TSE / BSE Risk Mitigation Statement

CytoPure™ Human Platelet Lysate — PLUS · XF · GI (Research Grade)

1. Purpose and scope

This statement addresses the risk of transmitting transmissible spongiform encephalopathy (TSE) agents, including bovine spongiform encephalopathy (BSE), through the use of CytoPure™ human platelet lysate. It applies to CytoPure™ PLUS, CytoPure™ XF, and CytoPure™ GI in all fill volumes.

Two guidance documents frame the assessment: **EMA/410/01 rev.3 — Note for Guidance on Minimising the Risk of Transmitting Animal Spongiform Encephalopathy Agents via Human and Veterinary Medicinal Products**, and **European Pharmacopoeia general chapter 5.2.8**. Cytologics applies the principles described in these documents; Cytologics does not claim certification to either, and no TSE Certificate of Suitability has been sought for any CytoPure™ product.

2. Origin of the source material

CytoPure™ is manufactured from human platelet units. It is not derived from, and does not contain, material from any TSE-relevant animal species.

Source material is human platelet units collected at U.S. Food and Drug Administration (FDA)-licensed and AABB-accredited blood centers in the United States, originally collected and released for use in patient transfusion. The complete donor eligibility, screening and infectious disease testing framework is described in CYT-VSD-009.

3. Materials used in manufacture

Under **EMA/410/01 rev.3**, the TSE-relevant animal species are **bovine, ovine, and caprine**. The table below states, for each product, every animal-derived material used at any stage of manufacture.

Product	Animal-derived materials used in manufacture	TSE-relevant species?
CytoPure™ PLUS	Heparin sodium, porcine origin	No — porcine
CytoPure™ XF	None	None used
CytoPure™ GI	None	None used

- No bovine serum albumin, fetal bovine serum, bovine trypsin, bovine-derived peptone, or any other material of **bovine, ovine, and caprine** origin is used at any stage of manufacture of any CytoPure™ product, including in culture media, buffers, processing aids, filtration media, and cleaning agents.
- Heparin sodium of porcine origin is used in the manufacture of CytoPure™ PLUS. Porcine is not a TSE-relevant animal species under EMA/410/01 rev.3. CytoPure™ XF and CytoPure™ GI are manufactured without heparin at any stage and contain no animal-derived components of any species.
- Raw material suppliers are qualified and monitored under the supplier qualification procedure described in CYT-QTS-031 section 2, which includes confirmation of the species origin of animal-derived materials.

4. Donor deferral for CJD and variant CJD

Source material is collected exclusively in the United States at FDA-licensed and AABB-accredited blood centers. Those centers apply the donor deferral criteria established by the FDA for Creutzfeldt-Jakob disease and variant Creutzfeldt-Jakob disease, including deferral for a diagnosis of CJD or vCJD, for a family history of CJD, and for receipt of human pituitary-derived growth hormone or a dura mater graft.

These deferrals are applied by the collecting blood center as a condition of releasing a unit for transfusion. A unit from a deferred donor is never available to Cytologics as source material.

5. Container and closure

CytoPure™ is filled into **Nalgene™ Square PETG media bottles** with polyethylene closures. No component of the container, closure, or secondary packaging is of animal origin.

6. Conclusion

On the basis of the human origin of the source material, the absence of any material from a TSE-relevant animal species at every stage of manufacture, and the CJD and vCJD donor deferral criteria applied by the collecting blood centers, Cytologics considers the risk of TSE transmission through the use of CytoPure™ products to be negligible.

Note This statement addresses TSE and BSE risk only. Viral safety, including the absence of any viral inactivation or clearance step, is addressed separately in CYT-VSD-009. CytoPure™ products are of human origin and should be handled as potentially infectious material under Biosafety Level 2 practices.

Related documentation

This document is part of the CytoPure™ technical documentation library. Refer to the following companion documents:

- **CYT-VSD-009** Viral Safety and Donor Qualification Statement
- **CYT-COO-016** Certificate of Origin — CytoPure™ Human Platelet Lysate
- **CYT-QTS-031** Quality and Testing Standards — CytoPure™ Human Platelet Lysate
- **CYT-COA-1909** Certificate of Analysis and Release — CytoPure™ XF

IMPORTANT For research use only. Not for use in diagnostic or therapeutic procedures. Not for human or animal use. This product contains human-derived material and must be handled as potentially infectious; observe universal precautions and handle at Biosafety Level 2 or higher.

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