



Policy issues
From the Drugs Directorate

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SUBMISSIONS FOR GENERIC PARENTERAL DRUGS

Generic parenteral drug products that are considered to be New Drugs, are subject to the requirements of Division 8 of Part C of the Food and Drug Regulations. New drug submissions (NDS) for these parenteral preparations are required to contain evidence of safety and efficacy under the proposed conditions of use in conformity with sections C.08.002 and C.08.005.1 of the Regulations. In the case of drugs intended to be used in food-producing animals, evidence must also be provided that, after the proposed withdrawal time, drug residues do not exceed levels acceptable to the Directorate.

The policy outlined below has been developed to help manufacturers in the preparation of new drug submissions for generic parenteral products.

For the purpose of this document the terms "chemical equivalence" and "pharmaceutical equivalence" apply to medicinal ingredients and to drug products which fulfil the following definitions:

CHEMICAL EQUIVALENCE: the condition in which medicinal ingredients obtained from different sources meet a compendial and/or other applicable standard of identity, quality, (including physical and chemical characteristics such as appearance, colour, particle size, solubility etc.) purity and potency acceptable to the Directorate.

PHARMACEUTICAL EQUIVALENCE: the condition in which drug products contain identical quantities of a chemically equivalent drug (but not necessarily containing the same nonmedicinal ingredients) in an identical parenteral dosage form and meet a compendial and/or other applicable standard of identity, strength, quality, purity and potency acceptable to the Directorate.

For the purpose of establishing the requirements for new drug submissions for generic parenteral products, the following categories have been established:

CATEGORY I PRODUCTS:

- (a) Water-soluble powders for reconstitution, no nonmedicinal ingredients;
- (b) Aqueous solutions, no nonmedicinal ingredients other than the vehicle;

Non-aqueous single solvent solutions, other than oil preparations, no nonmedicinal ingredients other than the vehicle.

CATEGORY II PRODUCTS:

Lyophilized powders
Buffered powders
Aqueous solutions, with nonmedicinal ingredients
Non-aqueous solutions, other than oil preparations, with nonmedicinal ingredients

CATEGORY III PRODUCTS:

Oil soluble preparations involving a single oil

CATEGORY IV PRODUCTS:

Special products, such as:
Suspensions
Emulsions
Preparations involving cosolvent systems
Modified release preparations
Special classes of drugs
Drugs subject to Schedule D of the Food and Drugs Act

The general requirements for all categories are outlined below:

GENERAL REQUIREMENTS (CATEGORY I, II, III AND IV)

A new drug submission (see Guidelines for Preparing and Filing New Drug Submissions) including:

- i) complete chemistry, manufacturing and quality control data.
- ii) in vitro and in vivo animal studies and clinical trials establishing safety and effectiveness of the product. Data in the public domain may be acceptable as fulfilling this requirement.
- iii) fully annotated Product Monograph, accompanied by appropriate documents cited in the annotations.
- iv) labels and any other labelling material required for the product.
- v) for products intended to be used in food-producing animals, appropriate residue studies in target species.

SPECIAL REQUIREMENTS, AS SPECIFIED BY CATEGORY:

CATEGORY I PRODUCTS

- i) proof of pharmaceutical equivalence of the generic and the innovator's product, as marketed in Canada, or
- ii) for products for which pharmaceutical equivalence has not been established, appropriate in vitro and/or in vivo animal studies and/or clinical trials.

CATEGORY II PRODUCTS

- i) proof of pharmaceutical equivalence of the generic and the innovator's products as marketed in Canada. A product will not be considered pharmaceutically equivalent if
 - any of the nonmedicinal ingredients are not generally accepted for such preparations, or
 - the quantity of any of the nonmedicinal ingredients falls outside the range acceptable to the Directorate;or
- ii) for products for which pharmaceutical equivalence has not been established, appropriate in vitro and/or in vivo animal studies and/or clinical trials.

CATEGORY III PRODUCTS

- i) complete information on the source of the oil, the description of the purification process, and the analytical profile of the oil, and
- ii) proof of pharmaceutical equivalence of the generic and the innovator's product as marketed in Canada. A product will not be considered pharmaceutically equivalent if
 - any of the nonmedicinal ingredients are not generally accepted for such preparations, or
 - the quantity of any nonmedicinal ingredient falls outside the range acceptable to the Directorate, or
 - the oil used is different from that used in the innovator's product;

or

iii) for products for which pharmaceutical equivalence has not been established, appropriate in vitro and/or in vivo animal studies and/or clinical trials.

CATEGORY IV PRODUCTS

In view of the particular considerations that may apply to these products, a written opinion on special requirements for individual products will be provided on request, upon submission of chemistry and manufacturing data, and proposed labelling.

A full submission will normally be required for all drugs subject to Schedule D.

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