CLAIMS

What is claimed is:

1). A method of inhibiting, preventing or treating diarrhea or dysentery and/or maintaining appropriate electrolyte and fluid levels in the colon of a subject having a condition associated with diarrhea or dysentery comprising administering an effective amount of an anti-CGRP antibody or anti-CGRP antibody fragment or an anti-CGRP receptor antibody or antibody fragment.

2) The method of Claim 1, wherein the diarrhea or dysentery is associated with increased CGRP.

3). The method of claim 1 or 2, wherein the diarrhea is acute diarrhea or chronic diarrhea.

4) The method of claim 1 or 2, wherein the diarrhea comprises osmotic diarrhea, secretory diarrhea, motility diarrhea, exudative diarrhea, and/or inflammatory diarrhea.

5). The method of claim 1 or 2, wherein diarrhea is caused by a chronic or acute condition selected from a functional bowel disorder, irritable bowel syndrome, coeliac disease, pancreatic disease, pancreatitis, type 1 or type 2 diabetes, cystic fibrosis, Crohn's disease, diabetic neuropathy, menstruation, hyperthyroidism, hormone imbalance, enteritis, an inflammatory bowel disease, microscopic colitis, ischemic bowel disease, ulcerative colitis, mucositis, or tuberculosis.

6). The method of claim 1 or 2, wherein the condition associated with diarrhea is a bacterial, parasitic or viral induced diarrhea.

7) The method of claim 1 or 2, wherein the condition resulting in diarrhea is a parasite selected from Entaamoeba histolytica, Giardia, or another protozoan.

8) The method of claim 1 or 2,, wherein the condition resulting in diarrhea is a bacterium selected from E coli, Shigella, Entaamoeba histolytica, Salmonella, Campylobacter, or Clostridium difficile.

9) The method of claim 1 or 2, wherein the condition resulting in diarrhea is a virus selected from rotavirus, RSV, HIV, norvovirus, adenovirus, and astrovirus.

10) The method of claim 1 or 2, wherein the condition resulting in diarrhea is food poisoning.

11). The method of claim 1 or 2, wherein the condition associated with diarrhea is a functional bowel disorder selected from the group consisting of gastro-esophageal reflux, dyspepsia, irritable bowel syndrome, functional abdominal pain syndrome, bile acid malabsorption, and diverticulitis.

12). The method according to claim 1 or 2, wherein the associated with diarrhea is an inflammatory bowel disease is selected from the group consisting of Crohn's disease, ileitis, collagenous colitis, lymphocytic colitis, and ulcerative colitis.

13). The method of claim 1 or 2, wherein the condition associated with diarrhea is a cancer or a cancer treatment associated with diarrhea.

14). The method of claim 13 wherein the cancer is medullary thyroid carcinoma, hormone secreting tumor condition, renal cancer, liver cancer, or a colorectal cancer.

15). The method of claim 13 wherein the cancer treatment associated with diarrhea is selected from chemotherapy, cytokine therapy and radiation or a combination thereof.

16) The method of claim 13 or 15, wherein said treatment results in mucositis or damage to the intestinal brush border.

17). The method of claim 15, wherein the chemotherapy includes a platinum compound.

18). The method of claim 1 or 2, wherein the condition associated with diarrhea is a drug, chemotherapy, an immunoregimen, cell therapy, and/or radiation therapy.

19). The method of Claim 18, wherein the drug associated with diarrhea is an antibiotic, analgesic agent such as an NSAID or opioid compound, antidepressant, or hormone.

20). The method of claim 1 or 2, wherein the antibody or antibody fragment is administered as a monotherapy.

21). The method of claim 1 or 2, wherein the antibody or antibody fragment is administered with another anti-diarrhea treatment agent.

22) The method of claim 21, wherein the other agent is an anti-motility agent such as loperamide, a bismuth compound, codeine, zinc compound, bile acid sequestrant such as cholestryamine, colestipol, or colesevelam, electrolyte solution or probiotic.

23). The method of any one of claims 1-22 wherein the antibody or antibody fragment is an anti-human CGRP antibody or antibody fragment which specifically binds to the same or an overlapping linear or conformational epitope(s) and/or competes for binding to the same or an overlapping linear or conformational epitope(s) on an intact CGRP polypeptide or fragment thereof as an anti-human CGRP antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

24). The method of any one of claims 1-23 wherein the antibody or antibody fragment specifically binds to the same or an overlapping linear or conformational epitope(s) and/or competes for binding to the same or an overlapping linear or conformational epitope(s) on an intact human CGRP polypeptide or a fragment thereof as Ab3, Ab6, Ab13 or Ab14.

25). The method of any one of claims 1-24 wherein the antibody fragment is selected from a Fab fragment, a Fab' fragment, or a F(ab')2 fragment.

26). The method of claim 25, wherein said fragment is a Fab fragment.

