

MegaBulb DNA

Enabling better non-viral gene therapy with mbDNA™ – a circular ssDNA

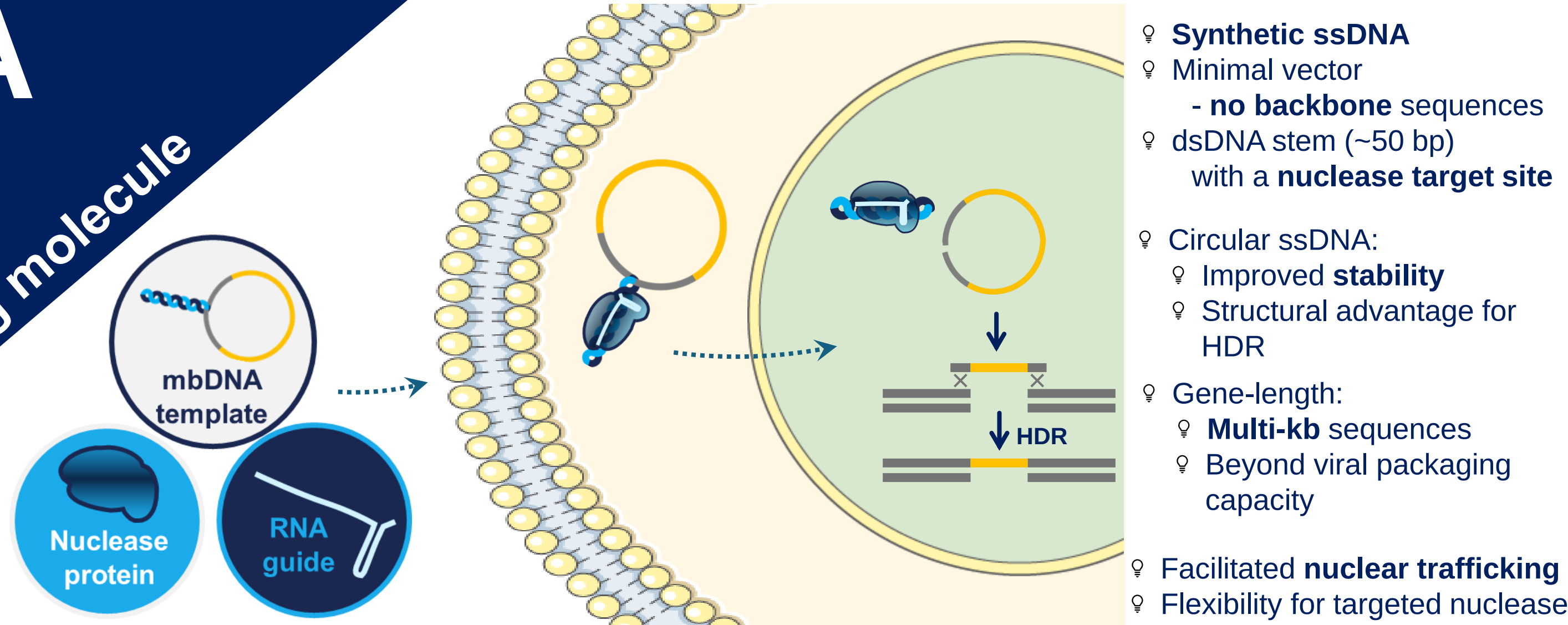
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mbDNA is the perfect gene editing molecule



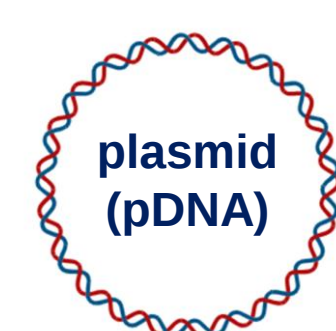
- ♀ Synthetic ssDNA
- ♀ Minimal vector
 - **no backbone** sequences
- ♀ dsDNA stem (~50 bp) with a **nuclease target site**
- ♀ Circular ssDNA:
 - ♀ Improved **stability**
 - ♀ Structural advantage for HDR
- ♀ Gene-length:
 - ♀ **Multi-kb** sequences
 - ♀ Beyond viral packaging capacity
- ♀ Facilitated **nuclear trafficking**
- ♀ Flexibility for targeted nuclease

