

Frequently Asked Questions about the use of Rh (D) Immunoglobulin and WinRho SDF™

Abbreviations used in this section:

ARCBS	Australian Red Cross Blood Service
MMR	Measles, Mumps and Rubella
IU	International Unit
FMH	Fetomaternal Haemorrhage
NHMRC	National Health and Medical Research Council
FDA	Food and Drug Administration (U.S.A)
CJD	Creutzfeldt-Jacob Disease (Mad Cow Disease)

NHMRC Report (2003): National Health and Medical Research Council (NHMRC)
Guidelines on the prophylactic use of Rh D immunoglobulin (Anti-D) in obstetrics 2003

Product Questions & Answers

Introduction

The following answers to frequently asked questions are intended for use by healthcare professionals and have been endorsed by CSL Limited. If you have received or expect to receive Rh (D) Immunoglobulin-VF, please direct any queries to your healthcare provider.

Rh (D) Immunoglobulin-VF Questions

- 1. What is the half-life of Rh (D) Immunoglobulin-VF and how long is it detectable in the patient's circulation?*
- 2. What dose of Rh (D) Immunoglobulin-VF will protect against 1 mL of fetal Rh (D) positive red cells?*
- 3. What are the recommendations regarding the administration of Rh (D) Immunoglobulin-VF and the MMR vaccination?*
- 4. For Rh (D) negative women who are not rubella immune, what is the recommended administration regimen for Rh (D) Immunoglobulin-VF and the rubella vaccine?*
- 5. What is the risk of viral transmission with Rh (D) Immunoglobulin-VF?*
- 6. Does Rh (D) Immunoglobulin-VF contain thiomersal?*
- 7. Does Rh (D) Immunoglobulin-VF contain red blood cells?*
- 8. What are the storage requirements for Rh (D) Immunoglobulin-VF?*
- 9. What intravenous Rh (D) immunoglobulin product is currently available in Australia and how can I access it?*

Rh (D) Immunoglobulin-VF Questions & Answers

- 1. *What is the half-life of Rh (D) Immunoglobulin-VF and how long is it detectable in the patient's circulation?***

The half-life of the ARCBS/CSL Rh (D) Immunoglobulin-VF is approximately 3-4 weeks. It can be detected in a patient's serum up to 6 weeks after administration. If there are ongoing silent bleeds during pregnancy, Rh (D) Immunoglobulin-VF will be removed from circulation, considerably shortening its half-life and duration of effect.

If there is a sensitising event* at any time, even within a few weeks of administration, it is important to quantify the magnitude of the fetomaternal haemorrhage (FMH). Depending on the magnitude of the FMH, more than one dose of Rh (D) Immunoglobulin-VF may be required.

* Sensitising events include normal delivery, ectopic pregnancy, miscarriage, termination of pregnancy and ultrasound needle guided procedures such as chorionic villus sampling, amniocentesis, cordocentesis and fetoscopy. Also abdominal trauma considered sufficient to cause fetomaternal haemorrhage, external cephalic version or antepartum haemorrhage.

Reference: Pollack W, Ascari WQ, Kochesky RJ et al (1971). Studies on Rh prophylaxis. Relationship between doses of anti-Rh and size of antigenic stimulus. Transfusion 11; 333-9.

- 2. *What dose of Rh (D) Immunoglobulin-VF will protect against 1 mL of fetal Rh (D) positive red cells?***

It is reasonably well established that 100 IU of Rh (D) Immunoglobulin-VF will protect against a fetomaternal haemorrhage (FMH) of 1 mL of fetal Rh (D) positive red cells (2 mL of whole blood). The standard Australian dose of 625 IU should protect against a FMH of up to 6 mL of fetal Rh (D) positive red cells (12 mL of whole blood).

References: Pollack W, Ascari WQ, Kochesky RJ et al (1971). Studies on Rh prophylaxis. Relationship between doses of anti-Rh and size of antigenic stimulus. Transfusion 11; 333-9.