27) The method of any one of claims 1-26, wherein said anti-human CGRP antibody or antibody fragment comprises 1, 2, 3, 4, 5 or all 6 CDRs identical to those contained in an anti-human CGRP antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

28) The method of claim 27, wherein at least 2 of the CDRs are identical to those contained in an antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

29) The method of claim 27, wherein at least 3 of the CDRs are identical to those contained in an antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

30) The method of claim 27, wherein at least 4 of the CDRs are identical to those contained in an antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

31) The method of claim 27, wherein at least 5 of the CDRs are identical to those contained in an antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

32) The method of claim 27, wherein all 6 of the CDRs are identical to those contained in an antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

33). The method of any one of claims 1-32 wherein the antibody or antibody fragment comprises a variable light chain comprising the CDR 1 sequence of SEQ ID NO:25, the CDR 2 sequence of SEQ ID NO:26, and the CDR 3 sequence of SEQ ID NO:27, and/or a variable heavy chain comprising the CDR 1 sequence of SEQ ID NO:28, the CDR 2 sequence of SEQ ID NO:29, and the CDR 3 sequence of SEQ ID NO:30.

34). The method of any one of claims 1-32 wherein the antibody or antibody fragment comprises a variable light chain comprising the CDR 1 sequence of SEQ ID NO:55, the CDR 2 sequence of SEQ ID NO:56, and the CDR 3 sequence of SEQ ID NO:57, and/or a variable heavy chain comprising the CDR 1 sequence of SEQ ID NO:58, the CDR 2 sequence of SEQ ID NO:59, and the CDR 3 sequence of SEQ ID NO:60.

35). The method of any one of claims 1-32 wherein the antibody or antibody fragment comprises at least 2 complementarity determining regions (CDRs) in each of the variable light and the variable heavy regions which are identical to those contained in an anti-human CGRP antibody selected from Ab2, Ab3, Ab4, Ab5, or Ab6, Ab13 or Ab14

36). The method of any one of claims 1-32 wherein the antibody or antibody fragment comprises at least 3, 4, 5 or 6 complementarity determining regions (CDRs) in each of the variable light and the variable heavy regions which are identical to those contained in Ab3, Ab6, Ab13 or Ab14.

37). The method of any one of claims 1-36 wherein the antibody or antibody fragment is non-glycosylated or lacks N-glycosylation or if glycosylated only contains only mannose residues.

38). The method of any one of claims 1-37 wherein the antibody or antibody fragment contains an Fc region that has been modified to alter effector function, half-life, proteolysis, and/or glycosylation.

39). The method of any one of claims 1-38 wherein the antibody or antibody fragment is a humanized, single chain or chimeric antibody.

40). The method of any one of claims 1-39 wherein the antibody or antibody fragment specifically binds to CGRP expressing human cells and/or to circulating soluble CGRP molecules *in vivo*.

41). The method of any one of claims 1-40 wherein the antibody or antibody fragment comprises a V_H polypeptide sequence selected from: SEQ ID NO: 3, 13, 23, 33, 43, 53, 63, 73, 83, 93, 103, 113, 123, or 133, or a variant thereof at least 90% identical thereto; and further comprising a V_L polypeptide sequence selected from: SEQ ID NO: 1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111, 121 or 131, or a variant thereof at least 90% identical thereto, wherein one or more of the framework (FR) or CDR residues in said V_H or V_L polypeptide has been substituted with another amino acid residue resulting in an anti-CGRP antibody that specifically binds CGRP.

42). The method of claim 41 wherein one or more of said FR residues are substituted with an amino acid present at the corresponding site in a parent rabbit anti-CGRP antibody from which the complementarity determining regions (CDRs) contained in said V_H or V_L polypeptides have been derived or by a conservative amino acid substitution.

43). The method of any one of Claims 1-42, wherein said antibody or antibody fragment is humanized.

44). The method of any one of Claims 1-42, wherein said antibody or antibody fragment is chimeric.

45). The method of any one of Claims 1-39, wherein said antibody or antibody fragment comprises a single chain antibody.

46.). The method of claim 44, wherein said chimeric antibody comprises a human F_c.

47). The method of claim 46, wherein said human F_c is derived from IgG1, IgG2, IgG3, or IgG4.

48). The method of any one of claims 1-47 wherein the antibody or antibody fragment inhibits the association of CGRP with CGRP-R and/or multimers thereof, one or more additional proteins in a CGRP-CGRP-R complex, and/or antagonizes the biological effects thereof.

49). The method of claim 41 wherein the antibody or antibody fragment comprises a polypeptide sequence having at least 90% or greater homology to any one of the polypeptide sequences recited therein.

50). The method of claim 41 wherein the antibody or antibody fragment comprises a polypeptide sequence having at least 95% or greater homology to any one of the polypeptide sequences recited therein.

51). The method of any one of Claims 1-50, wherein the CGRP antibody or antibody fragment binds to CGRP with an off-rate (K_{off}) of less than or equal to 10^{-4} S^{-1}, $5x10^{-5}$ S^{-1}, 10^{-5} S^{-1}, $5x10^{-6}$ S^{-1}, 10^{-6} S^{-1}, $5x10^{-7}$ S^{-1}, or 10^{-7} S^{-1}.