Extensive external industry leader & in-house ex vivo data demonstrates mbDNA's outstanding gene editing profile over existing DNA formats

Double-stranded DNA vs

mbDNA

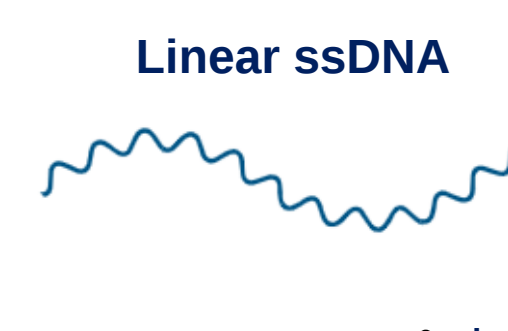
vs Single-stranded DNA



- ♀ Lower toxicity
- ♀ Better recovery
- ♀ Higher KI and cell counts

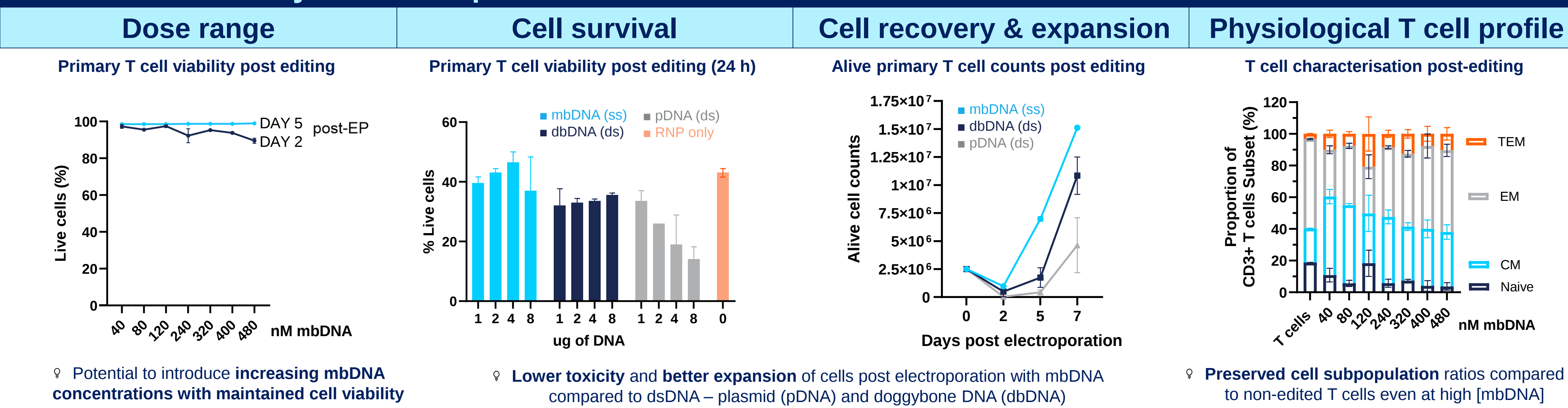


Interested in mbDNA? Get in touch!
www.touchlight.com elena.stoyanova@touchlight.com