Guidelines on the prophylactic use of Rh D Immunoglobulin (Anti-D) in obstetrics. NHMRC Report. 2003.

- 3. *What are the recommendations regarding the administration of Rh (D) Immunoglobulin-VF and the MMR vaccination?***

MMR (Measles, Mumps, Rubella) is a live attenuated vaccine. The ARCBS/CSL Rh (D) Immunoglobulin-VF approved Product Information cautions that passively acquired antibody from the administration of Rh (D) immunoglobulin can interfere with the response to live attenuated vaccines. Thus, it is recommended that administration of live attenuated vaccines like poliomyelitis and MMR be deferred until approximately 3 months after passive immunisation. By the same token, it is recommended that immunoglobulins should not be administered for at least 2 weeks after a live attenuated vaccine has been given.

The Australian Immunisation Handbook, however, states that Rh (D) immunoglobulin does not interfere with the antibody response to the MMR vaccine. The Handbook suggests the two injections may be given at the same time in different sites with separate syringes, or at any time in relation to each other. With this in mind, administration of live attenuated vaccines and Rh (D) Immunoglobulin should be at the healthcare professional's discretion.

*References: Approved Product Information for Rh (D) Immunoglobulin-VF
 The Australian Immunisation Handbook 8th Edition (NHMRC)*

4. For Rh (D) negative women who are not rubella immune, what is the recommended administration regimen for Rh (D) Immunoglobulin-VF and the rubella vaccine?

The approved Product Information for ARCBS/CSL Rh (D) Immunoglobulin-VF states that a live attenuated vaccine, such as rubella, should not be administered within 3 months of an injection of Rh (D) Immunoglobulin-VF. Passively acquired antibody can interfere with the response to live attenuated virus vaccines. If a patient has been vaccinated with the rubella vaccine and subsequently requires Rh (D) immunoglobulin, the Rh (D) immunoglobulin should be administered at least 2 weeks after the rubella vaccine to avoid interference with the immune response to the rubella vaccine. If the need to administer Rh (D) immunoglobulin is urgent, for example after a FMH, the patient should be checked for seroconversion two months after vaccination and revaccinated if seroconversion has not occurred.

In clinical practice, it is standard for women who are rubella seronegative on antenatal screening to be vaccinated after delivery, before discharge from the maternity unit of the hospital. For optimum efficacy, Rh (D) Immunoglobulin-VF must be administered within 72 hours post partum.

The Australian Immunisation Handbook states that Rh (D) immunoglobulin and the rubella vaccine may be given at the same time, or at any time in relation to each other, in different sites with separate syringes. In such cases, it is recommended that the patient's General Practitioner is alerted to test for seroconversion two months after vaccination and revaccinate the patient if necessary.

*References: Approved Product Information for Rh (D) Immunoglobulin-VF
 The Australian Immunisation Handbook 8th Edition (NHMRC)*

5. ***What is the risk of viral transmission with Rh (D) Immunoglobulin-VF?***

There has never been a confirmed case of viral transmission by ARCBS/CSL Rh (D) Immunoglobulin-VF.

References: Data held on file by CSL Bioplasma

6. ***Does Rh (D) Immunoglobulin-VF contain thiomersal?*** (Thiomersal is a mercury based antibacterial preservative used in some products).

No, ARCBS/CSL Rh (D) Immunoglobulin-VF does not contain thiomersal.

References: Data held on file by CSL Bioplasma

7. ***Does Rh (D) Immunoglobulin-VF contain red blood cells?***

Rh (D) Immunoglobulin does not contain red blood cells.

8. ***What are the storage requirements for Rh (D) Immunoglobulin-VF?***

ARCBS/CSL Rh (D) Immunoglobulin-VF should be stored under appropriate cold-chain conditions (refrigerate at 2° to 8° C, do not freeze, protect from light). Do not use after the expiry date shown on the label. Any unused product should be discarded in a medically acceptable manner.

