

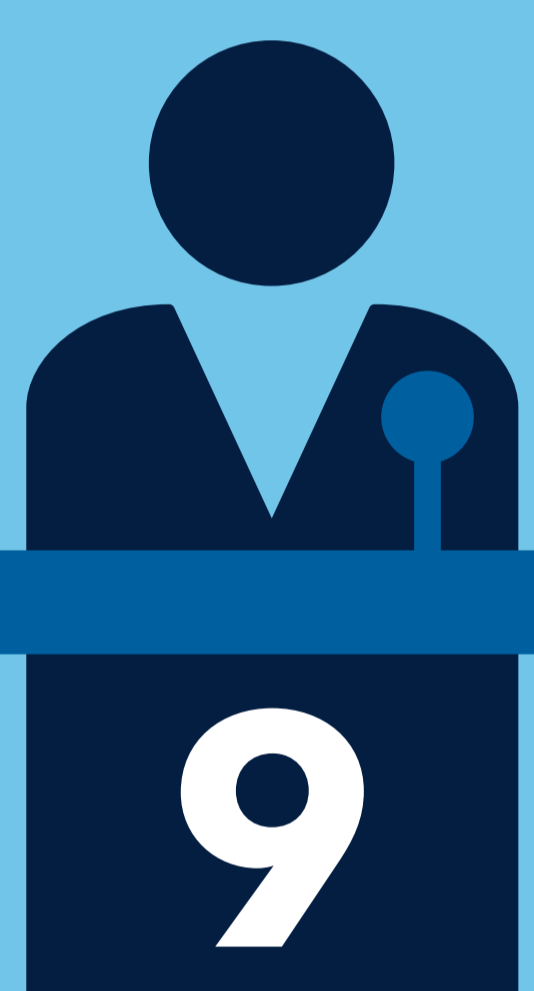
# MEETING THE CHALLENGES OF SCALE

DESIGNING THE CELL & GENE THERAPIES OF THE FUTURE

DELEGATES



SPEAKERS



Country Demographics



Location:  
QEII, London 2019



We asked the delegates, what do you think are the biggest challenges you will face in manufacturing cell and gene therapies, at scale to meet patient demand? Here are the top 5 answers.

**RAW MATERIALS**  
**SUPPLY CHAIN**  
**COST | TALENT**  
**SHELF LIFE**

What things are most important when you are qualifying the technologies that go into a process?



CONSISTENCY | TRANSPARENCY | PRODUCT  
**SCALABILITY**  
STAFFING CAPACITY | VALIDATION | COMPATABILITY  
REPRODUCIBILITY | PERSPECTIVE | TIME  
**RELIABILITY**  
QUALITY SCALABILITY | GMP | LONG TERM SUPPLY  
ENVIRONMENT | SUPPLIER | EFFICIENT  
REPRODUCIBILITY | CLOSED



What would you like to see us or other tool providers developing for the CGT space? What products do you think you will need and don't have yet...

