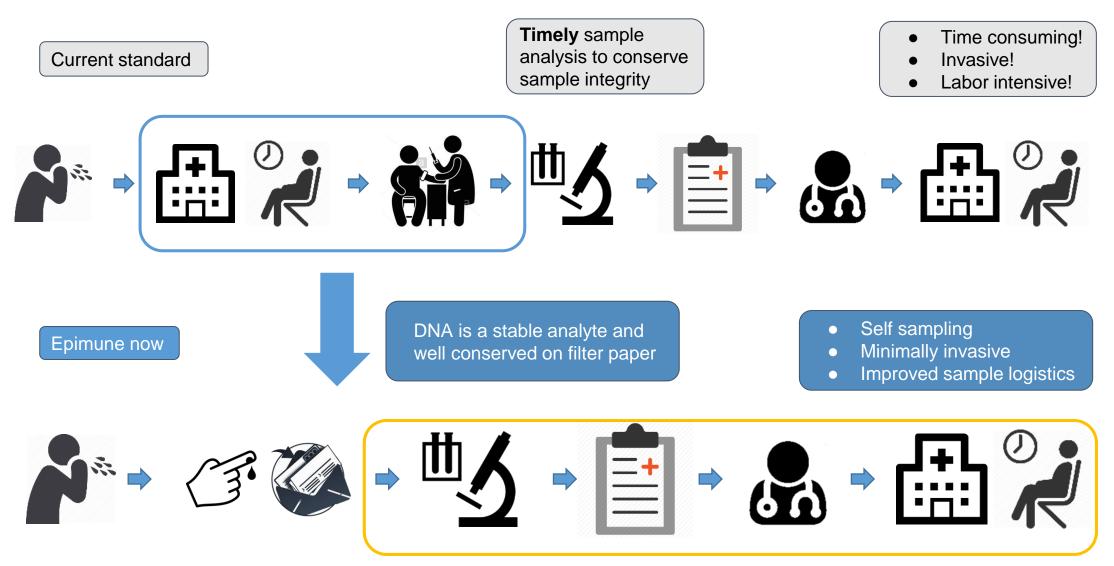


# EPIMUNE DIAGNOSTICS

Epigenetic Immune Cells Quantification For Diagnosis and Monitoring of Patients in Resource Limited Settings

