

Drugs of Animal Origin Guidance

Introduction and purpose

The purpose of this guideline is to provide information to healthcare professionals on drugs of animal origin in order to:

- Ensure that prescribers are aware of which drugs may contain animal products and what alternatives exist.
- Enable patients who do not wish to receive drugs of animal origin to make informed decisions about their treatment.

Background: Which patients may be affected by this guideline?

Some patients may not want to receive drugs that contain animal products for religious or ethical reasons. Patients who may not want to receive drugs of animal origin include²:

- **Buddhists:** May wish to follow a vegetarian diet.
- **Hindus:** Most do not eat beef and some will not eat egg/chicken. Some will be strict vegetarians.
- **Muslims:** Pork is forbidden, other meat must be slaughtered according to the Halal ritual.
- **Jews:** Shellfish, pork and rabbit is strictly prohibited. Porcine derived medication is normally only an issue if taken by mouth¹.
- **Sikhs:** Many are vegetarian, and in particular will not eat beef.
- **Rastafarians:** Many are vegetarian. Pork and shellfish are strictly forbidden.
- **Seventh Day Adventists:** Many are vegetarian. Others are not vegetarian but do not consume pig products, and some also avoid red meats.
- People who follow a **vegetarian/vegan** diet for other reasons such as ethical reasons.

Many patients will be unaware of the origin of their medicines. This will not be an issue for most patients, and many patients who do not consume animal products for religious or ethical reasons will be happy to receive drugs of animal origin for medical purposes when there is no alternative. However, if a patient wishes to avoid drugs of animal origin it's important that healthcare professionals understand how to determine which drugs this applies to so that a suitable alternative can be offered, where possible.

How to establish if a drug is of animal origin

Commonly used drugs within the Trust are included in the table below. If the drug is not listed and you are unsure whether it is of animal origin then the following sources can be used:

- Contact the medicines information department of the company who makes the drug
- Name - It may be obvious from the name of the drug e.g. 'porcine'.
- Patient information leaflet/[Summary of product characteristics](#) - These may give information about the active ingredients and excipients but may not always be explicit.

Commonly used drugs of animal origin (Please note: this is not an exhaustive list)

Drugs affected	Origin	Possible alternative
Heparin – all <ul style="list-style-type: none"> • Unfractionated – sodium and calcium • Fractionated – low molecular weight heparin (e.g. enoxaparin) 	Derived from porcine (pig) intestinal mucosa. Note: no porcine protein or DNA is present in the final presentation of low molecular weight heparins (LMWH).	Fondaparinux sodium
Nasal flu vaccine (Fluenz®)	Gelatine (from pigs)	Gelatine-free flu vaccine injection
MMR vaccine (MMR VaxPro®)	Gelatine (from pigs)	Priorix®
MMRV vaccine (ProQuad®)	Gelatine (from pigs)	Priorix Tetra®
Pancreatin (Pancrease®, Nutrizym®, Pancrex®, Creon®)	All pancreatin supplements are of porcine (pig) origin	None
Piroxicam orodispersible tablets (Feldene Melt®)	Gelatine (from cows)	Diclofenac dispersible tablets
Rizatriptan orodispersible tablets (Maxalt® Melt)	Gelatine (from cows)	Rizatriptan tablets, sumatriptan nasal spray
Saliva orthana® spray	Porcine (pig) mucin	Other mouthcare products e.g. Glandosane®, Biotene Oralbalance®
Ciclosporin (Neoral®) capsules	Gelatine (from pigs)	Ciclosporin liquid (note: contains ethanol which may be against religious belief). All ciclosporin capsules contain gelatine, but source is unknown.
Danaparoid	From porcine (pig) mucosa	Fondaparinux sodium

