

WHAT IS CLAIMED IS:

1. A device for injecting a medicament, the device comprising:
 - a housing having a proximal end, the housing having a container disposed within the housing, the container configured to hold a medicament, the container having a needle at a proximal end, and a stopper disposed within the container;
 - a plunger having a distal end and a proximal end, the proximal end of the plunger configured to engage the stopper, the distal end of the plunger configured to engage a first resilient member and move the stopper within the container to inject the medicament from the container and out of the needle;
 - a carriage having at least a portion of the container disposed therein, the carriage rotatable relative to the housing;
 - a collar having a distal end and a proximal end, the distal end of the collar configured to engage the carriage and cause rotation of the carriage, the proximal end of the collar configured to engage a second resilient member;
 - a skin sensor having a distal end and a proximal end, the distal end of the skin sensor configured to engage the second resilient member, and the proximal end of the skin sensor configured to contact an injection site; and
 - a cap configured to engage the proximal end of the housing to reduce movement of the skin sensor.
2. The device of claim 1, wherein when the cap is removed from the housing, and an injection force is applied to the skin sensor, the second resilient member is compressed and engages the collar and causes the collar to rotate the carriage, on rotation of the carriage, the first resilient member engages the plunger to inject the medicament from the container and out of the needle.
3. The device of claim 1, wherein the device is disposable and comprises a single dose of medicament.
4. The device of claim 1, wherein skin sensor is configured to retract when the needle is injected and extend to surround the needle after the medicament is injected.

5. The device of claim 1, wherein first resilient member is in a compressed state before an injection force is applied to the skin sensor.
6. The device of claim 2, wherein the distal end of the plunger comprises a restraining member, the restraining member configured to reduce or prevent movement of the plunger and is configured to hold the first resilient member in a compressed state.
7. The device of claim 6, wherein the rotation of the carriage causes the rotation of the restraining member of the plunger to cause the first resilient member to decompress and allow the plunger to move the stopper within the container to inject the medicament from the container and out of the needle.
8. The device of claim 1, further comprising a needle shield covering the needle at the proximal end.
9. The device of claim 8, wherein the needle shield comprises a flexible material relative to the housing and/or a rigid material relative to the first or second resilient member.
10. The device of claim 8, further comprising a cap insert coupled to the cap, the cap insert having a capture member for the needle shield, the needle shield protecting the needle at the proximal end, the capture member configured for removing the needle shield of the needle when the cap is removed from the housing.
11. The device of claim 10, further comprising a skin sensor insert coupled to the skin sensor, the skin sensor insert configured to couple with the cap insert.
12. The device of claim 11, wherein the skin sensor insert comprises a locking surface configured to lock with a locking surface of the cap before the cap is removed.
13. The device of claim 12, wherein the locking surface of the skin sensor insert is a W shaped cam.

14. The device of claim 13, wherein the locking surface of the cap is a triangular shaped cam which couples to the W shaped cam of the skin sensor insert.
15. The device of claim 1, further comprising a housing top coupled to the housing and a housing top insert coupled to the housing top.
16. The device of claim 15, wherein the first resilient member is a spring configured to couple the housing top insert to the plunger.
17. The device of claim 1, wherein the second resilient member is a spring which when compressed exerts a torque on the carriage causing the carriage to turn.
18. The device of claim 1, wherein the medicament comprises an analgesic agent, an anti-inflammatory agent, a hormone, a beta agonist agent, an alpha agonist agent, a beta antagonist agent, an alpha antagonist agent, a benzodiazepine, a glucose modulator, a narcotic, a narcotic antagonist, a cholinergic agent, an anti-cholinergic agent, a muscarinic agonist agent, a muscarinic antagonist agent, a steroid, a chloride salt, an iodide salt, a cholinesterase reactivator agent, a cholinesterase agonist, an antimicrobial agent, an anti-arrhythmic agent, a vasodilator agent, a vasoconstrictor agent, an anti-coagulant agent, a cardiovascular agent, an anti-parkinsonian agent, an anti-psychotic agent, an immunosuppressant agent, an antihistamine, or a combination thereof.
19. A device for injecting a medicament, the device comprising:
- a housing having a proximal end, the housing having a container disposed within the housing, the container configured to hold a medicament, the container having a needle at a proximal end, the needle being protected by a needle shield at the proximal end and a stopper disposed within the container;
 - a plunger having a distal end and a proximal end, the proximal end of the plunger configured to engage the stopper, the distal end of the plunger configured to engage a first

