BlueRock THERAPEUTICS

Focused to deliver on the promise of cell therapy

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President & CEO

Disclosures

I am the President and CEO of Bluerock Therapeutics LP, a wholly owned independently operated subsidiary of Bayer AG. I do not have any relevant disclosures or conflicts of interest.

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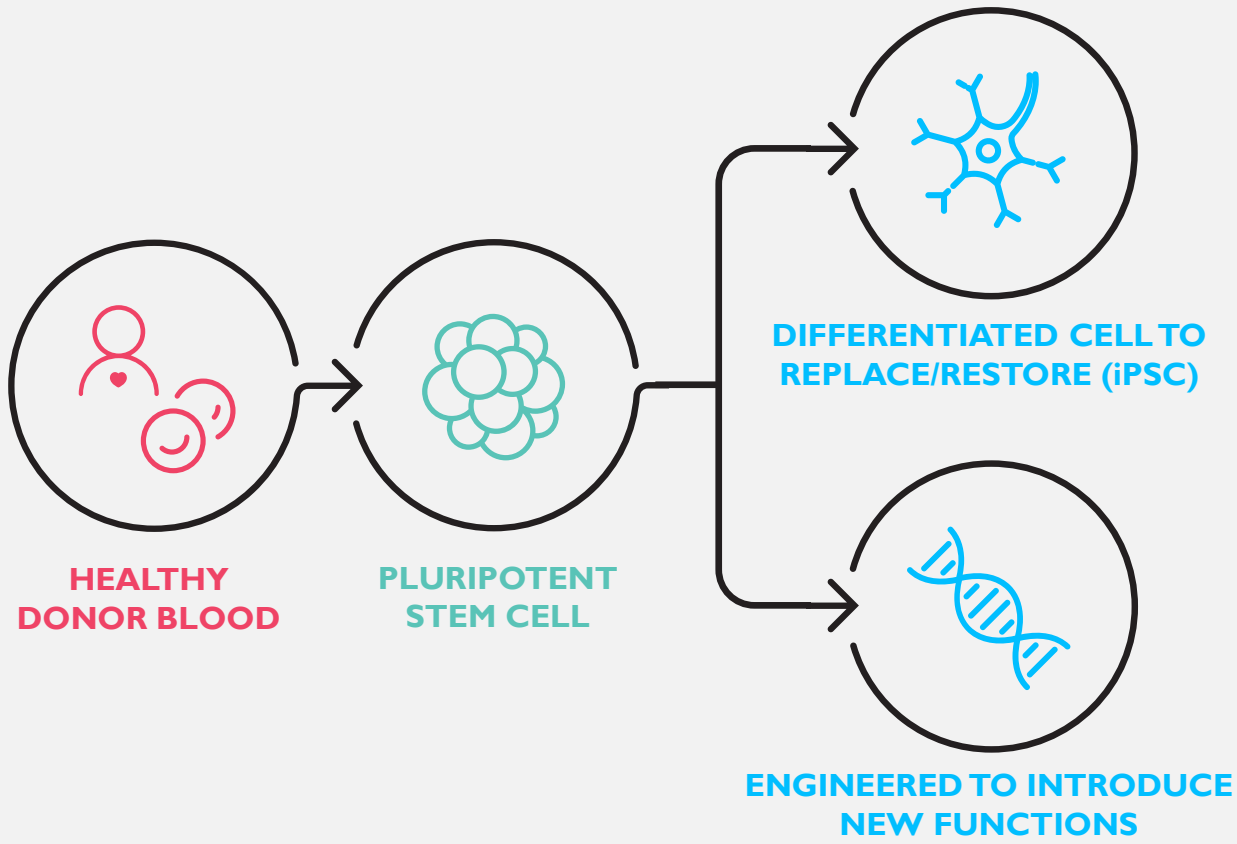
Cell therapy 101: PSCs and iPSCs



- iPSCs are "blank canvas" cells that are differentiated to become any cell type in the body
- Derived from cells taken via blood draw from healthy donor
- iPSCs can be mass produced
- Generally receptive to genetic engineering