FLEXIBLE QUANTITIES | UNIT ACTIVITY | GMP SERUM

**SMALL VOLUME**

CLOSED SYSTEM | BAG | SINGLE USE

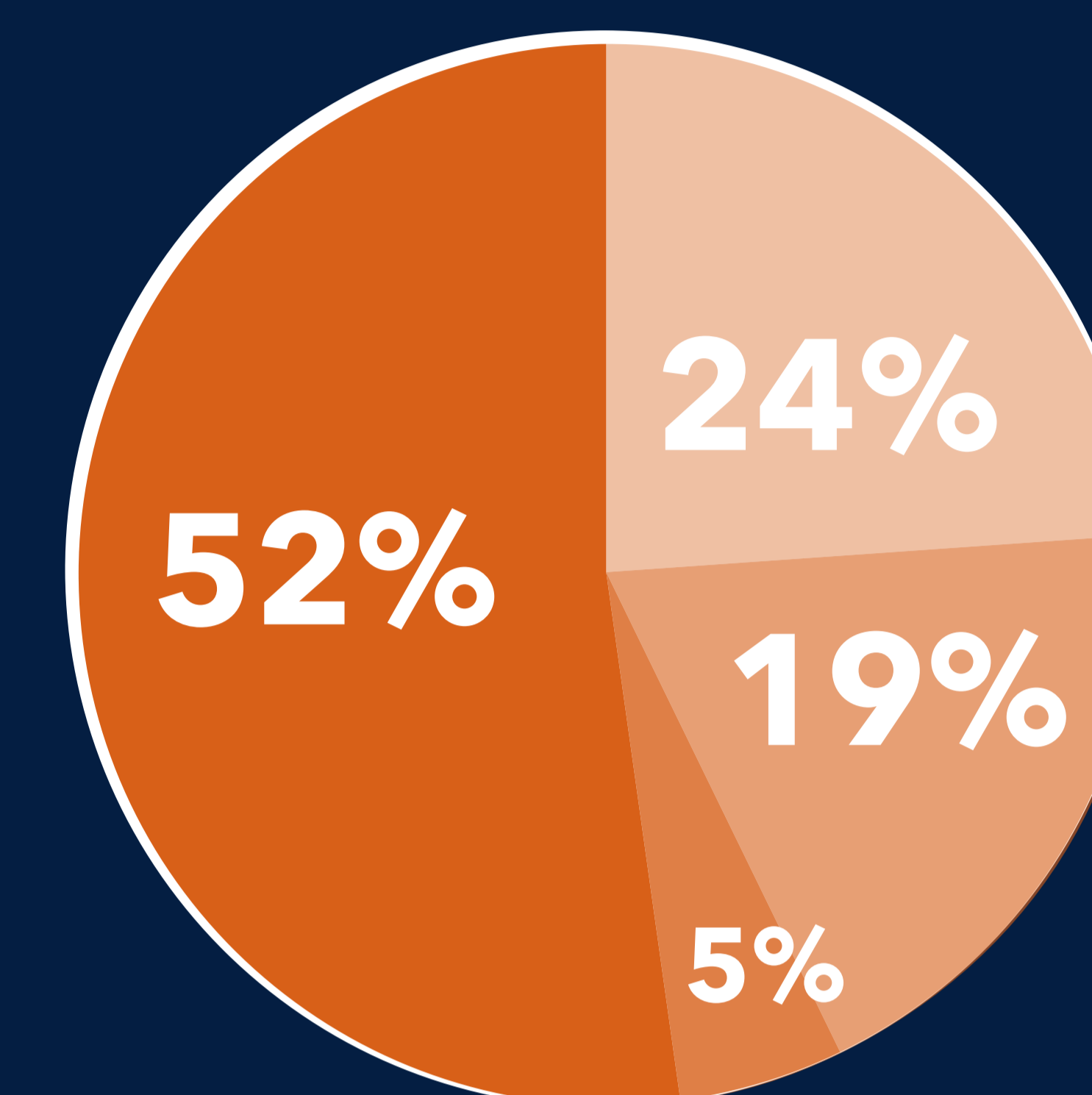
CYTOKINE SYRINGES | CELL SELECTION | MICROFLUIDS  
NON-VIRAL ACTIVATION | CELL ISOLATION | PEDF ELISA

