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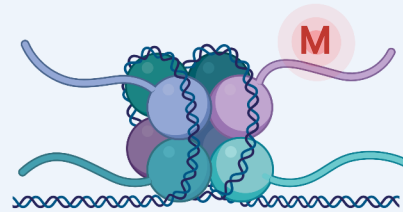
Epigenetic therapy in DIPG

Diffuse Intrinsic Pontine Glioma



<10% 2-year survival
 NO treatment options

DIPG is an epigenetically-driven cancer



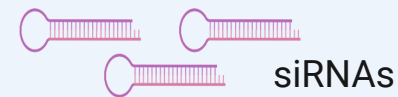
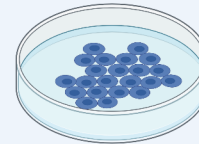
>80% cases carry histone H3
 a mutation: **H3K27M**

↓ H3K27me3
 ↓ DNA methylation
 ↑ H3K27ac
 ↑ H3K36me3

Extensive epigenetic
 remodelling

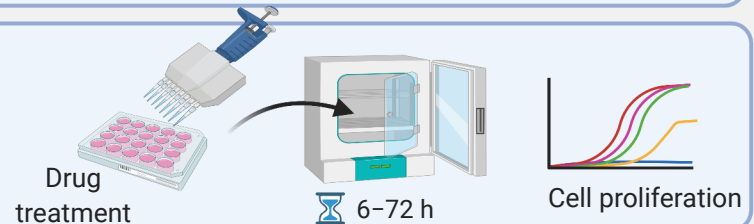
Aim 1: Validate new epigenetic partners of H3K27M

In vitro siRNA experiments to KD epigenetic partners



Aim 2: Epigenetic therapy in DIPG

In vitro drug treatments using specific epigenetic drugs



Aim 3: Molecular mechanism of action of epigenetic drugs

Changes of histone marks associated to epigenetic therapy

Western blot