52). The method of any one of Claims 1-51 wherein the antibody or antibody fragment inhibits the production of CGRP with CGRP-R and/or multimers thereof, and the production of CGRP with CGRP-R and one or more additional proteins in a complex.

53). The method of any one of claims 1-52 wherein the anti-CGRP antibody or antibody fragment binds to the same or an overlapping CGRP epitope as an anti-CGRP antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

54). The method of any one of claims 1-53 wherein the anti-CGRP antibody or antibody fragment comprises one or more of the CDRs contained in the V_H polypeptide sequences selected from: SEQ ID NO: 3, 13, 23, 33, 43, 53, 63, 73, 83, 93, 103, 113, 123, or 133 and/or one or more of the CDRs contained in the V_L polypeptide sequences selected from: SEQ ID NO: 1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111, 121 or 131.

55). The method of any one of claims 1-54 wherein the antibody or antibody fragment is administered intramuscularly, subcutaneously, intravenously, rectally, by infusion, orally, transdermally or via inhalation.

56). The method of any one of claims 1-54 wherein the antibody or antibody fragment is administered intravenously.

57). The method of claim 1 or 2, wherein the CGRP-associated diarrhea is selected from diarrhea associated with irritable bowel syndrome, inflammatory bowel disease, Crohn's disease, ileitis, ulcerative colitis, cholera, pancreatic disease, lactose intolerance, fructose malabsorption, malabsorption, magnesium overdose or overingestion, vitamin C overdose or overingestion, sorbitol overdose or overingestion, food poisoning, *E. coli* infection, enzyme deficiency, mucosal abnormality, celiac disease, gluten intolerance, pernicious anemia, food allergy, food intolerance, short bowel syndrome, radiation fibrosis, diarrhea

associated with chemotherapy, orlistat treatment, cystic fibrosis, pancreatitis, chronic ethanol ingestion, ischemic bowel disease, microscopic colitis, bile salt malabsorption (primary bile acid diarrhea), elevated seratonin secretion or levels, or toddler's diarrhea.

58). The method of claim 1 or 2, wherein the treatment further includes the administration of another therapeutic agent or regimen selected from the group consisting of: antibiotics, antivirals, absorbents, anti-motility medications, bismuth compounds, bismuth subsalicylate, bile acid sequestrants, probiotics, digestive enzymes, lactase, zinc, oral rehydration therapy, and any combination thereof.

59). The method of claim 58, wherein said anti-motility agents are selected from the group consisting of loperamide (Imodium), diphenoxylate with atropine (Lomotil), opiates, paregoric tincture of opium, codeine, and morphine.

60) The method of claim 58, wherein said bile acid sequestrants are selected from the group consisting of: cholestyramine, colestipol and colesevelam.

61). The method of claim 1 or 2, wherein the anti-CGRP antibody or antibody fragment having binding specificity for CGRP comprises variable light chain CDR1, CDR2, and CDR3 polypeptide sequences and variable heavy chain CDR1, CDR2, and CDR3 polypeptide sequences selected from the following:

	V_L CDR1	V_L CDR2	V_L CDR3	V_H CDR1	V_H CDR2	V_H CDR3
A	Seq ID No: 5	Seq ID No: 6	Seq ID No: 7	Seq ID No: 8	Seq ID No: 9	Seq ID No: 10
B	Seq ID No: 15	Seq ID No: 16	Seq ID No: 17	Seq ID No: 18	Seq ID No: 19	Seq ID No: 20
C	Seq ID No: 25	Seq ID No: 26	Seq ID No: 27	Seq ID No: 28	Seq ID No: 29	Seq ID No: 30
D	Seq ID No: 35	Seq ID No: 36	Seq ID No: 37	Seq ID No: 38	Seq ID No: 39	Seq ID No: 40
E	Seq ID No: 45	Seq ID No: 46	Seq ID No: 47	Seq ID No: 48	Seq ID No: 49	Seq ID No: 50
F	Seq ID No: 55	Seq ID No: 56	Seq ID No: 57	Seq ID No: 58	Seq ID No: 59	Seq ID No: 60
G	Seq ID	Seq ID	Seq ID	Seq ID	Seq ID	Seq ID

	No: 65	No: 66	No: 67	No: 68	No: 69	No: 70
H	Seq ID No: 75	Seq ID No: 76	Seq ID No: 77	Seq ID No: 78	Seq ID No: 79	Seq ID No: 80
I	Seq ID No: 85	Seq ID No: 86	Seq ID No: 87	Seq ID No: 88	Seq ID No: 89	Seq ID No: 90
J	Seq ID No: 95	Seq ID No: 96	Seq ID No: 97	Seq ID No: 98	Seq ID No: 99	Seq ID No: 100
K	Seq ID No: 105	Seq ID No: 106	Seq ID No: 107	Seq ID No: 108	Seq ID No: 109	Seq ID No: 110
L	Seq ID No: 115	Seq ID No: 116	Seq ID No: 117	Seq ID No: 118	Seq ID No: 119	Seq ID No: 120
M	Seq ID No: 125	Seq ID No: 126	Seq ID No: 127	Seq ID No: 128	Seq ID No: 129	Seq ID No: 130
N	Seq ID No: 135	Seq ID No: 136	Seq ID No:137	Seq ID No: 138	Seq ID No: 139	Seq ID No: 140

62). The method of claim 61, wherein said antibody or antibody fragment is an scFv, camelbody, nanobody, IgNAR (single-chain antibodies derived from sharks), Fab, Fab', or F(ab')2 fragment.

