A Critical Evaluation of a Nicotine Vaccine within a Self-Administration behavioral model.

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Figure 1. Self-administration patterns observed during the course of the study for both vaccinated and control animals. Up until the 2nd boost (i.e. vaccine 1, boost 1 and 2), the rats were exposed to nicotine in the IVSA model only 1-3 times per week. This was conducted with the intention to only maintain lever pressing behavior for the reinforcing properties of nicotine, and not to maintain stable levels of responding for nicotine until 2 weeks after the second boost, when we determined a priori that titer levels would be sufficient to examine the effects of AM1 on nicotine self-administration. After boost 2, rats were run more consistently under stable conditions and a repeated measures analysis of variance (ANOVA) of reinforced responses produced no significant differences across the IVSA sessions in vehicle control group.