



SENTI BIO

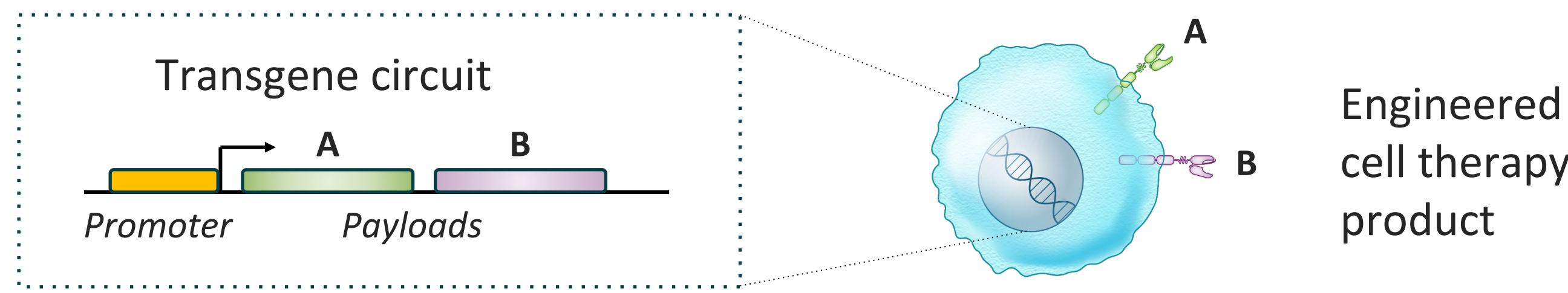
# High-throughput discovery of constitutive promoters to drive strong expression of next-generation gene circuits in CAR-NK and -T cells

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Abstract #270

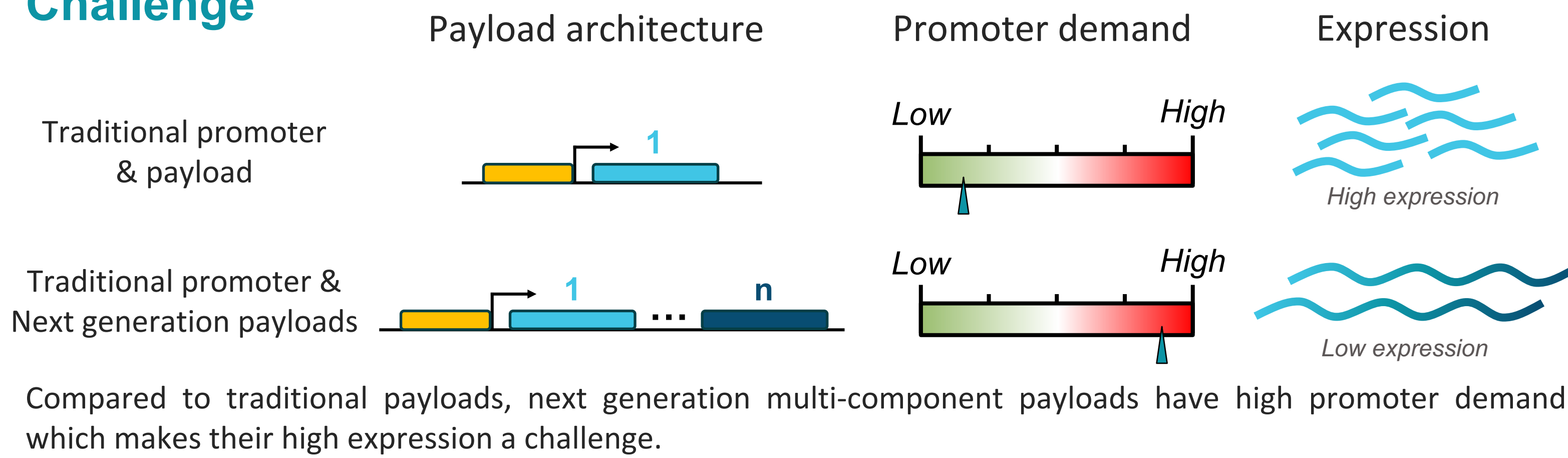
## Promoters play an important role in cell therapies



