

CLAIMS

1. Use of a progastrin-binding antibody, or an antigen-binding fragment thereof, for the manufacture of a medicament for the treatment of prostate cancer.
- 5 2. The use according to claim 1, wherein said progastrin-binding antibody, or antigen-binding fragment thereof, is selected among single chain antibodies, camelized antibodies, IgA1 antibodies, IgA2 antibodies, IgD antibodies, IgE antibodies, IgG1 antibodies, IgG2 antibodies, IgG3 antibodies, IgG4 antibodies and IgM antibodies.
- 10 3. The use according to any one of claims 1 or 2, wherein said progastrin-binding antibody, or an antigen-binding fragment thereof, is selected among N-terminal anti- progastrin antibodies and C-terminal anti-progastrin antibodies.
4. The use according to any one of claims 1 to 3, wherein said progastrin-binding antibody, or an antigen-binding fragment thereof, is a neutralizing antibody.
- 15 5. The use according to any one of claims 1 to 4, wherein said antibody is selected in the group consisting of:
 - An antibody comprising a heavy chain comprising CDR-H1 , CDR-H2 and CDR-H3 of amino acid sequences SEQ ID N° 4, 5 and 6, respectively, and a light chain comprising CDR-L1 , CDR-L2 and CDR-L3 of amino acid sequences SEQ ID N° 7, 8 and 9, respectively,
 - 20 - An antibody comprising a heavy chain comprising CDR-H1 , CDR-H2 and CDR-H3 of amino acid sequences SEQ ID N° 10, 11 and 12, respectively, and a light chain comprising CDR-L1 , CDR-L2 and CDR-L3 of amino acid sequences SEQ ID N° 13, 14 and 15, respectively,
 - 25 - An antibody comprising a heavy chain comprising CDR-H1 , CDR-H2 and CDR-H3 of amino acid sequences SEQ ID N° 16, 17 and 18, respectively, and a light chain comprising CDR-L1 , CDR-L2 and CDR-L3 of amino acid sequences SEQ ID N° 19, 20 and 21 , respectively,
 - An antibody comprising a heavy chain comprising CDR-H1 , CDR-H2 and CDR-H3 of amino acid sequences SEQ ID N° 22, 23 and 24, respectively, and a light

chain comprising CDR-L1 , CDR-L2 and CDR-L3 of amino acid sequences SEQ ID N° 25, 26 and 27, respectively,

5 - An antibody comprising a heavy chain comprising CDR-H1 , CDR-H2 and CDR-H3 of amino acid sequences SEQ ID N° 28, 29 and 30, respectively, and a light chain comprising CDR-L1 , CDR-L2 and CDR-L3 of amino acid sequences SEQ ID N° 31 , 32 and 33, respectively, and

10 - An antibody comprising a heavy chain comprising CDR-H1 , CDR-H2 and CDR-H3 of amino acid sequences SEQ ID N° 34, 35 and 36, respectively, and a light chain comprising CDR-L1 , CDR-L2 and CDR-L3 of amino acid sequences SEQ ID N° 37, 38 and 39, respectively; and

wherein said antigen binding fragment thereof comprises the 6 CDRS of the antibody it derives from.

6. The use according to any one of claims 1 to 5, wherein said antibody is selected in the group consisting of:

15 • A monoclonal antibody comprising a heavy chain variable region of amino acid sequence SEQ ID N° 41 and a light chain variable region of amino acid sequence SEQ ID N° 42;

20 • A monoclonal antibody comprising a heavy chain variable region of amino acid sequence SEQ ID N° 43 and a light chain variable region of amino acid sequence SEQ ID N° 44; • A monoclonal antibody comprising a heavy chain of amino acid sequence SEQ ID N° 45 and a light chain of amino acid sequence SEQ ID N° 46;

25 • A monoclonal antibody comprising a heavy chain variable region of amino acid sequence SEQ ID N° 47 and a light chain variable region of amino acid sequence SEQ ID N° 48;

• A monoclonal antibody comprising a heavy chain variable region of amino acid sequence SEQ ID N° 49 and a light chain variable region of amino acid sequence SEQ ID N° 50; and

- A monoclonal antibody comprising a heavy chain variable region of amino acid sequence SEQ ID N° 51 and a light chain variable region of amino acid sequence SEQ ID N° 52.
- 5 7. The use according to any one of claims 1 to 5, wherein said antibody is a humanized antibody.
8. The use according to claim 7, wherein said antibody is selected in the group consisting of:
- A humanized antibody comprising a heavy chain variable region of amino acid sequence SEQ ID N° 53, and a light chain variable region of amino acid sequence SEQ ID N° 54;
 - A humanized antibody comprising a heavy chain variable region of amino acid sequence SEQ ID N° 55, and a light chain variable region of amino acid sequence SEQ ID N° 56;
 - A humanized antibody comprising a heavy chain variable region of amino acid sequence selected between SEQ ID N° 57, 58, and 59, and a light chain variable region of amino acid sequence selected between SEQ ID N° 60, 61 , and 62;
 - A humanized antibody comprising a heavy chain variable region of amino acid sequence selected between SEQ ID N° 63, 64, and 65, and a light chain variable region of amino acid sequence selected between SEQ ID N° 66, 67, and 68;
 - A humanized antibody comprising a heavy chain variable region of amino acid sequence selected between SEQ ID N° 69 and 71 , and a light chain variable region of amino acid sequence selected between SEQ ID N° 70 and 72; and
 - A humanized antibody comprising a heavy chain variable region of amino acid sequence selected between SEQ ID N° 75 and 76, and a light chain variable region of amino acid sequence selected between SEQ ID N° 77 and 78;

wherein said antibody also comprises constant regions of the light-chain and the heavy-chain derived from a human antibody.

- 5 9. The use according to any one of claims 7 or 8, wherein said antibody comprises a heavy chain variable region of amino acid sequence SEQ ID N°71 and a light chain variable region of amino acid sequence SEQ ID N°72, said antibody also comprising constant regions of the light-chain and the heavy-chain derived from a human antibody.
- 10 10. The use according to any one of claims 7 to 9, wherein said antibody comprises a heavy chain of amino acid sequence SEQ ID N°73 and a light chain of amino acid sequence SEQ ID N°74.
11. Use of a pharmaceutical composition for the manufacture of a medicament for the treatment of prostate cancer; wherein said pharmaceutical composition comprises the progastatin-binding antibody, or an antigen-binding fragment thereof, as defined in any one of claims 1 to 10, and a pharmaceutically acceptable carrier and /or an excipient.
- 15 12. The use according to claim 11 , further comprising a second therapeutic agent.
13. The use according to claim 12, wherein said agent is a biological agent or a chemotherapeutic agent.
14. The use according to claim 13, wherein said biological agent is an anti-EGFR monoclonal antibody or an anti-VEGF monoclonal antibody.
- 20 15. The use according to claim 13, wherein said chemotherapeutic agent is selected in the group of alkylating agents, antimetabolites, anti-tumor antibiotics, mitotic inhibitors, chromatin function inhibitors, anti-angiogenesis agents, anti-estrogens, anti-androgens and immunomodulators.