



Bridge to Doctorate Meeting Minutes

December 3, 2018

Facilitator: Steven J. Toro

Minute Taker: Victor Calle

Duration: 11:00 am – 12:15 pm.

Presentation

Acetaminophen-Induced Liver Injury

1. Liver Properties/Anatomy

- Great Regenerative Capacity
- Blood Filtration
- Production
- 2 lobes → 8 segments → thousands of lobules
- Hepatic circulation

2. Drug Metabolism

- Ingestion/Absorption/Distribution/Metabolism/Excretion
- Binding of albumin to drug products
- Phases of Aspirin metabolism

3. Acetaminophen

- CYP metabolism → NAPQI (cytotoxic) → normally made nontoxic by GSH, yet GSH depletion leads to cytotoxicity
- 50% of liver transplants are from overdose-related liver failure

4. Rodent Model of Autoprotection

- Hypothesis: MSO increases the capacity for hepatocytes to deal with cytotoxic chemicals
- LDH 5 = Biomarker of liver damage
 - LDH activity Assay
- MSO treatment did not alter APAP-induced cytotoxicity in vitro (multiple cell lines)



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Priming Yourself

- How you start your day before you get into lab
- Analysis of characteristics/struggles of extremely successful people
- Examination of morning rituals vs. routines
- Value of and forms of Introspection

Concluding remarks:

Upcoming Meeting: January 23rd, 2019

Facilitators: Aida & Randi

Attendees:

Kevin Rivera

Pierre Fils

Cristian Aviles Martin

Brandon Williams

Roman Mays

Godwin Dzidotor

Steven J. Toro

Aida Ghiaei

Randi Mendes

Jessica Maita

Victor Calle