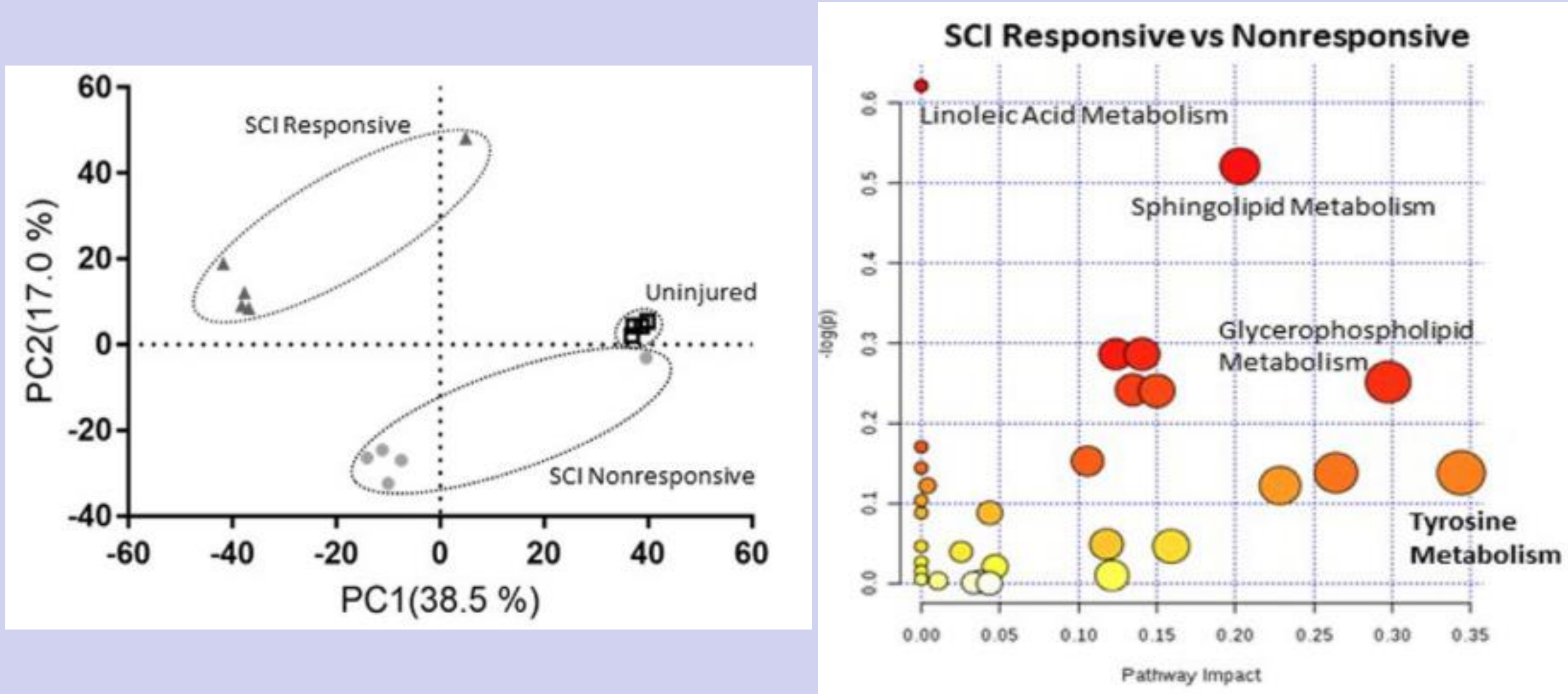


Introduction

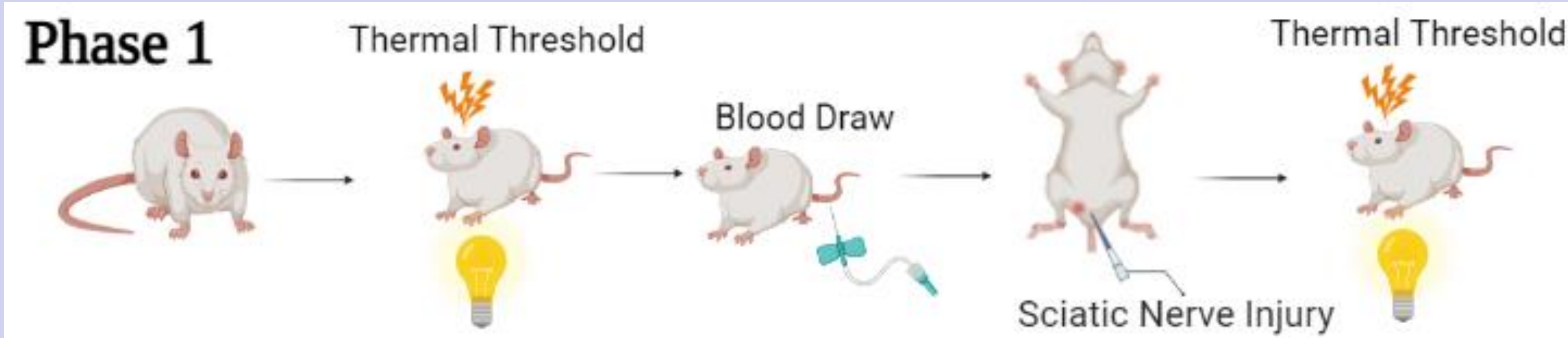
- The use of opioids to manage chronic neuropathic pain is not universally effective for the millions of individuals who take them and can often lead to abuse.
- Currently there is not a method to predict the effectiveness of opioid treatment in humans before it is administered.
- Previous studies show that the dopamine pathway is associated with rat opioid responsiveness.