63). The method of claim 61, wherein said anti-CGRP antibody or antibody fragment is a Fab fragment.

64). The method of claim 61, wherein said antibody or antibody fragment comprises a variable light chain polypeptide sequence and a variable heavy chain polypeptide sequence selected from the following:

	Variable Light Chain	Variable Heavy Chain
A	Seq ID No: 1	Seq ID No: 3
B	Seq ID No: 11	Seq ID No: 13
C	Seq ID No: 21	Seq ID No: 23
D	Seq ID No: 31	Seq ID No: 33
E	Seq ID No: 41	Seq ID No: 43
F	Seq ID No: 51	Seq ID No: 53
G	Seq ID No: 61	Seq ID No: 63
H	Seq ID No: 71	Seq ID No: 73
I	Seq ID No: 81	Seq ID No: 83
J	Seq ID No: 91	Seq ID No: 93

K	Seq ID No: 101	Seq ID No: 103
L	Seq ID No: 111	Seq ID No: 113
M	Seq ID No: 121	Seq ID No: 123
N	Seq ID No: 131	Seq ID No: 133

65). The method of claim 61, wherein said antibody or antibody fragment comprises a light chain polypeptide sequence and a heavy chain polypeptide sequence selected from the following:

	Light Chain	Heavy Chain
Ab1	Seq ID No: 2	Seq ID No: 4
Ab2	Seq ID No: 12	Seq ID No: 14
Ab3	Seq ID No: 22	Seq ID No: 24
Ab4	Seq ID No: 32	Seq ID No: 34
Ab5	Seq ID No: 42	Seq ID No: 44
Ab6	Seq ID No: 52	Seq ID No: 54
Ab7	Seq ID No: 62	Seq ID No: 64
Ab8	Seq ID No: 72	Seq ID No: 74
Ab9	Seq ID No: 82	Seq ID No: 84
Ab10	Seq ID No: 92	Seq ID No: 94
Ab11	Seq ID No: 102	Seq ID No: 104
Ab12	Seq ID No: 112	Seq ID No: 114
Ab13	Seq ID No: 122	Seq ID No: 124
Ab14	Seq ID No: 132	Seq ID No: 134

66). The method of claim 61, wherein said antibody or antibody fragment comprises a variable light chain and variable heavy chain polypeptide sequences are each at least 90% identical to one of the variable light chain polypeptide sequences of SEQ ID NOS: 1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111, 121, or 131, and one of the variable heavy chain polypeptide sequences of SEQ ID NOS: 3, 13, 23, 33, 43, 53, 63, 73, 83, 93, 103, 113, 123 or 133, respectively.

67). The method of claim 61, wherein said antibody or antibody fragment is chimeric or humanized.

68). The method of claim 61, wherein said anti-CGRP antibody or antibody fragment is entirely aglycosylated or lacks N-glycosylation or comprises only mannose residues.

69). The method of claim 61, wherein said anti-CGRP antibody or antibody fragment comprises a human constant domain.

70). The method of claim 61, wherein said anti-CGRP antibody or antibody fragment is an IgG1, IgG2, IgG3 or IgG4 antibody.

71). The method of claim 61, wherein said anti-CGRP antibody or antibody fragment contains an Fc region that has been modified to alter at least one of effector function, half-life, proteolysis, and/or glycosylation.

72). The method of claim 61, wherein said anti-CGRP antibody or antibody fragment has an Fc region that contains a mutation that alters or eliminates glycosylation or eliminates N-glycosylation.

73). The method of claim 61, wherein said anti-CGRP antibody or antibody fragment is directly or indirectly attached to a detectable label or therapeutic agent.

74). The method of claim 61, wherein said anti-CGRP antibody or antibody fragment further comprises an effector moiety.

75). The method of claim 74, wherein said effector moiety is a detectable moiety or a functional moiety.

76). The method of claim 75, wherein said detectable moiety is a fluorescent dye, an enzyme, a substrate, a bioluminescent material, a radioactive material, or a chemiluminescent material.

77). The method of claim 75, wherein said functional moiety is streptavidin, avidin, biotin, a cytotoxin, a cytotoxic agent, or a radioactive material.

