**Appendix 1.** Questionnaire

It is *very important* to this research that you answer the questions in this survey *honestly* and *accurately*. Your name will *not* be associated with the data you provide.

You are informed that you have cancer of the thigh bone. This type of cancer (osteosarcoma) starts in bone and has a significant risk of spreading to other parts of the body. It can be deadly. At this point, there is no evidence that your cancer has spread. It is located only in your thigh.

Treatment requires chemotherapy before and after surgery to decrease the risk of the tumor spreading to other parts of the body and to improve your chances of survival. Surgery is required to remove the tumor.

You are given two options for surgical treatment:
1) **Limb salvage**–involves replacing the bone with a large metal implant and keeps your leg.     2) **Amputation–**involves cutting the thigh bone and removing the leg with the cancer but leaving the normal part of your thigh bone (above the cancer) attached to your hip. You would be able to use an artificial leg and would still be able to walk.

With both surgical treatments there is a chance for a complication, an issue with healing, or an infection that may require additional surgeries.

Both options have equal survival rates and equal risk of tumor returning.

(Framing 1)

Measurements are available for how well people are able to function after surgery for a bone cancer. One of these measurements is scored on a scale from 0 (worst) to 100 (best). Young adults without cancer, on average, score approximately 98 of 100. The average score of patients treated with amputation is approximately 65. The average score of patients treated with limb salvage surgery is approximately 13 points lower than the general population.

Would you choose amputation or limb salvage?

* Limb salvage (1)
* Amputation (2)

(Affect 1)

If an amputation is done, there is a 5% risk that another surgery will need to be performed. If limb salvage surgery is done, there is a 30% to 50% chance of needing another surgery(s) and also a 5% risk that an amputation will be needed in the future.

Would you choose amputation or limb salvage?

* Limb salvage (1)
* Amputation (2)

(Anchoring 1)

What is the highest complication rate (% chance you need another surgery) that you would accept to have a surgery to treat bone cancer that kept your leg versus an amputation?

Please list your response as a percentage.

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(Bandwagon 1)

You are told by your doctor that amputation has a 5% risk of complications that will need repeat surgery, whereas limb salvage has a 30% to 50% chance of complications requiring repeat surgery and a 5% risk that an amputation will be needed in the future.

Would you choose amputation or limb salvage?

* Limb salvage (1)
* Amputation (2)

(Framing 2)

Measurements are available for how well people are able to function after surgery for bone cancer. One of these measurements is scored on a scale from 0 (worst) to 100 (best). Young adults without cancer, on average, score approximately 98/100. The average score of patients treated with amputation is approximately 65. The average score of patients treated with limb salvage surgery is approximately 17 points higher than patients treated with amputation.

Would you choose amputation or limb salvage?

* Limb salvage (1)
* Amputation (2)

(Affect 2)

If amputation is done, there is a 5% risk that another surgery will need to be performed. If limb salvage surgery is done, there is a 30% to 50% chance of needing repeat surgery(s) and also a 5% risk that an amputation will needed in the future. Please see the picture that shows a wound-healing complication that needed further surgeries.

Would you choose amputation or limb salvage?

* Limb salvage (1)
* Amputation (2)

(Anchoring 2)

Limb salvage surgery can have a 70% complication rate (for example, up to 70% of people will need another surgery to treat wound-healing problems or failures of the first surgery, and some will require an amputation in the future) and this is thought to be acceptable. What is the highest rate of complication that you would be willing to accept for limb salvage surgery to choose this over amputation?

Please type your answer as a percentage.

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(Bandwagon 2)

You are told by your doctor that amputation has a 5% risk of complications requiring repeat surgery, whereas limb salvage has a 30% to 50% chance of complications requiring repeat surgery and a 5% risk of future amputation. Most patients in your situation choose to have an amputation because of this increased risk for repeated surgeries.

Would you choose amputation or limb salvage?

* Limb salvage (1)
* Amputation (2)