Autism spectrum disorder (ASD) is a neurodevelopmental disorder characterized by impaired social interaction and communication as well as repetitive behaviors and restricted interests. Patients with ASD often need assistance navigating social settings and other day-to- day activities as social interaction in those with ASD is associated with anxiety and an enhanced stress response. Propranolol is a beta blocker often used to treat high blood pressure and high heart rate, but is also used to treat performance anxiety. Furthermore, propranolol has been shown to improve conversational reciprocity and brain connectivity in language areas in patients with ASD. Propranolol is a non-selective beta-adrenergic antagonist that reduces stress by blocking sympathetic nervous system activation. Thus, it is possible that propranolol may provide the most benefit to those with the greatest levels of anxiety and stress at baseline. This study was conducted to examine the relationship between baseline stress levels and the social and anxiety response to a 12-week open label trial of propranolol in ASD. Baseline heart rate variability (HRV), a non-invasive measure of stress, was used to assess physiological stress levels. Then, we examined correlations between baseline HRV and change scores for social interaction and anxiety (e.g., baseline anxiety minus anxiety after 12 weeks of propranolol). We hypothesize that lower baseline HRV will be associated with greater improvements in social and anxiety outcomes. Obtaining this information will be important for precision medicine efforts to treat core and co-occurring symptoms in ASD.