S-Equol Mitigates Motivational Deficits and Dysregulation Associated with HIV-1

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Number of Tables, Figures: 0, 6

Running Head (≤48 characters): Motivational Alterations Associated with HIV-1

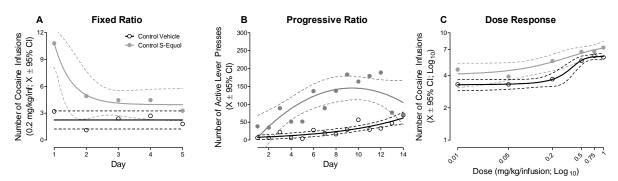
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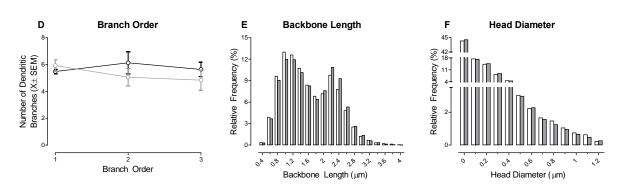
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SUPPLEMENTARY FIGURE 1

Cocaine Maintained Responding



Synaptic Dysfunction in Medium Spiny Neurons of the Nucleus Accumbens



Supplementary Figure S1. The impact of S-Equol (SE) on drug-seeking behavior (**A-C**) and medium spiny neurons (MSNs) of the nucleus accumbens (**D-F**) is illustrated for control animals as a function of treatment (Control Vehicle vs. Control SE). Control animals treated with SE exhibited an initial novelty response to cocaine self-administration followed by a rapid decay (**A**). Treatment with SE increased drug-seeking behavior in control animals (**B**) and altered the sensitivity to cocaine (**C**). Furthermore, although SE had no significant effect on dendritic branching in MSNs (**D**), profound population shifts towards longer dendritic spines (**E**) with decreased head diameter (**F**) were observed relative to control animals treated with vehicle.