Dedicated to innovative Solutions in Allograft Surgery

ATS1 combines quality prepared bone and soft tissue allografts, procedure specific instrumentation, superior service, technical support and surgical skills learning programs to maximize consistent surgical results in allograft reconstruction procedures.
ATSI provides “turnkey” convenience and reliability to the orthopaedic surgeon

- High quality bone and soft tissue allografts from leading AATB accredited and FDA registered tissue banks
- Precise and reliable on-site coordination
- Comprehensive and complete instrumentation
- Competent O.R. in-service and technical support
- Surgical Skills Training Programs: ATSI provides Surgical Skills Training Centers in Naples, FL, Los Angeles, CA, and Scottsdale, AZ. These training programs offer personalized hands-on education for a variety of procedures. Courses integrate state-of-the-art concepts taught by leading surgeons. For a complete listing of course offerings, please contact ATSI or your local representative.

You now only need one company and one representative to prepare everything for your allograft reconstruction procedures...

Allograft Tissue Systems, Inc.

PROCEDURE SPECIFIC ALLOGRAFTS AND ASSOCIATED INSTRUMENTATION

Anterior Cruciate/Posterior Cruciate Ligament Reconstruction Allografts

Use of allograft tendons for primary and revision ACL and PCL repair has gained greater acceptance among surgeons. The use of allografts reduces OR time and eliminates the risk of donor site morbidity. Recent articles demonstrate little clinical difference in the results of allograft use vs. autograft ACL reconstruction.1,2,3

Grafts Available:
- Achilles Tendon with Bone Block
- Tibialis Tendons
- Hamstring (Semitendinosus, Gracilis)
- Small Joint Tendon Allografts

For graft ID numbers and specifications please contact your local ATSI Representative or contact ATSI directly.

Graft-Specific Instrumentation

- Transtibial ACL Reconstruction System
- Transtibial PCL Reconstruction Set
- TransFix® ACL Reconstruction Set

Meniscus Allografts

Better understanding of the biomechanical consequences of total and partial meniscectomy has led surgeons to explore methods of meniscus preservation. However, in many cases, the damage is far too extensive to preserve the meniscus and few options exist for these patients.

Meniscal allografts have proven to be effective in improving function and reducing pain for selected patients with a meniscus-deficient knee. ATSI can provide medial and lateral meniscal allografts that come with sufficient bone block to perform various anchorage procedures including “Double Bone Plug”, “Keyhole” and “Dovetail”.

Meniscal allografts are most commonly used in symptomatic patients with prior meniscectomy and persistent pain. Patients should have normal alignment and should not have articular damage greater than grade III. Serious articular disease, osteophyte formation, or flattening of the femoral condyle are common contraindications for meniscal transplant.

Lateral and Medial grafts with bone blocks
- Specifically sized for your patient by ATSI

Graft-Specific Instrumentation

- Meniscal Allograft Instrumentation Set for “Dovetail” or “Keyhole” and “Double Plug” technique

Proximal Tibial or Distal Femoral Bone Wedges for Opening Wedge Osteotomy

- Custom cut set of freeze-dried cancellous/cortical bone wedges for placement behind and adjacent to the spacer plate.
  Processing Requirements
  - Wedge width, 20 mm; length, 50 mm; height, 17.5 mm
  - Wedge heights can be cut to size based on osteotomy distance created

Graft-Specific Instrumentation

- Opening Wedge Osteotomy System
- Titanium or Stainless Steel Plates
Fresh Osteochondral Allografts

There are few treatment options for patients with large symptomatic lesions of osteoarticular surfaces. The use of allograft for osteoarticular resurfacing allows a surgeon the ability to match the contour and cartilage morphology of the recipient site while also avoiding multiple surgical sites and the possible donor site morbidity associated with recovering an autograft from the knee. Fresh grafts are stored in a proprietary storage media and maintained at 4º C. These grafts must be implanted no more than 28 days from the time of recovery.