**C L O S E D**

CUSTOM FILLING FORMAT | CYTOKINE IN CLOSE SYSTEM  
ONLINE MEASUREMENT | HAS | GMP | PRECISE THAWING

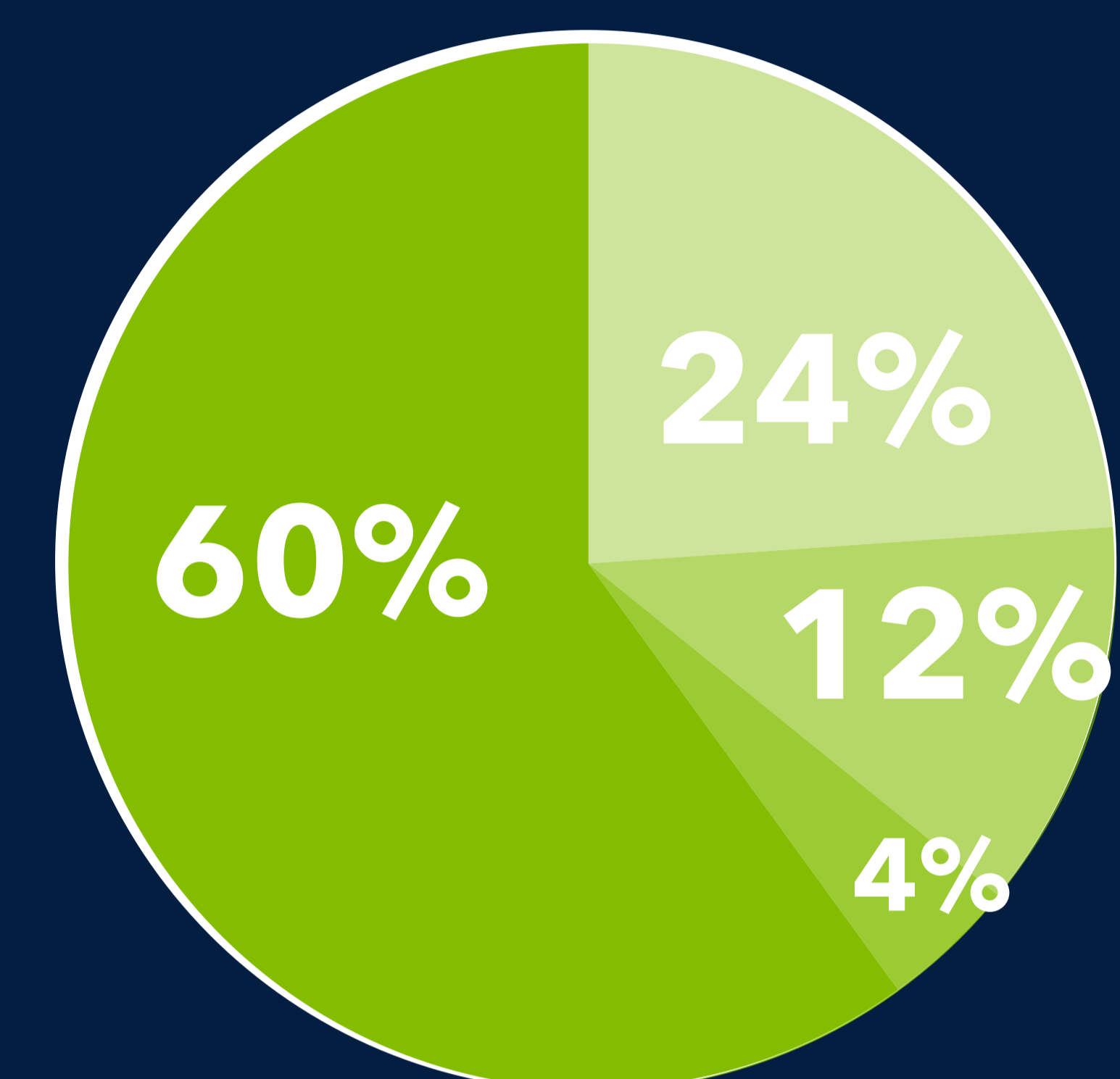
biotechne®

Is the future of Cell Therapy Autologous or Allogeneic?



Allogeneic Donor Derived | Autologous | Autologous IPSC Derived | Allogeneic IPSC or ES Derived

What are your current programs?

