Role of HIF2 signaling in small intestine regeneration after radiation injury

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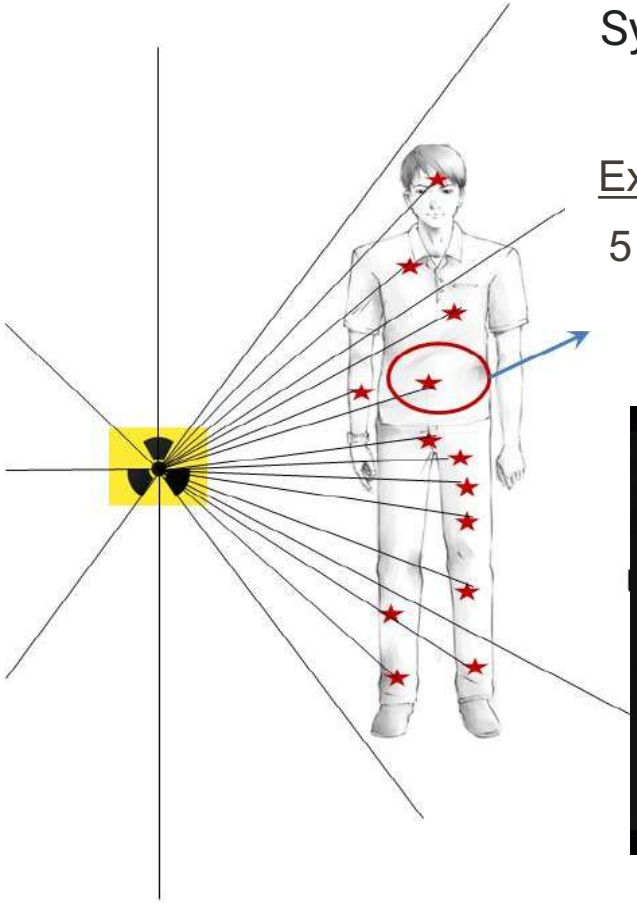
Gastrointestinal -ARS

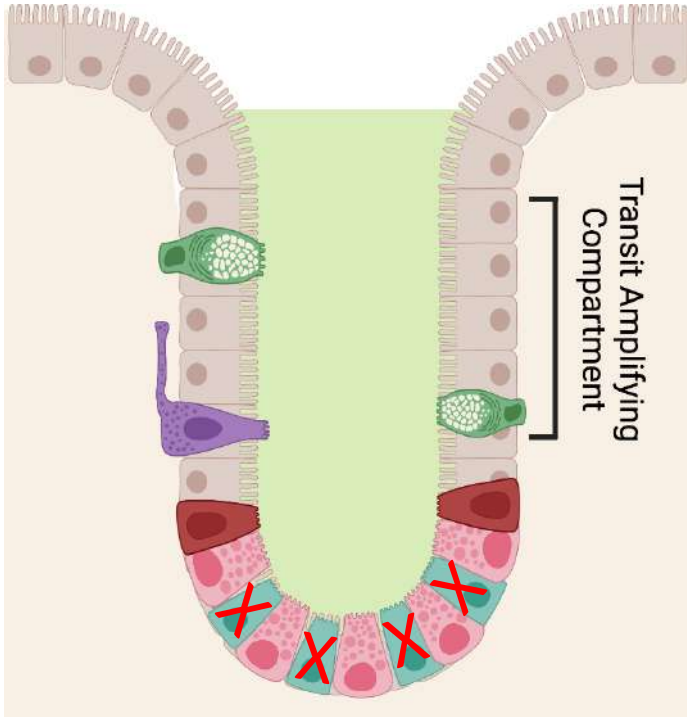


Radiation Exposure

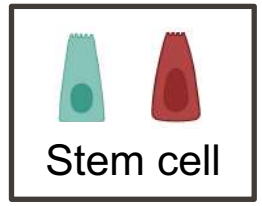
Symptoms appears within few hours to days

Exposure	Time of Onset	Manifestation
5 - 12 Gy	9 - 10 days	Gastrointestinal (GI) syndrome

Chernobyl (HBO, 2019)