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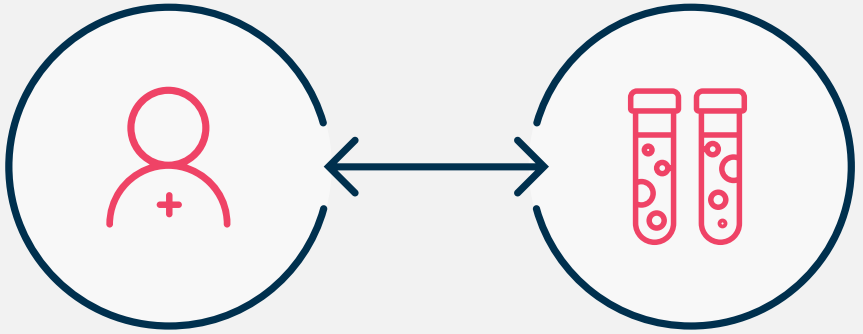
Allogeneic vs. autologous

ALLOGENEIC CELL THERAPY

HEALTHY DONOR | CELLS | PATIENTS

AUTOLOGOUS CELL THERAPY



PATIENT | CELLS

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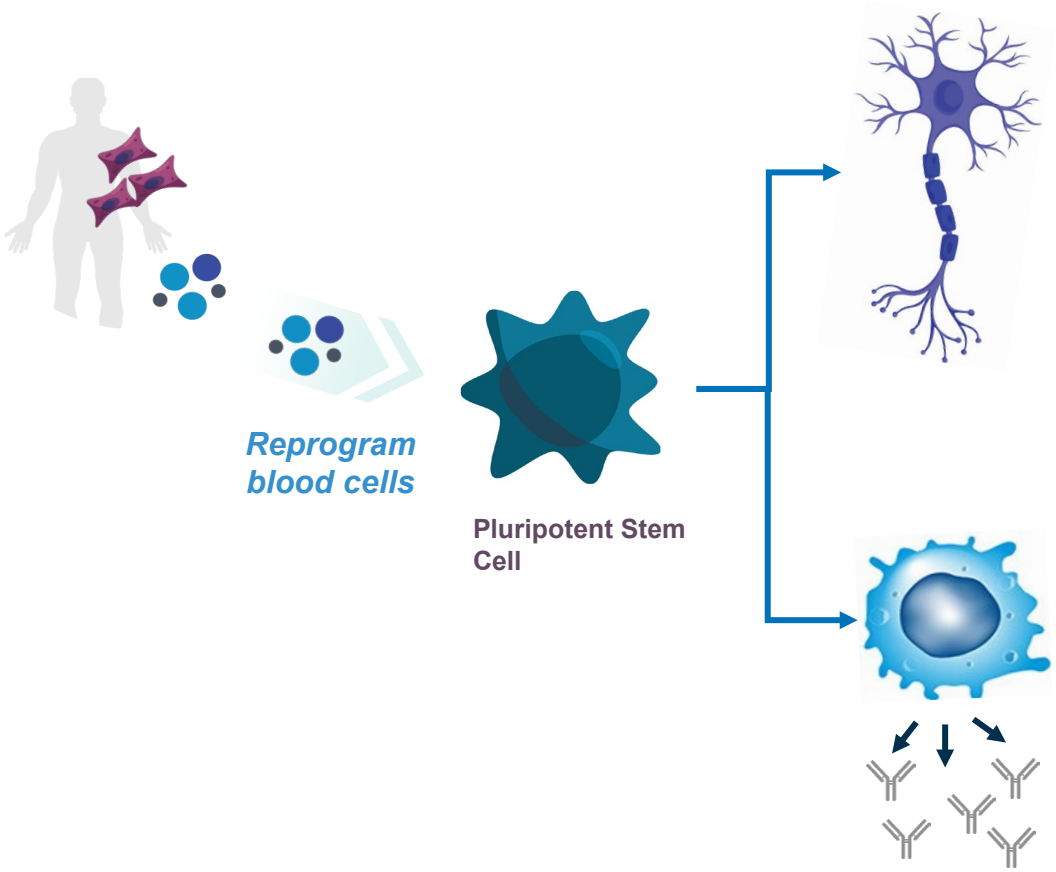
Pluripotent stem cells have broad therapeutic potential



Examples of Target Disease Areas

- Parkinson's disease
- Heart failure
- Primary photoreceptor diseases
- Geographic Atrophy (AMD)
- Stroke

- Oncology
- Alzheimer's disease
- Metabolic diseases
- Autoimmune disease

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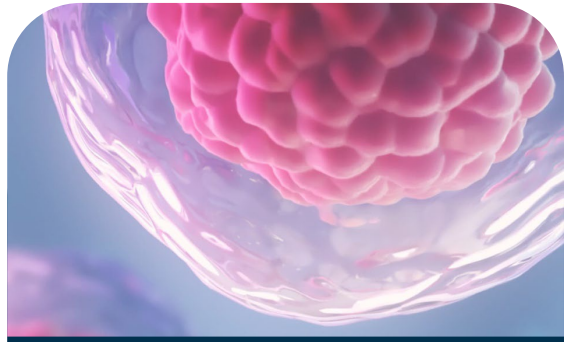
AMD: Age-related macular degeneration, PSC: Pluripotent stem cells
Sources: 1) El-Kadiry 2021. *Frontiers in Medicine*, p.2340.

