

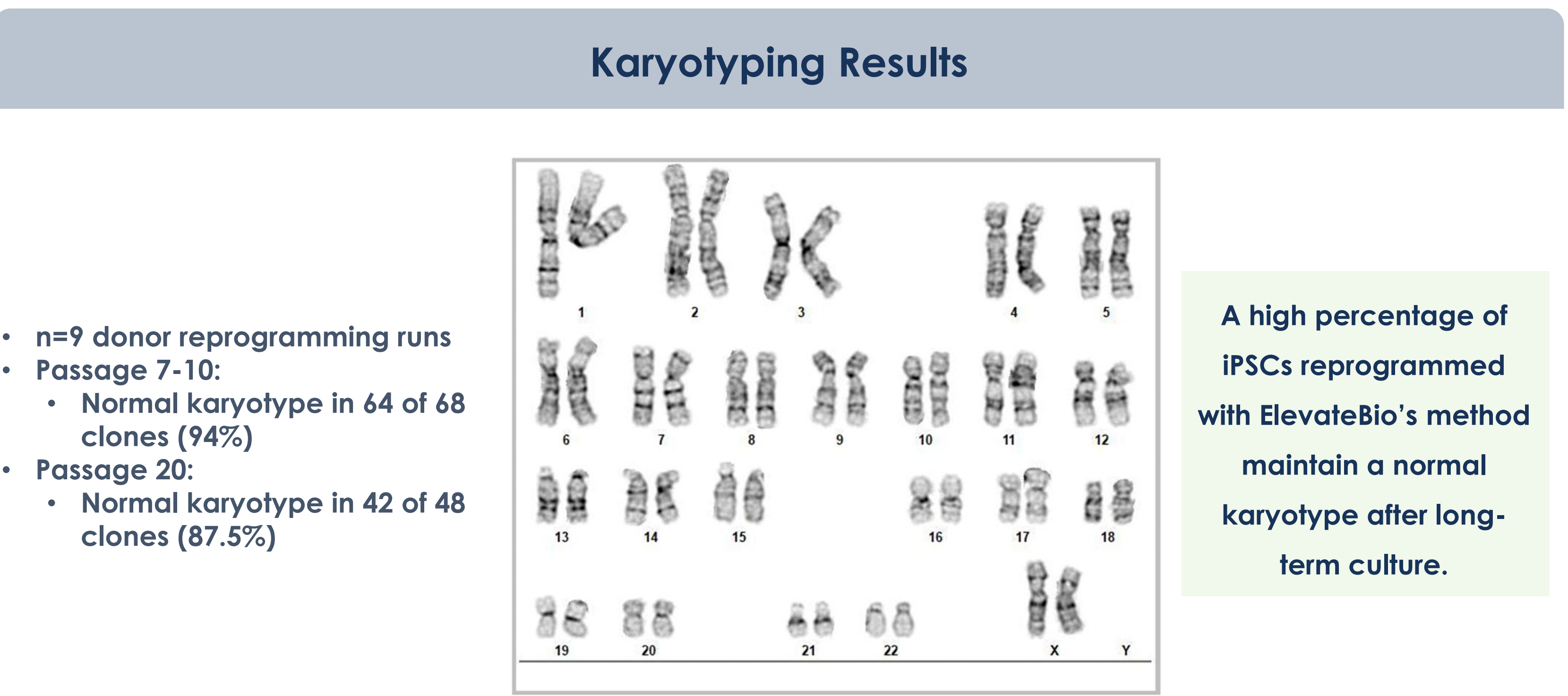
