Claims

1. A first proteinaceous molecule comprising a first binding site for binding to a first epitope of a first cell-surface molecule, the first proteinaceous molecule provided with at least one saponin covalently bound via at least one linker and/or via an oligomeric or polymeric scaffold to an amino-acid residue of said first proteinaceous molecule, or covalently bound directly to an amino-acid residue of said first proteinaceous molecule, wherein the first binding site comprises or consists of an immunoglobulin, such as an antibody or an IgG, and/or comprises or consists of at least one ligand for binding to a cell-surface molecule such as EGF or a cytokine, and wherein the at least one saponin is selected from the group consisting of: SO1861, SA1641, GE1741, QS-21, QS-21A, QS21-B, Quil-A, SO1832, SO1904, and SO1862.

2. The first proteinaceous molecule of claim 1 wherein the first binding site of the first proteinaceous molecule comprises or consists of any one of cetuximab, trastuzumab or EGF, preferably cetuximab or trastuzumab.

3. The first proteinaceous molecule of claim 1, wherein the first epitope of the first cell-surface molecule is a tumor-cell specific first epitope of a first tumor-cell surface molecule, more preferably a tumor-cell specific first epitope of a first tumor-cell surface receptor specifically present on a tumor cell.

4. The first proteinaceous molecule of any one of the claims 1-3, wherein the at least one saponin is selected from the group consisting of: SO1861, SO1862, SO1832, SO1904, GE1741 and QS21, preferably the saponin is SO1861 and/or QS-21.

5. The first proteinaceous molecule of claims 2 and 4, wherein the first binding site of the first proteinaceous molecule comprises or consists of any one of cetuximab, trastuzumab or EGF, preferably cetuximab or trastuzumab and wherein the at least one saponin is SO1861 and/or QS-21.

6. The first proteinaceous molecule of any one of the claims 1-5, wherein the at least one saponin is SO1861.

7. The first proteinaceous molecule of any one of the claims 1-6, wherein the at least one saponin is a bisdesmosidic triterpene saponin belonging to the type of a 12,13-dehydrooleanane with an aldehyde function in position C-23, wherein the at least one saponin is covalently coupled to the amino-acid residue of the first proteinaceous molecule via an aldehyde function in the saponin, preferably said aldehyde function in position C-23, preferably via at least one linker, more preferably via at least one cleavable linker, wherein the amino-acid residue preferably is selected from cysteine and lysine.

8. The first proteinaceous molecule of any one of the claims 1-7, wherein the at least one saponin is a bisdesmosidic triterpene saponin belonging to the type of a 12,13-dehydrooleanane with an aldehyde

function in position C-23 and comprising a glucuronic acid function in a carbohydrate substituent at the C-3beta-OH group of the saponin, wherein the at least one saponin is covalently coupled to the amino-acid residue of the first proteinaceous molecule via the glucuronic acid function in the carbohydrate substituent at the C-3beta-OH group of the saponin, preferably via at least one linker, wherein the amino-acid residue preferably is selected from cysteine and lysine.

9. The first proteinaceous molecule of any one of the claims 4-8, wherein the aldehyde function in position C-23 of the at least one saponin is covalently coupled to linker N-ε-maleimidocaproic acid hydrazide, which linker is covalently coupled via a thio-ether bond to a sulfhydryl group in the first proteinaceous molecule, such as a sulfhydryl group of a cysteine.

10. The first proteinaceous molecule of any one of the claims 4-9, wherein the glucuronic acid function in the carbohydrate substituent at the C-3beta-OH group of the at least one saponin is covalently coupled to linker 1-[Bis(dimethylamino)methylene]-1H-1,2,3-triazolo[4,5-b]pyridinium 3-oxid hexafluorophosphate, which linker is covalently coupled via an amide bond to an amine group in the first proteinaceous molecule, such as an amine group of a lysine or an N-terminus of the first proteinaceous molecule.

