1056-22-1764 Joshua M Lansky* (lansky@american.edu), Department of Mathematics and Statistics, American University, 4400 Massachusetts Avenue, NW, Washington, DC 20016-8050, and Jeffrey L Hakim (jhakim@american.edu), Department of Mathematics and Statistics, American University, 4400 Massachusetts Avenue, NW, Washington, DC 20016-8050. Tame supercuspidal representations of GL(n) distinguished by orthogonal groups.

For a nonarchimedean local field F, let G = GL(n, F) and let $H \subset G$ be the stabilizer group of a nondegenerate symmetric bilinear form over F. We determine the tame supercuspidal representations of G distinguished by H. In many cases, we also determine the dimension of H-invariant linear forms on these representations. (Received September 22, 2009)