

Supplementary Information S6 | Summary of currently available software-based solutions for rodent grooming behavioral analyses (information as provided by developers in Summer 2015)

Software	Company	Available since	Detection principle	Grooming activity endpoints	Ability to detect individual stages of grooming
LABORAS	Metris BV (Netherlands)	1995	Energy change	Frequency, duration, latency	Face, head, body, hindleg and genital grooming, scratching (Fig. 1S) ¹
HomeCage Scan	CleverSys, Inc. (USA)	2002	Video-tracking	Frequency, duration, latency	Face and body grooming, paw licking (Fig. 1S) ²
TopScan	CleverSys, Inc. (USA)	2013	Video-tracking	Frequency, duration, latency	-
Behavioral Spectrometer	Behavioral Instruments, Inc. (USA) and BiObserve GmbH (Germany)	2014	Vibration and video-tracking	Frequency, duration, latency	Paw, nose, cheek, face, back, belly and genital grooming, scratching ³
EthoVision XT	Noldus IT BV (Netherlands)	2015	Video-tracking	Frequency, duration, latency	- ⁴

References:

1. Chen, S.K. et al. Hematopoietic origin of pathological grooming in Hoxb8 mutant mice. *Cell* **141**, 775-85 (2010).
2. Kyzar, E.J. et al. Alterations in grooming activity and syntax in heterozygous SERT and BDNF knockout mice: the utility of behavior-recognition tools to characterize mutant mouse phenotypes. *Brain Res Bull* **89**, 168-76 (2012).
3. Brodtkin, J. et al. Validation and implementation of a novel high-throughput behavioral phenotyping instrument for mice. *J Neurosci Methods* **224**, 48-57 (2014).
4. van Dam, E.A. et al. An automated system for the recognition of various specific rat behaviours. *J Neurosci Methods* **218**, 214-24 (2013).