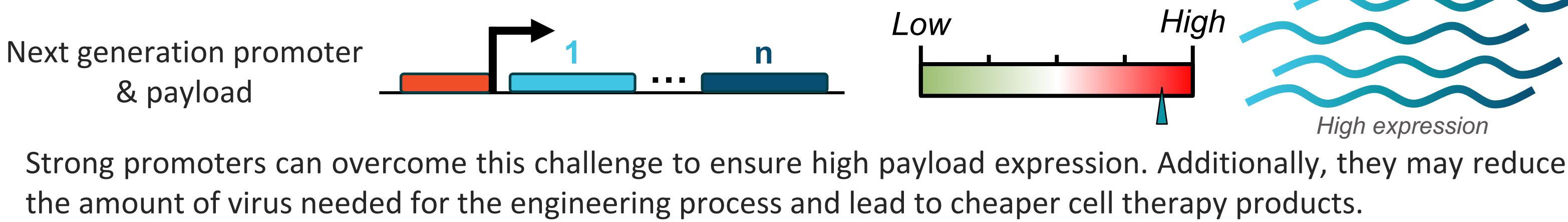
Promoters are important components of gene circuit design for cell therapies. They are responsible for regulating the expression of transgenic payloads, which can ultimately impact the overall functionality of engineered cells, such as CAR-NK and CAR-T cells. To improve cell therapy performance in solid tumors, next generation designs often involve the need to express multiple payloads under the control of a single promoter, which substantially increases the demand for have a strong promoter.