resilient member and move the stopper within the container to inject the medicament from the container and out of the needle;

a carriage having at least a portion of the container disposed therein, the carriage rotatable relative to the housing;

a collar having a distal end and a proximal end, the distal end of the collar configured to engage the carriage and cause rotation of the carriage, the proximal end of the collar configured to engage a second resilient member;

a skin sensor having a distal end and a proximal end, the distal end of the skin sensor configured to engage the second resilient member, and the proximal end of the skin sensor configured to contact an injection site;

a cap configured to engage the proximal end of the housing to reduce movement of the skin sensor; and

a cap insert coupled to the cap, the cap insert having a capture member for the needle shield, the capture member configured for removing the needle shield by removing the cap from the proximal end of the housing.

20. A method of injecting a dose of a medicament, the method comprising injecting a dose of the medicament at an injection site using an injection device, the injection device comprising:

a housing having a proximal end, the housing having a container disposed within the housing, the container configured to hold a medicament, the container having a needle at a proximal end, and a stopper disposed within the container;

a plunger having a distal end and a proximal end, the proximal end of the plunger configured to engage the stopper, the distal end of the plunger configured to engage a first resilient member and move the stopper within the container to inject the medicament from the container and out of the needle;

a carriage having at least a portion of the container disposed therein, the carriage rotatable relative to the housing;

a collar having a distal end and a proximal end, the distal end of the collar configured to engage the carriage and cause rotation of the carriage, the proximal end of the collar configured to engage a second resilient member;

a skin sensor having a distal end and a proximal end, the distal end of the skin sensor configured to engage the second resilient member, and the proximal end of the skin sensor configured to contact the injection site; and

a cap configured to engage the proximal end of the housing to reduce movement of the skin sensor.

21. The method of claim 20, further comprising removing the cap from the housing prior to injecting the dose of the medicament at an injection site; applying the skin sensor to the injection site with an injection force to cause the needle to pierce a skin of a patient and allowing the medicament to be injected from the container through the needle; and withdrawing the needle from the injection site.

22. The method of claim 21, wherein the applying the skin sensor to the injection site and the withdrawing of the needle from the injection site are performed manually.

23. The method of claim 21, wherein the device further comprises a cap insert coupled to the cap and a needle shield protecting the needle, the cap insert having a capture member for the needle shield, the method further comprising removing the needle shield by removing the cap from the proximal end of the housing.

24. The method of claim 21, wherein applying the skin sensor to the injection site with the injection force causes the second resilient member of the device to be compressed and engage the collar, and the collar rotates the carriage, and on rotation of the carriage, the first resilient member engages the plunger to inject the medicament from the container and out of the needle.

25. The method of claim 20, wherein the medicament is in liquid form.

26. The method of claim 25, wherein the medicament dose comprises an analgesic agent, an anti-inflammatory agent, a hormone, a beta agonist agent, an alpha agonist agent, a beta antagonist agent, an alpha antagonist agent, a benzodiazepine, a glucose modulator, a narcotic, a

narcotic antagonist, a cholinergic agent, an anti-cholinergic agent, a muscarinic agonist agent, a muscarinic antagonist agent, a steroid, a chloride salt, an iodide salt, a cholinesterase reactivator agent, a cholinesterase agonist, an antimicrobial agent, an anti-arrhythmic agent, a vasodilator agent, a vasoconstrictor agent, an anti-coagulant agent, a cardiovascular agent, an anti-parkinsonian agent, an anti-psychotic agent, an immunosuppressant agent, an antihistamine, or a combination thereof.

