Online Resource 1. Biospecimen Reporting for Improved Study Quality (BRISQ): Items to Consider Reporting if Known and Applicable (Moore HM, Kelly AB, Jewell SD, et al. Biospecimen reporting for improved study quality (BRISQ). Cancer cytopathology. Apr 25 2011;119(2):92-101)

| Apply to | Tier # | Item Description                                                                 | Item # | Location |
|----------|--------|----------------------------------------------------------------------------------|--------|----------|
| I. Pre-acquisition | All Tier 1 | Biospecimen type. Solid tissue, whole blood, serum/plasma, isolated cells, urine, secretions, or another product derived from a human being. | Tissue, Abutment, Exudate | p. 5, 8, 9 |
|          | All Tier 1 | Anatomical or collection site. In standard terminology, organ(s) of origin or site of blood draw. | Retroauricular area | p. 7 |
|          | All Tier 1 | Biospecimen disease status. From controls or individuals with the disease of interest; in the case of solid tissue, whether it is from disease site or normal adjacent (not involved but from the same anatomical site as a disease specimen in the same patient). | Biospecimens from (i) titanium surface, (ii) exudate surrounding titanium surface, (iii) soft tissue biopsy 5 mm from titanium, at the treatment site | p. 7 |
|          | All Tier 1 | Clinical characteristics of patients. In standard terminology, available medical information known or believed to be pertinent to the condition of the biospecimens. | Hearing deficiency | p. 5, Table 1 |
|          | All Tier 1 | Vital state. Alive or deceased when biospecimens were obtained. | Alive | p. 5 |
|          | All Tier 3 | Disease state. Patient condition relative to disease and treatment, if known (eg, during- or post-therapy; acute, chronic, or terminal stage). | Chronic | p. 5, Table 1 |
|          | All Tier 3 | Cause of death. For postmortem biospecimens, the cause of death and other diseases present at the time of death. | Not applicable | |
|          | All Tier 3 | Agonal state. The patients’ physical condition immediately preceding death (eg, prolonged degeneration or relatively healthy) | Not applicable | |
|          | All Tier 1 | Diagnosis. Patient diagnoses pertinent to the study being conducted, using an accepted system of standards (eg, the Systemized Nomenclature of Medicine or the International Classification of Diseases). Please note that clinical and pathology diagnoses are not always the same. | Congenital conductive hearing loss, acquired conductive-mixed hearing loss, single sided deafness | Table 1 |
|          | All Tier 1 | Clinical. Patient clinical diagnoses (determined by medical history, physical examination, and analyses of a biospecimen) pertinent to the study being conducted. | Congenital conductive hearing loss, acquired conductive-mixed hearing loss, single sided deafness | Table 1 |
|          | All Tier 1 | Pathology. Patient pathology diagnoses (determined by macro and/or microscopic evaluation of a biospecimen at the time of diagnosis and/or prior to research use) pertinent to the condition being studied. | Not applicable | |
|          | All Tier 2 | Time between diagnosis and sampling. The time or range of time between disease diagnosis and sample acquisition. | Time between treatment and sampling: 0, 3, 12 months | p. 7 |
|          | All Tier 3 | Exposures. Neoadjuvant therapy, other current or past medical treatments or environmental factors that might influence the condition of the biospecimen (eg, chemo-and radiation therapy, blood thinner, smoking status). | Exclusion criteria, demographics | P. 7, Table 1 |
|          | All Tier 3 | Reproductive status. The hormonal or reproductive state of the patients (eg, pregnant, pre-pubescent, post-menopausal). | Not applicable | |
|          | All Tier 2 | Patient demographic information. Demographic information that might be relevant to the condition of the biospecimens (eg, age range, gender). | Demographics | Table 1 |
|          | All Tier 2 | Accrual scheme. Whether the biospecimens were obtained for the study being conducted or for a generalized collection such as a population-based biospecimen resource (i.e. retrospective or prospective procurement); whether any standard operating procedures (SOPs) were employed and whether these SOPs are available to others upon request. | Obtained for the study; sampling SOPs available | p. 7 |
|          | All Tier 2 | Nature of the biobanking institution(s). The biobanking context in which the biospecimens were obtained (eg, as part of an internal collection or a biospecimen-acquisition network); include name, location, and primary contact details such as email address or Web site and reference to any pertinent SOPs. | Biobank 513 | p. 7 |

II. Acquisition

| Apply to | Tier # | Item Description                                                                 | Item # | Location |
|----------|--------|----------------------------------------------------------------------------------|--------|----------|
|          | All Tier 1 | Collection mechanism and parameters. How the biospecimens were obtained (eg, fine needle aspiration, pre-operative blood draw). | Tissue biopsy punch; retrieved abutment; paper-point absorption of exudate | p. 7 |
|          | Tissue Tier 3 | Time from cessation of blood flow in vivo to biospecimen excision/acquisition. The time or range of times that the biospecimens were ischemic in the body. | Not applicable | |

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Online Resource 1. (Continued)

### III. Stabilization/Preservation

| Apply to | Tier # | Item Description | Item # | Location |
|----------|--------|------------------|--------|----------|
| All      | Tier 2 | Time from biospecimen excision/acquisition to stabilization. The time or time-range between when the biospecimens were obtained (eg, blood drawn or tumor surgically removed) and when they were stabilized. *For postmortem biospecimens, list the postmortem interval range (i.e. the time from death to stabilization of the biospecimen).* | Immediately | p. 7________ |
| All      | Tier 2 | Temperature between biospecimen excision/acquisition and stabilization. The temperature or range thereof at which biospecimens were kept between when biospecimens were obtained (eg, blood drawn or tumor surgically removed) and when they were stabilized. *For postmortem biospecimens, the temperature at which the cadaver was stored during the postmortem interval.* | Room temperature | p. 7________ |
| Fluid    | Tier 2 | Collection container. The kind of tube into which biospecimens were captured as they left the body. | ESwab™ | p. 7________ |