11. The first proteinaceous molecule of any one of the claims 1, 3-4, 6-10, wherein the first epitope of the first cell-surface molecule to which the first binding site of the first proteinaceous molecule binds is a tumor-cell specific first epitope of the tumor-cell specific receptor preferably selected from CD71, CA125, EpCAM(17-1A), CD52, CEA, CD44v6, FAP, EGF-IR, integrin, syndecan-1, vascular integrin alpha-V beta-3, HER2, EGFR, CD20, CD22, Folate receptor 1, CD146, CD56, CD19, CD138, CD27L receptor, PSMA, CanAg, integrin-alphaV, CA6, CD33, mesothelin, Cripto, CD3, CD30, CD239, CD70, CD123, CD352, DLL3, CD25, ephrinA4, MUC1, Trop2, CEACAM5, CEACAM6, HER3, CD74, PTK7, Notch3, FGF2, C4.4A, FLT3, CD38, FGFR3, CD7, PD-L1, CTLA4, CD52, PDGFRA, VEGFR1, VEGFR2, more preferably selected from CD71, EGFR, HER2.

12. The first proteinaceous molecule of claim 3 or 11, wherein the tumor cell-specific first epitope, first tumor-cell surface molecule or first tumor-cell specific receptor, are a first epitope or a first molecule or a first receptor that are internalized by the tumor cell after binding of the first proteinaceous molecule of any one of the claims 1-11 to the first epitope or first molecule or first receptor, and wherein preferably the first proteinaceous molecule is subjected to tumor-cell receptor-mediated internalization, e.g. via endocytosis, or tumor-cell surface molecule mediated internalization, e.g. via endocytosis, when bound to the cell-surface molecule comprising the first epitope, the tumor-cell surface molecule or the tumor-cell specific receptor.

13. The first proteinaceous molecule of claim 11 or 12, wherein the first binding site of the first proteinaceous molecule comprises or consists of any one of cetuximab, daratumumab, gemtuzumab, trastuzumab, panitumumab, brentuximab, inotuzumab, moxetumomab, polatuzumab, obinutuzumab,

OKT-9 anti-CD71 monoclonal antibody of the IgG type, pertuzumab, rituximab, ofatumumab, Herceptin, alemtuzumab, pinatuzumab, OKT-10 anti-CD38 monoclonal antibody, an antibody of Table A2 or Table A3 or Table A4, preferably cetuximab or trastuzumab or OKT-9, or at least one tumor-cell receptor binding-fragment thereof and/or at least one tumor-cell receptor binding-domain thereof, preferably at least one tumor-cell specific receptor binding-fragment thereof and/or at least one tumor-cell specific receptor binding-domain thereof.

14. Therapeutic combination, wherein the therapeutic combination comprises:

(a) a first pharmaceutical composition comprising the first proteinaceous molecule of any one of the claims 1-13 and optionally a pharmaceutically acceptable excipient; and

(b) a second pharmaceutical composition comprising a second proteinaceous molecule different from the first proteinaceous molecule, the second proteinaceous molecule comprising a second binding site for binding to a second epitope of a second cell-surface molecule different from the first cell-surface molecule, and comprising an effector moiety, the second pharmaceutical composition optionally further comprising a pharmaceutically acceptable excipient, wherein the second epitope is different from the first epitope.

15. Therapeutic combination of claim 14, wherein the therapeutic combination comprises:

(a) the first pharmaceutical composition of claim 14 comprising the first proteinaceous molecule of any one of the claims 1-13, wherein the first epitope on the first cell-surface molecule is a tumor-cell specific first epitope on a first tumor cell-specific surface molecule, preferably a tumor-cell specific first epitope on a first cell-surface receptor specifically present at a tumor cell; and

(b) the second pharmaceutical composition of claim 14, wherein the second cell-surface molecule is a second tumor cell-specific surface molecule different from the first tumor cell-specific surface molecule, preferably a second cell-surface receptor specifically present at a tumor cell different from the first cell-surface receptor specifically present at said tumor cell, and wherein the second epitope is a tumor-cell specific second epitope.

