CLAIMS

What is claimed is:

[Claim 1]

A pharmaceutical composition for inducing a cell-mediated immunity against a tumor cell to subject the tumor cell to a medical treatment for tumor, the pharmaceutical composition comprising:

an oncolytic gene-modified measles virus,

wherein the tumor cell is a tumor cell expressing PVRL4/Nectin4,

the oncolytic gene-modified measles virus is rMV-SLAM-blind or rMV-V(-)-SLAM-blind which is a gene-modified measles virus from a wild-type measles virus, and

the pharmaceutical composition for inducing a cell-mediated immunity against a tumor cell to which the oncolytic gene-modified measles virus has not been directly administered by direct administration to a tumor mass.

[Claim 2]

The pharmaceutical composition according to Claim 1, wherein a tumor as a medical treatment target is breast cancer, lung cancer, colon cancer, or pancreatic cancer.

[Claim 3]

The pharmaceutical composition according to Claim 1 or 2, wherein the tumor cell as a medical treatment target is a tumor cell that remains even after

direct introduction of the oncolytic gene-modified measles virus.

[Claim 4]

The pharmaceutical composition according to Claim 3, wherein the remaining tumor cell is selected from the group consisting of a deep-seated tumor cell, a recurrent tumor cell, and a metastasized tumor cell.

[Claim 5]

The pharmaceutical composition according to Claim 1 or 2, wherein the tumor as a medical treatment target have progressed to stage 2 to stage 4.

[Claim 6]

The pharmaceutical composition according to Claim 1 or 2, which is applied to a tumor patient before receiving drug therapy, radiation therapy, or surgical therapy.

[Claim 7]

The pharmaceutical composition according to Claim 1 or 2, which is applied to a tumor patient after having receiving drug therapy, radiation therapy, or surgical therapy.

[Claim 8]

Use of an oncolytic gene-modified measles virus in the manufacture of a pharmaceutical composition for inducing a cell-mediated immunity against a tumor cell other than cells that have been directly introduced with the oncolytic gene-modified measles virus,

wherein the oncolytic gene-modified measles virus is to be directly introduced into tumor mass to cause cell death in the tumor cell in vivo, and

wherein the tumor cell is a tumor cell expressing PVRL4/Nectin4,

wherein the oncolytic gene-modified measles virus is rMV-SLAM-blind or rMV-V(-)-SLAM-blind which is a gene-modified measles virus from a wild-type measles virus, and

wherein the tumor cell other than cells that have been directly introduced with the oncolytic gene-modified measles viruses is a tumor cell remaining in a living body that could not be eliminated even by direct introduction of the oncolytic gene-modified measles virus, or against a tumor cell that has metastasized or recurred.

[Claim 9]

The use according to Claim 8, wherein the remaining tumor cell is selected from the group consisting of a deep-seated tumor cell, a recurrent tumor cell, and a metastasized tumor cell.

[Claim 10]

The use according to Claim 8 or 9, wherein the tumor cell other than cells directly introduced with the oncolytic gene-modified measles viruses is a tumor cell of tumor having progressed to stage 2 to stage 4.

[Claim 11]

A pharmaceutical composition for treating human peritoneal dissemination

or scirrhous gastric cancer, comprising an oncolytic gene-modified measles virus,

wherein the peritoneal dissemination or scirrhous gastric cancer expresses VRL4/Nectin4,

the oncolytic gene-modified measles virus is rMV-SLAM-blind or rMV-V(-)-SLAM-blind which is a gene-modified measles virus from a wild-type measles virus, and

the pharmaceutical composition is to be administered by intraperitoneal administration.

[Claim 12]

Use of an oncolytic gene-modified measles virus in the manufacture of a pharmaceutical composition for treating human peritoneal dissemination or scirrhous gastric cancer,

wherein the peritoneal dissemination or scirrhous gastric cancer expresses VRL4/Nectin4,

wherein the oncolytic gene-modified measles virus is rMV-SLAM-blind or rMV-V(-)-SLAM-blind which is a gene-modified measles virus from a wild-type measles virus, and

wherein the pharmaceutical composition is to be administered by intraperitoneal administration.