation~~ for parenteral injection, comprising:

(a) a peptide or a salt thereof, wherein the peptide has been dried in a non-volatile buffer, and wherein the dried peptide has a pH memory that is ~~about~~ equal to the pH of the peptide in the non-volatile buffer; and

(b) an aprotic polar solvent, wherein the peptide or salt thereof is in the aprotic polar solvent in an amount from 0.1 mg/mL up to the solubility limit of the peptide or salt thereof;

wherein the moisture content of the solution ~~formulation~~ is less than 5%, and wherein the dried peptide maintains the pH memory ~~that is about equal to the pH of the peptide in the non-volatile buffer when the dried peptide is reconstituted~~ in the aprotic polar solvent.

2. The solution~~formulation~~ in accordance with claim 1, wherein the peptide or salt thereof is selected from the group consisting of glucagon, pramlintide, insulin, leuprolide, an LHRH agonist, parathyroid hormone (PTH), amylin, botulinum toxin, hematide, an amyloid peptide, cholecystikinin, a conotoxin, a gastric inhibitory peptide, an insulin-like growth factor, a growth hormone releasing factor, an anti-microbial factor, glatiramer, glucagon-like peptide-1 (GLP-1), a GLP-1 agonist, exenatide, analogs thereof, and mixtures thereof.

3. The solution~~formulation~~ in accordance with claim 2, wherein the peptide is glucagon.

4. The solution~~formulation~~ in accordance with claim 2, wherein the peptide is glatiramer.

5. The solution~~formulation~~ in accordance with claim 1, wherein the non-volatile buffer is selected from a glycine buffer, a citrate buffer, a phosphate buffer, and mixtures thereof.

6. The solution~~formulation~~ in accordance with claim 5, wherein the non-volatile buffer is glycine buffer.

7. The solution~~formulation~~ in accordance with claim 5, wherein the non-volatile buffer is a mixture of citrate buffer and phosphate buffer.

8. The solution~~formulation~~ in accordance with claim 1, wherein the aprotic polar solvent is selected from dimethylsulfoxide (DMSO), n-methyl pyrrolidone (NMP), ethyl acetate, and mixtures thereof.

9. The solutionformulation in accordance with claim 8, wherein the aprotic polar solvent is DMSO.

10. The solutionformulation in accordance with claim 8, wherein the aprotic polar solvent is a mixture of DMSO and NMP.

11. The solutionformulation in accordance with claim 8, wherein the aprotic polar solvent is a mixture of DMSO and ethyl acetate.

12. The solutionformulation in accordance with claim 1, further comprising a co-solvent that depresses the freezing point of the solutionformulation, wherein the co-solvent is selected from ethanol, propylene glycol, glycerol, and mixtures thereof.

13. The solutionformulation in accordance with claim 12, wherein the co-solvent is ethanol or propylene glycol.

14. The solutionformulation in accordance with claim 12, wherein the co-solvent is present in the solutionformulation in an amount ranging from about 10% (w/v) to about 50% (w/v).

15. The solutionformulation in accordance with claim 1, further comprising a stabilizing excipient.

16. The solutionformulation in accordance with claim 15, wherein the stabilizing excipient is selected from sugars, starches, and mixtures thereof.

17. The solutionformulation in accordance with claim 16, wherein the stabilizing excipient is a sugar.

18. The solutionformulation in accordance with claim 17, wherein the sugar is trehalose.

19. The solutionformulation in accordance with claim 16, wherein the stabilizing excipient is a starch.

20. The solutionformulation in accordance with claim 19, wherein the starch is hydroxyethyl starch (HES).

21. The solutionformulation in accordance with claim 15, wherein the stabilizing excipient is present in the solutionformulation in an amount ranging from about 1% (w/v) to about 60% (w/v).

22. The solutionformulation in accordance with claim 1, wherein the moisture content of the formulation solution is from about 0.01% to about 3%.

23. The solutionformulation in accordance with claim 1, wherein the moisture content of the formulation solution is less than about 2%.

