# Materials List for: Practical Considerations in Studying Metastatic Lung Colonization in Osteosarcoma Using the Pulmonary Metastasis Assay

Michael M. Lizardo¹ ², Poul H. Sorensen² ³

¹Pediatric Oncology Branch, Center for Cancer Research, National Cancer Institute, National Institutes of Health
²BC Cancer Agency, Provincial Health Services Authority
³Department of Pathology and Laboratory Medicine, University of British Columbia

Correspondence to: Poul H. Sorensen at phbsorensen@gmail.com

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## Materials

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Catalog Number</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Table 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cell culture reagents for A-media, B-media, and complete media</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MNNG-HOS</td>
<td>ATCC</td>
<td>CRL-1547</td>
<td>highly metastatic OS cell line</td>
</tr>
<tr>
<td>HOS</td>
<td>ATCC</td>
<td>CRL-1543</td>
<td>poorly metastatic OS cell line</td>
</tr>
<tr>
<td>MG63.3</td>
<td>Amy LeBlanc Laboratory (NCI)</td>
<td>N/A</td>
<td>highly metastatic OS cell line</td>
</tr>
<tr>
<td>MG63</td>
<td>ATCC</td>
<td>CRL-1427</td>
<td>poorly metastatic OS cell line</td>
</tr>
<tr>
<td>10X M199 media</td>
<td>Thermofisher</td>
<td>11825015</td>
<td>Base media for A-media and B-media</td>
</tr>
<tr>
<td>Distilled Water (sterilized)</td>
<td>Thermofisher</td>
<td>15230-147</td>
<td>Component of A-media &amp; B-media</td>
</tr>
<tr>
<td>7.5% sodium bicarbonate solution</td>
<td>Thermofisher</td>
<td>25080094</td>
<td>Component of A-media &amp; B-media</td>
</tr>
<tr>
<td>Hydrocortizone</td>
<td>Sigma-Alrich</td>
<td>H6909</td>
<td>Component of A-media &amp; B-media</td>
</tr>
<tr>
<td>Retinol acetate-water soluble</td>
<td>Sigma-Alrich</td>
<td>R0635-5MG</td>
<td>Component of A-media &amp; B-media</td>
</tr>
<tr>
<td>Penicillin/Streptomycin 10X concentrated (10000 U/ml) solution</td>
<td>Thermofisher</td>
<td>15140122</td>
<td>Component of A-media &amp; B-media, complete media.</td>
</tr>
<tr>
<td>Bovine insulin solution (10mg/ml)</td>
<td>Sigma-Alrich</td>
<td>I0516-5ML</td>
<td>Component of A-media &amp; B-media</td>
</tr>
<tr>
<td>DMEM, high glucose</td>
<td>Thermofisher</td>
<td>11965092</td>
<td>Base media of Complete Media</td>
</tr>
<tr>
<td>L-Glutamine (200 mM)</td>
<td>Thermofisher</td>
<td>25030081</td>
<td>Component of Complete Media</td>
</tr>
<tr>
<td>Fetal Bovine Serum</td>
<td>Thermofisher</td>
<td>16000044</td>
<td>Component of Complete Media</td>
</tr>
<tr>
<td>Dulbecco’s Phosphate Buffered Saline</td>
<td>Thermofisher</td>
<td>14190144</td>
<td>Used in cell culture.</td>
</tr>
<tr>
<td>Hank’s Buffered Salts Solution, no calcium, no magnesium, no phenol red</td>
<td>Thermofisher</td>
<td>14175095</td>
<td>Used to resuspend cell pellet prior to injection</td>
</tr>
<tr>
<td>Trypsin-EDTA (0.25%), phenol red</td>
<td>Thermofisher</td>
<td>25200114</td>
<td>Used in cell culture.</td>
</tr>
<tr>
<td>DAR4M</td>
<td>Enzo</td>
<td>ALX-620-069-M001</td>
<td>Used to label lung parenchyma.</td>
</tr>
</tbody>
</table>

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<tr>
<td><strong>Table 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Materials for PuMA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zeiss 710 Confocal LSM</td>
<td>Zeiss</td>
<td>N/A</td>
<td>Upright LSM confocal microscope</td>
</tr>
<tr>
<td>Zeiss 780 Confocal LSM</td>
<td>Zeiss</td>
<td>N/A</td>
<td>Inverted LSM confocal microscope</td>
</tr>
<tr>
<td>SCID mice</td>
<td>Charles River</td>
<td>N/A</td>
<td>NOD.CB17-Prkdcsclid/NcrCrl, female, age 6-8 weeks</td>
</tr>
</tbody>
</table>