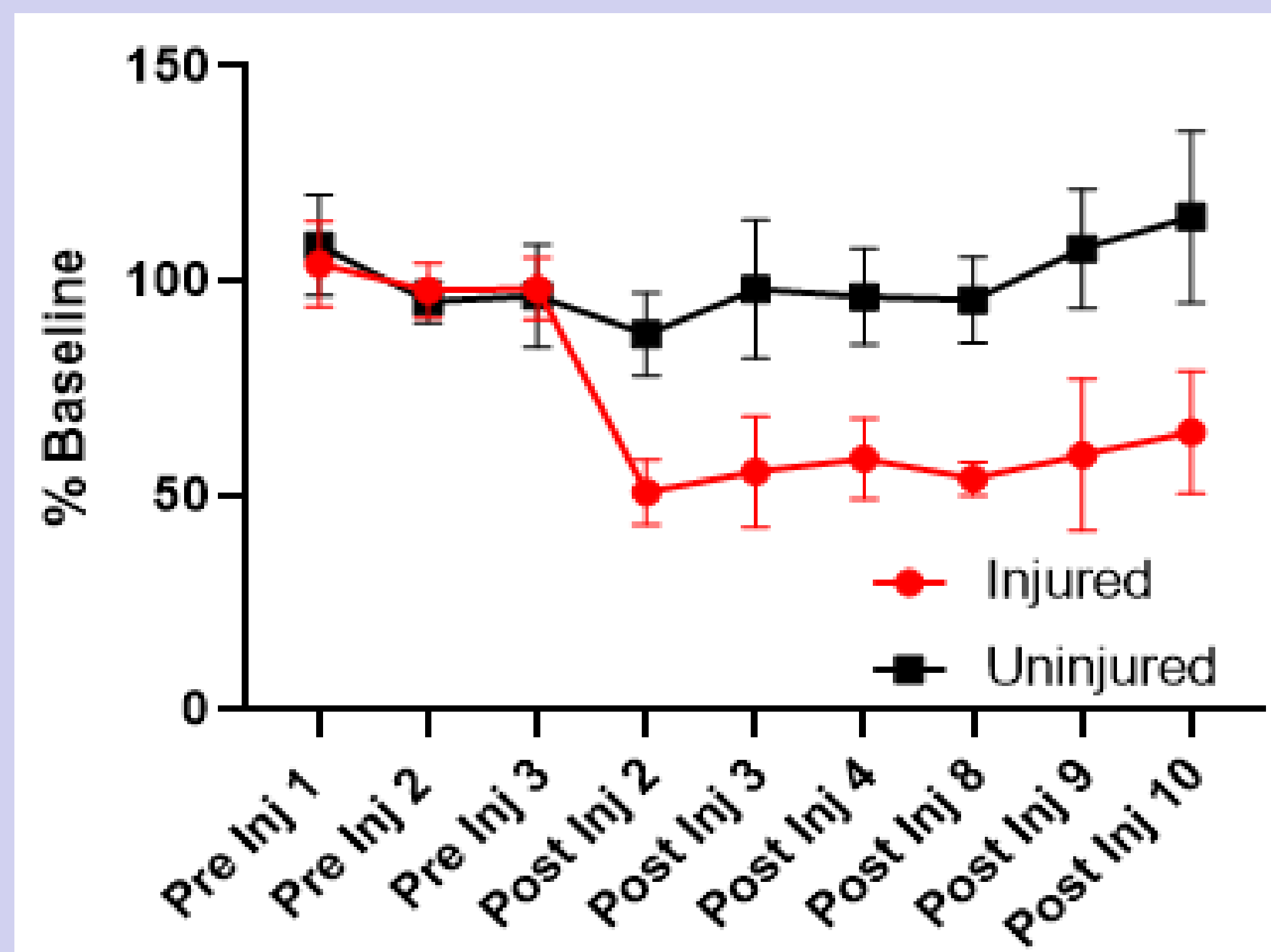
Hypothesis

- Rodents that benefit from morphine treatment have different dopamine metabolic profiles than rodents that do not benefit from treatment.