16. Therapeutic combination, wherein the therapeutic combination comprises:

(a) the first pharmaceutical composition of claim 14 or 15 comprising the first proteinaceous molecule according to of any one of the claims 1-13 and comprising the first binding site for binding to the first epitope on the first cell-surface molecule, the first pharmaceutical composition optionally further comprising a pharmaceutically acceptable excipient; and

(b) a third pharmaceutical composition comprising a third proteinaceous molecule, the third proteinaceous molecule comprising the first binding site for binding to the first epitope on the cell-surface molecule of (a) and an effector moiety, the third pharmaceutical composition optionally further comprising a pharmaceutically acceptable excipient,

wherein the first binding site of the first proteinaceous molecule and the first binding site of the third proteinaceous molecule are the same, and wherein the first cell-surface molecule and the first epitope on the first cell-surface molecule, to which the first proteinaceous molecule

can bind, and the first cell-surface molecule and the first epitope on the first cell-surface molecule, to which the third proteinaceous molecule can bind, are the same.

17. Therapeutic combination, wherein the therapeutic combination comprises:

(a) the first pharmaceutical composition of claim 16; and

(b) the third pharmaceutical composition of claim 16,

wherein the first cell-surface molecule is expressed on a tumor cell surface, and preferably the first cell-surface molecule is a tumor cell-specific surface molecule, and wherein preferably the first epitope is a first tumor-cell specific epitope.

18. The first proteinaceous molecule of any one of the claims 1-17 or the therapeutic combination of any one of the claims 14-17, wherein the first binding site for binding to the first epitope on the first cell surface molecule is a binding site for a tumor-cell specific first epitope on a first cell-surface receptor specifically present at a tumor cell.

19. The therapeutic combination of any one of the claims 14-18, wherein the second binding site of the second proteinaceous molecule and/or the first binding site of the third proteinaceous molecule comprises or consists of an immunoglobulin, at least one binding domain of an immunoglobulin and/or at least one binding fragment of an immunoglobulin, such as an antibody, an IgG, a molecule comprising or consisting of a Vhh domain or Vh domain, a Fab, an scFv, an Fv, a dAb, an F(ab)2, Fcab fragment, and/or comprises or consists of at least one ligand for binding to a cell-surface molecule such as EGF or a cytokine.

20. The therapeutic combination of any one of the claims 14, 15 or 18, 19 when dependent on any one of the claims 14 or 15 or 18, wherein the second binding site of the second proteinaceous molecule for binding to the second epitope is a second binding site for a tumor-cell specific second epitope on a second cell-surface receptor specifically present at the tumor cell, wherein the second binding site is different from the first binding site.

21. The first proteinaceous molecule of any one of the claims 1-20 or the therapeutic combination of any one of the claims 14, 15 or 18, 19, 20 when dependent on any one of the claims 14 or 15 or 18 or 19, wherein said first and second proteinaceous molecules comprise the first and second binding site respectively for binding to a first and a second tumor-cell specific epitope on a first and a second tumor-cell specific receptor respectively, the receptors being different and being present at the same tumor cell, wherein the first and second binding site are different and the first and second tumor cell specific epitope are different.

22. The first proteinaceous molecule of any one of the claims 1-20 or the therapeutic combination of any one of the claims 16, 17 or 18-20 when dependent on any one of the claims 16-19, wherein said first

and third proteinaceous molecules comprise the same first binding site for binding to a first tumor-cell specific epitope on a first tumor-cell specific receptor.

23. The first proteinaceous molecule or the therapeutic combination of claim 21 or 22, wherein the first receptor and/or the second receptor are selected from CD71, CA125, EpCAM(17-1A), CD52, CEA, CD44v6, FAP, EGF-IR, integrin, syndecan-1, vascular integrin alpha-V beta-3, HER2, EGFR, CD20, CD22, Folate receptor 1, CD146, CD56, CD19, CD138, CD27L receptor, PSMA, CanAg, integrin-alphaV, CA6, CD33, mesothelin, Cripto, CD3, CD30, CD239, CD70, CD123, CD352, DLL3, CD25, ephrinA4, MUC1, Trop2, CEACAM5, CEACAM6, HER3, CD74, PTK7, Notch3, FGF2, C4.4A, FLT3, CD38, FGFR3, CD7, PD-L1, CTLA4, CD52, PDGFRA, VEGFR1, VEGFR2, preferably selected from CD71, EGFR and HER2.

