PACKAGE INSERT
PREPARATION INSTRUCTIONS

This package contains an HCT/P (Human Cells, Tissues, and Cellular and Tissue Based Products) / CTO (Human Cell, Tissue, Organ) as defined by US Food and Drug Administration (FDA) 21 CFR Part 1271 and the Health Canada Codes, Tissues and Organs for Transplantation Regulations. All tissue has been collected, processed, stored and distributed according to the Standards for Tissue Banking of the American Association of Tissue Banks (AATB), the US FDA regulations, and the Health Canada CTO Regulations and associated Standards (when applicable).

DESCRIPTION / USE:
Human musculoskeletal allograft (bone, tendon, cartilage) may be used in a variety of orthopedic, neurosurgical, or reconstructive procedures. Tissue is processed and preserved by a variety of techniques and is supplied in a range of sizes for surgical use by licensed clinicians (i.e., physicians, physician’s assistants, nurse practitioners). All tissue is processed and packed using aseptic technique. Tissue may be fresh, fresh frozen, freeze dried, frozen, or cryopreserved. Some tissue may be terminally sterilized by a validated electron beam or gamma irradiation process. Fresh grafts are stored in a nutrient medium.

CONTRAINDICATIONS:
The presence of infection at the transplantation site is a contraindication for use of musculoskeletal allografts.

WARNINGS:
- Human tissue has the potential to transmit infectious agents. Donor screening, processing treatments, and laboratory testing follow stringent specifications to reduce the risk of infectious agent transmission.
- Do not use if the expiration date has been exceeded or if there is evidence of defects in package or label integrity.
- Do not sterilize or re-sterilize.
- It is the responsibility of the hospital or clinician to maintain tissue for transplantation according to recommended storage conditions. Do not use if tissue has not been stored according to the recommended STORAGE instructions.
- For fresh grafts, if an autopsy was performed, the final autopsy results may still be pending. Preliminary autopsy results will be reviewed to ensure no conditions exist that may make the tissue unacceptable for transplantation. Should the final autopsy results or other information associated with the donor, such as hospital medical records, become available and indicate the donor is unsuitable, the healthcare facility will be notified immediately.

ATTENTION:
- Due to the presence of blood and narrow components, fresh grafts and aseptic tissues, including osteochondral cryopreserved fresh frozen grafts, should not be considered sterile.
- Patients receiving any of the above grafts in a surgical procedure should be appropriately informed of the risk associated with these grafts.
- A prophylactic regimen of antibiotics, as used in arthroplasty, is highly recommended for fresh graft procedures.
- Each licensed clinician who will use fresh JRF Ortho Allografts must sign a Risk Information and Consent Confirmation form prior to shipment.

PRECAUTIONS:
- Restricted to use by a licensed clinician.
- Trace amounts of Bacitracin, Amphotericin B, Ciprofloxacin HCl, Gentamicin Sulfate, Polymyxin B Sulfate, and Vancomycin HCl may be present and caution should be exercised if the recipient is allergic to these antibiotics.
- Do not use if the packaging has been damaged and/or the product has been contaminated. In the event of contamination, discard the product. Damaged packaging should be returned to AlloSource.
- As with all biological products, JRF Ortho grafts have the potential to transmit infectious agents despite processing treatments, extensive donor screening, tissue selection and laboratory tests.
- As with any surgical procedure, the possibility of infection exists.
- Although the production technique is designed to eliminate antigenic properties of the product, the possibility of such a reaction is present.
- Adverse outcomes potentially attributable to the product must be reported promptly to JRF Ortho. Notify JRF Ortho immediately and promptly for return authorization if any dissatisfaction with the product performance or packaging occurs.

DONOR ELIGIBILITY:
Donor eligibility (screening and testing) is performed in accordance with AATB Standards and FDA regulations. Donor screening includes assessment of the medical and social history as well as physician assessment of the donor to assure that no conditions exist that may make the tissue unacceptable for transplantation.

MEDICAL DIRECTOR ASSESSMENT:
Donor eligibility determination is made by an AlloSource Medical Director who reviews and approves each donor for processing. Pertinent records may be made available upon written request to AlloSource at the address at the bottom of this document.

SEROLOGICAL TESTING:
Communicable disease testing was performed by a laboratory registered with FDA to perform donor testing and certified to perform such testing on human specimens in accordance with the Clinical Laboratory Improvement Amendments of 1988 (CLIA) and 42 CFR Part 493. The testing was conducted using FDA licensed, approved, or cleared donor screening tests for cadaveric specimens where applicable. The records of this testing are maintained at AlloSource at the address listed at the bottom of this document. The following required testing was performed and found to be negative or non-reactive:

- Antibody to Human Immunodeficiency Virus 1 & 2 (HIV 1 & 2)
- Human Immunodeficiency Virus Type 1 (HIV-1 NAT)
- Antibody to Hepatitis C (HCV)
- Hepatitis C Virus (HCV NAT)
- Hepatitis B Core IgG/IgM Antibody (HBcAb)
- Hepatitis B Surface Antigen (HBsAg)
- Hepatitis B Virus (HBV NAT) (as required)
- Rapid Plasma Reagin or Serologic Test For Syphilis (RPR or STS)

Additional tests, including but not limited to, Human T-Cell Lymphotropic Virus Type I & II (HTLV I & II) may have been performed at the time of donor screening, and were found to be acceptable for transplantation. A list of additional communicable disease test(s) performed may be provided upon request.