- Hemi-Condyles, Medial or Lateral
- Trochlea
- Partial Condyles
- Patella
- Talus
- Humeral Head
- Precut Cores, 18 mm & 20 mm
- Specialty grafts available upon request

Graft-Specific Instrumentation

- Allograft OATS™ System for intra operative harvesting of 15 mm - 35 mm diameter grafts from hemi-condyles, trochlea, patella and partial osteochondral allografts

Surgical Planning Process

1. Your local ATSI representative is contacted. Allograft-specific instrumentation and allograft type are discussed and ordered.
2. The ATSI representative coordinates with ATSI to source the allograft, instrumentation, implants, disposables and in-service presentation materials. X-rays or prior surgical documentation may need to be sent to ATSI for review.
3. The complete system delivery date is confirmed with the surgeon and O.R. staff in concert with the surgical booking date.
4. A purchase order is placed for the allograft, which includes use of instrumentation, technical in-service and motor skills preparation, with the surgeon locally or in an Arthrex Surgical Skills Learning Center, if desired.
5. The ATSI representative delivers the appropriate instrumentation to the O.R. prior to surgery for in-service with O.R. staff and sterilization.
6. The tissue bank ships the allograft overnight to the hospital.
7. Technical support from an ATSI trained representative is available by request at the time of surgery.
8. A representative facilitates return of instrumentation to ATSI.
ALLOGRAFT TISSUE QUALITY ASSURANCE OVERVIEW

ATSIs tissue banking partners have developed a new standard for sterilizing tissue without compromising the biomechanical properties, biochemical properties, and without any toxic residues. This comprehensive and validated process is designed to control incoming bioburden, remove and/or inactivate microorganisms, and terminally sterilize the tissues. This process results in an allograft that has a sterility assurance level of $10^{-6}$ and is free of bacteria, viruses, fungi, and spores.

This innovative process is achieved through six steps.

1. **Bioburden Control**  
   Meticulous and rigorous screening routine and strict aseptic recovery designed to rule out questionable donors.

2. **Bioburden Assessment**  
   Extensive microbial and serological pre-processing testing that exceed industry standards. In addition to utilizing Nucleic Acid Testing (NAT) for HIV and HCV, these additional blood and/or tissue(s) tests are also performed.
   - Human Immunodeficiency Virus (HIV)  
     - HIV-1/2 Antibody  
     - HIV Nucleic Acid Testing
   - Hepatitis B (HBV) and Hepatitis C Virus (HCV)  
     - HBV Surface Antigen  
     - HBV Antibody  
     - HCV Antibody  
     - HCV Nucleic Acid Testing
   - Other Blood-borne Viral Pathogens  
     - Human T-Cell Lymphotrophic Virus 1/2
   - Syphilis  
     - Rapid Plasma Reagin
   - Aerobic and Anaerobic Microbiological Cultures

3. **Minimized Contamination**  
   The processing facilities are designed to minimize or eliminate environmentally induced graft contamination.

4. **Rigorous Cleaning**  
   This step involves flushing, centrifugation, hypotonic processes, and ultrasonication to remove over 99% of marrow and lipids from the tissue.

5. **Disinfection and Rinsing**  
   An intensive disinfection, decontamination and scrubbing regimen, followed by a centrifugation and/or micro absorption step. This is the step that allows for the effective removal of viruses and bacteria, as well as the removal of the processing agents.

6. **Terminal Sterilization**  
   A controlled dose between 10-13kGy of gamma irradiation administered at low temperatures produces sterile tissue at $10^{-6}$ sterility assurance level (SAL).

*Method 2B validation data and other supporting material available upon request.
*Osteochondral allografts and meniscal allografts are processed aseptically and have not been subjected to the sterilization process.

Allograft quality and service you can trust

Announcing the Gold Standard of Excellence in allograft tissue reconstruction procedures: Allograft Tissue Systems, Inc. (ATSIs). Combining quality prepared allograft bone and soft tissue allografts, Arthrex instrumentation and fixation products, and unparalleled service and support.

Allograft Tissue Systems, Inc. is pleased to offer surgeons sterile allografts and fresh osteochondral allografts to give surgeons the greatest flexibility when deciding on an allograft for their patient.

Two new sterile alternatives in allograft reconstruction offered by Allograft Tissue Systems, Inc.

**Sterile R**  
*(offered exclusively by Allosource)*

**Allowash XG™**  
*(offered exclusively by LifeNet)*