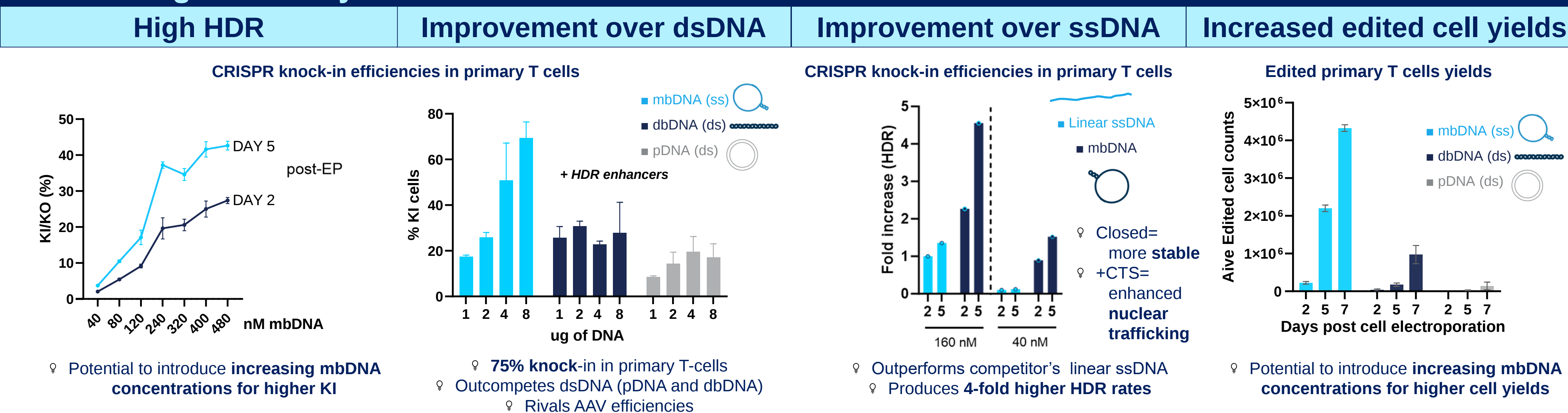


- ♀ Improved stability
- ♀ Better trafficking into the nucleus
- ♀ Improved efficiency

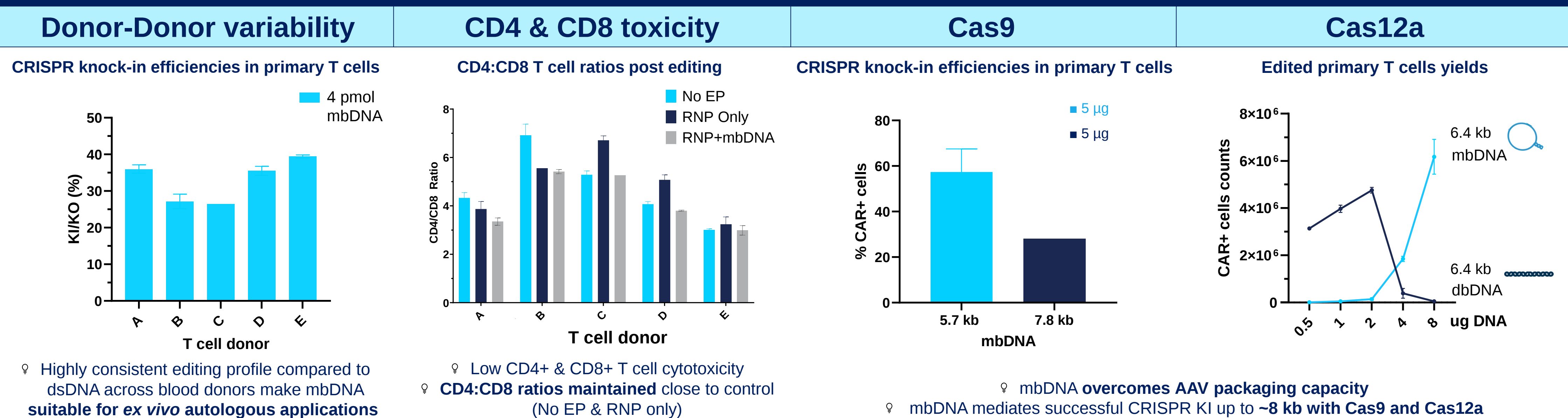
mbDNA's low toxicity enables improved...



mbDNA's high efficiency ensures...

