

Number & Title: 10737 - Implant Selection Criteria For Early Practicing Orthopaedic Oncologists

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With the wide arrange of megaprotheses on the market, it is ultimately the choice of an orthopedic oncologist as to which implant they prefer to use. To determine which factors are currently influencing surgeons in this decision, 25 surveys were mailed out to members of the Musculoskeletal Oncology Research Initiative and all 25 surveys were returned. The survey asked respondents to directly rank from very unimportant (0 points) to very important (4 points) certain preselected factors which would influence the surgeons decision as to which prosthesis to use in a salvage reconstruction. In addition to reviewing the most influential factors in choosing a megaprosthesis, the survey also allowed us to view any trends that may exist in training, location, number of implants performed per year, and their selection of a megaprosthesis. In those who returned surveys, 92% practice in an academic setting versus 8% in a private setting. The majority, 56%, claim to perform 6-15 limb salvage surgeries with use of a megaprosthesis per year, while 24% perform >15 surgeries and 20% performed 1-5 surgeries per year. The most influential factor with an average rating of 3.52/4 was the belief that the prosthesis has the best outcome for the patients. This was followed by ease of use (3.28/4), modularity to add segments (3.16/4), use in fellowship (2.92/4), and good working relationship with representative (2.88/4). Other factors examined include cheapest cost to the hospital (2.2/4), cheapest cost to the patient (2.08/4), required due to hospital contract (1.56/4), used in residency (1.48/4), and worked as a consultant for the company (0.17/4). When asked to select an implant for a given scenario, 11 responders (44%) selected Stryker as well as Biomet-Compress fit, while 2 (8%) chose Depuy, and 1 (4%) chose Zimmer. Of the classic types of stems offered, osteointegrative was the favorite with 11 respondents (44%), followed by press-fit with 9 (36%), and cemented with 5 (20%). Early career orthopedic oncologist select implants based on perceived outcomes and ease of use. Financial factors appeared to play a lesser role, if any, in selection criteria. Future physician engagement by the industry should focus on factors related to quality as opposed to financial benefits.