Methods and Results

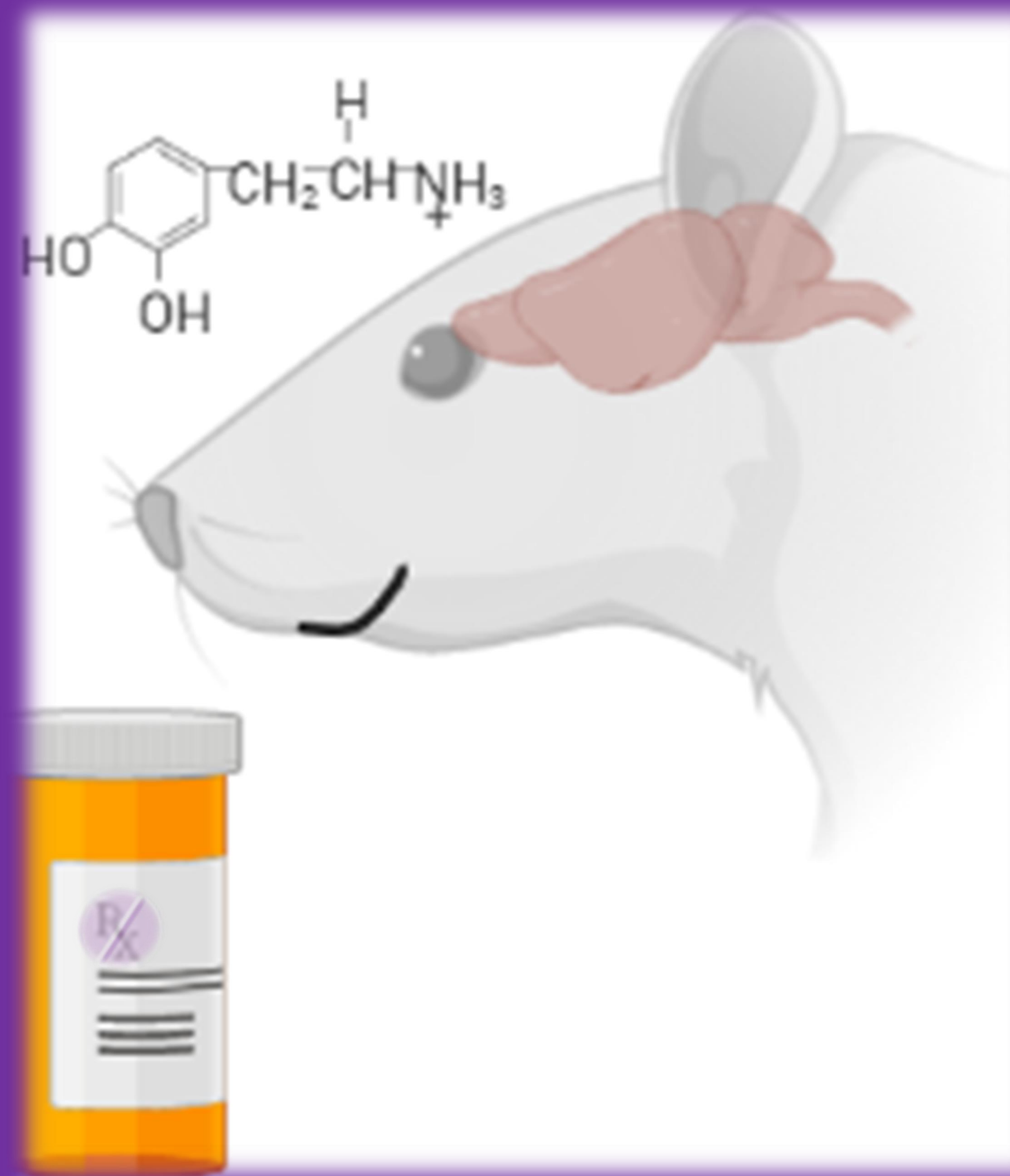


Pre-ligated vs Ligated Nerve



Thermal thresholds remain lower on injured side = **PAIN**

Dopamine Metabolite Profiles Predict Whether Opioids Provide Pain Relief in Rats With Chronic Neuropathic Pain



SCAN ME

Wanna Learn More?