27. The method of claim 25, wherein the medicament comprises glucagon or naloxone.

28. A removable cap for a device for injecting a medicament, the cap comprising a tubular body having a substantially oval cross-sectional profile, the tubular body having a proximal end and a distal end, the proximal end configured to receive a cap insert for covering the tubular body of the cap and the distal end configured to receive a housing of the device.

29. The removable cap of claim 28, wherein the cap further comprises grip features at the distal end of the tubular body and lock lugs or cams for providing a locking mechanism for the device.

30. The removable cap of claim 28, wherein the cap comprises a recess for retention of the housing of the device.

31. The removable cap of claim 28, wherein the cap insert comprises a cover, a cap insert body and a capture member for a needle shield of the needle attached to the container.

32. The removable cap of claim 31, wherein the capture member is a tubular shaft centrally disposed along a longitudinal axis on the cover of the cap, the tubular shaft further comprising clip hooks configured for engaging the needle shield of the needle.

33. The removable cap of claim 32, wherein the cap insert comprises two arms having opposed inner concave surfaces and disposed around the capture member of the cap insert configured to engage with the proximal end of the cap.

34. A device for dispensing a medicament, the device comprising:

a housing having a proximal end, the housing having a container disposed within the housing, the container configured to hold a medicament, the container having a needle at a proximal end, and a stopper disposed within the container;

a plunger having a distal end and a proximal end, the proximal end of the plunger configured to engage the stopper, the distal end of the plunger configured to engage a first resilient member and move the stopper within the container to dispense the medicament from the container and out of the needle;

a carriage having at least a portion of the container disposed therein, the carriage rotatable relative to the housing;

a collar having a distal end and a proximal end, the distal end of the collar configured to engage the carriage and cause rotation of the carriage, the proximal end of the collar configured to engage a second resilient member;

a skin sensor having a distal end and a proximal end, the distal end of the skin sensor configured to engage the second resilient member, and the proximal end of the skin sensor configured to contact skin; and

a cap configured to engage the proximal end of the housing and the skin sensor, the cap having a locking surface configured to lock with a locking surface of the skin sensor to reduce movement of the skin sensor.

35. The device of claim 34, wherein the locking surface of the cap comprises a recess or projection, and the skin sensor further comprises a skin sensor insert, the skin sensor insert comprising a recess or projection that locks with the recess or projection of the locking surface of the cap.

36. The device of claim 35, wherein the skin sensor insert comprises lugs configured to engage a U-slot in the carriage and/or slots in the skin sensor.

37. The device of claim 35, wherein the recess or projection of the cap comprises a triangular shaped cam.

38. The device of claim 37, wherein the recess or projection of the skin sensor insert is a W shaped cam configured to couple with the triangular shaped cam of the cap.
39. The device of claim 36, wherein the carriage has a proximal end and a distal end, the proximal end configured to engage with the lugs of the skin sensor insert and the distal end configured to engage with the collar.
40. The device of claim 36, wherein the carriage comprises a tubular body having a proximal end and a distal end, a lower portion at the proximal end, an upper portion at the distal end of the tubular body and a base between the upper portion and the lower portion of the tubular body.
41. The device of claim 40, wherein the proximal end of the carriage further comprises an abort rail, an injection rail and a lock rail, the rails spaced apart and next to one another.
42. The device of claim 39, wherein the lower portion of the tubular body of the carriage further comprises an abort rail, an injection rail and a lock rail, the rails disposed at the proximal end of the lower portion of the tubular body of the carriage, spaced apart and next to one another.
43. The device of claim 41, wherein the lock rail is disposed between the abort rail and the injection rail.
44. The device of claim 43, wherein the lock rail comprises a U-shaped slot configured to engage the lugs of the skin sensor insert to reduce or prevent the skin sensor from moving when the device is dropped or shocked.
45. The device of claim 44, wherein when the cap is removed from the housing, and an injection force is applied to the skin sensor, the second resilient member is compressed and drives the needle guard insert down a slope of the U-shaped slot and out of engagement with the lock rail.
46. The device of claim 40, wherein the skin sensor insert further comprises an external pin and the skin sensor comprises an external slot and a cam face configured to allow the external pin of

the skin sensor insert to run along the cam face of the skin sensor and engage with the slot of the skin sensor.