MICROBIAL TESTING:
Tissue is subjected to microbiological testing at recovery and in the course of processing, and must be free of specific aerobic / anaerobic microorganisms and fungal contaminants whose presence would preclude tissue from processing or transplantation.

POTENTIAL COMPLICATIONS / ADVERSE REACTIONS:
Inherent uncertainty exists in medical and social histories and laboratory testing which may not detect known or unknown pathogens. Therefore, the following complications may occur with tissue transplantation:

- Loss of function or integrity of transplanted tissue with resorption, fragmentation, disintegration, and associated loss of continuity, displacement, bending, or fracture.
- Immune response to transplanted tissue.
- Transmission of known pathogens including Hepatitis B or C, Human T-cell Leukemia / Lymphotropic Virus, Human Immunodeficiency Virus 1 & 2, syphilis or bacteria.
- Transmission or causation of diseases of unknown etiology and characteristics.
**HANDLING AND PREPARATION:**

**CAUTION:** All preparation should be performed using aseptic technique. Once the packaging has been opened, the tissue must either be transplanted or discarded. Reconstituted grafts must be used for the surgical event for which they were reconstituted or otherwise discarded.

**Tissue in Peel Pouch Packaging:** Graft may be in 2 or 3 pouches. The inner pouch(es) has/has been sterilized. Using aseptic technique, peel outer pouch and introduce innermost pouch onto sterile field. Thaw frozen grafts in accordance with the instructions below. With sterile scissors, open inner pouch.

<table>
<thead>
<tr>
<th>GRAFT TYPE</th>
<th>GRAFT STORAGE</th>
<th>GRAFT PREPARATION</th>
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</thead>
<tbody>
<tr>
<td>Cancellous products</td>
<td>Store freeze dried grafts at room temperature in a</td>
<td>To reconstitute, place graft in sterile basin and cover with sterile isotonic solution for 15 to 30 minutes, depending upon the size of the graft.</td>
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<tr>
<td>Fascia lata</td>
<td>clean, dry location.</td>
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<tr>
<td>Tricortical wedges</td>
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<tr>
<td>Machined grafts</td>
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<tr>
<td>Cortical products</td>
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<tr>
<td>FROZEN or CRYOPRESERVED</td>
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<tr>
<td>Tendons</td>
<td>Musculoskeletal tissue may be stored at -20°C to -</td>
<td>To thaw, place the innermost pouch in a sterile basin on a sterile field. Immerse inner pouch completely in warm, sterile isotonic solution. The recommended thawing time is 30 to 60 minutes, or until thawed, depending upon the size of the graft. If removal of blood and marrow elements is desired, rinse the graft completely using high-pressure lavage with an isotonic solution.</td>
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<tr>
<td>Intercalary grafts</td>
<td>-40°C if used within 6 months, otherwise store at</td>
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<tr>
<td>Osteochondral</td>
<td>or below -40°C.</td>
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<tr>
<td>Cryopreserved Fresh frozen grafts</td>
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<td>FRESH/Processed by</td>
<td>The recommended storage temperature for fresh grafts is &gt;0° to 10°C. <strong>DO NOT expose graft to freezing temperatures or heat.</strong></td>
<td>Fresh grafts are stored in a nutrient medium. Immediately prior to use, rinse graft completely to remove storage media, and any residual blood and marrow elements using high-pressure lavage with an isotonic solution. Manipulate / shape the graft on the sterile field. Keep graft moist with a cold or room temperature sterile isotonic solution until time of transplant. <strong>DO NOT USE WARM SOLUTION.</strong></td>
</tr>
<tr>
<td>Osteochondral allografts (OCA)</td>
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<tr>
<td><strong>DO NOT HANDLE OR MANIPULATE SOFT TISSUE GRAFTS UNTIL THAWING IS COMPLETE.</strong></td>
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**RECORD KEEPING:**

Regulatory bodies such as the US FDA and Health Canada require that allograft tissue be traceable from the donor to the recipient. The tissue bank (source establishment) is responsible for traceability from the donor to the consignee (transplantation facility, clinician or hospital), and the transplantation facility is responsible for the traceability to the recipient. A Transplantation Record & Feedback Form and pre-printed peel-off labels are included with each package of tissue. The lot number provided on the labels contains the donor identification number and graft serial number. Record patient identifier, the transplantation facility name and address, the allograft tissue identification information (using the peel-off stickers) and comments regarding the use of the tissue on the Transplantation Record & Feedback Form. Submit the completed form via the JRF Ortho website and retain a copy in the patient medical record. If the tissue has been discarded, please submit the Transplantation Record & Feedback Form via the JRF Ortho website with the graft identification information and reason for discard.