CLAIMS:

1. A non-replicating, Rhabdovirus-derived particle for use in the treatment of leukemia, wherein the particle is able to bind to the surface of a cell and be internalized, and wherein said Rhabdovirus-derived particle comprises an RNA polynucleotide, the RNA structure of which is cross-linked or cleaved to form discontinuous segments of RNA.

2. The Rhabdovirus-derived particle for use according to claim 1, wherein said Rhabdovirus-derived particle exhibits:
nucleotides in the RNA structure cross-linked to other RNA nucleotides, to amino acids in a protein in the protein structure around the RNA or both, or;
the protein structure around the RNA includes a protein that has an amino acid that is cross-linked to another protein of the protein structure, or cross-linked to another amino acid of the same protein; cross-linked to the RNA structure; or any combination thereof.

3. The Rhabdovirus-derived particle for use according to claim 1, wherein said cross-linked RNA comprises at least 0.05% cross-linked nucleotides.

4. The Rhabdovirus-derived particle for use according to claim 1, wherein said Rhabdovirus-derived particle exhibits at least 60 functional G proteins per particle.

5. The Rhabdovirus-derived particle for use according to claim 1 for use in the treatment of leukemiain combination with a chemotherapeutic agent.

6. The Rhabdovirus-derived particle for use according to claim 1, produced by the method of subjecting live Rhabdovirus to an RNA damaging agent to cross-link the RNA structure of the Rhabdovirus, or cleave the RNA structure of the Rhabdovirus or both.

7. The Rhabdovirus-derived particle for use according to claim 1, wherein $1x10^{10}$ to about $1x10^{15}$ particles are administered to the patient.

8. A method for producing the Rhabdovirus-derived particle of claim 1, comprising the steps of:
subjecting live Rhabdovirus to an RNA damaging agent to cross-link the RNA structure of the Rhabdovirus, or cleave the RNA structure of the Rhabdovirus or both.

9. The method of claim 8, wherein subjecting the live Rhabdovirus to an RNA damaging agent comprises subjecting the live Rhabdovirus to electromagnetic radiation, or exposing the live Rhabdovirus to an RNA damaging chemical agent or both.

10. The method of claim 9, wherein the electromagnetic radiation has a wavelength less than about 1mm.

11. The method of claim 9, wherein the electromagnetic radiation is in the UV spectrum and wherein the live Rhabdovirus is subjected to a dose of electromagnetic radiation of between about 100 mJ/cm^2 and about 8000 mJ/cm^2 or wherein the electromagnetic radiation is gamma radiation and wherein the live Rhabdovirus is subjected to a dose of electromagnetic radiation of between 1kGy and about 50kGy.