



**Impact of Pediatric Radiation Oncology with  
Movie Induced Sedation Effect (PROMISE) on  
Patient Movement and General Anesthesia  
Use in Pediatric Radiation Therapy**

Jeffery T. Chapman, MS

*University of Texas Southwestern Medical Center*

# Disclosure

- I have nothing to disclose
- Thank you to Wipe Out Kids Cancer for funding our upcoming phase II clinical trial
- Author list:  
Jeffrey Chapman BS, Tsuicheng Chiu PhD, David Parsons PhD, Eric Chambers MBA, Yang K. Park PhD, Xuejun Gu PhD, Tu D Dan MD, Steve Jiang PhD, Kiran A Kumar MD MBA

# Radiation Therapy for Children with Cancer

- Pediatric radiation therapy (RT) often requires daily anesthesia to ensure precise immobilization for safe and accurate treatment
  - Potential harm to the patient's health and quality of life
  - Significant logistical and financial burden

Is there a better way to help children stay still during their treatments?

# PROMISE: Pediatric Radiation Oncology with Movie Induced Sedation Effect

- Interactive, incentive-based system
- Wireless video streaming to a screen directly in front of the patient
- Real-time video monitoring of patient motion
- Automatically stops the radiation beam and video if the patient moves outside of defined parameters





# The Impact of PROMISE

- Estimated ~30% absolute reduction in need for daily general anesthesia in children 3-7 years old with PROMISE
- Anecdotally, significant improvement in patient & family quality of life
- Upcoming phase II clinical trial to safely reduce anesthesia use in children 3-11 through PROMISE



# Special Thanks



Dr. Kumar



Dr. Jiang



Dr. Chiu