CLAIMS

1). Use of an effective amount of an anti-CGRP antibody or anti-CGRP antibody fragment or an anti-CGRP receptor antibody or antibody fragment in the manufacture of a medicament for the therapeutic and/or prophylactic treatment of diarrhea or dysentery and/or maintaining appropriate electrolyte and fluid levels in the colon of a subject having a condition associated with diarrhea or dysentery.

2) The use of Claim 1, wherein the diarrhea or dysentery is associated with increased CGRP.

3). The use of claim 1 or 2, wherein the diarrhea is acute diarrhea or chronic diarrhea.

4) The use of claim 1 or 2, wherein the diarrhea comprises osmotic diarrhea, secretory diarrhea, motility diarrhea, exudative diarrhea, and/or inflammatory diarrhea.

5). The use of claim 1 or 2, wherein diarrhea is caused by a chronic or acute condition selected from a functional bowel disorder, irritable bowel syndrome, coeliac disease, pancreatic disease, pancreatitis, type 1 or type 2 diabetes, cystic fibrosis, Crohn's disease, diabetic neuropathy, menstruation, hyperthyroidism, hormone imbalance, enteritis, an inflammatory bowel disease, microscopic colitis, ischemic bowel disease, ulcerative colitis, mucositis, or tuberculosis.

6). The use of claim 1 or 2, wherein the condition associated with diarrhea is a bacterial, parasitic or viral induced diarrhea.

7) The use of claim 1 or 2, wherein the condition resulting in diarrhea is a parasite selected from Entaamoeba histolytica, Giardia, or another protozoan.

8) The use of claim 1 or 2, wherein the condition resulting in diarrhea is a bacterium selected from E coli, Shigella, Entaamoeba histolytica, Salmonella, Campylobacter, or Clostridium difficile.

9) The use of claim 1 or 2, wherein the condition resulting in diarrhea is a virus selected from rotavirus, RSV, HIV, norvovirus, adenovirus, and astrovirus.

10) The use of claim 1 or 2, wherein the condition resulting in diarrhea is food poisoning.

11). The use of claim 1 or 2, wherein the condition associated with diarrhea is a functional bowel disorder selected from the group consisting of gastro-esophageal reflux, dyspepsia, irritable bowel syndrome, functional abdominal pain syndrome, bile acid malabsorption, and diverticulitis.

12). The use according to claim 1 or 2, wherein the condition associated with diarrhea is an inflammatory bowel disease is selected from the group consisting of Crohn's disease, ileitis, collagenous colitis, lymphocytic colitis, and ulcerative colitis.

13). The use of claim 1 or 2, wherein the condition associated with diarrhea is a cancer or a cancer treatment associated with diarrhea.

14). The use of claim 13 wherein the cancer is medullary thyroid carcinoma, hormone secreting tumor condition, renal cancer, liver cancer, or a colorectal cancer.

15). The use of claim 13 wherein the cancer treatment associated with diarrhea is selected from chemotherapy, cytokine therapy and radiation or a combination thereof.

16) The use of claim 13 or 15, wherein said treatment results in mucositis or damage to the intestinal brush border.

17). The use of claim 15, wherein the chemotherapy includes a platinum compound.

18). The use of claim 1 or 2, wherein the condition associated with diarrhea is a drug, chemotherapy, an immunoregimen, cell therapy, and/or radiation therapy.

19). The use of Claim 18, wherein the drug associated with diarrhea is an antibiotic, analgesic agent such as an NSAID or opioid compound, antidepressant, or hormone.

20). The use of claim 1 or 2, wherein the antibody or antibody fragment containing medicament is to be administered as a monotherapy.

21). The use of claim 1 or 2, wherein the antibody or antibody fragment containing medicament is to be administered with another anti-diarrhea treatment agent.

22) The use of claim 21, wherein the other agent is an anti-motility agent such as loperamide, a bismuth compound, codeine, zinc compound, bile acid sequestrant such as cholestryamine, colestipol, or colesevelam, electrolyte solution or probiotic.

23). The use of any one of claims 1-22 wherein the antibody or antibody fragment is an anti-human CGRP antibody or antibody fragment which specifically binds to the same or an overlapping linear or conformational epitope(s) and/or competes for binding to the same or an overlapping linear or conformational epitope(s) on an intact CGRP polypeptide or fragment thereof as an anti-human CGRP antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

24). The use of any one of claims 1-23 wherein the antibody or antibody fragment specifically binds to the same or an overlapping linear or conformational epitope(s) and/or competes for binding to the same or an overlapping linear or conformational epitope(s) on an intact human CGRP polypeptide or a fragment thereof as Ab3, Ab6, Ab13 or Ab14.

25). The use of any one of claims 1-24 wherein the antibody fragment is selected from a Fab fragment, a Fab' fragment, or a F(ab')2 fragment.

26). The use of claim 25, wherein said fragment is a Fab fragment.