24. The solutionformulation in accordance with claim 1, wherein the moisture content of the formulation solution is less than about 1%.

25. The solutionformulation in accordance with claim 1, wherein the pH memory of the peptide when reconstituted in the aprotic polar solvent is within one pH unit of the pH of the peptide in the non-volatile buffer.

26. The solutionformulation in accordance with claim 1, wherein the pH memory of the peptide when reconstituted in the aprotic polar solvent is within a half of a pH unit of the pH of the peptide in the non-volatile buffer.

27. The solutionformulation in accordance with claim 1, wherein the peptide has a pH memory of about 2.0 to about 3.0.

28. The solutionformulation in accordance with claim 1, wherein the peptide has a pH memory of about 4.0 to about 6.0.

29. The solutionformulation in accordance with claim 1, wherein the peptide has a pH memory of about 6.0 to about 8.0.

30. The solutionformulation in accordance with claim 1, wherein the peptide is present in the formulation solution in an amount ranging from about 0.5 mg/mL to about 100 mg/mL.

31. The solutionformulation in accordance with claim 30, wherein the peptide is present in the solutionformulation in an amount ranging from about 1 mg/mL to about 50 mg/mL.

32. The solutionformulation in accordance with claim 1, wherein the peptide is a hydrochloride salt or an acetate salt.

33. The solution~~formulation~~ in accordance with claim 1, wherein the solution~~formulation~~ is stable for at least one month at 40°C.

34. The solution~~formulation~~ in accordance with claim 1, wherein the solution~~formulation~~ is stable for at least one week at 4°C.

35. A stable ~~formulation~~ solution for parenteral injection, comprising:

(a) glucagon, wherein the glucagon has been dried in a non-volatile buffer, and wherein the dried glucagon has a pH memory that is ~~about~~ equal to the pH of the glucagon in the non-volatile buffer selected from a glycine buffer, a citrate buffer, a phosphate buffer, and mixtures thereof, wherein the pH memory of the dried glucagon is from ~~about~~ 2.0 to ~~about~~ 3.0; and

(b) an aprotic polar solvent selected from dimethylsulfoxide (DMSO), n-methyl pyrrolidone (NMP), ethyl acetate, and mixtures thereof, wherein the glucagon is in the aprotic polar solvent in an amount from 0.1 mg/mL up to the solubility limit of the glucagon;

wherein the moisture content of the ~~formulation~~ solution is less than 1%, and wherein the dried glucagon maintains the pH memory ~~that is about equal to the pH of the glucagon in the non-volatile buffer when the dried glucagon is reconstituted~~ in the aprotic polar solvent.

36. The solution~~formulation~~ in accordance with claim 35, further comprising a co-solvent that depresses the freezing point of the solution~~formulation~~, wherein the co-solvent is selected from ethanol, propylene glycol, glycerol, and mixtures thereof.

37. The solution~~formulation~~ in accordance with claim 35, further comprising a stabilizing excipient selected from sugars, starches, and mixtures thereof.

38. The solution~~formulation~~ in accordance with claim 35, wherein the glucagon is present in the solution~~formulation~~ in an amount ranging from ~~about~~ 1 mg/mL to ~~about~~ 50 mg/mL.

39. A stable solution~~formulation~~ for parenteral injection, comprising:

(a) a first peptide or a salt thereof, wherein the first peptide has been dried in a first non-volatile buffer, and wherein the first dried peptide has a first pH memory that is ~~about~~ equal to the pH of the first peptide in the first non-volatile buffer;

(b) a second peptide or a salt thereof, wherein the second peptide has been dried in a second non-volatile buffer, and wherein the second dried peptide has a second pH memory that is ~~about~~ equal to the pH of the second peptide in the second non-volatile buffer; and

(c) an aprotic polar solvent, wherein the first peptide or a salt thereof is in the aprotic polar solvent in an amount from 0.1 mg/mL up to the solubility limit of the first peptide or a salt thereof, and wherein the second peptide or a salt thereof is in the aprotic polar solvent in an amount from 0.1 mg/mL up to the solubility limit of the second peptide or salt thereof;

wherein the moisture content of the ~~formulation~~ solution is less than 5%, wherein the first dried peptide maintains the first pH memory ~~that is about equal to the pH of the first peptide in the first non-volatile buffer when the first dried peptide is reconstituted~~ in the aprotic polar solvent, and wherein the second dried peptide maintains the second pH memory ~~that is about equal to the pH of the second peptide in the second non-volatile buffer when the second dried peptide is reconstituted~~ in the aprotic polar solvent.