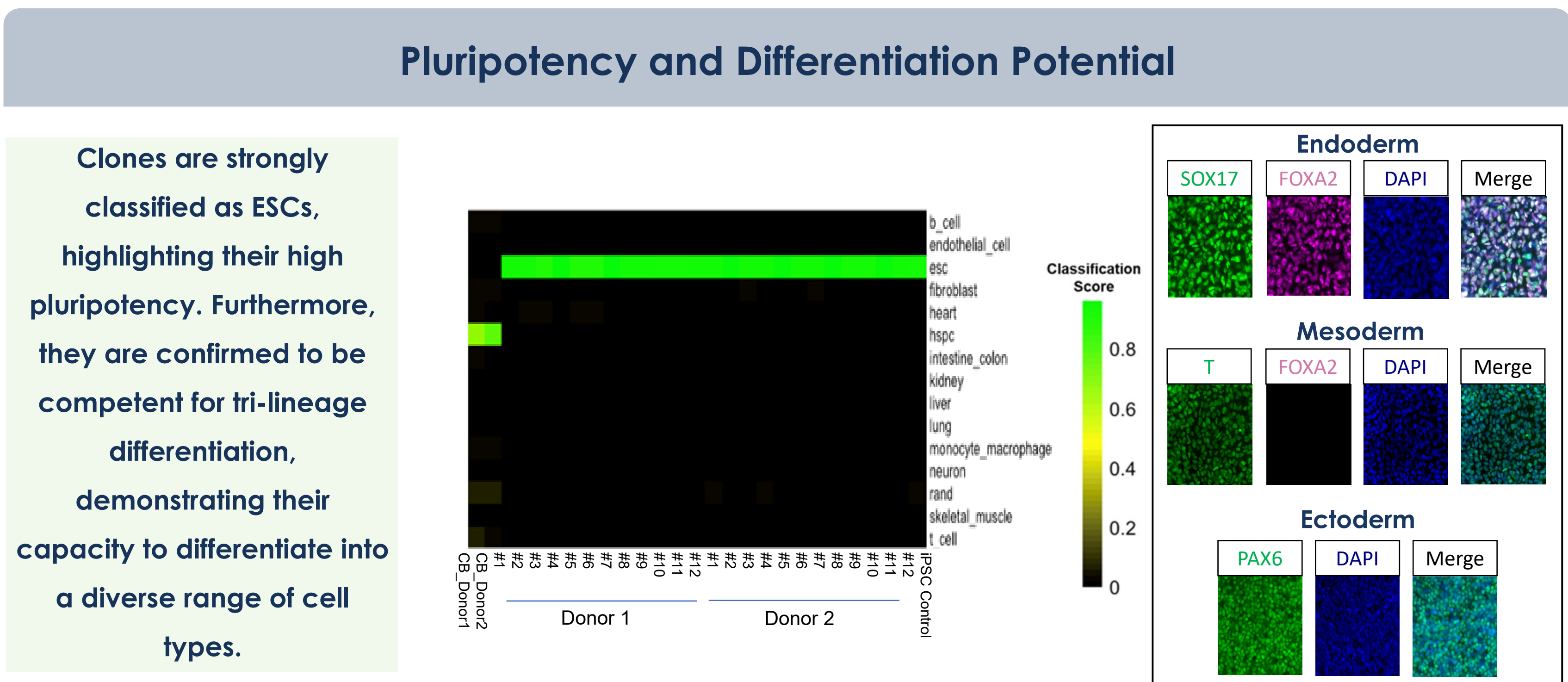
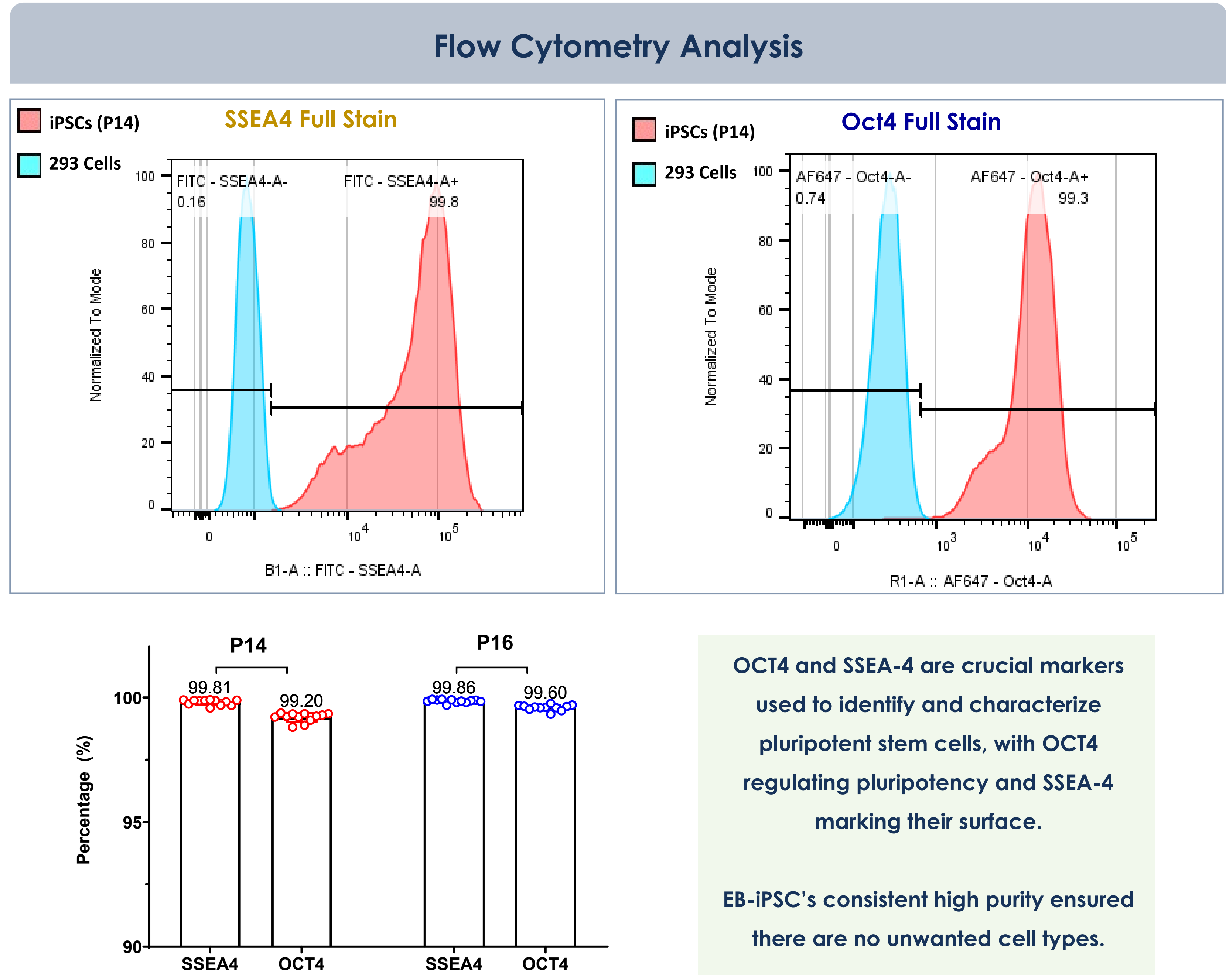