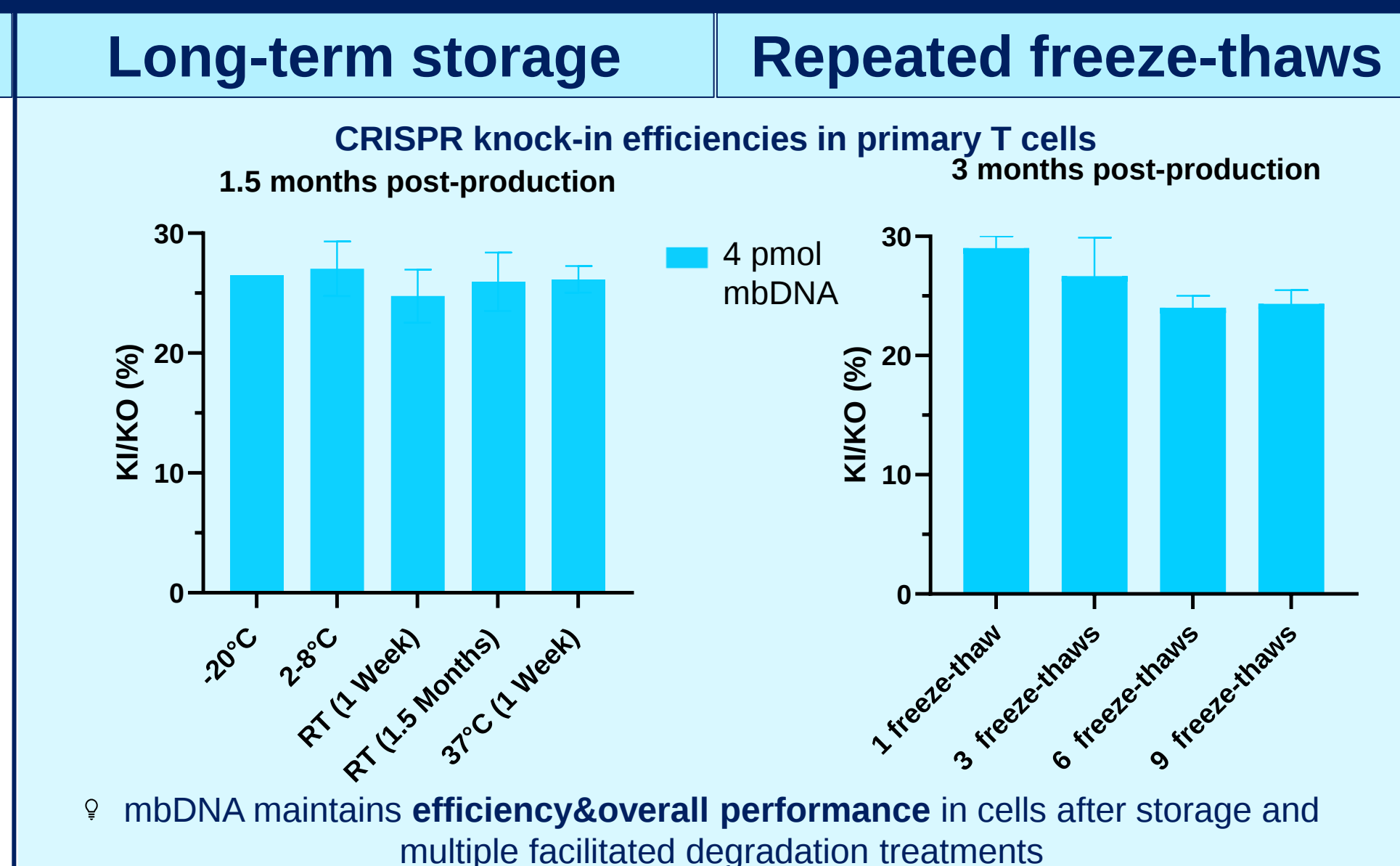


mbDNA has low...

