Biologics and Genetic Therapies
Directorate
Bureau of Biologics and
Radiopharmaceuticals
Building #6, AL 0603C3
Tunney's Pasture
Ottawa, Ontario
K1A 0L2

October 4, 2001

01-114275-566

To: All Establishments and Physicians that Process, Distribute and/or Import Donor Semen for Assisted Conception

Subject: Guidance on Donor Semen Special Access Programme: Alternative Test Requirements

Health Canada is pleased to inform you of the release of the Document entitled *"Guidance on Donor Semen Special Access Programme: Alternative Test Requirements."* This Guidance Document was developed in response to queries from physicians and patients regarding the alternative testing provisions outlined in subparagraph 20(1)(b)(ii) of the *Processing and Distribution of Semen for Assisted Conception Regulations* (Semen Regulations), which were promulgated on December 1, 2000. It provides guidance on alternative tests that will be considered acceptable by Health Canada within the context of the Donor Semen Special Access Programme.

A copy of the Guidance Document is included with this letter and is also available on the Therapeutic Products Directorate website at:

http://www.hc-sc.gc.ca/hpb-dgps/therapeut

If you have any questions regarding this document, please do not hesitate to contact:

.../2

DSSAP
Blood and Tissues Division
Bureau of Biologics and Radiopharmaceuticals
Building #6, AL 0603C3

Tunney’s Pasture
Ottawa, Ontario K1A 0L2

Telephone: (613)952-8318
Facsimile: (613)941-5841
Email: DSSAP@hc-sc.gc.ca

Yours sincerely,

Original signed by

Julia Hill
Associate Director General

Attachments:

Document entitled *“Guidance on Donor Semen Special Access Programme: Alternative Test Requirements.”*

Health Canada Santé Canada

Guidance on Donor Semen Special Access Programme: Alternative Test Requirements

Biologics and Genetic Therapies Directorate
Health Canada

October 2001

Canada

1. PURPOSE:

The purpose of this document is to:

a) provide guidance as to the alternative testing requirements set out in subparagraph 20(1)(b)(ii) of the *Processing and Distribution of Semen for Assisted Conception Regulations* (Semen Regulations); and

b) outline conditions, within the context of a request for special access to donor semen, under which infectious disease tests performed on the patient could be considered an acceptable alternative to tests performed on the semen donor in meeting the requirements stated in subparagraph 20(1)(b)(ii).

2. DEFINITIONS

The following definitions apply in this Guidance Document:

Patient - The woman on whom assisted conception will be performed using the donor semen for which the special access authorization is being requested.

Physician - The individual who submits a Donor Semen Special Access Programme application to Health Canada on behalf of the patient.

Previously Exposed Patient - The patient who has already been exposed to semen from the same donor as that of the semen for which the special access authorization is being requested.

Requested Semen Donation - the semen donations for which the special access authorization is being requested.

3. BACKGROUND:

The Donor Semen Special Access Programme (DSSAP) is intended to provide access, in exceptional circumstances, to semen that has not been processed in accordance with the requirements specified in paragraphs 4(1)(b), 9(1)(a) and section 10 of the Semen Regulations. Pursuant to paragraph 20(1)(b) of the Semen Regulations, the Minister shall issue a special access authorization for the release of such semen to the processor, distributor or importer referred to in a DSSAP application **if** tests for human immunodeficiency virus types 1 and 2 (HIV-1 and HIV-2), hepatitis B virus (HBV) and hepatitis C virus (HCV) were performed collectively using one of the following tests, and the result of each test was negative:

i) A serological test for antibody to HIV-1 and HIV-2, antibody to HCV, and antibody to HBV (i.e., **IgG** anti-HBcAg), performed on a specimen obtained from the semen donor at least six months after the donation date of the requested semen;

ii) Other tests that are at least as effective as the tests specified in item (i) above in detecting these infectious agents; **or**

iii) In the case of testing for HBV in respect of semen processed prior to March 14, 2000, a serological test for Hepatitis B Surface Antigen (HBsAg) performed on two specimens obtained from the donor of the requested semen within six months of each other, one obtained on or before the date of the donation and the other after that date.

Issues have arisen concerning DSSAP applications submitted to Health Canada in which the tests performed on the donor do not comply with the requirements specified in items (i) and (iii) above. Specifically, these donors were:

a) never tested for the relevant infectious disease marker(s);

b) tested for the relevant infectious disease marker(s) before, but not after, the requested semen donations were made;

c) tested for antibodies to these infectious agents in a time frame of less than six months after the requested semen donations were made; and/or

d) tested for HBsAg both before and after the semen donation(s), but the two tests were performed more than six months apart.

Further, some donors cannot be located for testing according to the requirements specified under subparagraph 20(1)(b)(i) of the Semen Regulations. Consequently, Health Canada has been asked to provide guidance on alternative tests that will be considered acceptable under subparagraph 20(1)(b)(ii) of the Semen Regulations.