27) The use of any one of claims 1-26, wherein said anti-human CGRP antibody or antibody fragment comprises 1, 2, 3, 4, 5 or all 6 CDRs identical to those contained in an anti-human CGRP antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

28) The use of claim 27, wherein at least 2 of the CDRs are identical to those contained in an antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

29) The use of claim 27, wherein at least 3 of the CDRs are identical to those contained in an antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

30) The use of claim 27, wherein at least 4 of the CDRs are identical to those contained in an antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

31) The use of claim 27, wherein at least 5 of the CDRs are identical to those contained in an antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

32) The use of claim 27, wherein all 6 of the CDRs are identical to those contained in an antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

33). The use of any one of claims 1-32 wherein the antibody or antibody fragment comprises a variable light chain comprising the CDR 1 sequence of SEQ ID NO:25, the CDR 2 sequence of SEQ ID NO:26, and the CDR 3 sequence of SEQ ID NO:27, and/or a variable heavy chain comprising the CDR 1 sequence of SEQ ID NO:28, the CDR 2 sequence of SEQ ID NO:29, and the CDR 3 sequence of SEQ ID NO:30.

34). The use of any one of claims 1-32 wherein the antibody or antibody fragment comprises a variable light chain comprising the CDR 1 sequence of SEQ ID NO:55, the CDR 2 sequence of SEQ ID NO:56, and the CDR 3 sequence of SEQ ID NO:57, and/or a variable heavy chain comprising the CDR 1 sequence of SEQ ID NO:58, the CDR 2 sequence of SEQ ID NO:59, and the CDR 3 sequence of SEQ ID NO:60.

35). The use of any one of claims 1-32 wherein the antibody or antibody fragment comprises at least 2 complementarity determining regions (CDRs) in each of the variable light and the variable heavy regions which are identical to those contained in an anti-human CGRP antibody selected from Ab2, Ab3, Ab4, Ab5, or Ab6, Ab13 or Ab14

36). The use of any one of claims 1-32 wherein the antibody or antibody fragment comprises at least 3, 4, 5 or 6 complementarity determining regions (CDRs) in each of the variable light and the variable heavy regions which are identical to those contained in Ab3, Ab6, Ab13 or Ab14.

37). The use of any one of claims 1-36 wherein the antibody or antibody fragment is non-glycosylated or lacks N-glycosylation or if glycosylated only contains only mannose residues.

38). The use of any one of claims 1-37 wherein the antibody or antibody fragment contains an Fc region that has been modified to alter effector function, half-life, proteolysis, and/or glycosylation.

39). The use of any one of claims 1-38 wherein the antibody or antibody fragment is a humanized, single chain or chimeric antibody.

40). The use of any one of claims 1-39 wherein the antibody or antibody fragment specifically binds to CGRP expressing human cells and/or to circulating soluble CGRP molecules *in vivo*.

41). The use f any one of claims 1-40 wherein the antibody or antibody fragment comprises a V_H polypeptide sequence selected from: SEQ ID NO: 3, 13, 23, 33, 43, 53, 63, 73, 83, 93, 103, 113, 123, or 133, or a variant thereof at least 90% identical thereto; and further comprising a V_L polypeptide sequence selected from: SEQ ID NO: 1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111, 121 or 131, or a variant thereof at least 90% identical thereto, wherein one or more of the framework (FR) or CDR residues in said V_H or V_L polypeptide has been substituted with another amino acid residue resulting in an anti-CGRP antibody that specifically binds CGRP.

42). The use of claim 41 wherein one or more of said FR residues are substituted with an amino acid present at the corresponding site in a parent rabbit anti-CGRP antibody from which the complementarity determining regions (CDRs) contained in said V_H or V_L polypeptides have been derived or by a conservative amino acid substitution.

43). The use of any one of Claims 1-42, wherein said antibody or antibody fragment is humanized.

44). The use of any one of Claims 1-42, wherein said antibody or antibody fragment is chimeric.

45). The use of any one of Claims 1-39, wherein said antibody or antibody fragment comprises a single chain antibody.

46.). The use of claim 44, wherein said chimeric antibody comprises a human F_c.

47). The use of claim 46, wherein said human F_c is derived from IgG1, IgG2, IgG3, or IgG4.

48). The use of any one of claims 1-47 wherein the antibody or antibody fragment inhibits the association of CGRP with CGRP-R and/or multimers thereof, one or more additional proteins in a CGRP-CGRP-R complex, and/or antagonizes the biological effects thereof.

49). The use of claim 41 wherein the antibody or antibody fragment comprises a polypeptide sequence having at least 90% or greater homology to any one of the polypeptide sequences recited therein.

50). The use of claim 41 wherein the antibody or antibody fragment comprises a polypeptide sequence having at least 95% or greater homology to any one of the polypeptide sequences recited therein.

51). The use of any one of Claims 1-50, wherein the CGRP antibody or antibody fragment binds to CGRP with an off-rate (K_{off}) of less than or equal to 10^{-4} S^{-1}, $5x10^{-5}$ S^{-1}, 10^{-5} S^{-1}, $5x10^{-6}$ S^{-1}, 10^{-6} S^{-1}, $5x10^{-7}$ S^{-1}, or 10^{-7} S^{-1}.