The Intestinal Crypt



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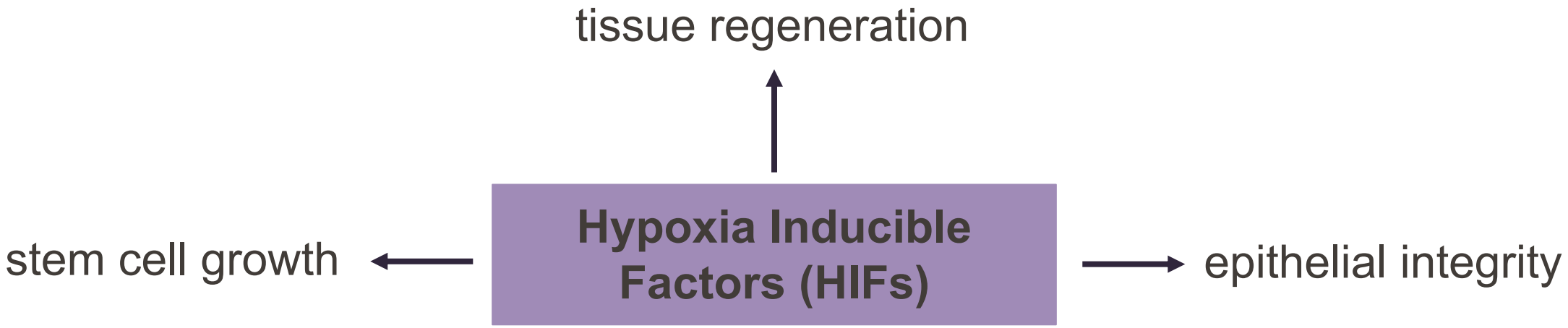
There are no approved treatments for GI-ARS

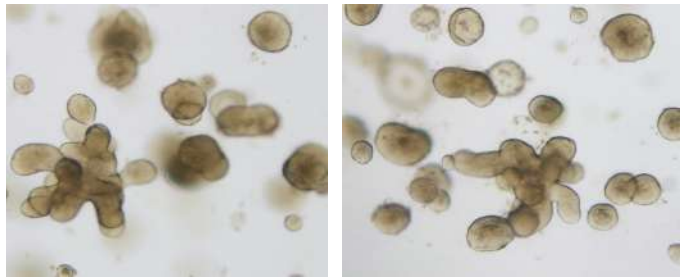
FG-4592- an oral HIF activator

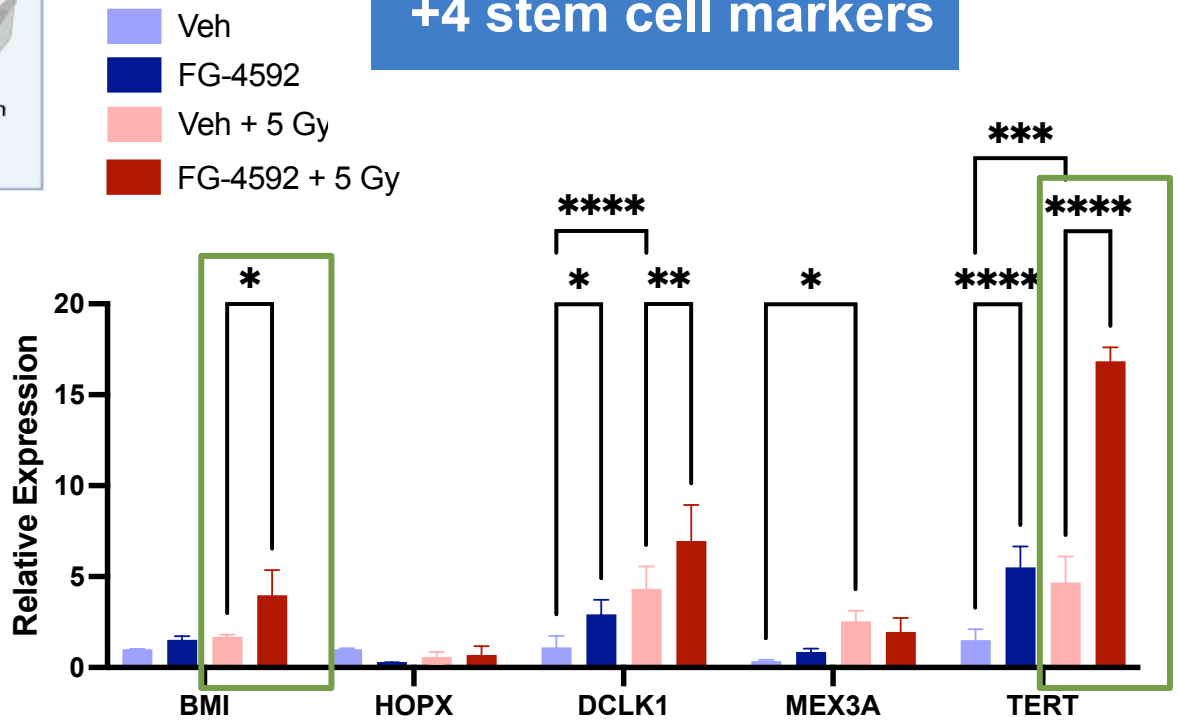
FDA approved for Anemia treatment and could be rapidly repurposed



FG-4592 induces intestinal stem cells markers

Intestinal Organoid (Mini-Guts)





FG-4592

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⇧ intestinal stem cell/crypt survival

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GI radioprotection

Acknowledgements

Cullen Taniguchi, MD, PhD
Carolina Garcia, PhD
Robert Fuentes, PhD
Matthew Cribb, PhD
Tara Fujimoto
Maya Ferell
Emily Caggiano
Abagail Delahoussaye
Jasper Chen

Thank you for your attention…….