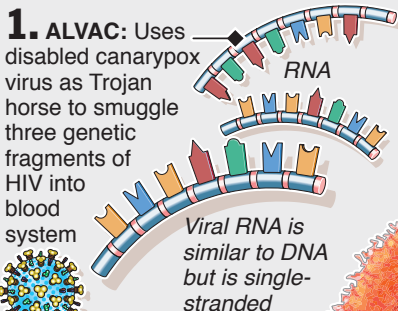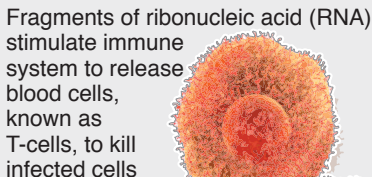# Twin vaccines help prevent HIV infection

For the first time, an experimental vaccine has prevented infection of the AIDS virus. The $105 million study used a "prime-boost" combination of vaccines – ALVAC primes the immune system to hunt and kill infected cells and AidsVax boosts antibody production to destroy HIV viruses

1. ALVAC: Uses disabled canarypox virus as Trojan horse to smuggle three genetic fragments of HIV into blood system

RNA

Viral RNA is similar to DNA but is single-stranded

Fragments of ribonucleic acid (RNA) stimulate immune system to release blood cells, known as T-cells, to kill infected cells

T-cells

Infected cell

HIV virus

Receptors

Binders, which dock with receptors on surface of host cell, contain protein gp120

2. AidsVax: Contains genetically-engineered version of gp120 protein. This stimulates antibodies to block viral entry mechanism into host cell

Antibodies

Binder

© GRAPHIC NEWS

Sources: Sanofi-Aventis, Sanofi-Aventis