24. The first proteinaceous molecule of claim 21 or 23 and/or the therapeutic combination of claim 21 or 23, wherein the first and second tumor-cell specific receptors are internalized by the tumor cell after binding to the first proteinaceous molecule of any one of the claims 1-21 or 23 and/or the second proteinaceous molecule of any one of the claims 14, 15 or 18-21 or 23 when dependent on any one of the claims 14 or 15 or 18-21, and wherein preferably binding of the first proteinaceous molecule and/or the second proteinaceous molecule to the first and second tumor-cell specific receptors respectively, results in tumor-cell receptor-mediated internalization, e.g. via endocytosis, of a complex of the first proteinaceous molecule and the first tumor-cell specific receptor and of a complex of the second proteinaceous molecule and the second tumor-cell specific receptor.

25. The therapeutic combination of claim 22 or 23 or the first pharmaceutical composition according to claim 22 or 23, wherein the first tumor-cell receptor, preferably the first tumor-cell specific receptor, is internalized by the tumor cell after binding to the first proteinaceous molecule of any one of the claims 1-20, 22 or 23 and/or after binding to the third proteinaceous molecule of any one of the claims 16, 17 or 18-20, 22 when dependent on any one of the claims 16-20, and wherein preferably binding of the first proteinaceous molecule and/or the third proteinaceous molecule to the first tumor-cell receptor, such as the first tumor-cell specific receptor, is followed by tumor-cell receptor-mediated internalization, e.g. via endocytosis, of a complex of the first proteinaceous molecule and the first tumor-cell receptor and of a complex of the third proteinaceous molecule and the first tumor-cell receptor.

26. The first proteinaceous molecule of any one of the claims 1-15 or 18-21 or 24 when dependent on any one of the claims 1-15 or 18-21, and/or therapeutic combination of any one of the claims 14, 15, 18-21 or 24, wherein the first binding site and/or the second binding site is/are or comprise(s) a monoclonal antibody or at least one cell-surface molecule binding fragment and/or –domain thereof, and preferably comprise or consist of any one of cetuximab, daratumumab, gemtuzumab, trastuzumab, panitumumab, brentuximab, inotuzumab, moxetumomab, polatuzumab, obinutuzumab, OKT-9 anti-CD71 monoclonal antibody of the IgG type, pertuzumab, rituximab, ofatumumab, Herceptin, alemtuzumab, pinatuzumab, OKT-10 anti-CD38 monoclonal antibody, and an antibody of Table A4, preferably cetuximab or

trastuzumab or OKT-9, or at least one cell-surface molecule binding fragment or -domain thereof, with the proviso that the first binding site of the first proteinaceous molecule is different from the second binding site of the second proteinaceous molecule.

27. The therapeutic combination of any one of the claims 16, 17 or 18-20, 22 when dependent on any one of the claims 16-20 or the first pharmaceutical composition according to any one of the claims 16, 17 or 18-20, 22 when dependent on any one of claims 16-20, wherein the first binding site of the first proteinaceous molecule and the third proteinaceous molecule comprises a monoclonal antibody or at least one of a cell-surface molecule binding domain and/or -fragment thereof, and preferably comprise or consist of any one of cetuximab, daratumumab, gemtuzumab, trastuzumab, panitumumab, brentuximab, inotuzumab, moxetumomab, polatuzumab, obinutuzumab, OKT-9 anti-CD71 monoclonal antibody of the IgG type, pertuzumab, rituximab, ofatumumab, Herceptin, alemtuzumab, pinatuzumab, OKT-10 anti-CD38 monoclonal antibody, an antibody of Table A2 or Table A3 or Table A4, preferably cetuximab or trastuzumab or OKT-9, or at least one cell-surface molecule binding fragment and/or -domain thereof, with the proviso that the first binding site of the first proteinaceous molecule is the same as the first binding site of the third proteinaceous molecule.