52). The use of any one of Claims 1-51 wherein the antibody or antibody fragment inhibits the production of CGRP with CGRP-R and/or multimers thereof, and the production of CGRP with CGRP-R and one or more additional proteins in a complex.

53). The use of any one of claims 1-52 wherein the anti-CGRP antibody or antibody fragment binds to the same or an overlapping CGRP epitope as an anti-CGRP antibody selected from Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7, Ab8, Ab9, Ab10, Ab11, Ab12, Ab13 or Ab14.

54). The use of any one of claims 1-53 wherein the anti-CGRP antibody or antibody fragment comprises one or more of the CDRs contained in the V_H polypeptide sequences selected from: SEQ ID NO: 3, 13, 23, 33, 43, 53, 63, 73, 83, 93, 103, 113, 123, or 133 and/or one or more of the CDRs contained in the V_L polypeptide sequences selected from: SEQ ID NO: 1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111, 121 or 131.

55). The use of any one of claims 1-54 wherein the antibody or antibody fragment containing medicament is to be administered intramuscularly, subcutaneously, intravenously, rectally, by infusion, orally, transdermally or via inhalation.

56). The use of any one of claims 1-54 wherein the antibody or antibody fragment containing medicament is to be administered intravenously.

57). The use of claim 1 or 2, wherein the CGRP-associated diarrhea is selected from diarrhea associated with irritable bowel syndrome, inflammatory bowel disease, Crohn's disease, ileitis, ulcerative colitis, cholera, pancreatic disease, lactose intolerance, fructose malabsorption, malabsorption, magnesium overdose or overingestion, vitamin C overdose or overingestion, sorbitol overdose or overingestion, food poisoning, *E. coli* infection, enzyme deficiency, mucosal abnormality, celiac disease, gluten intolerance, pernicious anemia, food allergy, food intolerance, short bowel syndrome, radiation fibrosis, diarrhea associated with chemotherapy, orlistat treatment, cystic fibrosis, pancreatitis, chronic ethanol ingestion, ischemic bowel disease, microscopic colitis, bile salt malabsorption (primary bile acid diarrhea), elevated seratonin secretion or levels, or toddler's diarrhea.

58). The use of claim 1 or 2, that includes another medicament in the form of another therapeutic agent or regimen selected from the group consisting of: antibiotics, antivirals, absorbents, anti-motility medications, bismuth compounds, bismuth subsalicylate, bile acid sequestrants, probiotics, digestive enzymes, lactase, zinc, oral rehydration therapy, and any combination thereof.

59). The use of claim 58, wherein said anti-motility agents are selected from the group consisting of loperamide (Imodium), diphenoxylate with atropine (Lomotil), opiates, paregoric tincture of opium, codeine, and morphine.

60) The use of claim 58, wherein said bile acid sequestrants are selected from the group consisting of: cholestyramine, colestipol and colesevelam.

61). The use of claim 1 or 2, wherein the anti-CGRP antibody or antibody fragment having binding specificity for CGRP comprises variable light chain CDR1, CDR2, and CDR3 polypeptide sequences and variable heavy chain CDR1, CDR2, and CDR3 polypeptide sequences selected from the following:

	V_L CDR1	V_L CDR2	V_L CDR3	V_H CDR1	V_H CDR2	V_H CDR3
A	Seq ID No: 5	Seq ID No: 6	Seq ID No: 7	Seq ID No: 8	Seq ID No: 9	Seq ID No: 10
B	Seq ID No: 15	Seq ID No: 16	Seq ID No: 17	Seq ID No: 18	Seq ID No: 19	Seq ID No: 20
C	Seq ID No: 25	Seq ID No: 26	Seq ID No: 27	Seq ID No: 28	Seq ID No: 29	Seq ID No: 30
D	Seq ID No: 35	Seq ID No: 36	Seq ID No: 37	Seq ID No: 38	Seq ID No: 39	Seq ID No: 40
E	Seq ID No: 45	Seq ID No: 46	Seq ID No: 47	Seq ID No: 48	Seq ID No: 49	Seq ID No: 50
F	Seq ID No: 55	Seq ID No: 56	Seq ID No: 57	Seq ID No: 58	Seq ID No: 59	Seq ID No: 60
G	Seq ID No: 65	Seq ID No: 66	Seq ID No: 67	Seq ID No: 68	Seq ID No: 69	Seq ID No: 70
H	Seq ID No: 75	Seq ID No: 76	Seq ID No: 77	Seq ID No: 78	Seq ID No: 79	Seq ID No: 80
I	Seq ID No: 85	Seq ID No: 86	Seq ID No: 87	Seq ID No: 88	Seq ID No: 89	Seq ID No: 90