References: Approved Product Information for Rh (D) Immunoglobulin-VF

9. ***What intravenous Rh (D) immunoglobulin product is currently available in Australia and how can I access it?***

A quantity of WinRho SDFTM is available in reserve where access to an intravenous preparation is warranted. This product may be accessed via the Australian Red Cross Blood Service. Contact the ARCBS Transfusion Medicine Specialist in your capital city.

References: Approved Product Information for WinRho SDFTM

WinRho SDFTM Questions

- 1. How soon after reconstituting WinRho SDFTM should the injection be given?***
- 2. Is WinRho SDFTM as safe as the Rh (D) Immunoglobulin-VF product fractionated by CSL Bioplasma?***
- 3. What are the major differences between the ARCBS/CSL Rh (D) Immunoglobulin-VF and WinRho SDFTM Rh (D) immunoglobulin?***
- 4. Does WinRho SDFTM contain thiomersal?***
- 5. Does WinRho SDFTM contain red blood cells?***
- 6. What are the storage requirements for WinRho SDFTM?***

WinRho SDF™ Questions & Answers

1. How soon after reconstituting WinRho SDF™ should the injection be given?

If WinRho SDF™ is not used immediately after reconstitution, it can be stored for up to 4 hours at room temperature (<25° C).

References: Approved Product Information for WinRho SDF™

2. Is WinRho SDF™ as safe as the Rh (D) Immunoglobulin-VF product fractionated by CSL Bioplasma?

The plasma used to manufacture WinRho SDF™ comes from FDA licensed centres where donors are thoroughly screened. The quality assurance measures performed by the manufacturer of WinRho SDF™ are comparable to those used by the ARCBS/CSL during the collection of plasma for Rh (D) Immunoglobulin-VF. Donors whose plasma is used to make WinRho SDF™ undergo an annual examination as well as a rigorous screening and interview process every time they present for donation. Any donors who have risk factors for infection with variant CJD are deferred. This is a risk assessment that is used in Australia. Additionally, every time a donation is made there is an assessment of the donor's physical health, including blood pressure, weight gain/loss and haematocrit. Therefore, WinRho SDF™ has been approved by the Australia Therapeutic Goods Administration (TGA) for supply in Australia for the treatment of Australians. Note that there has never been a confirmed case of viral transmission by either the ARCBS/CSL Rh (D) Immunoglobulin-VF or WinRho SDF™ anywhere in the world.

References: Data held on file by CSL Bioplasma and Cangene

3. What are the major differences between the ARCBS/CSL Rh (D) Immunoglobulin-VF and WinRho SDF™?

Feature	ARCBS/CSL Rh(D) Immunoglobulin-VF	WinRho SDF™
Viral Inactivation Steps	Pasteurisation	Solvent detergent & nanofiltration
Administration	Intramuscular only	Intramuscular or Intravenous
Formulation	Liquid, ready to use	Lyophilised powder for reconstitution
Presentation	250IU, 625IU	600IU

4. Does WinRho SDF™ contain thiomersal? (Thiomersal is a mercury based antibacterial preservative used in some products).

No, WinRho SDF™ does not contain thiomersal.

References: Data held on file by Cangene

5. ***Does WinRho SDF™ contain red blood cells?***
WinRho SDF™ does not contain red blood cells.

6. ***What are the storage requirements for WinRho SDF™?***

WinRho SDF™ should be stored under appropriate cold-chain conditions (refrigerate at 2° to 8° C, do not freeze, protect from light). Do not use after the expiry date shown on the label. Any unused product should be discarded in a medically acceptable manner.

References: Approved Product Information for WinRho SDF™

For further medical and/or technical inquiries, please contact the Medical Affairs Department at CSL Bioplasma:

Free Phone: **1800 067 140**

Phone: +61 3 9358 5213

Email: medicalaffairs_bioplasma@csl.com.au