



Our STN: BL 125657/0

**BLA APPROVAL**  
June 21, 2018

MD Anderson Cord Blood Bank  
Attention: Elizabeth Shpall, M.D.  
1841 Old Spanish Trail  
Houston, TX 77054

Dear Dr. Shpall:

Please refer to your Biologics License Application (BLA) for Hematopoietic Progenitor Cells, Cord Blood (HPC, Cord Blood) dated June 26, 2017, received June 26, 2017, submitted under section 351(a) of the Public Health Service Act (PHS Act).

## **LICENSING**

We are issuing Department of Health and Human Services U.S. License No. 2072 to MD Anderson Cord Blood Bank, Houston, Texas, under the provisions of section 351(a) of the PHS Act controlling the manufacture and sale of biological products. The license authorizes you to introduce, or deliver for introduction into interstate commerce, those products for which your company has demonstrated compliance with establishment and product standards.

Under this license, you are authorized to manufacture the product HPC, Cord Blood, which is indicated for use in unrelated donor hematopoietic progenitor cell transplantation procedures in conjunction with an appropriate preparative regimen for hematopoietic and immunologic reconstitution in patients with disorders affecting the hematopoietic system that are inherited, acquired, or result from myeloablative treatment. The benefit-risk assessment for an individual patient depends on the patient characteristics, including disease, stage, risk factors, and specific manifestations of the disease, on characteristics of the graft, and on other available treatments or types of hematopoietic progenitor cells.

## **MANUFACTURING LOCATION**

Under this license, you are approved to manufacture HPC, Cord Blood at your facility located at Houston, Texas. You may label your product with the proper name HPC, Cord Blood and market it in 25 milliliter capacity cryobags.

We did not refer your application to the Cellular, Tissue, and Gene Therapy Advisory Committee because our review of information submitted in your BLA, including the

clinical study design and trial results, did not raise concerns or controversial issues that would have benefited from an advisory committee discussion.

#### **DATING PERIOD**

The dating period for HPC, Cord Blood shall be 120 months from the date of manufacture when stored at  $\leq -150^{\circ}\text{C}$ . The date of manufacture shall be defined at the date of cryopreservation. We have approved the stability protocol in your license application for the purpose of extending the expiration dating period of your HPC, Cord Blood product under 21 CFR 601.12.

#### **FDA LOT RELEASE**

You are not currently required to submit samples or protocols of future lots of HPC, Cord Blood to the Center for Biologics Evaluation and Research (CBER) for release by the Director, CBER, under 21 CFR 610.2(a). We will continue to monitor compliance with 21 CFR 610.1 requiring completion of tests for conformity with standards applicable to each product prior to release of each lot.

#### **BIOLOGICAL PRODUCT DEVIATIONS**

You must submit reports of biological product deviations under 21 CFR 600.14. You should identify and investigate all manufacturing deviations promptly, including those associated with processing, testing, packaging, labeling, storage, holding and distribution. If the deviation involves a distributed product, may affect the safety, purity, or potency of the product, and meets the other criteria in the regulation, you must submit a report on Form FDA 3486 to the Director, Office of Compliance and Biologics Quality, at the following address:

Food and Drug Administration  
Center for Biologics Evaluation and Research  
Document Control Center  
10903 New Hampshire Ave.  
WO71-G112  
Silver Spring, MD 20993-0002

#### **MANUFACTURING CHANGES**

You must submit information to your BLA for our review and written approval under 21 CFR 601.12 for any changes in, including but not limited to, the manufacturing, testing, packaging or labeling of HPC, Cord Blood, or in the manufacturing facilities.

#### **LABELING**

We hereby approve the draft package insert labeling submitted under amendment #8 dated June 18, 2018 and the draft carton and container labeling submitted under amendment #8, dated June 18, 2018.

Please provide your final content of labeling including the carton and container labels, in Structured Product Labeling (SPL) format. All final labeling should be submitted as Product Correspondence to this BLA 125657 at the time of use (prior to marketing) and include implementation information on Form FDA 356h.