40. The ~~formulation~~ solution in accordance with claim 39, wherein each of the first peptide or salt thereof and second peptide or salt thereof is selected from the group consisting of glucagon, pramlintide, insulin, leuprolide, an LHRH agonist, parathyroid hormone (PTH), amylin, botulinum toxin, hematide, an amyloid peptide, cholecystikinin, a conotoxin, a gastric inhibitory peptide, an insulin-like growth factor, a growth hormone releasing factor, an anti-microbial factor, glatiramer, glucagon-like peptide-1 (GLP-1), a GLP-1 agonist, exenatide, analogs thereof, and mixtures thereof.

41. The solution~~formulation~~ in accordance with claim 40, wherein the first peptide is pramlintide and the second peptide is insulin.

42. The solution~~formulation~~ in accordance with claim 40, wherein the first peptide is glucagon and the second peptide is exenatide.

43. The solution~~formulation~~ in accordance with claim 39, wherein the non-volatile buffer is selected from a glycine buffer, a citrate buffer, a phosphate buffer, and mixtures thereof.

44. The solution~~formulation~~ in accordance with claim 39, wherein the first non-volatile buffer and the second non-volatile buffer are the same.

45. The solution~~formulation~~ in accordance with claim 39, wherein the first non-volatile buffer and the second non-volatile buffer are different.

46. The solution~~formulation~~ in accordance with claim 39, wherein the aprotic polar solvent is selected from dimethylsulfoxide (DMSO), n-methyl pyrrolidone (NMP), ethyl acetate, and mixtures thereof.

47. The solution~~formulation~~ in accordance with claim 39, further comprising a co-solvent that depresses the freezing point of the solution~~formulation~~, wherein the co-solvent is selected from ethanol, propylene glycol, glycerol, and mixtures thereof.

48. The solution~~formulation~~ in accordance with claim 39, wherein one or both of the first peptide in the first non-volatile buffer and the second peptide in the second non-volatile buffer further comprises a stabilizing excipient.

49. The solution~~formulation~~ in accordance with claim 48, wherein the stabilizing excipient is selected from sugars, starches, and mixtures thereof.

50. The solution~~formulation~~ in accordance with claim 39, wherein the pH of the first pH memory is within one pH unit of the pH of the second pH memory.

51. The solution~~formulation~~ in accordance with claim 39, wherein the pH of the first pH memory is more than one pH unit from the pH of the second pH memory.

52. The solution~~formulation~~ in accordance with claim 39, wherein the first pH memory is from ~~about~~ 3.0 to ~~about~~ 5.0 and the second pH memory is from ~~about~~ 6.0 to ~~about~~ 8.0.

53. The solution~~formulation~~ in accordance with claim 39, wherein one or both of the first peptide and the second peptide is present in the solution~~formulation~~ in an amount ranging from ~~about~~ 0.5 mg/mL to ~~about~~ 100 mg/mL.

54. The solution~~formulation~~ in accordance with claim 39, wherein the moisture content of the solution ~~formulation~~ is from ~~about~~ 0.01% to ~~about~~ 3%.

55. The solution~~formulation~~ in accordance with claim 39, wherein the moisture content of the solution ~~formulation~~ is less than ~~about~~ 2%.