BlueRock has end-to-end capabilities in PSC technology

Development and Manufacturing

Clinical development, process development, quality and manufacturing to support preclinical through commercial



Platform Capabilities

Delivering impactful cell therapies to help patients suffering from disease

Expertise and Resources

Partnering with world experts in cell therapies, leveraging Bayer capabilities

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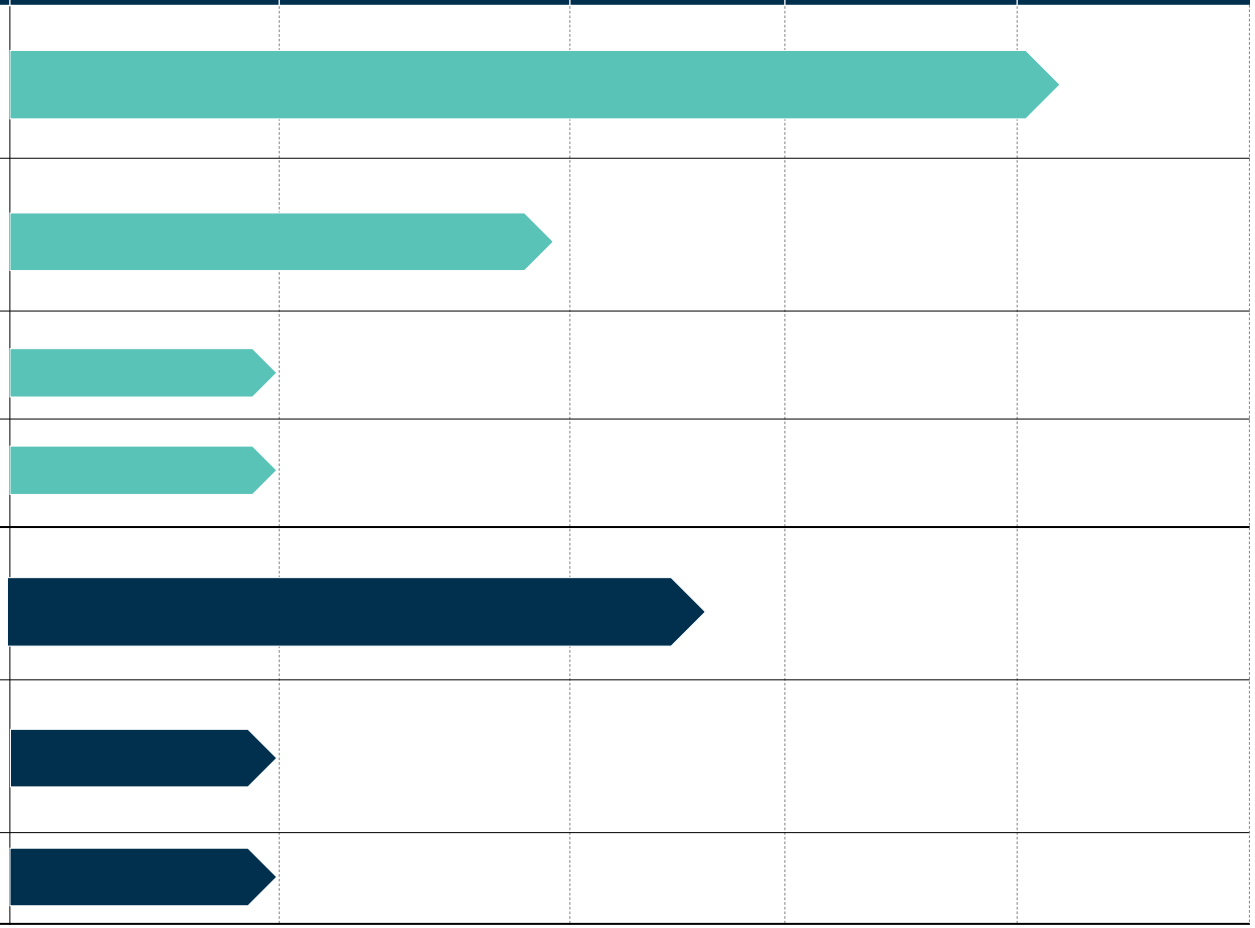
BlueRock pipeline

