Supplemental Table: The descriptions of all the variables used in heroin treatment study.

Baseline variables	
Survey variables	
ΔPre_Cra_Heroin	Craving for heroin after cue exposure minus that before cue exposure at baseline
ΔPre_Cra_Oth	Craving for other drugs after cue exposure minus that before cue exposure at baseline
ΔPre_WD_Heroin	Withdrawal for heroin after cue exposure minus that before cue exposure at baseline
ΔPre_WD_Oth	Withdrawal for other drugs after cue exposure minus that before cue exposure at baseline
ΔPre_high_Heroin	Feeling "high" for heroin after cue exposure minus that before cue exposure at baseline
ΔPre_high_Oth	Feeling "high" for other drugs after cue exposure minus that before cue exposure at baseline
ΔPre_SOWS	Subjective opioid withdrawal scale after cue exposure minus that before cue exposure at baseline
Pre_BDI	Beck depression inventory at baseline
Pre_TLFB	Numbers of cigarettes smoked per day at baseline
Lab test variables	
Pre_OPI	Opioid level in urine drug screen at baseline
Pre_THC	Tetrahydrocannabinol level in urine drug screen at baseline
Pre_COC	Cocaine in urine drug screen at baseline
Vital sign variables	
ΔPre_HR	Heart rate after cue exposure minus that before cue exposure at baseline
ΔPre_SP	Systolic pressure after cue exposure minus that before cue exposure at baseline
ΔPre_MAP	Mean arterial pressure after cue exposure minus that before cue exposure at baseline
On-treatment Variables	
Survey variables	
ΔOn_Cra_Heroin	Craving for heroin after cue exposure minus that before cue exposure during treatment
ΔOn_Cra_Oth	Craving for other drugs after cue exposure minus that before cue exposure during treatment
ΔOn_WD_Heroin	Withdrawal for heroin after cue exposure minus that before cue exposure during treatment
ΔOn_WD_Oth	Withdrawal for other drugs after cue exposure minus that before cue exposure during treatment
ΔOn_high_Heroin	Feeling "high" for heroin after cue exposure minus that before cue exposure during treatment
ΔOn_high_Oth	Feeling "high" for other drugs after cue exposure minus that before cue exposure during treatment
ΔSOWS_Post	Subjective opioid withdrawal scale after cue exposure minus that before cue exposure during treatment
BDI_1st	Beck depression inventory after 1st injection
BDI_2nd	Beck depression inventory after 2nd injection
BDI_3rd	Beck depression inventory after 3rd injection
TLFB_1st	Numbers of cigarettes smoked per day after 1st injection
TLFB_2nd	Numbers of cigarettes smoked per day after 2nd injection
TLFB_3rd	Numbers of cigarettes smoked per day after 3rd injection
Lab test variables	
OPI_On_1st	Opioid level in urine drug screen after 1st injection
OPI_On_2nd	Opioid level in urine drug screen after 2nd injection
OPI_On_3rd	Opioid level in urine drug screen after 3rd injection
THC_On_1st	Tetrahydrocannabinol level in urine drug screen after 1st injection
THC_On_2nd	Tetrahydrocannabinol level in urine drug screen after 2nd injection
THC_On_3rd	Tetrahydrocannabinol level in urine drug screen after 3rd injection
COC_On_1st	Cocaine level in urine drug screen after 1st injection
COC_On_2nd	Cocaine level in urine drug screen after 2nd injection

COC_On_3rd	Cocaine level in urine drug screen after 3rd injection
Nal_1st	Naltrexone level after 1st injection
Beta_1st	6-beta-naltrexol level after 1st injection
Nal_2nd	Naltrexone level after 2nd injection
Beta_2nd	6-beta-naltrexol level after 2nd injection
Nal_3rd	Naltrexone level after 3rd injection
Beta_3rd	6-beta-naltrexol level after 3rd injection
Vital sign variables	
ΔOn_HR	Heart rate after cue exposure minus that before cue exposure during treatment
ΔOn_SP	Systolic pressure after cue exposure minus that before cue exposure during treatment
ΔOn_MAP	Mean arterial pressure after cue exposure minus that before cue exposure during treatment

Post-treatment Variables

Survey variables	
ΔPost_Cra_Heroin	Craving for heroin after cue exposure minus that before cue exposure after treatment
ΔPost_Cra_Oth	Craving for other drugs after cue exposure minus that before cue exposure after treatment
ΔPost_WD_Heroin	Withdrawal for heroin after cue exposure minus that before cue exposure after treatment
ΔPost_WD_Oth	Withdrawal for other drugs after cue exposure minus that before cue exposure after treatment
ΔPost_high_Heroin	Feeling "high" for heroin after cue exposure minus that before cue exposure after treatment
ΔPost_high_Oth	Feeling "high" for other drugs after cue exposure minus that before cue exposure after treatment
ΔPost_SOWS	Subjective opioid withdrawal scale after cue exposure minus that before cue exposure after treatment
Post_BDI	Beck depression inventory after treatment
Post_TLFB	Numbers of cigarettes smoked per day after treatment
Lab test variables	
Post_OPI	Opioid level in urine drug screen after treatment
Post_THC	Tetrahydrocannabinol level in urine drug screen after treatment
Post_COC	Cocaine level in urine drug screen after treatment
Post_Nal	Naltrexone level after treatment
Post_Beta	6-beta-naltrexol level after treatment
Vital sign variables	
ΔPost_HR	Heart rate after cue exposure minus that before cue exposure after treatment
ΔPost_SP	Systolic pressure after cue exposure minus that before cue exposure after treatment
ΔPost_MAP	Mean arterial pressure after cue exposure minus that before cue exposure after treatment