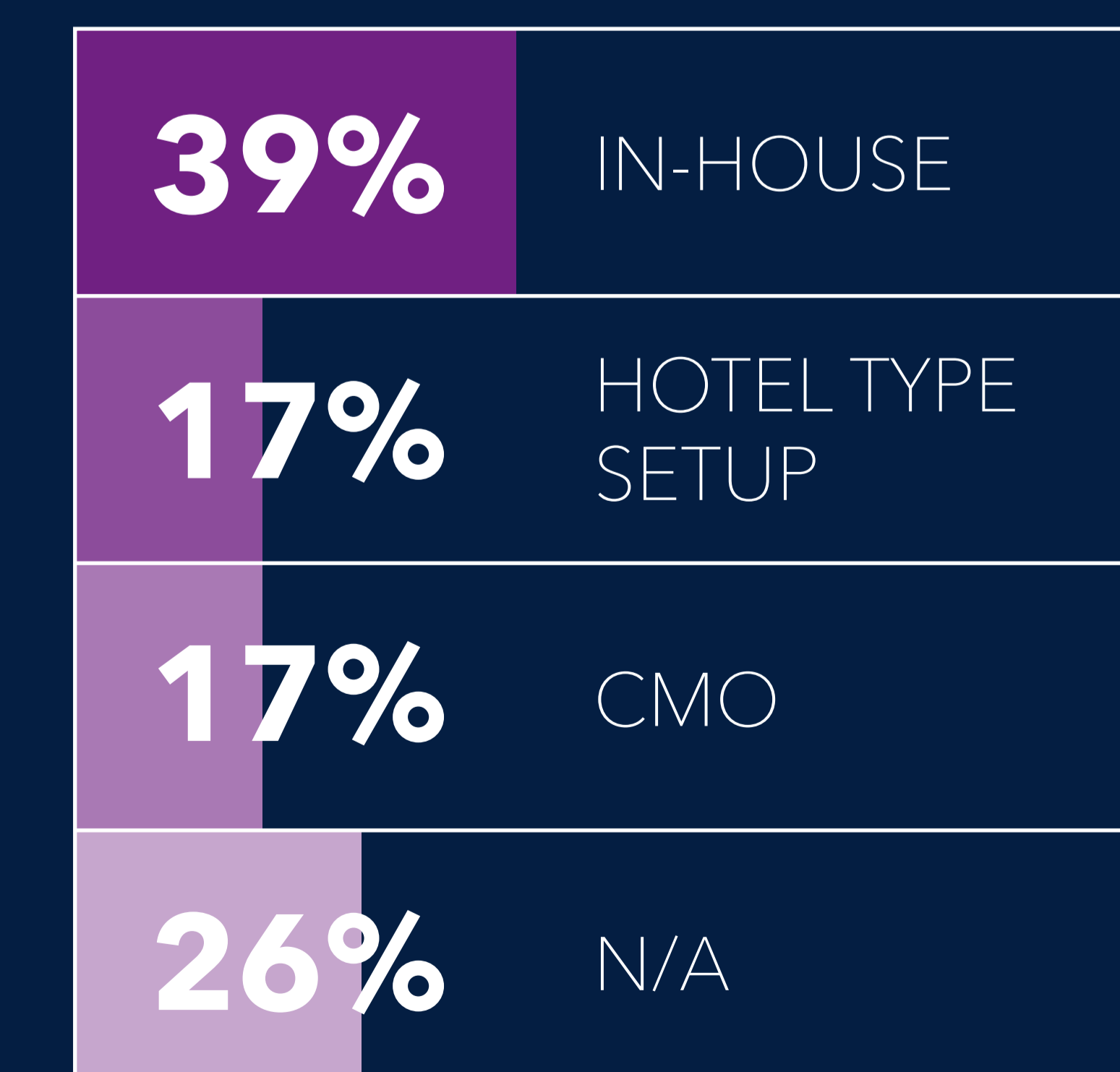


Allogeneic Donor Derived | IPSC or ES Delivery | In Vivo Gene Delivery | Autologous

What does the future of Gene Modification look like?



How are you manufacturing your Clinical Programs?



If you are using viral methods, how are you making Vectors?