## Complex multi-payload circuits have high promoter demand

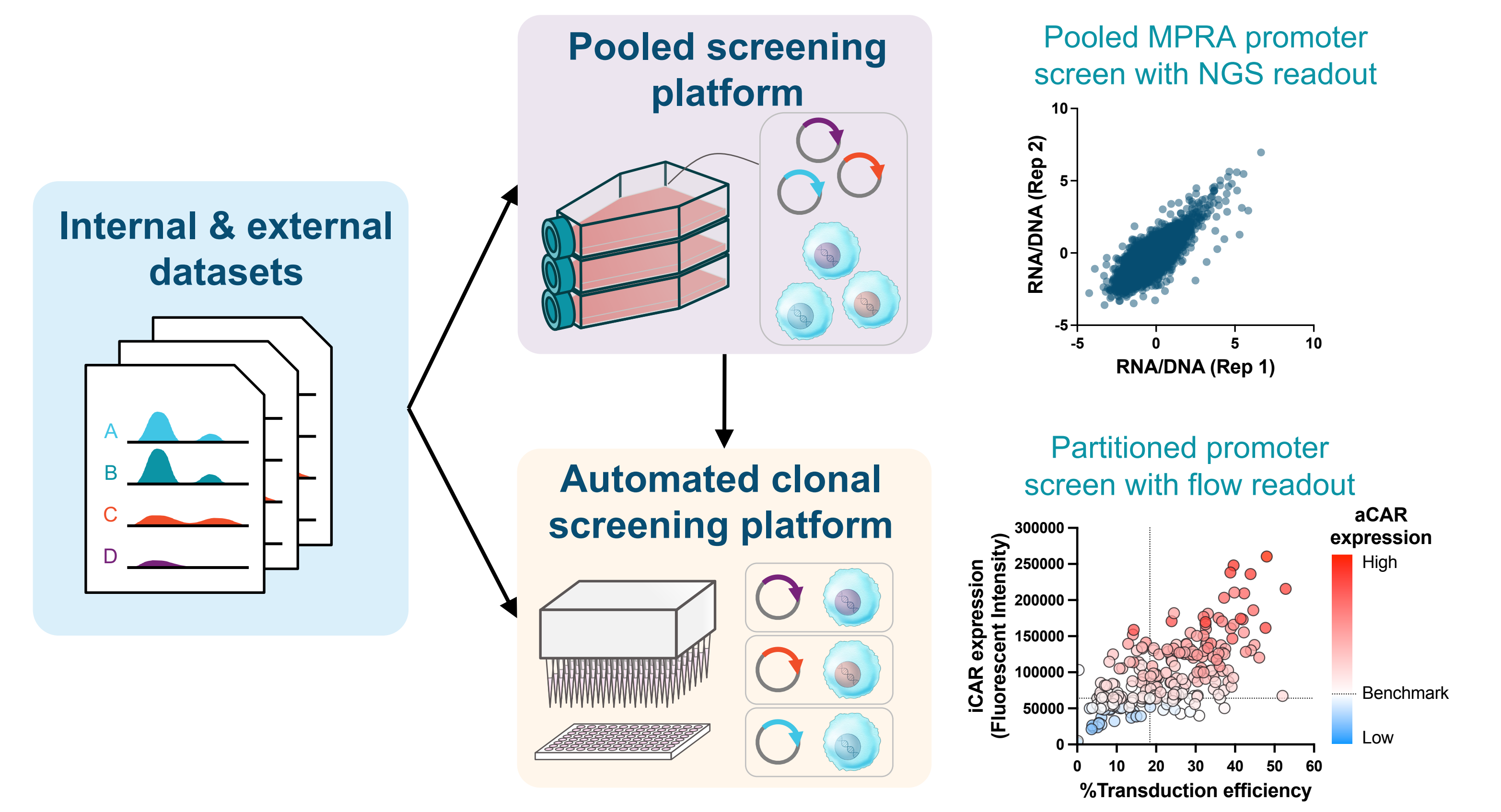
### Challenge



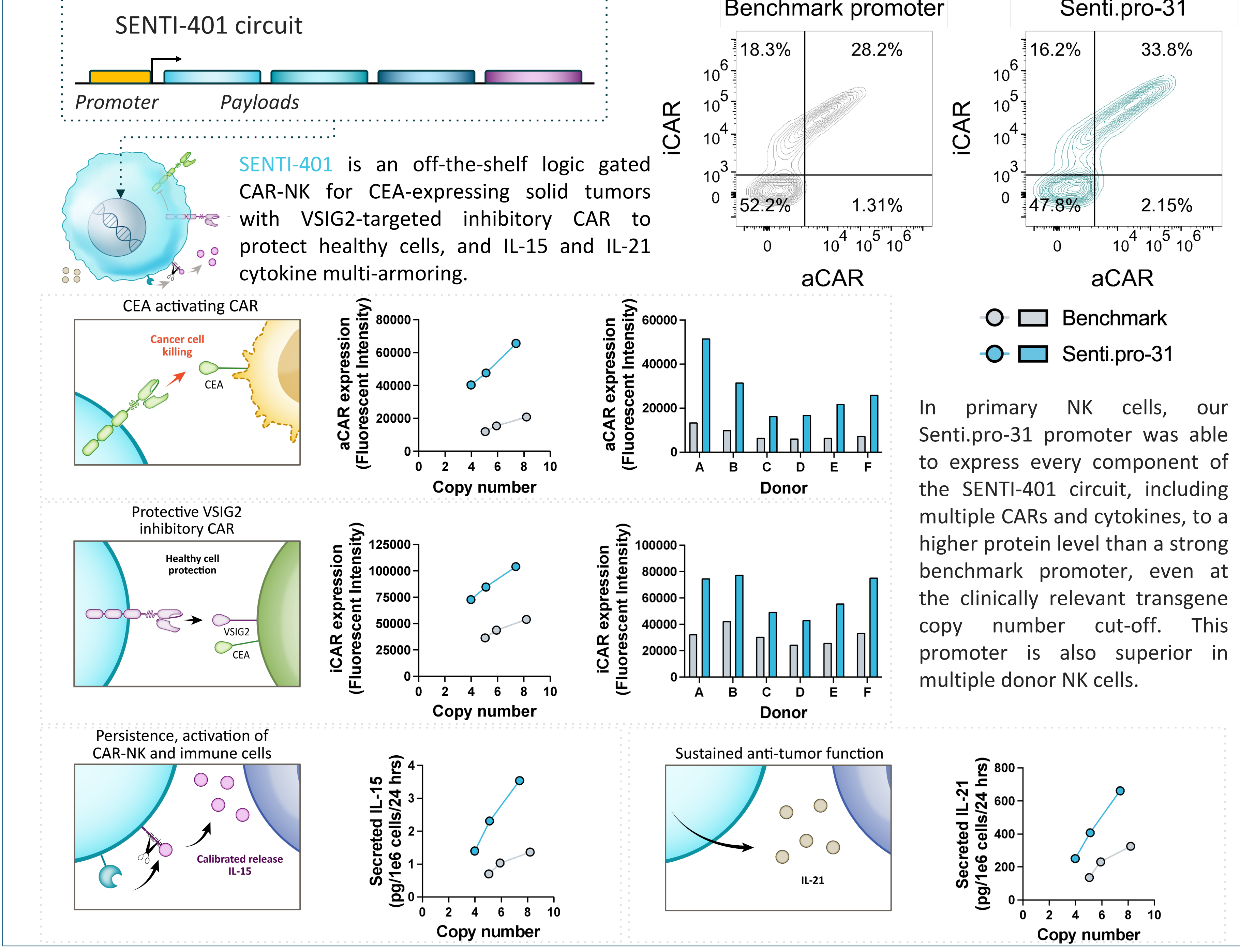