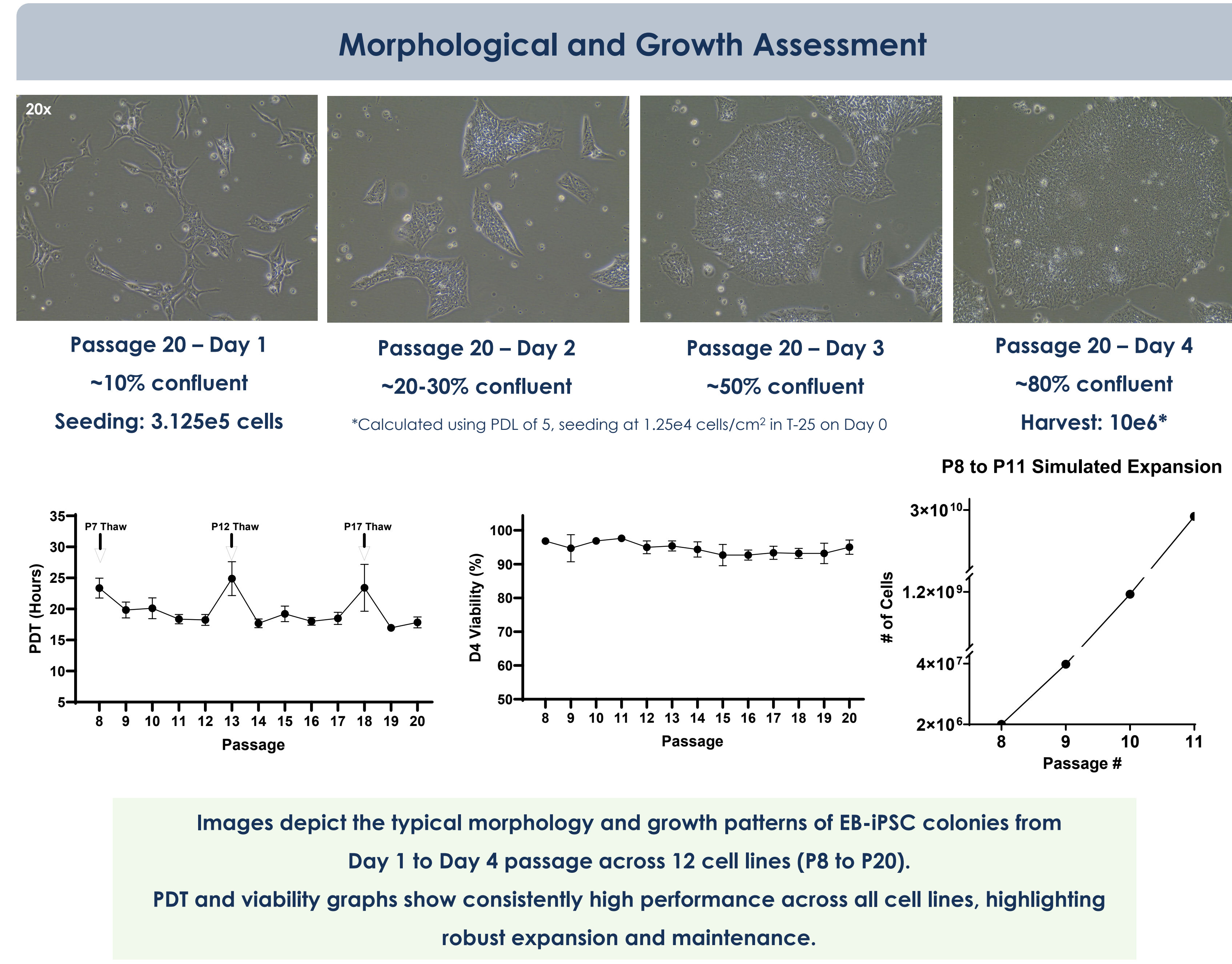
