

Oral presentation

## Black Swans and white tablets

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The Black Swan, a metaphor for highly improbable, high impact events, warns us to understand the limits of our predictions and expect the "unknown unknowns" everywhere, from war to science and industry. From the earliest stages of discovery to post-marketing events, we argue that fundamentally the structure of pharmaceutical industry is driven by and impacted by both positive and negative Black Swans. We take a critical look at the consequences of the Black Swan impacts in the pharmaceutical industry and what steps can be taken to manage the unpredictable.