47. The device of claim 36, wherein the distal end of the skin sensor further comprises a cam for engagement with the collar.

48. The device of claim 47, wherein at the distal end the collar further comprises a threshold face, the cam of the skin sensor causes the threshold face of the collar to rotate and engage with the carriage to generate a threshold force.

49. The device of claim 48, wherein the threshold force varies from about 9N to about 23N.

50. The device of claim 39, wherein at the distal end, the carriage further comprises a helical cam, the helical cam having a straight edge and an arcuate edge, the edges defining a point configured to receive the collar so that the collar can rotate the carriage.

51. The device of claim 50, wherein the second resilient member is a spring, which upon compression exerts a torque on the carriage causing the carriage to rotate.

52. The device of claim 34, wherein the medicament comprises an analgesic agent, an anti-inflammatory agent, a hormone, a beta agonist agent, an alpha agonist agent, a beta antagonist agent, an alpha antagonist agent, a benzodiazepine, a glucose modulator, a narcotic, a narcotic antagonist, a cholinergic agent, an anti-cholinergic agent, a muscarinic agonist agent, a muscarinic antagonist agent, a steroid, a chloride salt, an iodide salt, a cholinesterase reactivator agent, a cholinesterase agonist, an antimicrobial agent, an anti-arrhythmic agent, a vasodilator agent, a vasoconstrictor agent, an anti-coagulant agent, a cardiovascular agent, an anti-parkinsonian agent, an anti-psychotic agent, an immunosuppressant agent, an antihistamine, or a combination thereof.

53. A device for dispensing a medicament, the device comprising:

a housing having a proximal end, the housing having a container disposed within the housing, the container configured to hold a medicament, the container having a needle at a proximal end, and a stopper disposed within the container;

a plunger having a distal end and a proximal end, the proximal end of the plunger configured to engage the stopper, the distal end of the plunger configured to engage a first resilient member and move the stopper within the container to dispense the medicament from the container and out of the needle;

a carriage having at least a portion of the container disposed therein, the carriage rotatable relative to the housing;

a collar having a distal end and a proximal end, the distal end of the collar configured to engage the carriage and cause rotation of the carriage, the proximal end of the collar configured to engage a second resilient member;

a skin sensor having a distal end and a proximal end, the distal end of the skin sensor configured to engage the second resilient member, and the proximal end of the skin sensor configured to contact skin;

a cap configured to engage the proximal end of the housing and the skin sensor, the cap having a locking surface configured to lock with a locking surface of the skin sensor to reduce or prevent movement of the skin sensor,

wherein the locking surface of the cap comprises a recess or projection, and the skin sensor further comprises a skin sensor insert, the skin sensor insert comprising a recess or projection that locks with the recess or projection of the locking surface of the cap, and the skin sensor insert comprises lugs configured to engage a slot in the carriage and/or slots in the skin sensor causing the skin sensor to be locked.

54. The device of claim 53, wherein the slot in the carriage is U-shaped.

55. A method of injecting a dose of a medicament, the method comprising injecting a dose of the medicament at an injection site using an injection device, the injection device comprising:

a housing having a proximal end, the housing having a container disposed within the housing, the container configured to hold a medicament, the container having a needle at a proximal end, and a stopper disposed within the container;

a plunger having a distal end and a proximal end, the proximal end of the plunger configured to engage the stopper, the distal end of the plunger configured to engage a first resilient member and move the stopper within the container to dispense the medicament from the container and out of the needle;

a carriage having at least a portion of the container disposed therein, the carriage rotatable relative to the housing;

a collar having a distal end and a proximal end, the distal end of the collar configured to engage the carriage and cause rotation of the carriage, the proximal end of the collar configured to engage a second resilient member;

a skin sensor having a distal end and a proximal end, the distal end of the skin sensor configured to engage the second resilient member, and the proximal end of the skin sensor configured to contact skin; and

a cap configured to engage the proximal end of the housing and the skin sensor, the cap having a locking surface configured to lock with a locking surface of the skin sensor to reduce or prevent movement of the skin sensor.

