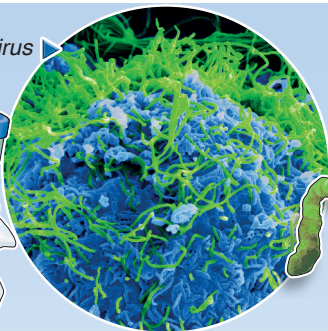


Drugs boost Ebola survival rates

A clinical trial conducted in the midst of an Ebola epidemic in the Democratic Republic of Congo (DRC) has identified two new drugs that can dramatically cut mortality from the disease

Scanning electron micrograph of Ebola virus budding – exiting from surface of host cell



Ebola virus: Disease is transmitted by contact with blood or bodily fluids, including sweat, of infected person

Viral envelope
Outer membrane is studded with glycoprotein which binds to receptors on host cells

Treatment: Known by their code names as **REGN-EB3** and **mAb114**, drugs belong to class of treatments called **monoclonal antibodies**

Virus

Monoclonal antibodies

Matrix layer

Contains viral proteins which enable budding and disable infected host's immune response

Genome

One molecule strand of RNA (ribonucleic acid)

Antibodies: Protein molecules injected shortly after infection lock onto glycoprotein of invading virus, disabling it, or marking infected human cells for destruction by immune-system

Ebola: Haemorrhagic fever kills nine in 10 of those it infects

90%

Mortality rates of 499 patients: **REGN-EB3** (Regeneron Pharmaceuticals)

29%

mAb114 (U.S. National Institute of Allergy and Infectious Diseases)

34%