56. A stable ~~formulation~~ solution for parenteral injection, comprising:

(a) insulin, wherein the insulin has been dried in a first non-volatile buffer selected from a glycine buffer, a citrate buffer, a phosphate buffer, and mixtures thereof, and wherein the dried insulin has a first pH memory that is ~~about~~ equal to the pH of the insulin in the first non-volatile buffer, wherein the first pH memory is from ~~about~~ 1.5 to ~~about~~ 2.5 or from ~~about~~ 6.0 to ~~about~~ 8.0;

(b) pramlintide, wherein the pramlintide has been dried in a second non-volatile buffer selected from a glycine buffer, a citrate buffer, a phosphate buffer, and mixtures thereof, and wherein the dried pramlintide has a second pH memory that is ~~about~~ equal to the pH of the pramlintide in the second non-volatile buffer, wherein the second pH memory is from ~~about~~ 3.0 to ~~about~~ 5.0; and

(c) an aprotic polar solvent selected from dimethylsulfoxide (DMSO), n-methyl pyrrolidone (NMP), ethyl acetate, and mixtures thereof;

wherein the moisture content of the solution ~~formulation~~ is less than 1%, wherein the dried insulin maintains the first pH memory that is ~~about~~ equal to the pH of the insulin in the first non-volatile buffer when the dried insulin is reconstituted in the aprotic polar solvent, and wherein the dried pramlintide maintains the second pH memory that is ~~about~~ equal to the pH of the pramlintide in the second non-volatile buffer when the dried pramlintide is reconstituted in the aprotic polar solvent.

57. The solution~~formulation~~ in accordance with claim 56, further comprising a co-solvent that depresses the freezing point of the ~~formulation~~solution, wherein the co-solvent is selected from ethanol, propylene glycol, glycerol, and mixtures thereof.

58. The solution~~formulation~~ in accordance with claim 56, wherein one or both of the first peptide in the first non-volatile buffer and the second peptide in the second non-volatile buffer further comprises a stabilizing excipient selected from sugars, starches, and mixtures thereof.

59. The solution~~formulation~~ in accordance with claim 56, wherein the first non-volatile buffer and the second non-volatile buffer are the same.

60. The solution~~formulation~~ in accordance with claim 56, wherein the first non-volatile buffer and the second non-volatile buffer are different.

61. The solution~~formulation~~ in accordance with claim 56, wherein each of the insulin and the pramlintide is present in the solution~~formulation~~ in an amount ranging from ~~about~~ 1 mg/mL to ~~about~~ 50 mg/mL.

~~62. A stable formulation for parenteral injection, the formulation comprising:~~
~~a peptide or a salt thereof; and~~
~~an aprotic, polar solvent;~~
~~wherein the moisture content of the formulation is less than 5%.~~

~~63. The formulation in accordance with claim 62, wherein the peptide or salt thereof is selected from the group consisting of glucagon, pramlintide, insulin, leuprolide, an LHRH agonist, parathyroid hormone (PTH), amylin, botulinum toxin, hematide, an amyloid peptide, cholecystikinin, a conotoxin, a gastric inhibitory peptide, an insulin-like~~

~~growth factor, a growth hormone releasing factor, an anti-microbial factor, glatiramer, analogs thereof, and mixtures thereof.~~

~~64. The formulation in accordance with claim 62, further comprising a non-volatile buffer.~~

~~65. The formulation in accordance with claim 62, further comprising a stabilizing excipient.~~

~~66~~62. Use of the stable solution~~formulation~~ of any of claims 1-~~65~~ 61 in the manufacture of a medicament for treating a disease, condition, or disorder that may be treated, alleviated, or prevented by administration of the medicament.

~~67~~63. Use of the stable solution~~formulation~~ of any of claims 35-38 in the manufacture of a medicament for treating hypoglycemia.

~~68~~64. Use of the stable solution~~formulation~~ of any of claims 56-61 in the manufacture of a medicament for treating diabetes.

~~69~~65. The use in accordance with any of claims ~~66-68~~ 62-64, wherein the stable solution~~formulation~~ is to be administered via the use of a syringe.

~~70~~66. The use in accordance with any of claims ~~66-68~~ 62-64, wherein the stable solution~~formulation~~ is to be administered via the use of a pen injection device.

