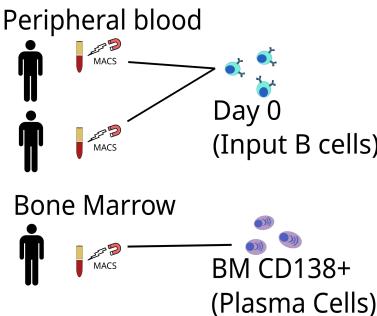
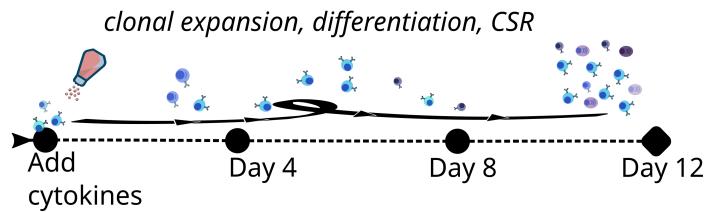
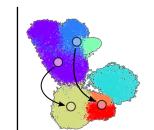


a.**1. Obtain B cells from donors****2. Perform in vitro differentiation on B cells****3. Analyze samples with single cell genomics****Samples**

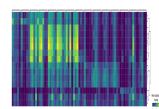
this study		public
<i>in vivo</i>	<i>in vitro</i>	<i>in vivo</i>
Day 0 BM CD138+	Day 4 Day 8 Day 12	BMMNC PBMC

Measurement

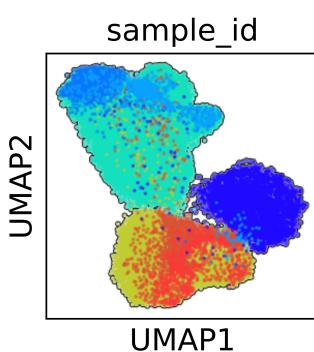
lineage barcode & isotype



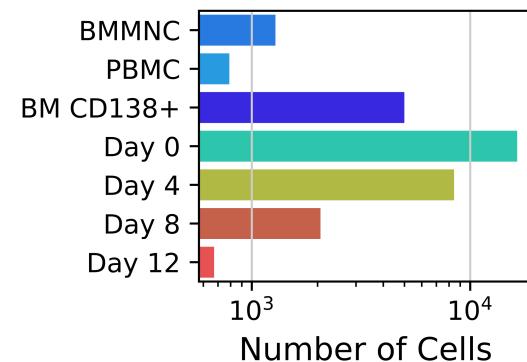
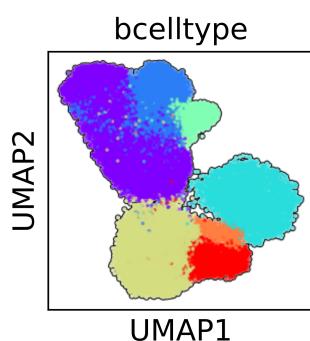
clonal fate mapping



transcriptome

b.

- BMMNC
- PBMC
- BM CD138+
- Day 0
- Day 4
- Day 8
- Day 12

c.**d.**

- Naive B cell
- Non-Switched Memory B cell
- Plasma B cell
- Switched Memory B cell
- iv GC B cell
- iv Plasma B cell
- iv Plasmablast

e.