### IV. Storage/Transport

**Storage parameters. The conditions under which the biospecimens were maintained until analysis.**

| Apply to | Tier # | Item Description | Item # | Location |
|----------|--------|------------------|--------|----------|
| All      | Tier 1 | Storage temperature. The temperature or range thereof at which the biospecimens were maintained until delivery or analysis. | 4°C or room temperature | p. 7, 8________ |
| All      | Tier 1 | Storage duration. The time or range thereof between biospecimen acquisition and distribution or analysis. | Maximum 2 days | p. 7, 8________ |
| All      | Tier 2 | Storage details. Other conditions under which specimens were maintained during storage (eg, to minimize oxidation). | Samples completely submerged | p. 7________ |
| All      | Tier 3 | Type of storage container. The vessel in which biospecimens were kept. | Plastic Tube | p. 7________ |
| All      | Tier 3 | Type of slide. The microscope slides to which biospecimens were affixed. | Not applicable | __________ |

**Shipping parameters. The conditions to which biospecimens were exposed during each shipment or inventory management.**

| Apply to | Tier # | Item Description | Item # | Location |
|----------|--------|------------------|--------|----------|
| All      | Tier 1 | Shipping temperature(s). The temperature or range thereof at which biospecimens were maintained during each shipment or relocation. | Room temperature | p. 7, 8________ |
| All      | Tier 2 | Shipping duration. The time, estimate, or range thereof that the biospecimens spent in shipment each time they were transported. | 5-24 h | p. 7, 8________ |
| All      | Tier 3 | Type of transport container. The type of vessel (eg, pre-manufactured shipping container, polystyrene box) and the packing material in which the biospecimens were transported. | Carton box | p. 7________ |
| All      | Tier 3 | Shipping parameters. Other conditions under which the biospecimens were transported (eg, vacuum sealing, desiccant, packing material). Please note any deviations from standard operating procedures that might influence the condition of the biospecimens (eg, shipping anomalies that exposed paraffin blocks to high temperatures). | Carton box with an upright position of the tubes | p. 7________ |

**Freeze-thaw parameters. The conditions to which biospecimens were subjected during any thaw events.**

(Continued)
| Apply to | Tier # | Item Description | Item # | Location |
|----------|--------|-----------------|--------|----------|
| Fluid    | Tier 2 | Number of freeze-thaw cycles. The number, estimate, or range thereof of thaw-refreeze events to which biospecimens were subjected prior to analysis. | Not applicable | ________________ |
| Fluid    | Tier 3 | Duration of thaw events. The amount of time or range thereof the biospecimens spent thawed prior to the final thaw before processing. | Not applicable | ________________ |
| Fluid    | Tier 3 | Time from last thaw to processing. The time or range of times between unfreezing and analysis at which biospecimens were kept between unfreezing and analysis. | Not applicable | ________________ |
| All      | Tier 3 | Temperature between last thaw and processing. | Not applicable | ________________ |

**V. Quality Assurance Measures Relevant to the Extracted Product and Processing Prior to Analyte Extraction and Evaluation**

| All | Tier 1 | Composition assessment and selection. Any parameters that were used to evaluate and/or choose biospecimens for inclusion in the study. | Visual inspection | p. 8 ________________ |
| All | Tier 2 | Gross and microscopic review. The anatomical characteristics of the biospecimens in the study and the relevant qualifications of the individual performing the review (eg, anatomist, pathologist, hematologist, microbiologist, or researcher). | Visual inspection by a microbiologist (MT) | ________________ |
| Tissue | Tier 2 | Proximity to primary pathology of interest. Whether the biospecimen was taken from a region adjacent to or distal from another region of interest, such as a tumor or area of necrosis. Give approximate distances if known. | All specimens taken from the immediate site of interest. Soft tissue biopsy (3 m, 12 m) obtained 5 mm from abutment | ________________ |
| All | Tier 2 | Method of enrichment for relevant component(s). The method by which pertinent portions of the biospecimen were separated from the rest of the biospecimen (eg, laser-capture microdissection of tissue, block selection for region of lesion, centrifugation of blood). | Cultures in thioglycolate broth | ________________ |
| All | Tier 2 | Details of enrichment for relevant component(s). The parameters used to separate pertinent portions of the biospecimen from the rest of the biospecimen, if applicable (eg, centrifugation speed and temperature). | 5 days additional enrichment | ________________ |
| Tissue | Tier 3 | Embedding reagent/medium. Any formulation used to enclose the biospecimens (eg, paraffin). | Not applicable | ________________ |
| All | Tier 2 | Quality assurance measures. Any methods used to assess the quality of the biospecimens relevant to the biomolecular analyte, when these methods were employed (eg, prior to long-term storage or immediately before experimental analysis), and the results (eg, RNA integrity number, hemolysis assessment). | Testing of selective media with relevant control strains | ________________ |

**Bold: Tier 1–Recommended to report.**

**Plain: Tier 2–Beneficial to report.**

**Italics: Tier 3–Additional items to report.**

The clinical outcome and microbiological profile of bone anchored hearing systems (BAHS) with different abutment topographies – A prospective pilot study

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