AREA	TARGET DISEASE	CELL TYPE	DISCOVERY	PRECLINICAL	PHASE I	PHASE 2	PHASE 3
Neurology	Parkinson's Disease (bemdaneprocel)	Dopaminergic Neuron Progenitor					
	Parkinson's Disease (DA02)	Dopaminergic Neuron Progenitor					
	Demyelinating Disorders	Oligodendrocyte					
	Neurodegenerative Disease	Microglia					
Ophthalmology *In collaboration with Opsis Therapeutics*	Primary Photoreceptor Diseases (OpCT-001)	Photoreceptor Progenitor (PRP)					
	Early / Intermediate Dry AMD	Retinal Pigment Epithelium (RPE)					
	Late Dry AMD / GA	PRP + RPE					



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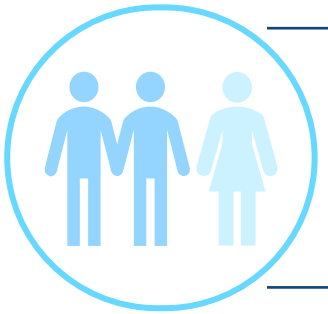
Parkinson's disease is a leading neurodegenerative disease

- **~0.9 M in the US** and **~0.9 M in the EU4/UK** are living with PD
- Prevalence of PD is expected to **grow by 2.5%**
- **Over 10 M people** currently live with PD globally



- **More common in men** (60%) than in women (40%)
- **There are no** social, ethnic, economic or geographic **boundaries for PD**

- **Prevalence of PD increases with age**, rises sharply after age of 50, and peaks between 85 and 89
- Affects 2% to 3% of people ≥65 years

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Cell therapy for the treatment of Parkinson's disease

Replacing diseased or damaged cells with allogeneic cell therapies to restore function.

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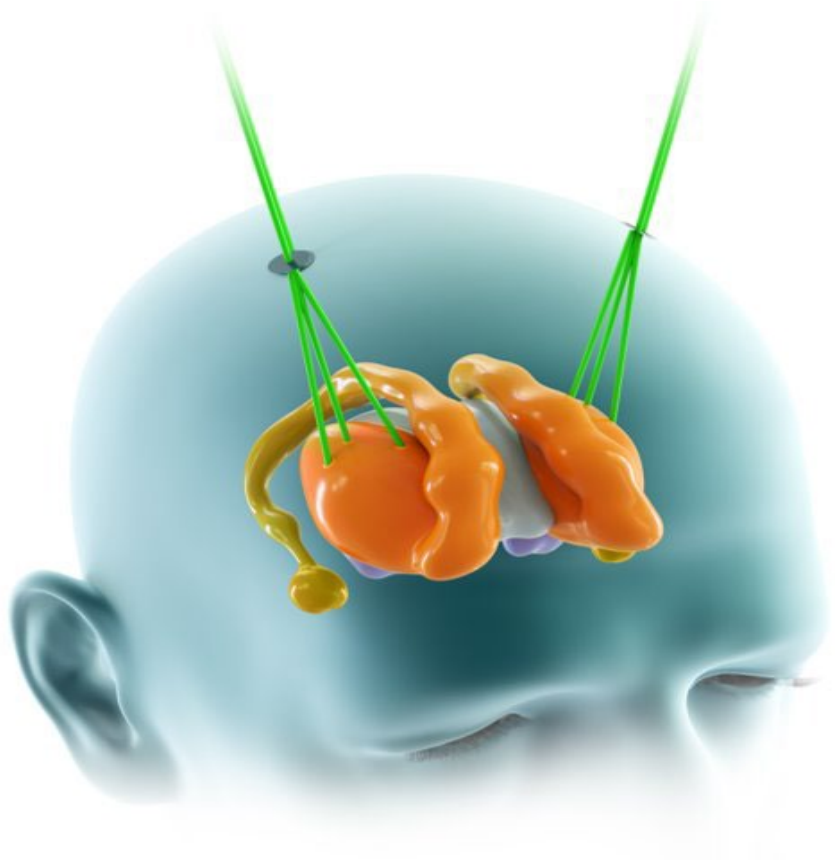
Bemdaneprocel: Phase 1 36-month data results

- Favorable safety profile continues at 36 months
- Secondary clinical endpoints related to motor outcomes remain stable compared to 24 months and continue to show positive trends from baseline
- Demonstrated cell engraftment and survival after stopping immune suppression at 12 months