### Solution



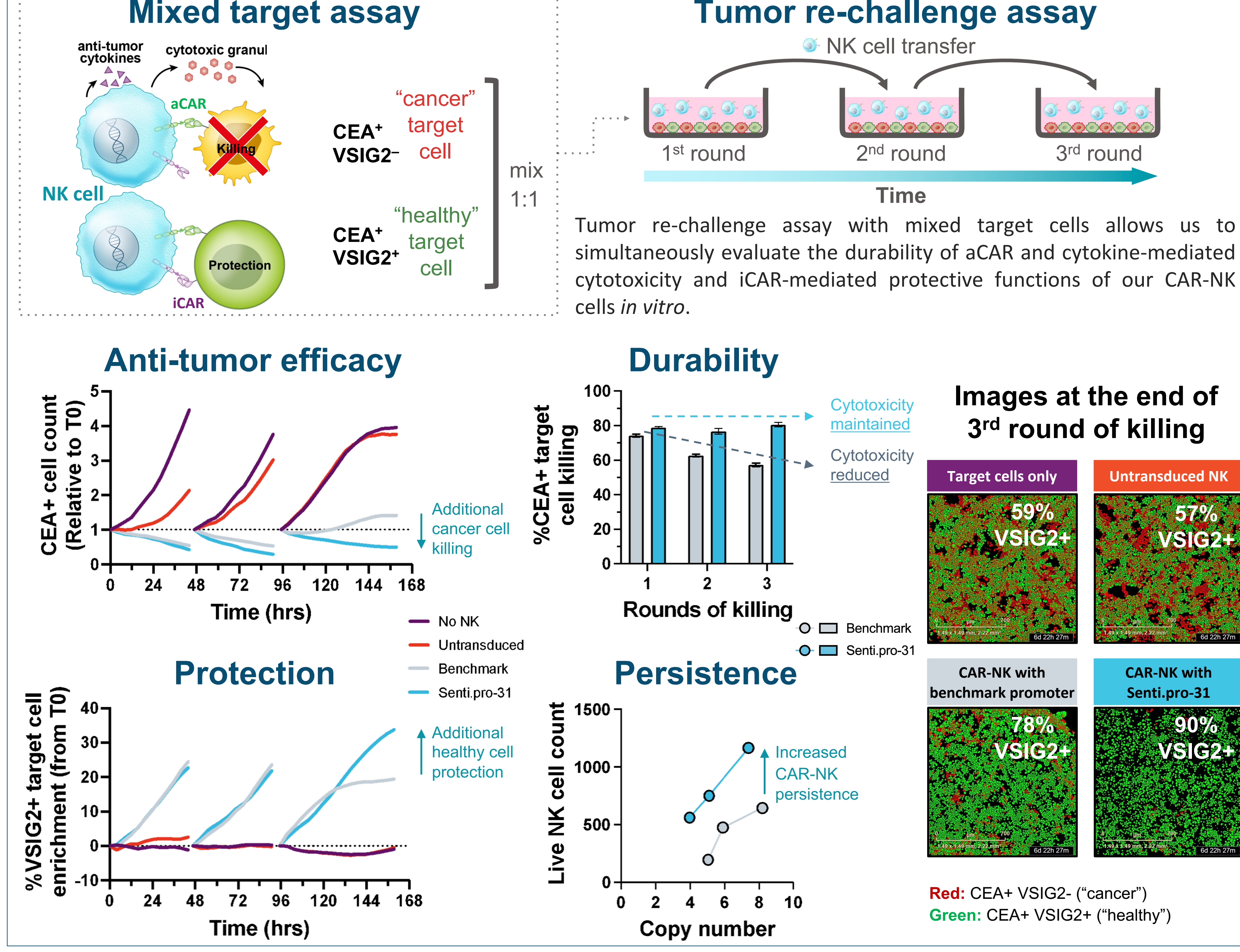
## Senti utilizes high-throughput platforms for promoter discovery



