

CLAIMS:

1. A pharmaceutical composition comprising:
 - a multispecific antibody, functional part or derivative thereof, comprising a first binding domain binding to EGFR and a second binding domain binding to LGR5;
 - 5 a buffer system comprising a histidine buffer and/or a citrate buffer;
 - a sugar component; and
 - a non-ionic surfactant.
2. The pharmaceutical composition as claimed in claim 1, wherein the sugar component is or comprises sucrose.
3. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the non-ionic surfactant is or
 10 comprises polysorbate 80.
4. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the buffer system comprises a histidine buffer system and the composition has a pH of 5-7.
5. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the buffer system comprises a citrate buffer system and the composition has a pH of 6.2-7.8.
- 15 6. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the antibody is present at a concentration of 0.5-150 mg/mL.
7. The pharmaceutical composition as claimed in any one of the preceding claims, wherein:

the sugar component is present at a concentration of 200-400 mM; or

the molar concentration ratio of sugar component to antibody is between 250:1 and 60,000:1.
- 20 8. The pharmaceutical composition as claimed in any one of the preceding claims, wherein:

the non-ionic surfactant is present at a concentration of 0.01-2 mg/mL; or

the molar concentration ratio of non-ionic surfactant to antibody is between 1:90 and 224:1.
9. The pharmaceutical composition as claimed in any one of the preceding claims, wherein:

the buffer system, or combination of buffer systems, is present at a concentration between 2 and 50 mM; or
- 25 the molar concentration ratio of buffer system (or combination of buffer systems) to antibody is between 2.9:1 and 7300:1.
10. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the buffer system consists of a citrate or histidine buffer system; or the composition comprises only a single buffer system.
11. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the composition is free of trehalose.
12. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the composition is free of
 30 polysorbate 20, and/or free of antioxidants, and/or free of chelators; and/or free of non-buffering salt tonicifiers, most preferably free of sodium chloride.
13. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the antibody is a bispecific antibody.
14. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the antibody comprises an EGFR
 35 binding domain comprising a heavy chain variable region (VH) that comprises the sequence of the VH chain of MF3370, MF3755, MF4280 or MF4289 as depicted in Figure 1 and/or wherein the antibody comprises an LGR5 binding domain comprising a heavy

chain variable region that comprises the sequence of the VH chain of MF5790, MF5803, MF5805, MF5808, MF5809, MF5814, MF5816, MF5817 or MF5818 as depicted in Figure 2.

15. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the antibody comprises a heavy chain sequence corresponding to any sequence of Figure 5a, 5b, 5c, 5d, 5e or 5f.

5 16. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the antibody comprises a binding domain comprising a light chain variable region (VL) that comprises the sequence of the VL chain as depicted in Figure 3.

17. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the antibody comprises a light chain constant region (CL) that comprises the sequence of the CL chain as depicted in Figure 3.

10 18. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the antibody comprises the VH amino acid sequence of MF3370 as depicted in Figure 1 and the VH amino acid sequence of MF5790 as depicted in Figure 2 and the VL amino acid sequence as depicted in Figure 3; or wherein the antibody comprises the VH amino acid sequence of MF3755 as depicted in Figure 1 and the VH amino acid sequence of MF5816 as depicted in Figure 2 and the VL amino acid sequence as depicted in Figure 3; or wherein the antibody comprises the VH amino acid sequence of MF4280 as depicted in Figure 1 and the VH amino acid sequence of MF5809 as depicted in Figure 2 and the VL amino acid sequence as depicted in Figure 3; or wherein the antibody
15 comprises the VH amino acid sequence of MF4289 as depicted in Figure 1 and the VH amino acid sequence of MF5818 as depicted in Figure 2 and the VL amino acid sequence as depicted in Figure 3.

19. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the antibody comprises EGFR variable heavy chain MF3755, MF3370, MF4280 or MF4289 as depicted in Figure 1, LGR5 variable heavy chain MF5790, MF5809, MF5816 or MF5818 as depicted in Figure 2, variable light chain (VL) as depicted in Figure 3, constant light chain (CL) as depicted in
20 Figure 3, the CH1 domain sequence as depicted in Figure 4, the hinge sequence as depicted in Figure 4, the CH2 domain sequence as depicted in Figure 4, the CH3-DE domain sequence as depicted in Figure 4, and the CH3-KK domain sequence as depicted in Figure 4.

20. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the composition is an aqueous composition comprising:

25 1-30 mg/mL bispecific antibody, functional part or derivative thereof, comprising a first binding domain binding to EGFR and a second binding domain binding to LGR5;

3-20 mM buffer system comprising a histidine buffer and/or a citrate buffer;

200-400 mM sugar and/or sugar alcohol component; and

0.01-2 mg/mL non-ionic surfactant;

30 wherein the composition has a pH between 5.4 and 7.4;

or

the composition is an aqueous composition comprising:

15-25 mg/mL bispecific antibody, functional part or derivative thereof, comprising a first binding domain binding to EGFR and a second binding domain binding to LGR5;

35 4-12 mM buffer system comprising a histidine buffer and/or a citrate buffer;

250-350 mM sucrose; and

0.1-1.5 mg/mL polysorbate 80;

wherein the composition has a pH between 5.4 and 7.4.

21. The pharmaceutical composition as claimed in any one of the preceding claims, consisting of:

20 mg/mL bispecific antibody, functional part or derivative thereof, comprising a first binding domain binding to EGFR and a second binding domain binding to LGR5;

10 mM histidine buffer system;

280 mM sucrose;

5 0.5 mg/mL polysorbate 80; and

water;

wherein the composition has a pH of 5.8-6.0.

22. The pharmaceutical composition as claimed in any one of the preceding claims, wherein the composition comprises:

10 a bispecific antibody, functional part or derivative thereof, comprising a first binding domain binding to EGFR and a second binding domain binding to LGR5;

a buffer system comprising a histidine buffer and/or a citrate buffer, wherein the molar concentration ratio of buffer system (or combination of buffer systems) to antibody is between 21:1 and 146:1;

a sugar and/or sugar alcohol component, wherein the molar concentration ratio of sugar and/or sugar alcohol component to antibody is between 1460:1 and 2920:1; and

15 a non-ionic surfactant, wherein the molar concentration ratio of non-ionic surfactant to antibody is between 1:18 and 11:1;

wherein the composition has a pH between 5.4 and 7.4;

or

the composition comprises:

20 a bispecific antibody, functional part or derivative thereof, comprising a first binding domain binding to EGFR and a second binding domain binding to LGR5;

a buffer system comprising a histidine buffer and/or a citrate buffer, wherein the molar concentration ratio of buffer system (or combination of buffer systems) to antibody is between 29:1 and 88:1;

sucrose, wherein the molar concentration ratio of sucrose to antibody is between 1825:1 and 2555:1; and

25 polysorbate 80, wherein the molar concentration ratio of polysorbate 80 to antibody is between 1:2 and 8.5:1;

wherein the composition has a pH between 5.4 and 7.4;

or

the composition consists of:

30 a bispecific antibody, functional part or derivative thereof, comprising a first binding domain binding to EGFR and a second binding domain binding to LGR5;

histidine buffer system, wherein the molar concentration ratio of histidine buffer system to antibody is 73:1;

sucrose, wherein the molar concentration ratio of sucrose to antibody is 2040:1;

polysorbate 80, wherein the molar concentration ratio of polysorbate 80 to antibody is 2.79:1; and

optionally water;

35 wherein the composition has a pH of 5.8-6.0.

23. A drug delivery device comprising a pharmaceutical composition as claimed in any one of the preceding claims.