56. The method of claim 55, further comprising removing the cap from the housing prior to injecting the dose of the medicament at an injection site; applying the skin sensor to the injection site with an injection force to cause the needle to pierce a skin of a patient and allowing the medicament to be injected from the container through the needle; and withdrawing the needle from the injection site.

57. The method of claim 56, wherein the applying the skin sensor to the injection site and the withdrawing of the needle from the injection site are performed manually.

58. The method of claim 55, wherein the method further comprises removing a needle shield from the needle by removing the cap from the proximal end of the housing.

59. The method of claim 56, wherein the applying the skin sensor to the injection site with the injection force causes the second resilient member of the device to be compressed and engage

the collar, and the collar rotates the carriage, and on rotation of the carriage, the first resilient member engages the plunger to inject the medicament from the container and out of the needle.

60. The method of claim 55, wherein the medicament is in liquid form.

61. The method of claim 58, wherein the medicament dose comprises an analgesic agent, an anti-inflammatory agent, a hormone, a beta agonist agent, an alpha agonist agent, a beta antagonist agent, an alpha antagonist agent, a benzodiazepine, a glucose modulator, a narcotic, a narcotic antagonist, a cholinergic agent, an anti-cholinergic agent, a muscarinic agonist agent, a muscarinic antagonist agent, a steroid, a chloride salt, an iodide salt, a cholinesterase reactivator agent, a cholinesterase agonist, an antimicrobial agent, an anti-arrhythmic agent, a vasodilator agent, a vasoconstrictor agent, an anti-coagulant agent, a cardiovascular agent, an anti-parkinsonian agent, an anti-psychotic agent, an immunosuppressant agent, an antihistamine, or a combination thereof.

62. The method of claim 58, wherein the medicament comprises glucagon or naloxone.

63. The device of claim 34, wherein the device is disposable and comprises a single dose of medicament.

64. The device of claim 34, wherein skin sensor is configured to retract when the needle is injected and extend to surround the needle after the medicament is injected.

65. The device of claim 35, wherein the first resilient member is in a compressed state before an injection force is applied to the skin sensor.

66. A carriage for a device for injecting a medicament, the carriage comprising a tubular body having a proximal end and a distal end, a lower portion at the proximal end and an upper portion at the distal end, the upper portion having a base, the base having a lower rim, an upper rim and two arms extending from the upper rim, the arms facing each other to form a U-shape with the upper rim and the carriage configured to receive a medicament container.

67. The carriage of claim 66, wherein the tubular body of the carriage is monolithic.
68. The carriage of claim 66, wherein the lower portion of the carriage comprises a ramp ridge at the distal end, the ramp ridge configured for engagement with a collar of the device.
69. The carriage of claim 68, wherein the ramp ridge further comprises a straight edge and an arcuate edge meeting at one point configured to cooperate with the collar of the device.
70. The carriage of claim 68, wherein the ramp ridge is helical.
71. The carriage of claim 66, wherein at the proximal end of the lower portion of the carriage, the carriage further comprises an abort rail, an injection rail and a lock rail, the lock rail having a slot.
72. The carriage of claim 71, wherein the slot of the lock rail is U-shaped.
73. A device for dispensing a medicament, the device comprising:
- a housing having a proximal end, the housing having a container disposed within the housing, the container configured to hold a medicament, the container having a needle at a proximal end, and a stopper disposed within the container;
 - a plunger having a distal end and a proximal end, the proximal end of the plunger configured to engage the stopper, the distal end of the plunger configured to engage a first resilient member and move the stopper within the container to dispense the medicament from the container and out of the needle;
 - a carriage having at least a portion that engages a constrainer, the constrainer disposed within the carriage and holding the container therein, the constrainer having audible and/or tactile feedback member to indicate the medicament dispensing, the carriage rotatable relative to the housing;

a collar having a distal end and a proximal end, the distal end of the collar configured to engage the carriage and cause rotation of the carriage, the proximal end of the collar configured to engage a second resilient member;

a skin sensor having a distal end and a proximal end, the distal end of the skin sensor configured to engage the second resilient member, and the proximal end of the skin sensor configured to contact skin; and

a cap configured to engage the proximal end of the housing to reduce or prevent movement of the skin sensor.

