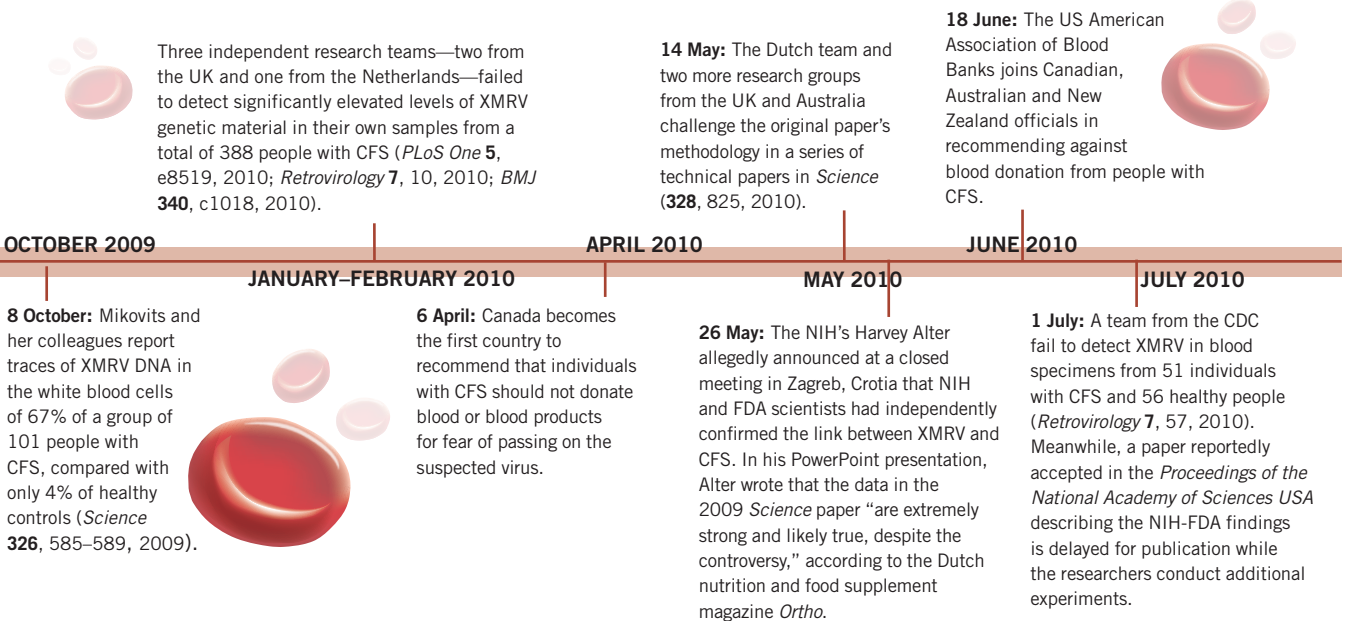


## Chronic controversy continues over mysterious XMRV virus

Last year, a Nevada team linked a peculiar retrovirus to chronic fatigue syndrome (CFS), an elusive condition with no known cause. The virus—known as xenotropic murine leukemia virus–related virus, or XMRV—had previously been implicated in an aggressive form of prostate cancer, but XMRV's role in both diseases has been hotly contested, particularly with regard to CFS.

Several research groups have failed to reproduce the initial finding, including a team from the US Centers for Disease Control and Prevention (CDC), but scientists at the National Institutes of Health (NIH) and Food and Drug Administration (FDA) reportedly have unpublished data supporting the link between the mysterious virus and CFS. “When the data are published, they will provide a confirmation of our initial discovery,” says Judy Mikovits, director of research at the Whittemore Peterson Institute in Reno, Nevada who led the research.

Spurred on by these mixed results, the FDA's blood products advisory committee met for two days in late July to discuss whether the virus poses a safety threat to the blood supply. Here are the facts they had to consider:



Elie Dolgin

## Fewer shots proposed to increase uptake of HPV vaccine

Immunization rates against the human papillomavirus (HPV), the virus that causes cervical cancer, are amongst the lowest of all vaccine programs in the US, with fewer than one in four female teens getting the shot in many poor-income states, and often far fewer women than that get immunized in countries of the developing world. A major deterrent, public health experts warn, is the vaccine's price—the two approved HPV vaccines are among the most expensive adult vaccines, often costing close to \$400 in the US private sector for a full three-dose course of therapy. To bring down costs, researchers are investigating whether women are afforded the same protection with an abridged vaccine regimen.

“If you reduce the cost, it may mean that many more countries are able to

afford the vaccine,” says Marc Steben, a medical consultant at Quebec's National Public Health Institute in Montreal.

Some of the first evidence that this strategy might be effective came last month at the International Papillomavirus Conference in Montreal. At the meeting, Aimée Kreimer, an investigator at the US National Cancer Institute in Bethesda, Maryland, presented results from a four-year study of nearly 7,500 women in Costa Rica treated with either GlaxoSmithKline's (GSK's) HPV vaccine Cervarix or a control vaccine. Although the researchers planned to administer the full three-dose treatment, around 1,500 women received fewer than three doses, owing to missed visits, pregnancy or other reasons. Kreimer and her colleagues tracked the majority of these women nonetheless and found that a one- or two-shot treatment of Cervarix was

comparable to three doses in preventing infection from two of the cancer-causing strains of HPV.

Simon Dobson, a pediatric vaccine researcher at the University of British Columbia in Vancouver, reported results from a more deliberately planned study of dosing routine. He showed that Canadian girls aged 9–13 who had received two doses of Merck's competing vaccine Gardasil had antibody responses to the two main cancer-causing HPV strains that were at least as good as those in women aged 16–26 who had received three doses of the vaccine.

According to Steben, reducing vaccination costs by a third could particularly help middle income countries that currently have no access to GAVI Alliance-sponsored cheap HPV shots, such as some in Eastern Europe, South America