4. ALTERNATIVE TESTING PROVISIONS

The alternative testing provisions in subparagraph 20(1)(b)(ii) were included in the Semen Regulations to allow the use of other tests that are as effective as those specified in subparagraph 20(1)(b)(i) in detecting the relevant infectious agents. For example, in cases where donors cannot be located, and the only specimens available for testing are their cryopreserved semen donations, testing laboratories could proceed with testing these donations as soon as they are able to validate a method for the detection of the

relevant infectious agents in semen specimens.

Many of the patients requesting special access authorization have already had a child(ren) using semen from the donors of the requested semen, and wish to have another child using semen from the same donor to ensure their children will be genetic siblings. These patients and their physicians have indicated that they do not believe the requested semen is contaminated because the patients, and in some cases their spouses/sexual partners, have been tested and found negative for all the relevant infectious agents. Thus, in lieu of a validated method for testing cryopreserved semen specimens for these infectious agents, Health Canada has been asked to consider serological tests performed on previously exposed patients as an acceptable alternative to tests performed on the semen donor.

5. CONSIDERATIONS

Health Canada recognizes that the likelihood of a semen donor being infected with HIV, HBV and HCV is relatively low if the patient has already been exposed to his donations in the past without any adverse consequences. However, it is important to note that the various donations from a single donor may have been made on different days and over an extended period of time. Thus, the safety of the individual donations from the same donor will depend on the time of exposure to an infectious agent. For example, if a donor was tested and found negative for an infectious disease marker on January 1, 2000 and subsequently became infected on March 15, 2000, the donations he made **before** March 15, 2000 will not be contaminated with the infectious agent. However, the probability of the donations he made **on or after** March 15, 2000 being contaminated with the infectious agent is relatively high. Consequently, there is no assurance that all of the semen donations from a single donor are equivalent with respect to infectious disease risk.

For the reasons stated above, infectious disease tests performed on previously exposed patients were not generally accepted as effective alternative tests by Health Canada. However, some physicians have indicated they can provide additional information to assist with evaluating the effectiveness of the serological tests performed on previously exposed patients.

6. CONDITIONS FOR ACCEPTING RECIPIENT TEST RESULTS

The acceptability of infectious disease tests performed on previously exposed patients as a substitute for donor testing will be considered on a case by case basis. A test performed on the patient may be deemed acceptable if all of the following conditions are satisfied:

a) the donor of the requested semen cannot be located for testing as specified in subparagraph 20(1)(b)(i) of the Semen Regulations;

b) the special access authorization is being requested on behalf of a previously exposed patient;

c) the requested semen was donated **on or before** the date of donation of the semen samples used previously by the patient;

d) the patient, and where applicable, her spouse/sexual partner, were tested for the relevant infectious disease markers at least six months after the patients's last exposure to semen from the donor of the requested semen, and the results of the tests are negative.

Note: *Relevant infectious disease markers are the markers for the infectious disease agents the donor was not tested for.*

7. ADDITIONAL INFORMATION REQUIRED

In order to determine the validity of accepting infectious disease tests performed on the patient as a substitute for tests performed on the donor, Health Canada is requesting that physicians provide all of the following information in addition to the information requested in the DSSAP application form:

a) the date(s) of donation of the semen samples used in the past by the patient;

b) the dates and results of the relevant infectious disease tests performed on the donor with respect to the semen samples used in the past by the patient, **if** they are different from those of the semen samples requested in the DSSAP application;

c) the date of the patient's last exposure to semen from the donor of the requested semen;

d) evidence that the patient and, where applicable, her spouse/sexual partner were tested and found negative for the relevant infectious disease markers;

e) the dates and results of the relevant infectious disease tests performed on the patient, and where applicable, her spouse/sexual partner; and
Note: *Relevant infectious disease as used in items (b), (d) and (e) above means any infectious disease that the donor was not tested for as specified in subparagraph 20(1)(b)(i) and 20(1)(b)(iii) of the Semen Regulations.*

f) any other information that will assist Health Canada reviewers in determining the acceptability of the recipient's test results as a substitute for tests performed on the donor of the requested semen, where the donor cannot be located.

Information regarding infectious disease tests must include the **specific** infectious disease markers detected by the tests performed. The specific markers include:

a) antibody to HIV-1 and HIV-2
b) antibody to HCV
c) HBsAg
d) antibody to HBc (**IgG** or **total**).

In the case of HBV, the patients and, where applicable, her spouse/sexual partner must be tested for **both** HBsAg and antibody to HBc (**IgG** or **total**).

For additional information please contact:

DSSAP
Blood and Tissues Division
Bureau of Biologics and Radiopharmaceuticals
3rd Floor, Building #6
Postal Locator 0603C3
Tunney's Pasture
Ottawa, Ontario KIA 0L2

Tel: (613) 952-8318
Fax: (613) 941-5841
E-mail: DSSAP@hc-sc.gc.ca