Human rotavirus live attenuated vaccine (Rotarix®)	Uses porcine (pig) trypsin – limited information	None
Defibrotide (Defitelio®)	Produced from porcine (pig) intestinal mucosa	None
Loperamide orodispersible tables (Imodium® instants)	Contains gelatine	Loperamide tablets
Isotretinoin	Contains gelatine	Capsule may be opened. Must be opened immediately prior to administration and taken with food.
Calcium & vit D preparations	Many products contain gelatine	See local guideline for alternatives
Some HRT preparations – Premarin®, Premique®	Equine (horse) origin	All other HRT preparations other than Premarin® and Premique® do not come from animal origin.
Anti-TNFs including infliximab, adalimumab, etanercept, golimumab	Murine (mouse) origin	Certolizumab
JAK Inhibitor: Filgotinib	Murine (mouse) origin	Baricitinib, tofacitinib
Vascular endothelial growth factor inhibitors – aflibercept, bevacizumab	Murine (mouse) origin	Ranibizumab
There are many other monoclonal antibodies on the market which may be of murine origin. Please contact Medicines Information for details of excipients		

Please note that this table only includes a non-exhaustive list of products which are currently licenced in the UK. For products that are unlicensed please contact Medicines Information.

Gelatine

Most capsule shells are made from gelatine which is of animal origin. Some religions may allow the use of gelatine when there is no easily available alternative or where it is being consumed in a non-edible form, such as a totally tasteless capsule shell or a powdered form as a binder in tablets.

It is not possible to list every capsule available in this guideline, but if you have a patient who does not wish to take gelatine in any form then be aware that it is likely that capsules will contain gelatine. This can be confirmed by discussing it with your ward pharmacist or following the steps in the section 'How to establish if a drug is of animal origin'. Alternatives to consider may include liquids or tablets depending on the drug in question. Dependent on the medication

it may be possible to open the capsules but this should be discussed with either your ward pharmacist or Medicines Information to confirm if this is possible.

Lactose

This is a sugar derived from milk that is used as a bulking agent in many tablets and to improve the taste of chewable tablets. This may be a problem for some Jewish patients because of certain religious dietary laws that do not allow the consumption of meat and milk together, however where it is in an inedible form (e.g. non-chewable tablet or capsule formulations that are swallowed whole) it should not normally be a problem. Other patients for whom lactose may be a problem include those who follow a strict vegan diet.

Stearic acid/Stearates

These are now usually from vegetable sources, however there are still some products using porcine derived stearates. This information can be found by contacting your ward pharmacist. Under Jewish Law less than 1.5% would not create a problem and there is no issue if the preparation is a non-edible tablet.

Glycerol/Glycerine

Most glycerine used within the pharmaceutical industry is now of vegetable extraction. It is worth noting that under Jewish law animal derived-glycerine in a liquid preparation would be forbidden as it helps to impart a good taste.

Documentation: What you should do if a patient does not want to receive drugs of animal origin

- Record the patient's wishes in their medical notes. A note should also be made on the inpatient drug chart or, if using EPR, the allergies section of the worklist manager.
- A table listing common drugs of animal origin and their alternatives is included in this guideline. If a suitable alternative is available then this can be prescribed.

If no suitable alternative is available then this should be discussed with the patient, and the risks of not taking the drug explained. If the patient is certain that they do not wish to receive a drug despite the risks then this should be documented in the medical notes.

References:

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<https://lx.iriss.org.uk/sites/default/files/resources/A%20guide%20to%20cultural%20and%20spiritual%20awareness.pdf>

3. Specialist Pharmacy Service. Avoiding Animal Contents Within Medicines:
<https://www.sps.nhs.uk/articles/avoiding-animal-contents-within-medicines/>
4. UK Health Security Agency. Vaccines and porcine gelatine. Updated November 2025.
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5. Queensland Health. Medicines/Pharmaceuticals of animal origin v4 April 2025.
Available from:
https://www.health.qld.gov.au/_data/assets/pdf_file/0025/1456216/medicines-of-animal-origin.pdf

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Approved by: Drug & Therapeutics Committee April 2026

Review Date: April 2029