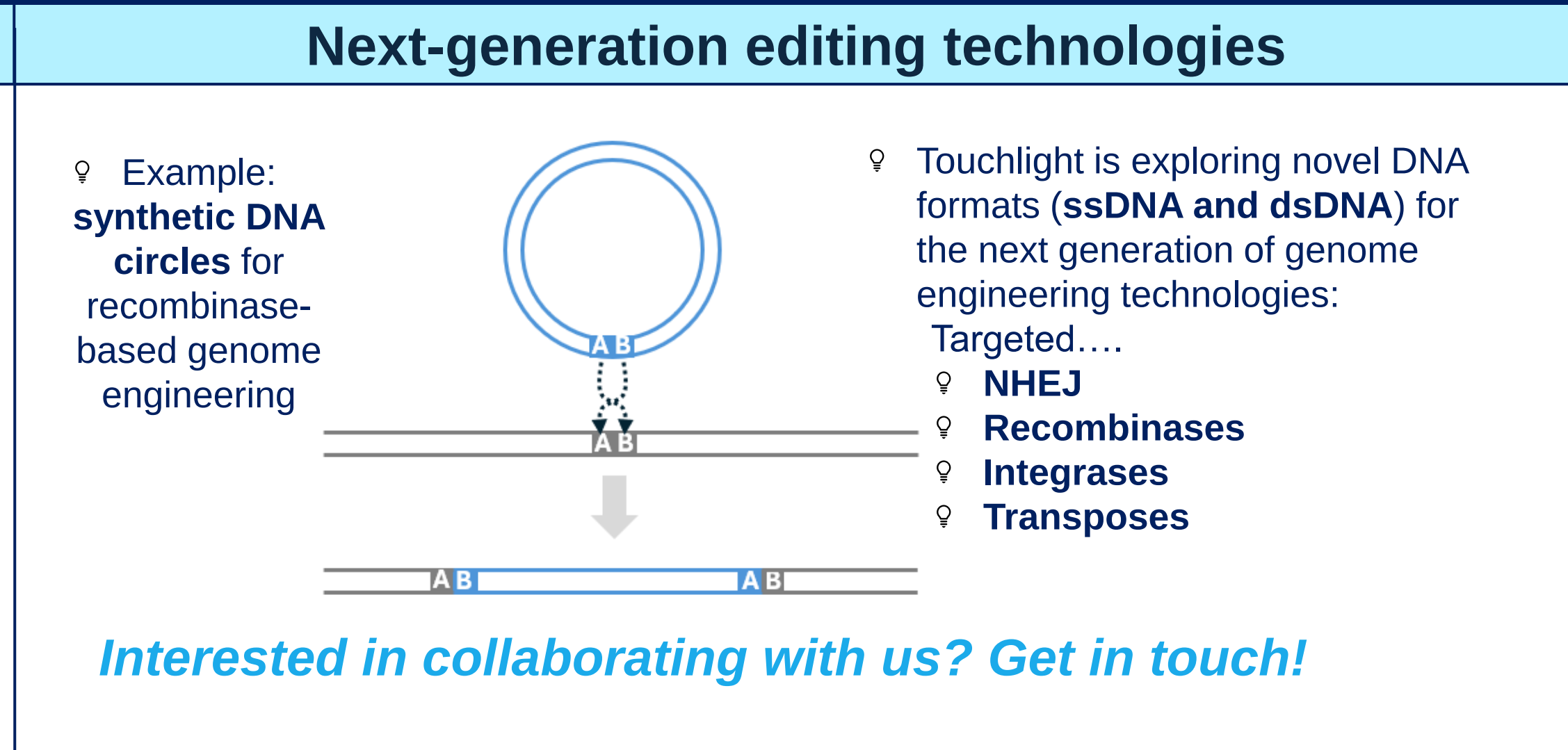
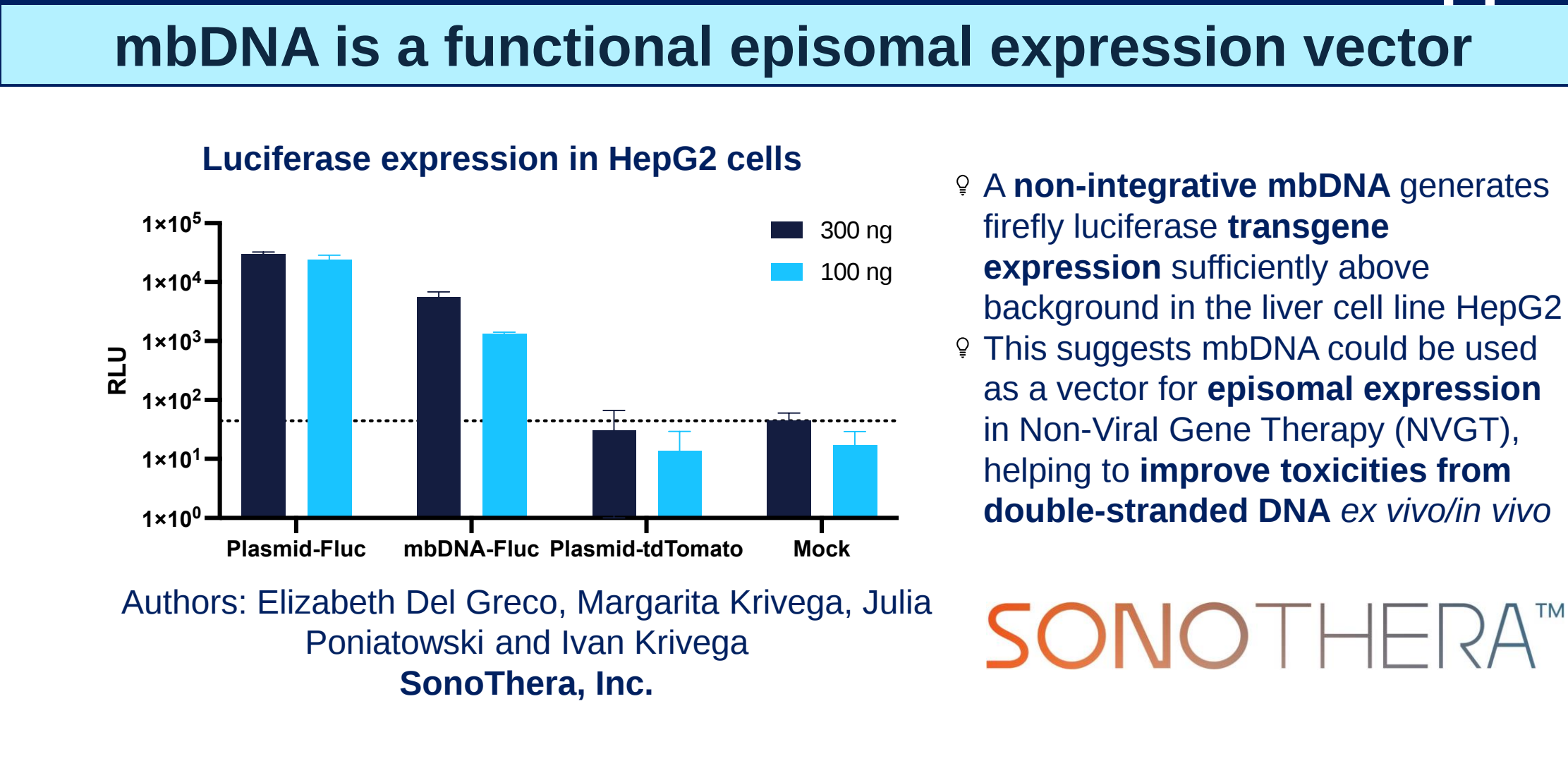


mbDNA overcomes AAV size limits with...

mbDNA is stable after....



Non-HDR Applications & Future



More data...