~~71~~67. The use in accordance with any of claims ~~66-68~~ 62-64, wherein the stable solution~~formulation~~ is to be administered via the use of an auto-injector device.

~~72~~68. The use in accordance with any of claims ~~66-68~~ 62-64, wherein the stable solution~~formulation~~ is to be administered via the use of a pump.

~~73~~69. A method of making a stable solution~~formulation~~ for parenteral injection, the method comprising:

(a) drying a mixture comprising a peptide or salt thereof in a non-volatile buffer to a dried peptide powder, wherein the dried peptide powder has a pH memory that is ~~about~~ equal to the pH of the peptide in the non-volatile buffer; and

(b) reconstituting the dried peptide powder in an aprotic polar solvent, wherein the peptide or salt thereof is reconstituted in the aprotic polar solvent in an amount from 0.1 mg/mL up to the solubility limit of the peptide or salt thereof;

wherein the moisture content of the ~~formulation~~ solution is less than 5%, and wherein the dried peptide powder maintains the pH memory ~~that is about equal to the pH of the peptide in the non-volatile buffer when the dried peptide powder is reconstituted~~ in the aprotic polar solvent.

~~74~~70. The method in accordance with claim ~~73~~69, wherein the peptide or salt thereof is selected from the group consisting of glucagon, pramlintide, insulin, leuprolide, an LHRH agonist, parathyroid hormone (PTH), amylin, botulinum toxin, hematide, an amyloid peptide, cholecystikinin, a conotoxin, a gastric inhibitory peptide, an insulin-like growth factor, a growth hormone releasing factor, an anti-microbial factor, glatiramer, exenatide, analogs thereof, and mixtures thereof.

~~75~~71. The method in accordance with claim ~~74~~, wherein the peptide is glucagon.

~~76~~72. The method in accordance with claim ~~73~~69, wherein the non-volatile buffer is selected from a glycine buffer, a citrate buffer, a phosphate buffer, and mixtures thereof.

~~77~~73. The method in accordance with claim ~~73~~69, wherein the aprotic polar solvent is selected from dimethylsulfoxide (DMSO), n-methyl pyrrolidone (NMP), ethyl acetate, and mixtures thereof.

~~78~~74. The method in accordance with claim ~~73~~69, further comprising drying the peptide and the non-volatile buffer with a stabilizing excipient, wherein the stabilizing excipient is selected from sugars, starches, and mixtures thereof.

~~79~~75. The method in accordance with claim ~~73~~69, wherein step (b) comprises reconstituting the dried peptide powder in a solution comprising an aprotic polar solvent and a co-solvent that depresses the freezing point of the ~~formulation~~solution, wherein the co-solvent is selected from ethanol, propylene glycol, glycerol, and mixtures thereof.

~~80~~76. The method in accordance with claim ~~73~~69, wherein the pH of the peptide in the non-volatile buffer is such that the dried peptide powder has a pH memory of ~~about~~ 2.0 to ~~about~~ 3.0.

~~81~~77. The method in accordance with claim ~~73~~69, wherein the pH of the peptide in the non-volatile buffer is such that the dried peptide powder has a pH memory of ~~about~~ 4.0 to ~~about~~ 6.0.

~~82~~78. The method in accordance with claim ~~73~~69, wherein the pH of the peptide in the non-volatile buffer is such that the dried peptide powder has a pH memory of ~~about~~ 4.0 to ~~about~~ 5.0.

~~83~~79. The method in accordance with claim ~~73~~ 69, wherein the peptide is present in the mixture in an amount ranging from ~~about~~ 0.5 mg/mL to ~~about~~ 100 mg/mL.

~~84~~80. The method in accordance with claim ~~73~~69, wherein the moisture content of the ~~formulation~~ solution is from ~~about~~ 0.01% to ~~about~~ 3%.