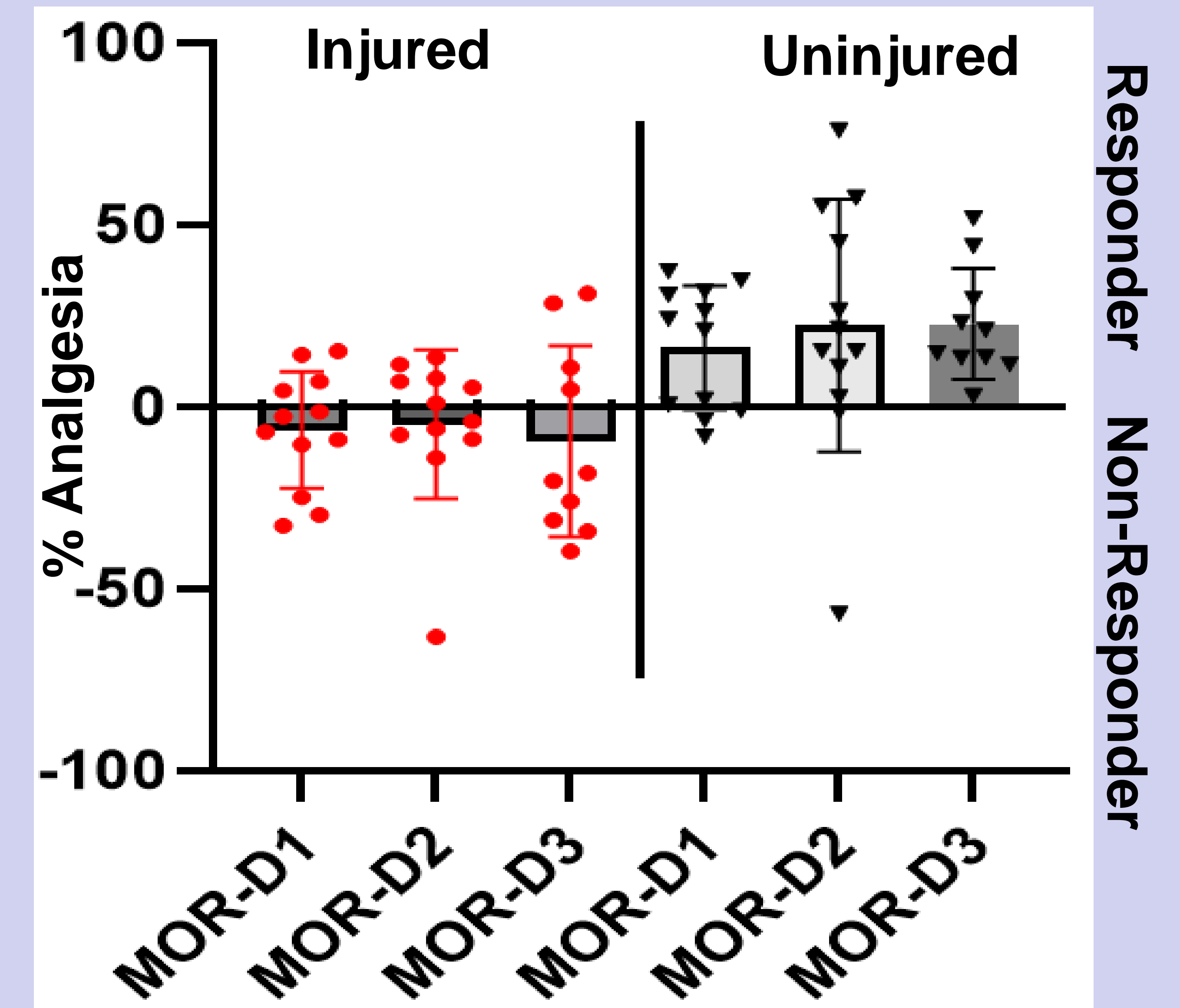
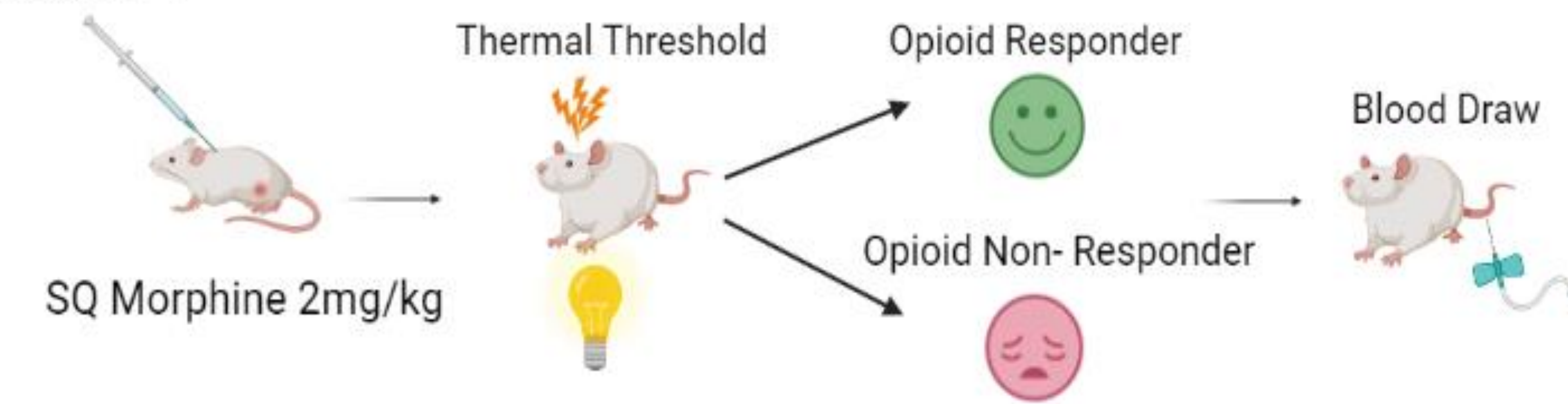
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This work was performed in the labs of Drs. KL Brewer¹ and S. Clemens² with the help of Mande Schaub and Dylan Marshall.

