

**Supplementary Table 1 – Gold standard and novel mouse behavioral tests for ASDs**

<b>Gold-standard tests</b>	<b>PMID</b>	<b>Alternative and novel tests</b>	<b>PMID</b>
<b>Social behavior</b>		<b>Empathy</b>	
Reciprocal social interaction	22388289, 17559418	Social modulation of pain test	16809545
Three-chamber test	15344923, 15344922, 21732314	Social observational fear learning test	21971850, 19209221
Partition test	12921177	<b>Group social behavior</b>	
Social transmission of food preference	18428610, 18428585	Automated group social behavior	23661762, 24015357, 23771126
<b>Repetitive/Stereotyped behavior</b>		<b>Repetitive/Rigid behavior</b>	
Marble burying test	17406223	Jammed running wheel test	22633921
Digging test	17406223	Hole board test	18068825
Spontaneous and induced self-grooming	17947996	<b>Cognitive flexibility</b>	
<b>Cognitive Flexibility</b>		Transitive inference assay	24293564
Reversal learning in T-maze	17406205	<b>Social recognition</b>	
Reversal learning in Morris water maze	17406317	Female social recognition task	19816420
<b>Communication</b>			
Ultrasonic vocalizations (USVs)	18771687		
Olfactory communication	19575474		
Urinary scent marking	18359521, 18565582		