~~85~~81. A method of making a stable ~~formulation~~ solution for parenteral injection, the method comprising:

(a) drying a first mixture comprising a first peptide or salt thereof in a first non-volatile buffer to a first dried peptide powder, wherein the first dried peptide powder has a first pH memory that is ~~about~~ equal to the pH of the first peptide in the first non-volatile buffer;

(b) drying a second mixture comprising a second peptide or salt thereof in a second non-volatile buffer to a second dried peptide powder, wherein the second dried peptide powder has a second pH memory that is ~~about~~ equal to the pH of the second peptide in the second non-volatile buffer; and

(c) reconstituting the first dried peptide powder and the second dried peptide powder in an aprotic polar solvent, wherein the first peptide or salt thereof is reconstituted in the aprotic polar solvent in an amount from 0.1 mg/mL up to the solubility limit of the first peptide or salt thereof, and wherein the second peptide or salt thereof is reconstituted in the aprotic polar solvent in an amount from 0.1 mg/mL up to the solubility limit of the second peptide or salt thereof;

wherein the moisture content of the ~~formulation~~ solution is less than 5%, wherein the first dried peptide powder maintains the first pH memory ~~that is about equal to the pH of the first peptide in the first non-volatile buffer when the first dried peptide powder is reconstituted~~ in the aprotic polar solvent, and wherein the second dried peptide powder maintains the second pH memory ~~that is about equal to the pH of the second peptide in the second non-volatile buffer when the second dried peptide powder is reconstituted~~ in the aprotic polar solvent.

~~86~~82. The method in accordance with claim ~~85~~ 81, wherein each of the first peptide or salt thereof and second peptide or salt thereof is selected from the group consisting

of glucagon, pramlintide, insulin, leuprolide, an LHRH agonist, parathyroid hormone (PTH), amylin, botulinum toxin, hematide, an amyloid peptide, cholecystikinin, a conotoxin, a gastric inhibitory peptide, an insulin-like growth factor, a growth hormone releasing factor, an anti-microbial factor, glatiramer, glucagon-like peptide-1 (GLP-1), a GLP-1 agonist, exenatide, analogs thereof, and mixtures thereof.

~~87~~83. The method in accordance with claim ~~85~~ 81, wherein the first peptide is pramlintide and the second peptide is insulin.

~~88~~84. The method in accordance with claim ~~85~~ 81, wherein the first peptide is glucagon and the second peptide is exenatide.

~~89~~85. The method in accordance with claim ~~85~~ 81, wherein the non-volatile buffer is selected from a glycine buffer, a citrate buffer, a phosphate buffer, and mixtures thereof.

~~90~~86. The method in accordance with claim ~~85~~ 81, wherein the first non-volatile buffer and the second non-volatile buffer are the same.

~~91~~87. The method in accordance with claim ~~85~~ 81, wherein the first non-volatile buffer and the second non-volatile buffer are different.

~~92~~88. The method in accordance with claim ~~85~~ 81, wherein the aprotic polar solvent is selected from dimethylsulfoxide (DMSO), n-methyl pyrrolidone (NMP), ethyl acetate, and mixtures thereof.

~~93~~89. The method in accordance with claim ~~85~~81 , wherein one or both of the first pH memory and the second pH memory is from ~~about~~ 2.0 to ~~about~~ 3.0.

~~94~~90. The method in accordance with claim ~~85~~ 81, wherein one or both of the first pH memory and the second pH memory is from ~~about~~ 4.0 to ~~about~~ 6.0.

~~95~~91. The method in accordance with claim ~~85~~ 81, wherein one or both of the first pH memory and the second pH memory is from ~~about~~ 6.0 to ~~about~~ 8.0.

~~96~~92. The method in accordance with claim ~~85~~ 81, wherein one or both of the first peptide and the second peptide is present in the solution~~formulation~~ in an amount ranging from ~~about~~ 0.5 mg/mL to ~~about~~ 100 mg/mL.

~~97~~93. The method in accordance with claim ~~85~~ 81, wherein the moisture content of the solution ~~formulation~~ is from ~~about~~ 0.01% to ~~about~~ 3%.

~~98~~94. The method in accordance with claim ~~85~~ 81, wherein the moisture content of the solution ~~formulation~~ is less than ~~about~~ 2%