74. The device of claim 73, wherein the constrainer comprises a cylindrical body and a wing member, the cylindrical body having a proximal end and a distal end, the cylindrical body configured to contact the container at the proximal end and configured to contact the plunger at the distal end, the wing member extending along a longitudinal axis of the cylindrical body and comprising a feedback arm, a wing body, and a bridge member connecting the body to the wing member.

75. The device of claim 74, wherein the constrainer further comprises a retaining clip between the proximal end and distal end of the cylindrical body, the retaining clip configured to suspend the container in the carriage.

76. The device of claim 74, wherein the wing body is substantially rectangular.

77. The device of claim 74, wherein the wing body comprises a first surface, a second surface opposite the first surface and a side surface disposed between the first and second surfaces, the first surface having a feedback arm and the bridge member connected to the wing body, the second surface having grooves and ridges.

78. The device of claim 77, wherein the first and the second surfaces are substantially rectangular.

79. The device of claim 74, wherein the bridge member bisects the wing body defining an upper wing above the cylindrical body and a lower wing below the cylindrical body of the constrainer.

80. The device of claim 79, wherein a groove on the second surface of the upper wing is larger than a groove on the second surface of the lower wing.

81. The device of claim 80, wherein the side surface of the wing body has grooves and ridges.

82. The device of claim 81, wherein a side surface on the upper wing has a groove and a side surface on the lower wing has a second groove.

83. The device of claim 74, wherein the constrainer is monolithic.

84. The device of claim 74, wherein the wing body has at least two grooves.

85. The device of claim 80, wherein the upper wing is longer than the lower wing.

86. The device of claim 74, wherein the feedback arm comprises an upper arm, a lower arm and an elbow joint connecting the upper arm and the lower arm.

87. The device of claim 86, wherein the upper arm comprises a first end adjacent to the first surface of the upper wing and a second end comprising a tip which protrudes past the elbow joint to form an L-shape with the lower arm such that the lower arm is longer than the tip of the upper arm.

88. The device of claim 86, wherein the feedback arm extends toward the cylindrical body such that a U-shape is formed between the upper arm, the lower arm and the cylindrical body.

89. The device of claim 74, wherein the bridge member comprises a rectangular arm and a triangular support, wherein the triangular support abuts the first surface of the lower wing.

90. The device of claim 75, wherein the cylindrical body of the constrainer has a cutout around the retaining clip of the constrainer.

91. The device of claim 90, wherein the cutout is substantially rectangular forming a U shape around the retaining clip of the constrainer.

92. The device of claim 75, wherein the retaining clip is a rectangular piece on the periphery of the circumference of the constrainer.

93. The device of claim 75, wherein the retaining clip comprises a body having a distal end adjacent to the distal end of the constrainer and a proximal end adjacent to a cutout in the constrainer.

94. The device of claim 93, wherein the body of the retaining clip has a tapered and/or arcuate surface pointing toward an inner surface of the constrainer.

95. The device of claim 93, wherein the retaining clip further comprises a tab portion extending toward the inner surface of the constrainer.

96. The device of claim 88, wherein the constrainer is configured to produce the audible and /or tactile sound providing a signal that the plunger has been activated to push the medicament inside the container and out of the needle when the plunger contacts the U-shape of the feedback arm.

97. The device of claim 96, wherein the feedback arm is flexible relative to the housing such that an upper portion of the plunger is configured to move past the feedback arms.

98. The device of claim 97, wherein the upper arm of the feedback arm is configured to expand horizontally away from the constrainer body allowing the plunger to move longitudinally in the container.