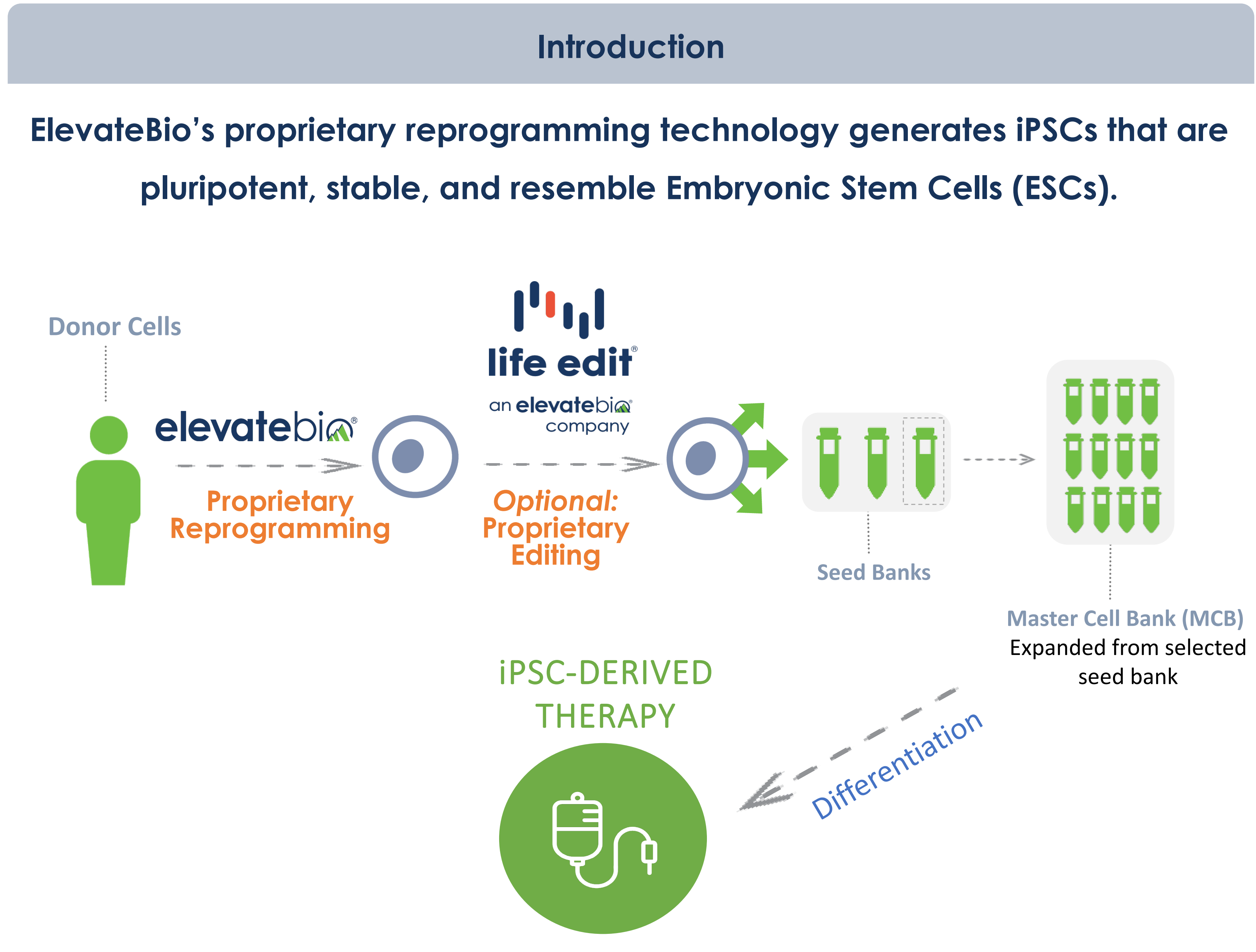
Abstract