J	Seq ID No: 95	Seq ID No: 96	Seq ID No: 97	Seq ID No: 98	Seq ID No: 99	Seq ID No: 100
K	Seq ID No: 105	Seq ID No: 106	Seq ID No: 107	Seq ID No: 108	Seq ID No: 109	Seq ID No: 110
L	Seq ID No: 115	Seq ID No: 116	Seq ID No: 117	Seq ID No: 118	Seq ID No: 119	Seq ID No: 120
M	Seq ID No: 125	Seq ID No: 126	Seq ID No: 127	Seq ID No: 128	Seq ID No: 129	Seq ID No: 130
N	Seq ID No: 135	Seq ID No: 136	Seq ID No:137	Seq ID No: 138	Seq ID No: 139	Seq ID No: 140

62). The use of claim 61, wherein said antibody or antibody fragment is an scFv, camelbody, nanobody, IgNAR (single-chain antibodies derived from sharks), Fab, Fab', or F(ab')2 fragment.

63). The use of claim 61, wherein said anti-CGRP antibody or antibody fragment is a Fab fragment.

64). The use of claim 61, wherein said antibody or antibody fragment comprises a variable light chain polypeptide sequence and a variable heavy chain polypeptide sequence selected from the following:

	Variable Light Chain	Variable Heavy Chain
A	Seq ID No: 1	Seq ID No: 3
B	Seq ID No: 11	Seq ID No: 13
C	Seq ID No: 21	Seq ID No: 23
D	Seq ID No: 31	Seq ID No: 33
E	Seq ID No: 41	Seq ID No: 43
F	Seq ID No: 51	Seq ID No: 53
G	Seq ID No: 61	Seq ID No: 63
H	Seq ID No: 71	Seq ID No: 73
I	Seq ID No: 81	Seq ID No: 83
J	Seq ID No: 91	Seq ID No: 93
K	Seq ID No: 101	Seq ID No: 103
L	Seq ID No: 111	Seq ID No: 113
M	Seq ID No: 121	Seq ID No: 123
N	Seq ID No: 131	Seq ID No: 133

65). The use of claim 61, wherein said antibody or antibody fragment comprises a light chain polypeptide sequence and a heavy chain polypeptide sequence selected from the following:

	Light Chain	Heavy Chain
Ab1	Seq ID No: 2	Seq ID No: 4
Ab2	Seq ID No: 12	Seq ID No: 14
Ab3	Seq ID No: 22	Seq ID No: 24
Ab4	Seq ID No: 32	Seq ID No: 34
Ab5	Seq ID No: 42	Seq ID No: 44
Ab6	Seq ID No: 52	Seq ID No: 54
Ab7	Seq ID No: 62	Seq ID No: 64
Ab8	Seq ID No: 72	Seq ID No: 74
Ab9	Seq ID No: 82	Seq ID No: 84
Ab10	Seq ID No: 92	Seq ID No: 94
Ab11	Seq ID No: 102	Seq ID No: 104
Ab12	Seq ID No: 112	Seq ID No: 114
Ab13	Seq ID No: 122	Seq ID No: 124
Ab14	Seq ID No: 132	Seq ID No: 134

66). The use of claim 61, wherein said antibody or antibody fragment comprises a variable light chain and variable heavy chain polypeptide sequences are each at least 90% identical to one of the variable light chain polypeptide sequences of SEQ ID NOS: 1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111, 121, or 131, and one of the variable heavy chain polypeptide sequences of SEQ ID NOS: 3, 13, 23, 33, 43, 53, 63, 73, 83, 93, 103, 113, 123 or 133, respectively.

67). The use of claim 61, wherein said antibody or antibody fragment is chimeric or humanized.

68). The use of claim 61, wherein said anti-CGRP antibody or antibody fragment is entirely aglycosylated or lacks N-glycosylation or comprises only mannose residues.

69). The use of claim 61, wherein said anti-CGRP antibody or antibody fragment comprises a human constant domain.

70). The use of claim 61, wherein said anti-CGRP antibody or antibody fragment is an IgG1, IgG2, IgG3 or IgG4 antibody.

71). The use of claim 61, wherein said anti-CGRP antibody or antibody fragment contains an Fc region that has been modified to alter at least one of effector function, half-life, proteolysis, and/or glycosylation.

72). The use of claim 61, wherein said anti-CGRP antibody or antibody fragment has an Fc region that contains a mutation that alters or eliminates glycosylation or eliminates N-glycosylation.

73). The use of claim 61, wherein said anti-CGRP antibody or antibody fragment is directly or indirectly attached to a detectable label or therapeutic agent.

74). The use of claim 61, wherein said anti-CGRP antibody or antibody fragment further comprises an effector moiety.

75). The use of claim 74, wherein said effector moiety is a detectable moiety or a functional moiety.

76). The use of claim 75, wherein said detectable moiety is a fluorescent dye, an enzyme, a substrate, a bioluminescent material, a radioactive material, or a chemiluminescent material.

77). The use of claim 75, wherein said functional moiety is streptavidin, avidin,

biotin, a cytotoxin, a cytotoxic agent, or a radioactive material.