99. A constrainer for a device for injecting a medicament, the constrainer comprising a cylindrical body and a wing member, the cylindrical body having a proximal end and a distal end, the cylindrical body configured to contact the container at the proximal end and configured to contact the plunger at the distal end, the wing member extending along a longitudinal axis of the cylindrical body and comprising a feedback arm, a wing body, and a bridge member connecting the body to the wing member.

100. A method of injecting a dose of a medicament, the method comprising injecting the dose of the medicament at an injection site using an injection device, the injection device comprising:

- a housing having a proximal end, the housing having a container disposed within the housing, the container configured to hold a medicament, the container having a needle at a proximal end, and a stopper disposed within the container;

- a plunger having a distal end and a proximal end, the proximal end of the plunger configured to engage the stopper, the distal end of the plunger configured to engage a first resilient member and move the stopper within the container to dispense the medicament from the container and out of the needle;

- a carriage having at least a portion that engages a constrainer, the constrainer disposed within the carriage and holding the container therein, the constrainer having audible and/or tactile feedback member to indicate the medicament dispensing, the carriage rotatable relative to the housing;

- a collar having a distal end and a proximal end, the distal end of the collar configured to engage the carriage and cause rotation of the carriage, the proximal end of the collar configured to engage a second resilient member;

- a skin sensor having a distal end and a proximal end, the distal end of the skin sensor configured to engage the second resilient member, and the proximal end of the skin sensor configured to contact skin; and

- a cap configured to engage the proximal end of the housing to reduce or prevent movement of the skin sensor.

101. The method of claim 100, further comprising removing the cap from the housing prior to injecting the dose of the medicament at the injection site; applying the skin sensor to the

injection site with the injection force to cause the needle to pierce a skin of a patient and allowing the medicament to be injected from the container through the needle; and withdrawing the needle from the injection site.

102. The method of claim 101, wherein the applying the skin sensor to the injection site and the withdrawing of the needle from the injection site are performed manually.

103. The method of claim 101, wherein the applying the skin sensor to the injection site with the injection force causes the second resilient member of the device to be compressed and engage the collar, and the collar rotates the carriage, and on rotation of the carriage, the first resilient member engages the plunger to inject the medicament from the container and out of the needle.

104. The method of claim 101, wherein the dose of the medicament is in liquid form.

105. The method of claim 104, wherein the medicament dose comprises an analgesic agent, an anti-inflammatory agent, a hormone, a beta agonist agent, an alpha agonist agent, a beta antagonist agent, an alpha antagonist agent, a benzodiazepine, a glucose modulator, a narcotic, a narcotic antagonist, a cholinergic agent, an anti-cholinergic agent, a muscarinic agonist agent, a muscarinic antagonist agent, a steroid, a chloride salt, an iodide salt, a cholinesterase reactivator agent, a cholinesterase agonist, an antimicrobial agent, an anti-arrhythmic agent, a vasodilator agent, a vasoconstrictor agent, an anti-coagulant agent, a cardiovascular agent, an anti-parkinsonian agent, an anti-psychotic agent, an immunosuppressant agent, an antihistamine, selective serotonin receptor agonist, or a combination thereof.

106. The method of claim 105, wherein the medicament comprises glucagon or naloxone.

107. The device of claim 73, wherein the device is disposable and comprises a single dose of medicament.

108. The device of claim 73, wherein skin sensor is configured to retract when the needle is injected and extend to surround the needle after the medicament is injected.

109. The device of claim 73, wherein first resilient member is in a compressed state before the injection force is applied to the skin sensor.

110. The device of any of claims 1-19, 34-54, 63-65, 73-98 and 107-109, wherein the device is sterilizable.

111. The removable cap of any of claims 28-33, wherein the cap is sterilizable.

112. The carriage of claims any of claims 66-72, wherein the carriage is sterilizable.

113. The constrainer of claim 99, wherein the constrainer is sterilizable.

114. The method of any of claims 20-27, 55-62 and 100-106, wherein the dose of medicament is sterilized.