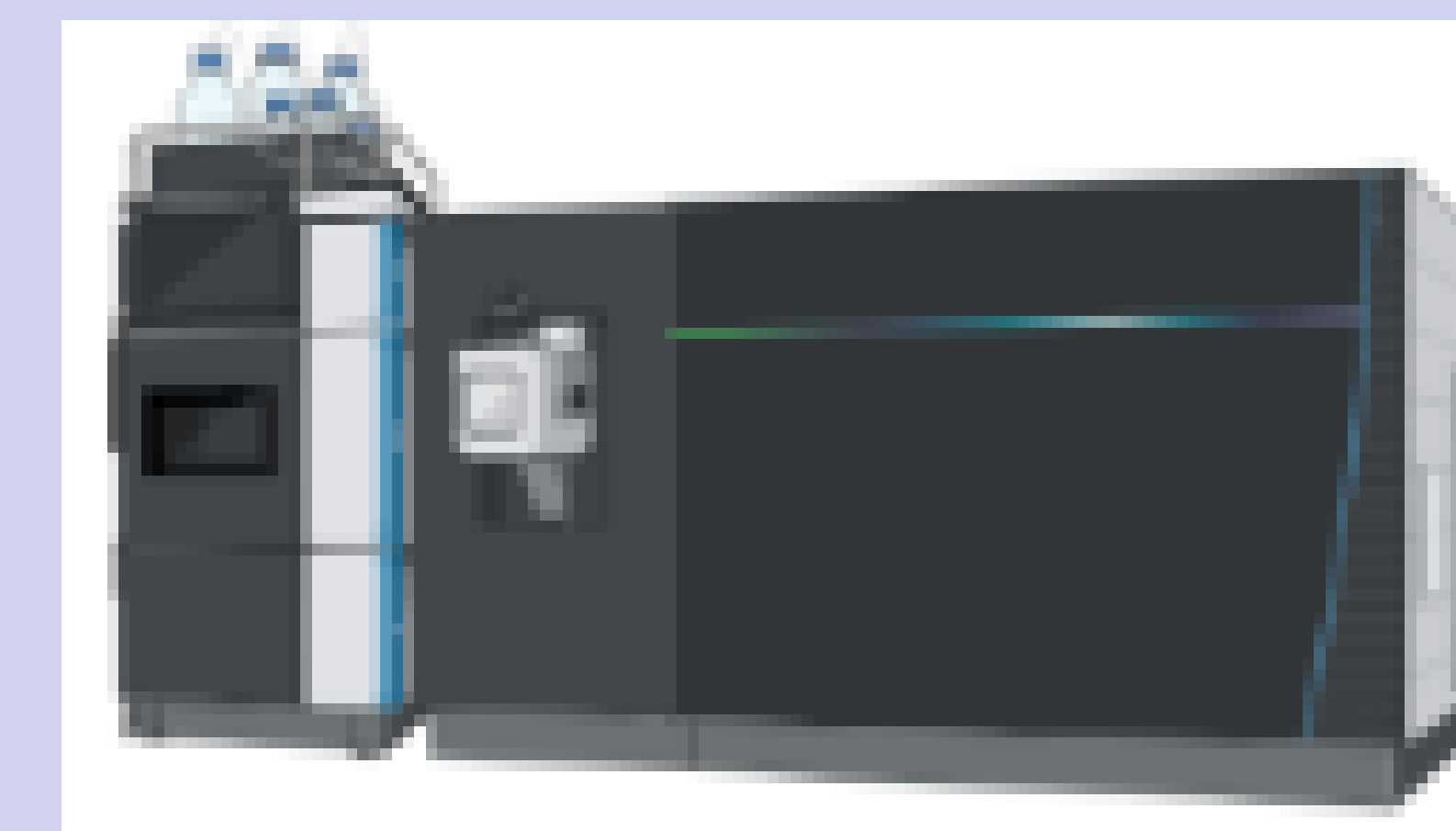


Methods and Results Continued..

Phase 2



Phase 3



Untargeted Metabolomics for Dopamine

- Pending blood analysis, we hope to identify a metabolic profile that is ultimately predictive of opioid responsiveness.

