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Ryan Blair, Marion Campisi* (mcampisi@stanford.edu), **Jesse Johnson, Scott Taylor** and **Maggy Tomova**. *Exceptional and cosmetic surgeries on knots*. Preliminary report.

We show that the bridge distance of a knot determines a lower bound on the genus of essential surfaces and Heegaard surfaces in the manifolds that result from non-trivial Dehn surgeries on the knot. In particular, knots with high bridge distance do not admit non-trivial non-hyperbolic surgeries or non-trivial cosmetic surgeries. We further show that if a knot has bridge distance at least 3 then its bridge number is bounded above by a function of Seifert genus, or indeed by the genus of (almost) any essential surface or Heegaard surface in the surgered manifold. (Received August 18, 2014)