28. The therapeutic combination of any one of the claims 14-27, wherein the second binding site of the second proteinaceous molecule and/or the first binding site of the third proteinaceous molecule is or comprises a monoclonal antibody or at least one cell-surface molecule binding fragment or –domain thereof, and preferably comprises or consists of any one of Gemtuzumab ozogamicin, Brentuximab vedotin, Trastuzumab emtansine, Inotuzumab ozogamicin, Moxetumomab pasudotox and Polatuzumab vedotin and an antibody-drug conjugate of Table A2 and Table A3.

29. The therapeutic combination of any one of the claims 14-28, wherein the effector moiety that is comprised by the second proteinaceous molecule and/or by the third proteinaceous molecule comprises or consists of any one or more of an oligonucleotide, a nucleic acid, a xeno nucleic acid, preferably selected from any one or more of a vector, a gene, a cell suicide inducing transgene, deoxyribonucleic acid (DNA), ribonucleic acid (RNA), anti-sense oligonucleotide (ASO, AON), short interfering RNA (siRNA), microRNA (miRNA), DNA aptamer, RNA aptamer, mRNA, mini-circle DNA, peptide nucleic acid (PNA), phosphoramidate morpholino oligomer (PMO), locked nucleic acid (LNA), bridged nucleic acid (BNA), 2’-deoxy-2’-fluoroarabino nucleic acid (FANA), 2’-O-methoxyethyl-RNA (MOE), 2'-O,4'-aminoethylene bridged nucleic acid, 3’-fluoro hexitol nucleic acid (FHNA), a plasmid, glycol nucleic acid (GNA) and threose nucleic acid (TNA), or a derivative thereof, more preferably a BNA, for example a BNA for silencing HSP27 protein expression.

30. The therapeutic combination of any one of the claims 14-29, wherein the effector moiety that is comprised by the second proteinaceous molecule and/or by the third proteinaceous molecule comprises or consists of at least one proteinaceous molecule, preferably selected from any one or more of a peptide, a protein, an enzyme such as urease and Cre-recombinase, a ribosome-inactivating protein, a

proteinaceous toxin, more preferably selected from any one or more of a protein toxin selected from Table A5 and/or a viral toxin such as apoptin; a bacterial toxin such as Shiga toxin, Shiga-like toxin, Pseudomonas aeruginosa exotoxin (PE) or exotoxin A of PE, full-length or truncated diphtheria toxin (DT), cholera toxin; a fungal toxin such as alpha-sarcin; a plant toxin including ribosome-inactivating proteins and the A chain of type 2 ribosome-inactivating proteins such as dianthin e.g. dianthin-30 or dianthin-32, saporin e.g. saporin-S3 or saporin-S6, bouganin or de-immunized derivative debouganin of bouganin, shiga-like toxin A, pokeweed antiviral protein, ricin, ricin A chain, modeccin, modeccin A chain, abrin, abrin A chain, volkensin, volkensin A chain, viscumin, viscumin A chain; or an animal or human toxin such as frog RNase, or granzyme B or angiogenin from humans, or any fragment or derivative thereof; preferably the protein toxin is dianthin and/or saporin.

31. The therapeutic combination of any one of the claims 14-30, wherein the effector moiety comprised by the second proteinaceous molecule and/or by the third proteinaceous molecule comprises or consists of at least one payload, preferably selected from any one or more of a toxin targeting ribosomes, a toxin targeting elongation factors, a toxin targeting tubulin, a toxin targeting DNA and a toxin targeting RNA, more preferably any one or more of emtansine, pasudotox, maytansinoid derivative DM1, maytansinoid derivative DM4, monomethyl auristatin E (MMAE, vedotin), monomethyl auristatin F (MMAF, mafodotin), a Calicheamicin, N-Acetyl-γ-calicheamicin, a pyrrolobenzodiazepine (PBD) dimer, a benzodiazepine, a CC-1065 analogue, a duocarmycin, Doxorubicin, paclitaxel, docetaxel, cisplatin, cyclophosphamide, etoposide, docetaxel, 5-fluorouracyl (5-FU), mitoxantrone, a tubulysin, an indolinobenzodiazepine, AZ13599185, a cryptophycin, rhizoxin, methotrexate, an anthracycline, a camptothecin analogue, SN-38, DX-8951f, exatecan mesylate, truncated form of *Pseudomonas aeruginosa* exotoxin (PE38), a Duocarmycin derivative, an amanitin, α-amanitin, a spliceostatin, a thailanstatin, ozogamicin, tesirine, Amberstatin269 and soravtansine, or a derivative thereof.

