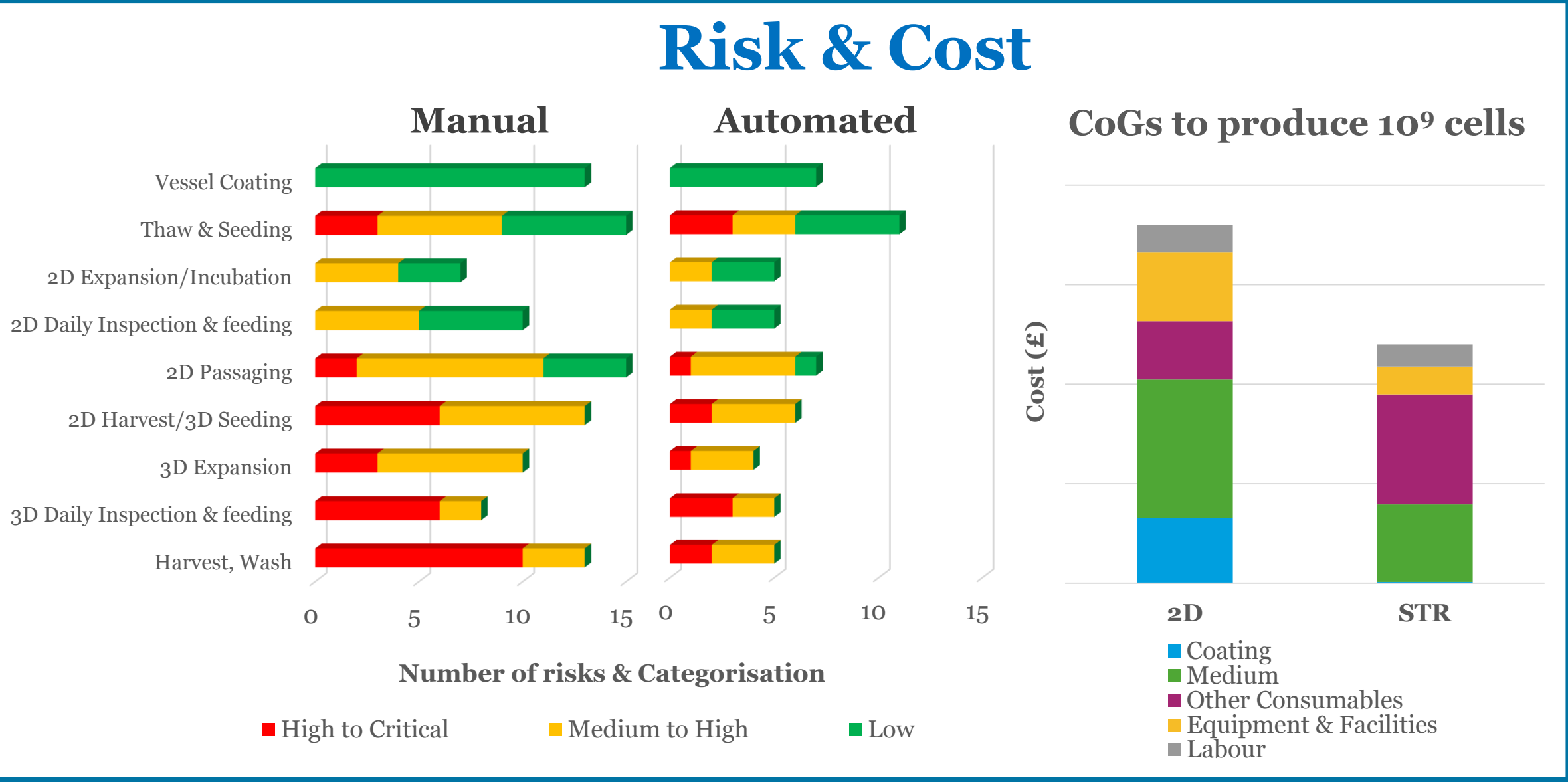
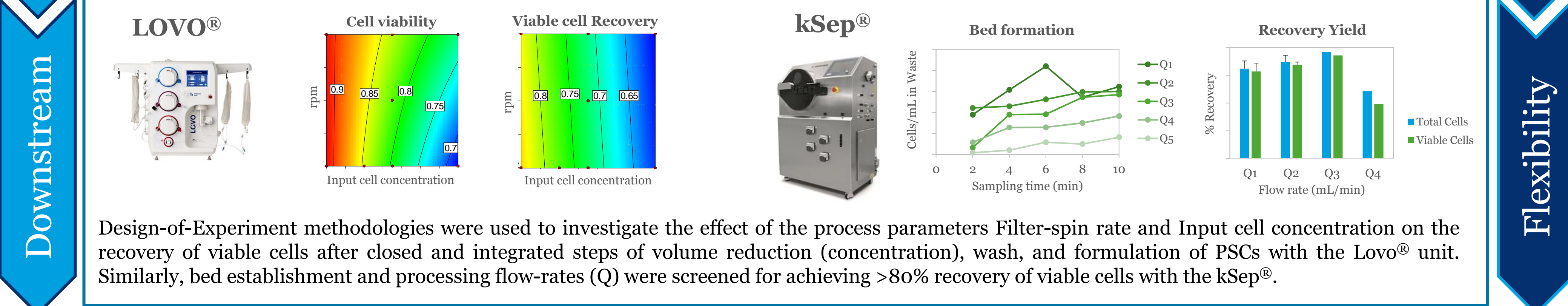
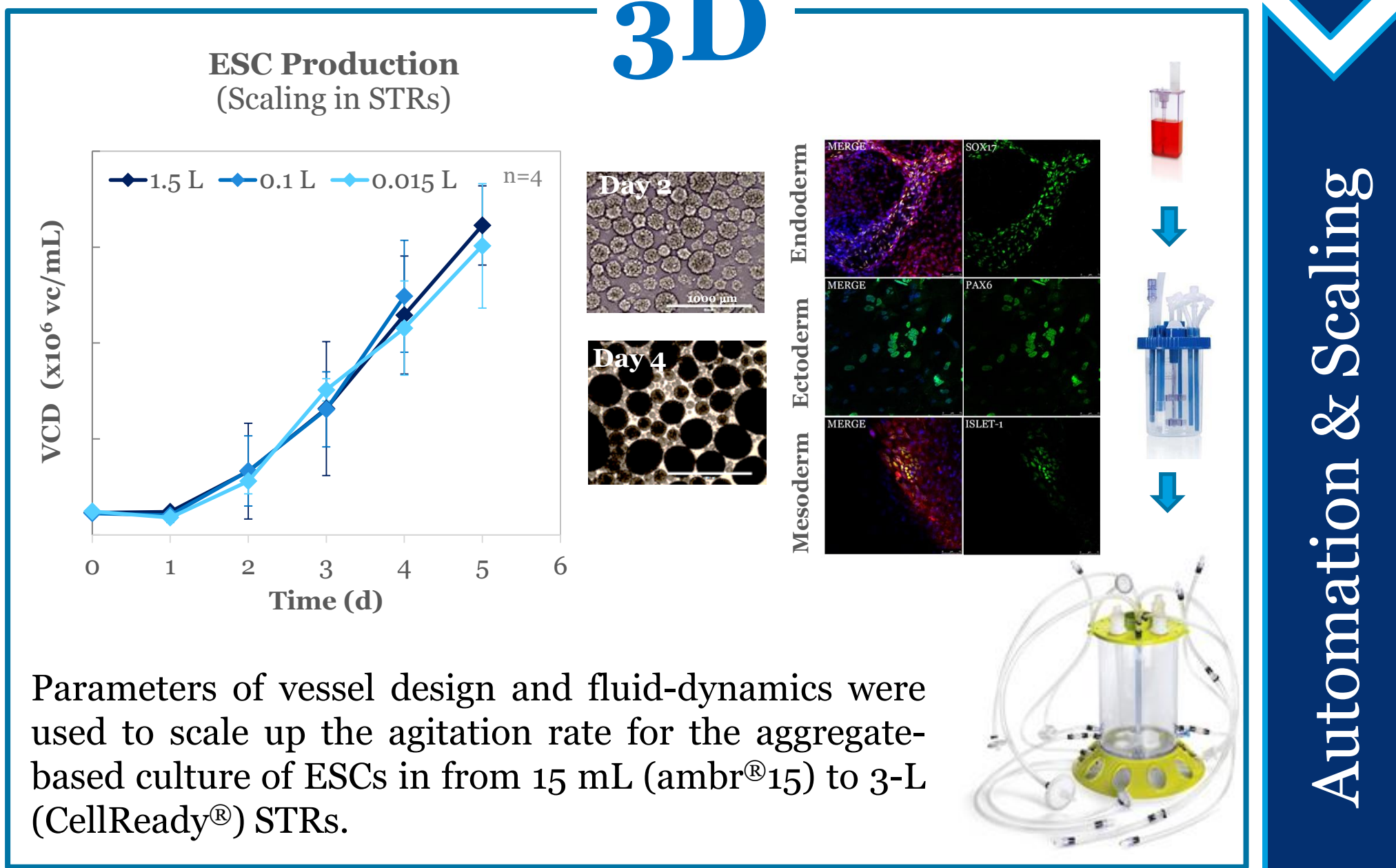
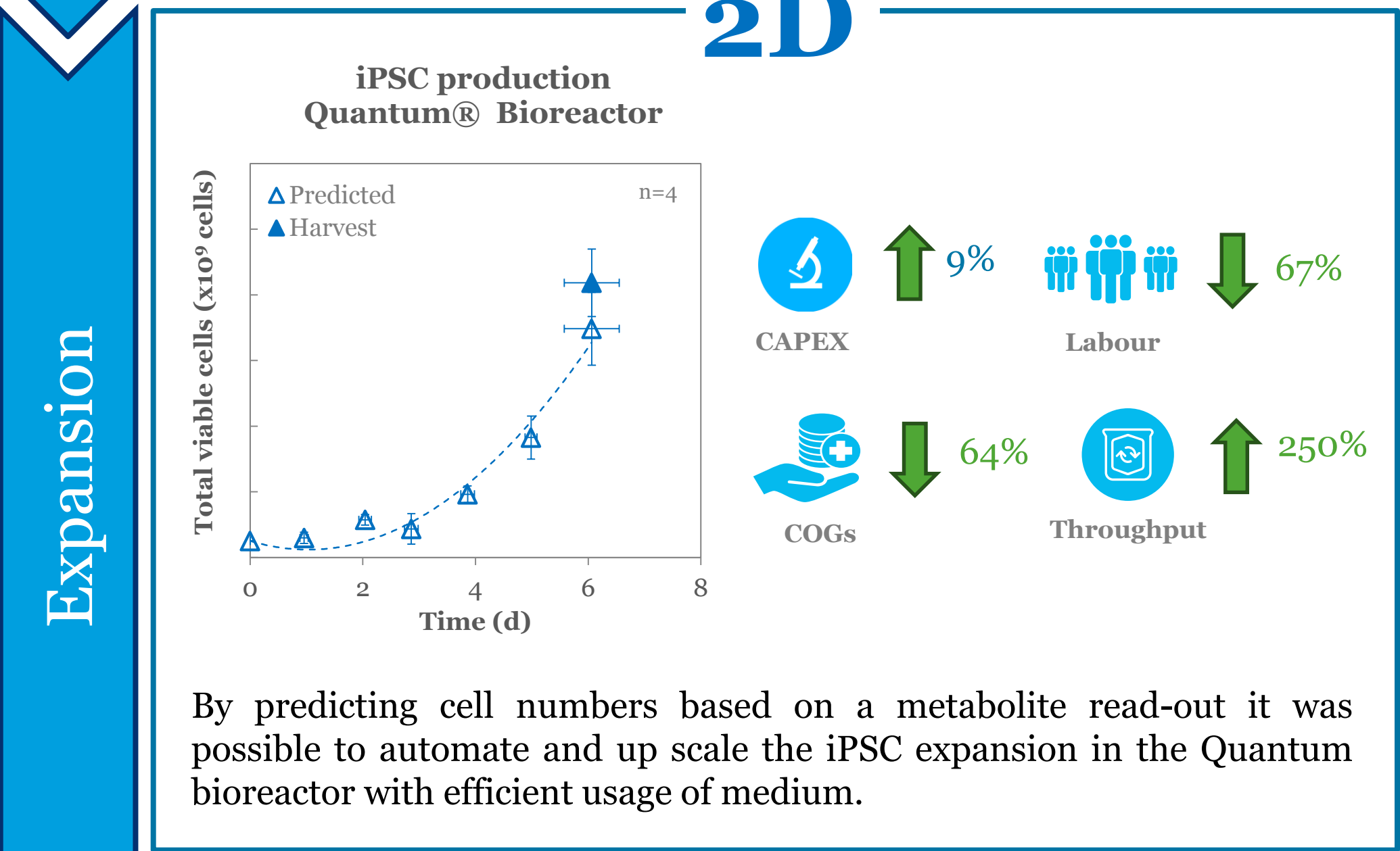
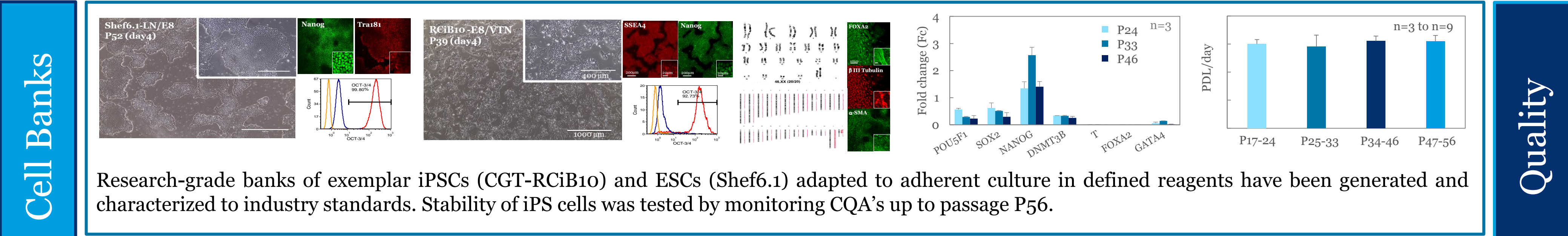
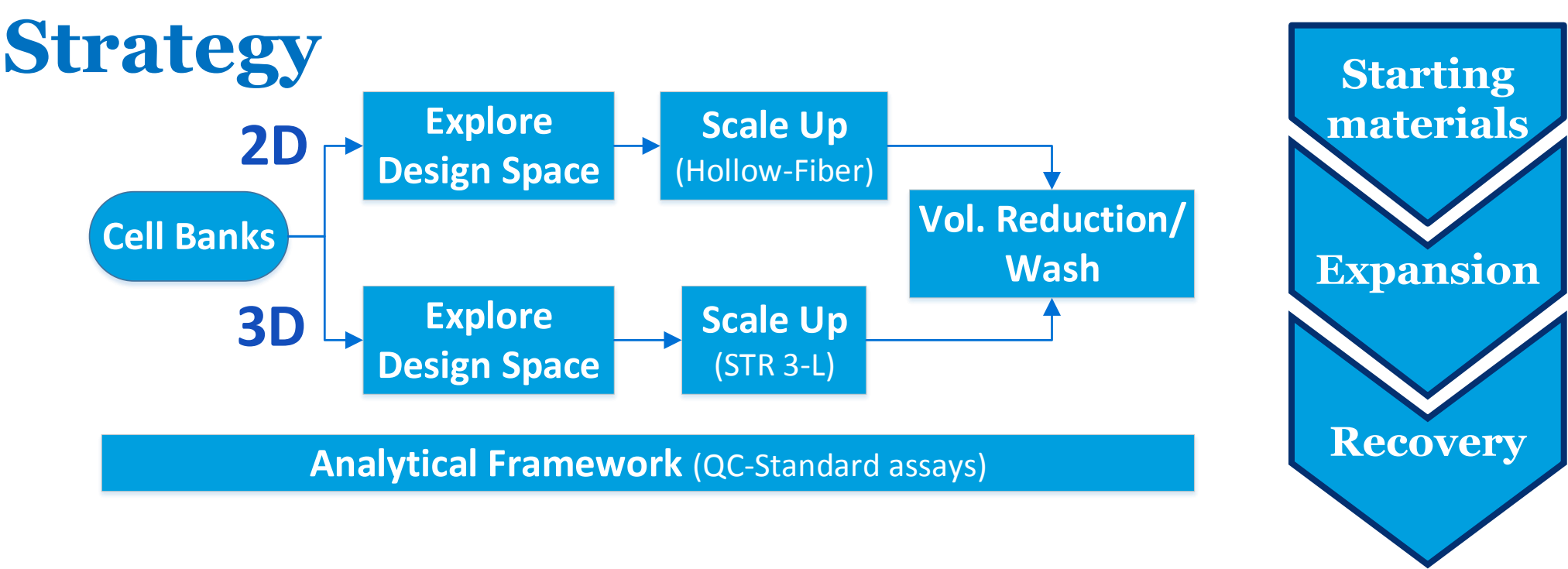


Addressing the challenges of controlled, scalable and affordable expansion of hPSCs for therapeutic use

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Introduction Cost of Goods and process complexity are key challenges for the commercialisation and competitiveness of PSC derived allogeneic therapies. Our Cell Plasticity Platform Programme aimed to design automated processing solutions for the controlled, scalable, and affordable expansion of PSCs in 2D and 3D culture systems. Work is centred around starting materials compliant with industry-standards and development of exemplar processes for scalable expansion with integrated downstream of volume reduction and cell wash.



- Summary**
- ❑ We have established exemplar processes for the scalable and controlled culture of PSCs in single-use hollow-fibre and STR systems.
 - ❑ We demonstrate technology feasibility to integrate the steps of volume reduction, wash, and formulation for flexible and rapid downstream processing.
 - ❑ Increasing the level of automation reduced process risks and cost
 - ❑ Current development strategy is focused on exemplar processes for seamless expansion and differentiation



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