**FACT** is an “accelerator” of malignant transformation and potential marker and target of aggressive cancer

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**Background**

Curaxins, small molecule FACT inhibitors

- Were identified in the chemical screening of simultaneous activators of p53 and inhibitors of NF-kB in tumor cells
- Effect of curaxins on p53, NF-kB and toxicity to tumor cells result from depletion of active FACT in cells

**Curaxin** is a marker of aggressive poorly differentiated tumors

- Water soluble, orally bioavailable
- Not a substrate of multidrug transporters
- Penetrates blood brain barrier
- Is in Phase I trial against advanced treatment resistant cancers and refractory lymphomas

**Anti-tumor effect of FACT inhibition**

- FACT is the facilitator of chromatin transcription
- FACT is expressed at the highest levels in normal and cancer stem cells
- FACT selectively assists transcription of genes involved in cancer and maintenance of pluripotency

**Conclusions**

**FACT** is a marker of aggressive poorly differentiated tumors

**FACT** is expressed at the highest levels in normal and cancer stem cells

**FACT** selectively assists transcription of genes involved in cancer and maintenance of pluripotency

**Targeting of FACT is a promising anti-cancer strategy**