In addition, please submit the final content of labeling (21 CFR 601.14) in SPL format via the FDA automated drug registration and listing system, (eLIST) as described at <http://www.fda.gov/ForIndustry/DataStandards/StructuredProductLabeling/default.htm>. Information on submitting SPL files using eLIST may be found in the guidance for industry *SPL Standard for Content of Labeling Technical Qs and As* at <http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM072392.pdf>.

## **ADVERSE EVENT REPORTING**

You must submit adverse experience reports in accordance with the adverse experience reporting requirements for licensed biological products (21 CFR 600.80) and you must submit distribution reports as described in 21 CFR 600.81. For information on adverse experience reporting, please refer to the guidance for industry *Providing Submissions in Electronic Format – Postmarketing Safety Reports* at <http://www.fda.gov/Drugs/DrugSafety/ucm400526.htm> and FDA’s Adverse Event reporting System website <http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Surveillance/AdverseDrugEffects/ucm115894.htm>. For information on distribution reporting, please refer to the guidance for industry *Electronic Submission of Lot Distribution Reports* at <http://www.fda.gov/BiologicsBloodVaccines/GuidanceComplianceRegulatoryInformation/Post-MarketActivities/LotReleases/ucm061966.htm>.

In addition, you must submit adverse event reports for any infectious disease transmission within 15 days after learning of the event. Infectious disease transmission refers to an adverse event that involves suspected or confirmed transmission of an infectious agent, whether the recipient develops the infectious disease or only has serologic or other evidence. If an infectious disease transmission event is serious and unexpected, you must submit a 15-day “alert report,” as required under 21 CFR 600.80(c)(1)(i). Infectious disease transmission events that do not meet criteria for expedited submission require periodic reports and must be submitted as individual safety case reports within 15 days, as authorized under 21 CFR 600.80(c)(2)(i). You should submit reports for all other non-expedited adverse events under the periodic reporting requirements specified in 21 CFR 600.80(c)(2).

FDA regulations require periodic safety reports (Periodic Adverse Experience Reports (PAERs)) to contain a narrative summary and analysis of the information in the report and an analysis of the 15-day alert reports submitted during the reporting interval (21 CFR 600.80(c)(2)). The narrative summary in PAERs should include a detailed summary and assessment of all serious infusion reactions observed during the reporting period, as well as your assessment of each case and the overall frequency of serious infusion

reactions since approval and during the reporting period. PAERs should also include the number of units released for infusion and the number of patients receiving infusions with HPC, Cord Blood during the reporting period.

In addition you have agreed to do the following:

- a) Implement a safety outcomes monitoring and analysis plan. This plan will include: 1) maintenance of an observational database to include, for all HPC, Cord Blood units released, information including but not limited to, time to neutrophil recovery, graft failure, survival, cause of death, infusion reactions, and other adverse experiences; 2) aggregate analyses of interval and cumulative adverse experience reports; and 3) safety outcomes analyses of interval and cumulative data that address early mortality, graft failure-related mortality, graft failure, time to neutrophil recovery, infusion-related events, and other adverse experiences. Reports will include a description of the population analyzed, results of the analyses, whether outcomes indicators were triggered and, if so, what actions were implemented as a result.
- b) Submit to FDA a 15-day “alert report” for each serious infusion reaction associated with administration of HPC, Cord Blood.

## **MEDWATCH-TO-MANUFACTURER PROGRAM**

The MedWatch-to-Manufacturer Program provides manufacturers with copies of serious adverse event reports that are received directly by the FDA. New molecular entities and important new biological products qualify for inclusion for three years after approval. Your firm is eligible to receive copies of reports for this product. To participate in the program, please see the enrollment instructions and program description details at <http://www.fda.gov/Safety/MedWatch/HowToReport/ucm166910.htm>.

Sincerely,

Mary A.  
Malarkey -S

Mary A. Malarkey  
Director  
Office of Compliance and Biologics Quality  
Center for Biologics  
Evaluation and Research

Digitally signed by Mary A. Malarkey -S  
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Wilson W. Bryan, MD  
Director  
Office of Tissues and  
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Center for Biologics  
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