

Materials List for:

An Improved Mechanical Testing Method to Assess Bone-implant Anchorage

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Materials

Name	Company	Catalog Number	Comments
Dulbecco's Phosphate Buffer solution (DPBS)	Gibco Life Technologies, Burlington, ON, Canada	14190-250	
10% neutral buffered formalin solution	Sigma-Aldrich Co. LLC., Canada	HT501128-4L	
Custom-designed rectangular implants (commercially pure titanium; dimensions: 4mm x 2.5mm x 1.3mm with a 0.7mm hole drilled centrally down the long axis)	Biomet 3i, FL, USA	N/A	
Custom-designed breakaway mould	Biomet 3i, FL, USA	N/A	
Isoflurane	Baxter International Inc.	N/A	
Buprenorphine	Bedford Laboratories	N/A	
10% betadine	Bruce Medical, MA, US	FR-2200-90	
Scalpel	Almedic, Medstore, University of Toronto, Canada	2586-M36-0100	
Scalpel blade #15 (sterile)	Magna, Medstore, University of Toronto, Canada	2586	
Periosteal elevator #24G	Spectrum Surgical, OH, USA	EX7	
Forceps	Almedic, Medstore, University of Toronto, Canada	7747-A10-108	
Tissue forceps	Almedic, Medstore, University of Toronto, Canada	7722-A10-308	
Scissors	Almedic, Medstore, University of Toronto	7603-A8-240	
Absorbant Fabric General Purpose Drape (sterile)	Vitality Medical	1089	
Gauze (non-sterile)	VWR	89133-260	
Needles 25G X 5/8" (disposable)	BD, Canada	305122	
Syringes (sterile)	VWR, Canada	CABD309653	
Needle Driver	Almedic, Medstore, University of Toronto, Canada	A17-132	
Dynarex Surgical gloves (sterile)	Amazon.com	2475	
Surgical masks	Fisherbrand, Medstore, University of Toronto, Canada	296360759	
0.9% sterile saline	House brand, Medstore, University of Toronto, Canada	1011-L8001	
Hair clippers	Remington, US	N/A	
4-0 Polysorb	Syneture	SL5627G	
9mm Wound Clips	Becton Dickinson, MD, USA	427631	

ImplantMED DU 900 and WS-75 dental hand piece	W&H Dentalwerk, Austria	DU1000US	
1.3 mm twist drill	Brasseler, GA, USA	203.21.013	
1.3 mm dental burr	Biomet 3i, FL, USA	custom	
1.2 mm cylindrical side-cutting burr	Biomet 3i, FL, USA	custom	
Cylindrical diamond burr	Brasseler, GA, USA	H1.21.014	
High speed dental drilling system	Handpiece: KaVo Dental Corporation, IL, USA	N/A	
Handpiece Control: DCI International, OR, USA			
99.5% Ultra Pure sucrose	BioShop Canada Inc., Burlington, ON, Canada	57-50-1	
Flowable dental composite	Filtek Supreme Ultra Flowable Restorative, 3M ESPE, St Paul, Minnesota, USA	6033XW	
Sapphire Plasma Arc high intensity curing light	Den-Mat Holdings, Santa Maria, CA, USA	N/A	
Instron 4301 with 1000 N load cell	Instron, Norwood, MA, USA	N/A	
Leica Wild M3Z Stereozoom dissecting microscope	Leica, Heerbrugg, Switzerland	N/A	
QImaging Micropublisher 5.0 RTV digital camera coupled with QCapture 2.90.1 acquisition software	QImaging, Surrey, BC, Canada	N/A	
Electronic digital caliper	Fred V. Fowler Company, Inc., Newton, MA, USA	N/A	
Mechanical testing instrument	Instron, Norwood, MA, USA	N/A	