32. The first proteinaceous molecule of any one of the claims 1-31, wherein the first proteinaceous molecule comprises more than one saponin, preferably 2, 3, 4, 5, 6, 8, 10, 16, 32, 64 or 1-100 saponins, or any number of saponins therein between, such as 7, 9, 12 saponins, covalently bound directly to an amino-acid residue of the first proteinaceous molecule, preferably to a cysteine and/or to a lysine, and/or covalently bound via at least one linker and/or via at least one cleavable linker and/or via at least one polymeric or oligomeric scaffold, preferably 1-8 of such scaffolds or 2-4 of such scaffolds, wherein the at least one scaffold is optionally based on a dendron, wherein 1-32 saponins such as 2, 3, 4, 5, 6, 8, 10, 16, 32 saponins, or any number of saponins therein between, such as 7, 9, 12 saponins, are covalently bound to the at least one scaffold.

33. The first proteinaceous molecule of any one of the claims 7-32, wherein the at least one linker is a non-cleavable linker or a cleavable linker, wherein the cleavable linker is for example subject to cleavage under acidic conditions, reductive conditions, enzymatic conditions or light-induced conditions, and preferably the cleavable linker comprises a hydrazone bond or a hydrazide bond subject to cleavage under acidic conditions when bound to saponin, and/or comprises a bond susceptible to proteolysis, for

example proteolysis by Cathepsin B, and/or is a bond susceptible for cleavage under reductive conditions such as a disulphide bond, when bound to saponin.

34. The first proteinaceous molecule of any one of the claims 7-33, wherein the cleavable linker is subject to cleavage *in vivo* under acidic conditions as present in endosomes and/or lysosomes of mammalian cells, preferably human cells, preferably at pH 4.0 – 6.5, and more preferably at pH ≤ 5.5, when the cleavable linker is bound to a saponin.

35. The first proteinaceous molecule of any one of the claims 1-34, wherein the oligomeric or polymeric scaffold comprises a polymeric or oligomeric structure and comprises a chemical group, the chemical group for covalently coupling of the scaffold to the amino-acid residue of said first proteinaceous molecule.

36. The first proteinaceous molecule of any one of the claims 1-35, wherein the at least one saponin is covalently bound to the polymeric or oligomeric structure of the oligomeric or polymeric scaffold via at least one cleavable linker according to any one of the claims 32-34.

37. The first proteinaceous molecule of any one of the claims 1-36, wherein the chemical group of the oligomeric or polymeric scaffold, for covalently coupling of the oligomeric or polymeric scaffold to the amino-acid residue of said first proteinaceous molecule, is a click chemistry group, preferably selected from a tetrazine, an azide, an alkene or an alkyne, or a cyclic derivative of these groups, more preferably said chemical group is an azide.

38. The first proteinaceous molecule of any one of the claims 1-37, wherein the polymeric or oligomeric structure of the oligomeric or polymeric scaffold comprises a linear, branched and/or cyclic polymer, oligomer, dendrimer, dendron, dendronized polymer, dendronized oligomer, a DNA, a polypeptide, poly-lysine, a poly-ethylene glycol, or an assembly of these polymeric or oligomeric structures which assembly is preferably built up by covalent cross-linking.

39. A composition comprising the first proteinaceous molecule of any one of the claims 1-38 and the second proteinaceous molecule of any one of the claims 14, 15 or 18-38.

40. A composition comprising the first proteinaceous molecule of any one of the claims 1-38 and the third proteinaceous molecule of any one of the claims 16-38.