Induced Pluripotent Stem Cells (iPSCs) are a groundbreaking innovation in biomedical research, holding significant potential for regenerative and personalized medicine. Defined as somatic cells reprogrammed to a pluripotent state, iPSCs mimic embryonic stem cells (ESCs) in their ability to differentiate into various cell types. ElevateBio (EB) has developed a novel and proprietary method for iPSC reprogramming to enable the development of iPSC-derived therapies for our partners.

In this study, iPSCs are generated from CD34+ donor cord blood using EB's proprietary reprogramming method. Our EB-iPSCs exhibit colony morphology, marker expression by flow cytometry, and gene expression profiles consistent with pluripotency. EB-iPSCs possess the capability to undergo directed differentiation into all three germ layers, further demonstrating their pluripotency.

Genomic stability is a key safety consideration for iPSCs, and our results demonstrate that cells reprogrammed with ElevateBio's proprietary method maintain a consistent growth rate and have a low frequency of karyotypic abnormalities and TP53/BCOR mutations.

At ElevateBio, we offer an integrated ecosystem providing end-to-end capabilities to translate concepts from bench to bedside. Our extensive iPSC experience includes successful verification runs for GMP cell bank activities at our BaseCamp process development and cGMP manufacturing facility. Our proprietary gene editing tools by Life Edit, an ElevateBio company, can be utilized to generate novel engineered iPSC cell lines. Partnering with us allows biopharma companies to leverage advanced technology and expertise in genetic engineering and cell therapy manufacturing, ensuring iPSC-derived therapies meet stringent regulatory standards, thereby accelerating the development of next-generation genomic medicines.



Integrated Genomic Medicine Ecosystem

ElevateBio's integrated ecosystem provides biopharma companies a new approach to design, manufacture and develop genomic medicines.

- Integrated ecosystem derisks and accelerates development, from idea to therapy
- Seamless pathway with gene editing, GMP manufacturing, and regulatory expertise
- Comprehensive platform enhances scalability and success of iPSC-derived therapies

Learn More

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