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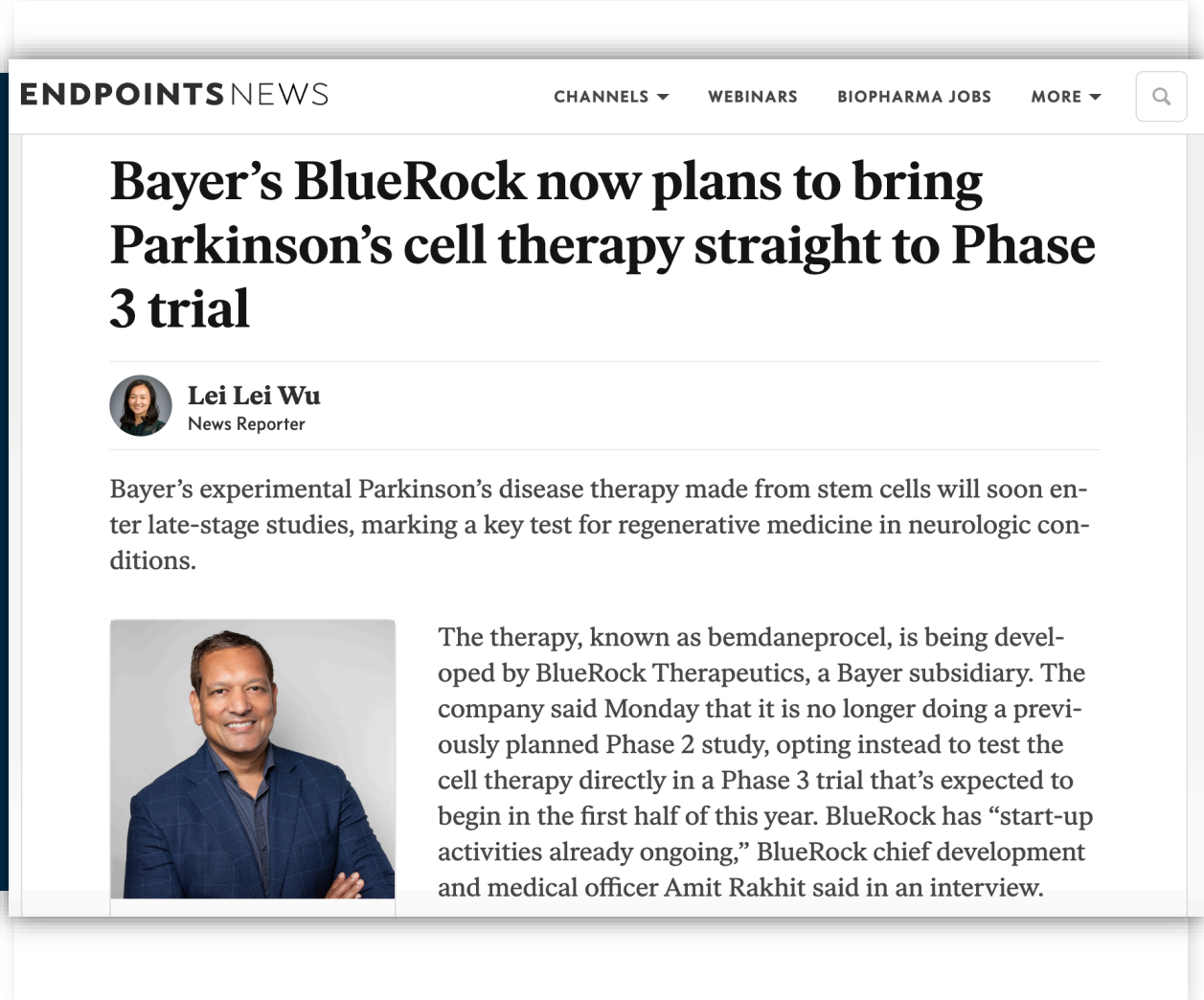
Bemdaneprocel: Phase 3 clinical trial, exPDite-2

- First registrational Phase 3 clinical trial for an investigational allogeneic pluripotent stem cell derived therapy to treat Parkinson's disease
- Randomized, sham surgery-controlled double-blind trial assessing efficacy and safety of bemdaneprocel in people living with moderate Parkinson's disease
- First patient dosed in late summer 2025



ENDPOINTS NEWS

CHANNELS WEBINARS BIOPHARMA JOBS MORE

Bayer's BlueRock now plans to bring Parkinson's cell therapy straight to Phase 3 trial

Lei Lei Wu
News Reporter

Bayer's experimental Parkinson's disease therapy made from stem cells will soon enter late-stage studies, marking a key test for regenerative medicine in neurologic conditions.

