



Updated Recommendations on Use of Rotavirus Vaccines

Dear Colleague:

I am writing to inform you that the US Food and Drug Administration (FDA) updated its recommendations on the use of rotavirus vaccines on May 14, 2010. These recommendations are in follow-up to recent findings on the presence of porcine circovirus (PCV) DNA in rotavirus vaccines. Specifically, FDA recommended that it is appropriate for health care professionals to continue the use of RotaTeq® (Rotavirus Vaccine, Live, Oral, Pentavalent) and also to resume the use of *Rotarix*.

For your background, in March 2010 an independent research team and the FDA tested rotavirus vaccines for PCV DNA. At that time, PCV DNA was not detected in RotaTeq by the assays that were used initially. Subsequently, Merck initiated PCV testing of RotaTeq using highly sensitive assays. Merck's testing detected low levels of DNA from PCV 1 and PCV 2 in RotaTeq. Merck immediately shared these results with the FDA and other regulatory agencies.

The FDA stated that they have no evidence that PCV 1 or PCV 2 poses a safety risk in humans, and neither is known to cause infection or illness in humans. The FDA noted that the benefits of rotavirus vaccines are substantial, and that these benefits outweigh the risk, which is theoretical. The FDA does not believe medical follow-up is warranted for infants who have been vaccinated with RotaTeq.

We remain confident in the safety profile and quality of RotaTeq. RotaTeq was studied in nearly 70,000 infants in one of the largest pre-licensure vaccine clinical trials ever conducted. The safety profile of the vaccine has been and continues to be evaluated by FDA, the US Centers for Disease Control and Prevention (CDC), other worldwide regulatory agencies, and Merck.

Merck is fully committed to working closely with the FDA and regulatory agencies throughout the world, to continue conducting and sharing comprehensive research related to this finding, and taking appropriate action. While additional research is ongoing to further understand this emerging area of science and the associated technical challenges, Merck is committed to initiating the following actions:

- Identifying the source of the DNA from PCV recently detected in RotaTeq
- Developing approaches to enhance screening and removal of PCV from RotaTeq in the future
- Continuing to share data with regulatory agencies, health care providers, the scientific community, the public health community, and the public as more information becomes available

Merck will also work with scientific experts and regulatory authorities throughout the world to further understand current and emerging technologies and evaluate how they may supplement our current methods of quality assurance.

RotaTeq is indicated for the prevention of rotavirus gastroenteritis in infants and children caused by serotypes G1, G2, G3, and G4 when administered as a 3-dose series to infants between the ages of 6 to 32 weeks.

The vaccination series consists of 3 ready-to-use liquid doses of RotaTeq administered orally starting at 6 to 12 weeks of age, with the subsequent doses administered at 4- to 10-week intervals. The third dose should not be given after 32 weeks of age.

Select safety information

RotaTeq should not be administered to infants with a demonstrated history of hypersensitivity to the vaccine or any component of the vaccine.

DNA=deoxyribonucleic acid.

Select safety information about RotaTeq® (Rotavirus Vaccine, Live, Oral, Pentavalent) Cont'd

Infants with Severe Combined Immunodeficiency Disease (SCID) should not receive RotaTeq. Post-marketing reports of gastroenteritis, including severe diarrhea and prolonged shedding of vaccine virus, have been reported in infants who were administered RotaTeq and later identified as having SCID.

No safety or efficacy data are available from clinical trials regarding the administration of RotaTeq to infants who are potentially immunocompromised.

No safety or efficacy data are available for administration of RotaTeq to infants with a history of gastrointestinal disorders.

Caution is advised when considering whether to administer RotaTeq to individuals with immunodeficient contacts.

In clinical trials, the most common adverse events included diarrhea, vomiting, irritability, otitis media, nasopharyngitis, and bronchospasm.

In post-marketing experience, intussusception (including death) and Kawasaki disease have been reported in infants who have received RotaTeq.

RotaTeq may not protect all vaccine recipients against rotavirus.

Before administering RotaTeq, please read the accompanying Prescribing Information.

Additional Information on this topic is available at www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm212140.htm.

If you have questions regarding this information, please call the Merck National Service Center at 1-800-672-6372, visit MerckVaccines.com® or contact your Merck representative.

In summary, the FDA supports the continued use of rotavirus vaccines. Merck is fully committed to working closely with the FDA and regulatory agencies throughout the world to conduct and share comprehensive research related to recent findings and to taking appropriate action.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Feinberg", with a large, stylized flourish extending from the end of the name.

Mark Feinberg, MD, PhD
Vice President, Medical Affairs and Policy
Merck Vaccines