

Materials List for:

# Athymic Rat Model for Evaluation of Engineered Anterior Cruciate Ligament Grafts

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## Materials

| Name                                                                                         | Company                                                                                                      | Catalog Number  | Comments                                                             |
|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------|
| Medical grade ester terminated poly ( $\epsilon$ -caprolactone), granule form (MW = 110,000) |  Lactel Absorbable Polymers |                 | Custom synthesized polymer to desired molecular weight               |
| 1,1,1,3,3,3-hexafluoro-2-propanol                                                            | Sigma-Aldrich                                                                                                | 105228          | Solvent for PCL polymer                                              |
| 18 G x 1½" bevel needle                                                                      | BD Medical                                                                                                   | 305196          |                                                                      |
| Remote Infuse/Withdraw Programmable Syringe Pump                                             | Harvard Apparatus                                                                                            | 702101          |                                                                      |
| VersaLaser VLS2.30 Laser Engraver                                                            | Microgeo USA                                                                                                 | VLS2.30         |                                                                      |
| Expanded Plasma Cleaner 115 V                                                                | Harrick Plasma                                                                                               | PDC-001         | Plasma etch just prior to collagen coating for surface modification  |
| PureCol Collagen Standard Solution, 3 mg/ml                                                  | Advanced Biomatrix                                                                                           | 5015-A          | Mix 8:1:2.5 solution of PureCol, 10x PBS, 0.1 N NaOH 1:9 in 1x PBS   |
| Suture, 5-0 Vicryl                                                                           | Henry Schein                                                                                                 | 1086471         |                                                                      |
| Suture, 4-0 Vicryl                                                                           | Henry Schein                                                                                                 | 6540072         |                                                                      |
| Sharp-pointed Dissecting Scissors (Straight; 4.5 inch)                                       | Fisher Scientific                                                                                            | 8940            |                                                                      |
| Buprenorphine hydrochloride                                                                  | Sigma-Aldrich                                                                                                | B9275           | Use 0.03 mg/kg for both intra- and post-operatively for pain control |
| Ampicillin, injectable                                                                       | Henry Schein                                                                                                 | 1185678         | Use 25 mg/kg subcutaneously during the procedure                     |
| K-wire, 1.6 mm                                                                               | Spectrum Surgical                                                                                            | SI040062        |                                                                      |
| Keith Needle, Straight 1½"                                                                   | Delasco Dermatology Lab & Supply                                                                             | KE-112          |                                                                      |
| Immunocal Decalcifying Solution                                                              | Fisher Scientific                                                                                            | NC9491030       |                                                                      |
| Opticryl Acrylic Resin Bone Cement (PMMA) (Monomer and polymer)                              | US Dental Depot                                                                                              | OPTICRYL 100410 |                                                                      |
| Instron Model 5564 Tensile Testing Machine                                                   | Instron                                                                                                      | 5564            | Any comparable tensile testing apparatus is suitable                 |