41. The composition of claim 39 or 40, wherein the effector moiety that is comprised by the second proteinaceous molecule or by the third proteinaceous molecule is any one of the effector moieties according to claim 29, preferably a BNA.

42. A composition comprising the first proteinaceous molecule of any one of the claims 1-41 and any one or more of an oligonucleotide, a nucleic acid and a xeno nucleic acid, preferably selected from at least one of a vector, a gene, a cell suicide inducing transgene, deoxyribonucleic acid (DNA), ribonucleic acid (RNA), anti-sense oligonucleotide (ASO, AON), short interfering RNA (siRNA), microRNA (miRNA), DNA aptamer, RNA aptamer, mRNA, mini-circle DNA, peptide nucleic acid (PNA), phosphoramidate morpholino oligomer (PMO), locked nucleic acid (LNA), bridged nucleic acid (BNA), 2’-deoxy-2’-fluoroarabino nucleic acid (FANA), 2’-O-methoxyethyl-RNA (MOE), 2'-O,4'-aminoethylene bridged nucleic acid, 3’-fluoro hexitol nucleic acid (FHNA), a plasmid, glycol nucleic acid (GNA) and threose nucleic acid (TNA), or a derivative thereof, more preferably a BNA, for example a BNA for silencing HSP27 protein expression.

43. Antibody-drug conjugate or a ligand-drug conjugate comprising the first proteinaceous molecule of any one of the claims 1-42 and an effector moiety.

44. Antibody-drug conjugate or ligand-drug conjugate of claim 43, wherein the antibody can bind to any one of CD71, CA125, EpCAM(17-1A), CD52, CEA, CD44v6, FAP, EGF-IR, integrin, syndecan-1, vascular integrin alpha-V beta-3, HER2, EGFR, CD20, CD22, Folate receptor 1, CD146, CD56, CD19, CD138, CD27L receptor, PSMA, CanAg, integrin-alphaV, CA6, CD33, mesothelin, Cripto, CD3, CD30, CD239, CD70, CD123, CD352, DLL3, CD25, ephrinA4, MUC1, Trop2, CEACAM5, CEACAM6, HER3, CD74, PTK7, Notch3, FGF2, C4.4A, FLT3, CD38, FGFR3, CD7, PD-L1, CTLA4, CD52, PDGFRA, VEGFR1, VEGFR2, preferably CD71, HER2, EGFR, and/or is or comprises any one of cetuximab, daratumumab, gemtuzumab, trastuzumab, panitumumab, brentuximab, inotuzumab, moxetumomab, polatuzumab, obinutuzumab, OKT-9 anti-CD71 monoclonal antibody of the IgG type, pertuzumab, rituximab, ofatumumab, Herceptin, alemtuzumab, pinatuzumab, OKT-10 anti-CD38 monoclonal antibody, an antibody of Table A2 or Table A3 or Table A4, preferably cetuximab or trastuzumab or OKT-9, or at least one tumor-cell receptor binding-fragment thereof and/or at least one tumor-cell receptor binding-domain thereof, and/or wherein the antibody-drug conjugate comprises any one of Gemtuzumab ozogamicin, Brentuximab vedotin, Trastuzumab emtansine, Inotuzumab ozogamicin, Moxetumomab pasudotox and Polatuzumab vedotin and an antibody-drug conjugate of Table A2 and Table A3, or wherein the ligand-drug conjugate comprises at least one ligand for binding to a cell-surface molecule such as EGF or a cytokine.

45. Antibody-drug conjugate or ligand-drug conjugate of claim 43 or 44, wherein the effector moiety is any one or more of the effector moieties according to claims 29-31.

46. Pharmaceutical composition comprising the composition of any one of the claims 39-42 or the antibody-drug conjugate of any one of the claims 43-45 or the ligand-drug conjugate of any one of the claims 43-45, and optionally further comprising a pharmaceutically acceptable excipient.

47. The therapeutic combination of any one of the claims 14-38 or the composition of any one of the claims 39-42 or the antibody-drug conjugate or ligand-drug conjugate of any one of the claims 43-45 or the pharmaceutical composition of claim 46, for use as a medicament.