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<tr>
<td>GelFoam</td>
<td>Harvard Apparatus</td>
<td>59-9863</td>
<td>Used as a support for lung tissue sections.</td>
</tr>
<tr>
<td>SeaPlaque Agarose</td>
<td>Lonza</td>
<td>50100</td>
<td>Used during insufflation of the lung.</td>
</tr>
<tr>
<td>1 ml syringe with 27 gauge needle</td>
<td>Fisherscientific</td>
<td>14-826-87</td>
<td>Used for tail vein injection.</td>
</tr>
<tr>
<td>10 ml syringe</td>
<td>BD</td>
<td>309604</td>
<td>Used for insufflation of the lung.</td>
</tr>
<tr>
<td>20 gauge catheter</td>
<td>Terumo</td>
<td>SR-OX2032CA</td>
<td>Used during insufflation of the lung.</td>
</tr>
<tr>
<td>Abbott IV extension set (30&quot;, Sterile)</td>
<td>Medisca</td>
<td>8342</td>
<td>Used during insufflation of the lung.</td>
</tr>
<tr>
<td>Alcohol swabs</td>
<td>BD</td>
<td>326895</td>
<td>For wiping tail vein before injection</td>
</tr>
<tr>
<td>Sterile surgical gloves</td>
<td>Fisherscientific</td>
<td>Varies with size</td>
<td>Asceptic handing of mouse lungs</td>
</tr>
<tr>
<td>30 cm ruler</td>
<td>Staples</td>
<td></td>
<td>Used for insufflation of the lung.</td>
</tr>
<tr>
<td>Support stand for ruler</td>
<td>Pipette.com</td>
<td>HS29022A</td>
<td>Used for insufflation of the lung.</td>
</tr>
<tr>
<td>35 mm glass-bottomed culture dish</td>
<td>Ibidi</td>
<td>81158</td>
<td>Used during imaging of lung slices</td>
</tr>
<tr>
<td>Absorbent Underpads with Waterproof Moisture Barrier</td>
<td>VWR</td>
<td>56617-014</td>
<td>Used to line the sterile work area in the biological hood.</td>
</tr>
<tr>
<td>Catgut Plain Absorbable Suture</td>
<td>Braun</td>
<td>N/A</td>
<td>Used to tie off cannulated trachea.</td>
</tr>
</tbody>
</table>

### Table 4

**Surgical instruments for PuMA**

<table>
<thead>
<tr>
<th>Name</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Micro Dissecting Scissors 3.5&quot; Straight Sharp/Sharp</td>
<td>Roboz</td>
<td>RS-5910</td>
<td>For cutting lung sections</td>
</tr>
<tr>
<td>4&quot; (10 cm) Long Serrated Straight Extra Delicate 0.5mm Tip</td>
<td>Roboz</td>
<td>RS-5132</td>
<td>For manipulating/holding lung sections.</td>
</tr>
<tr>
<td>4&quot; (10 cm) Long Serrated Slight Curve 0.8mm Tip</td>
<td>Roboz</td>
<td>RS5135</td>
<td>For manipulating/holding lung sections.</td>
</tr>
<tr>
<td>Thumb Dressing Forceps; Serrated; Delicate; 4.5&quot; Length; 1.3 mm Tip Width</td>
<td>Roboz</td>
<td>RS-8120</td>
<td>For general dissection</td>
</tr>
<tr>
<td>Thumb Dressing Forceps 4.5&quot; Serrated 2.2 mm Tip Width</td>
<td>Roboz</td>
<td>RS-8100</td>
<td>For general dissection</td>
</tr>
<tr>
<td>Extra Fine Micro Dissecting Scissors 3.5&quot; Straight Sharp/Sharp, 20mm blade</td>
<td>Roboz</td>
<td>RS-5880</td>
<td>For general dissection</td>
</tr>
<tr>
<td>Knapp Scissors; Straight; Sharp-Blunt; 27mm Blade Length; 4” Overall Length</td>
<td>Roboz</td>
<td>RS-5960</td>
<td>For general dissection</td>
</tr>
</tbody>
</table>