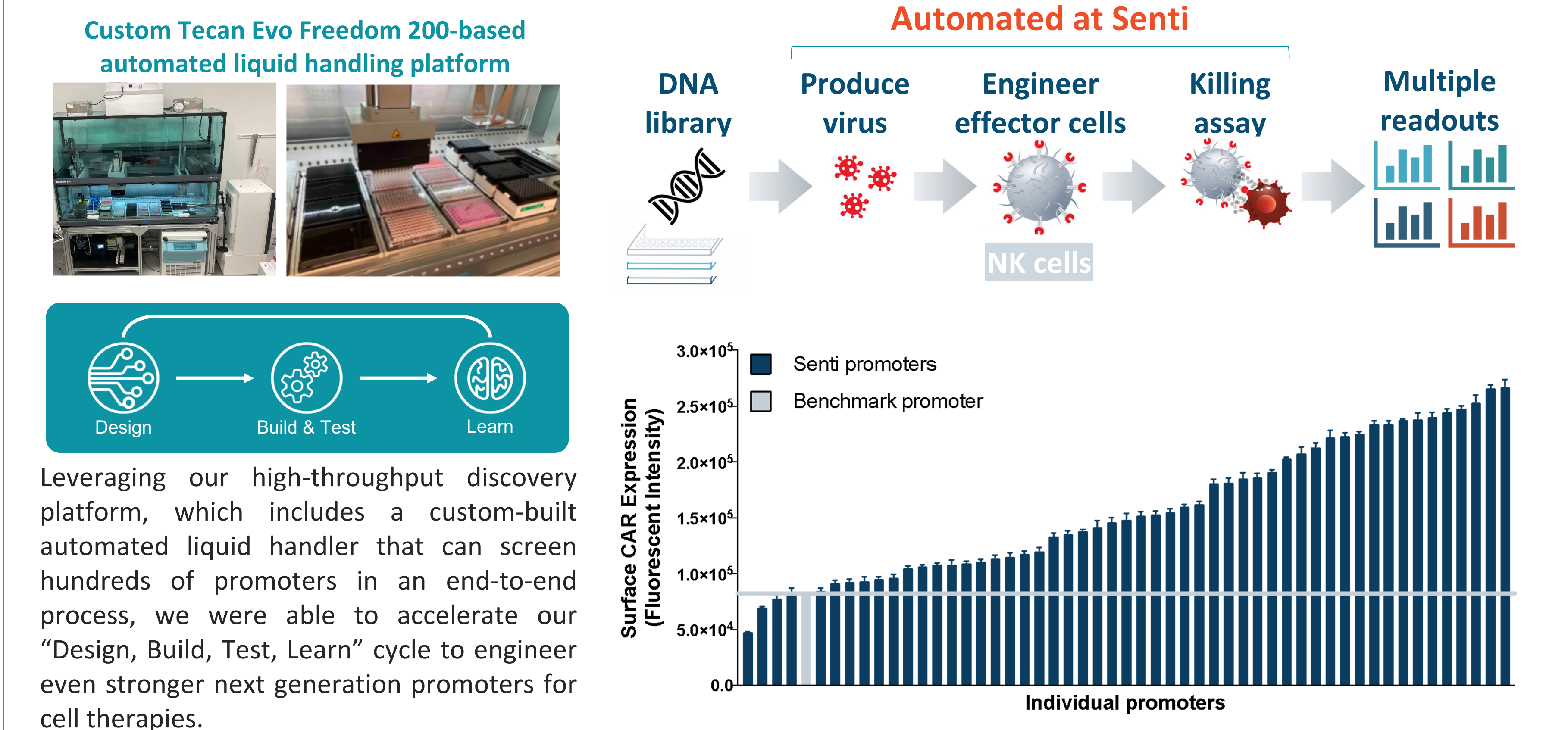
## Optimized promoter leads to higher expression of SENTI-401 components



## High payload expression results in better CAR-NK functionality



## Next generation promoter discovery using automation at Senti



## Our promoters can also drive high payload expression in CAR-T cells