The therapy, known as bemdaneprocel, is being developed by BlueRock Therapeutics, a Bayer subsidiary. The company said Monday that it is no longer doing a previously planned Phase 2 study, opting instead to test the cell therapy directly in a Phase 3 trial that's expected to begin in the first half of this year. BlueRock has "start-up activities already ongoing," BlueRock chief development and medical officer Amit Rakhit said in an interview.

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AI @ BlueRock today

Automating electronic lab notebook entries and review

Accelerating document creation and review

Manufacturing Process Improvements

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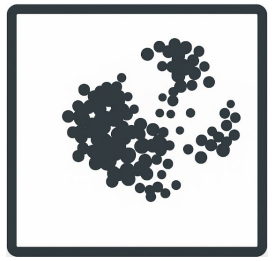
Leveraging AI to annotate scRNAseq data

AI-Powered scRNAseq Annotation Workflow

scRNAseq



Data Export/Upload

- Characteristic Gene Sets
- UMAP Spatial Representation
- RNA velocity (optional)

LLM Interface

Assess aggregate biology, signaling pathways, and predict cell type

Structured Report Compilation

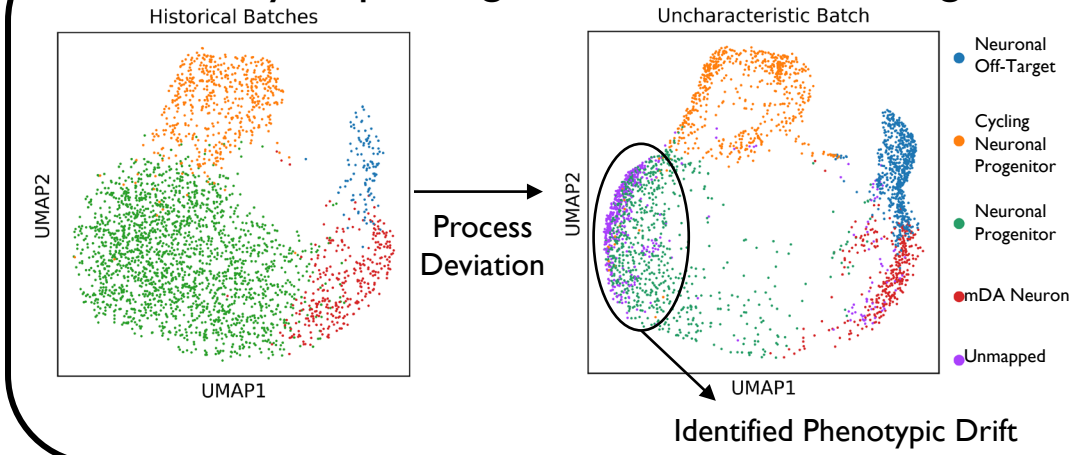
Per-cluster Readouts:

- Summary Biology
- Active Signaling Pathways
- Cell Type Prediction

Population Readouts:

- Aggregate Biology
- Inferred Phenotypic Progression Through Differentiation States

Case Study: Improving Process Understanding



AI-Powered Annotation

Structured Report Compilation

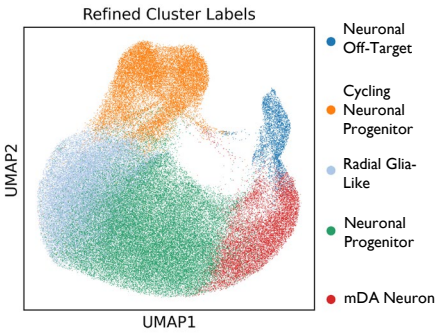
Per-cluster Readouts:

- Quiescent radial glia
- Wnt potentiation, ECM niche

Population Readouts:

- Radial glia adjacent to Cycling Neuronal Progenitor and preceding the progenitor trajectory. It sustains progenitor self-renewal and establishes the extracellular architecture guiding early neurogenesis.

Refined Process Characterization



AI aspirations

Clinical and Regulatory

- End to end authoring and management of regulatory documents
- AI enabled clinical trial design

Discovery Research

- Cell line and cellular drug product quality optimization
- Predicting in vivo efficacy

Manufacturing

- Streamlined process and analytical development
- AI enabled process automation and predictive control

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Thank you

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