## Current Standard of Immune Cell Monitoring

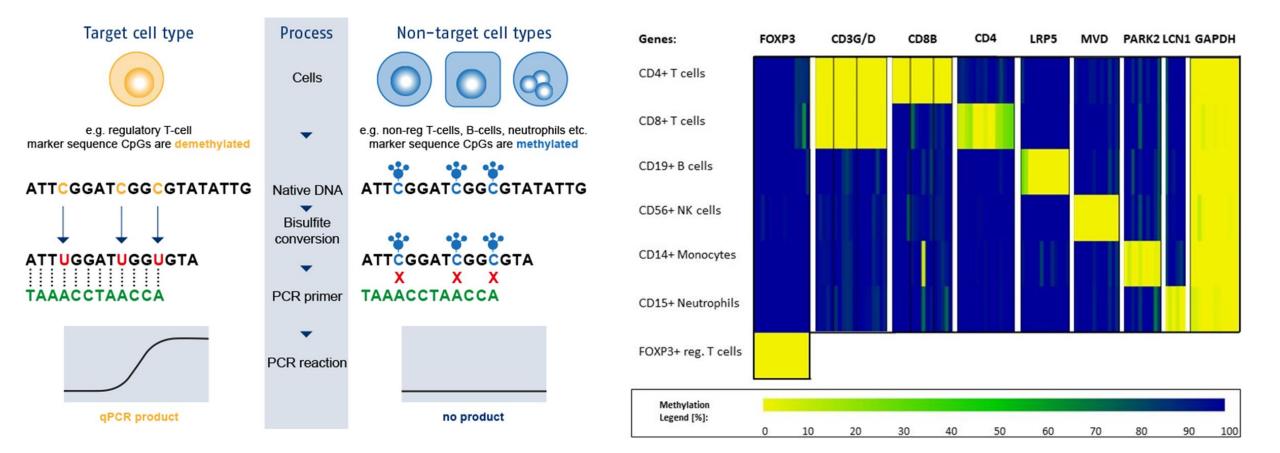




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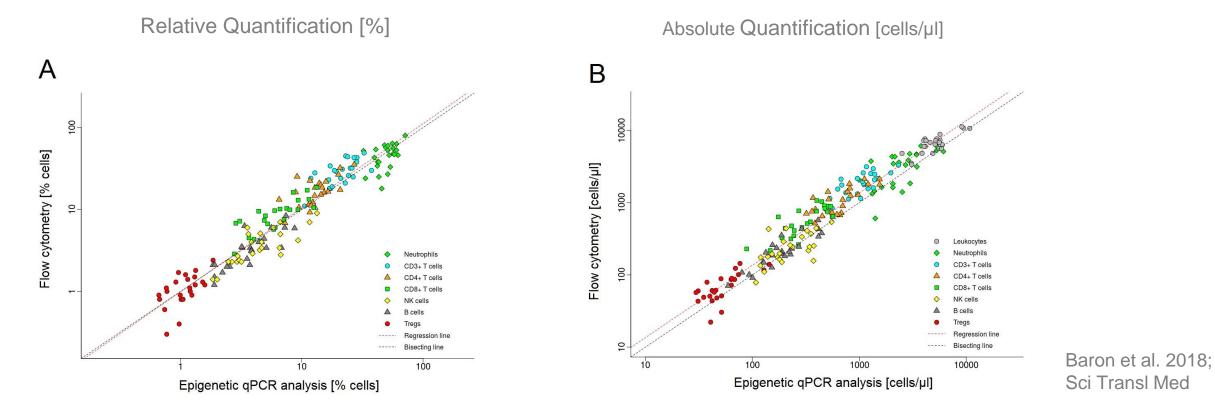
### Epimune Methodology





# Correlation of Epigenetic Cell Quantification to Flow Cytometry



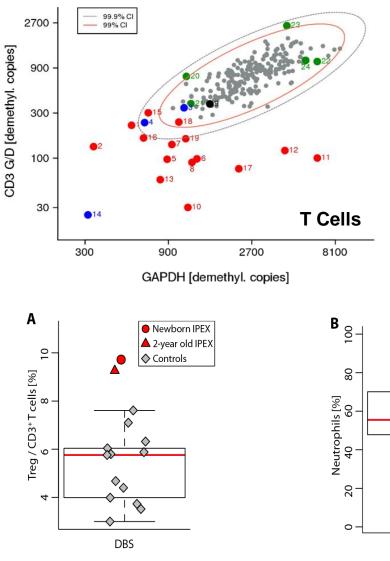


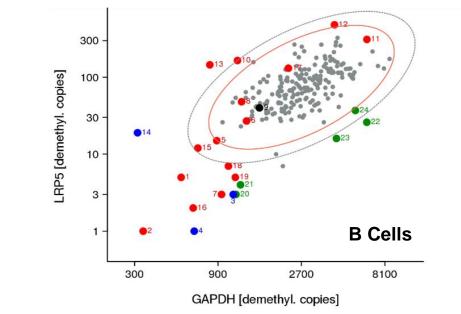
- Epigenetic immune cell quantification allows the detection of all major immune cell types as well as highly specialized populations like regulatory T cells
- Relative and absolute quantification show excellent correlation to standard flow cytomentry measurement

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## Identification of PID/PIRD Patients







- SCID
- DO-SCID
- SCID (Maternal Engraftment)
- XLA
- controls

Baron et al. 2018; Sci Transl Med

- Correct identification of 23 out of 24 PID cases from dried blood spots
- PIDs not covered by current newborn screening like IPEX or Severe Congenital Neutropenia (SCN) were also detected

SCN

DBS

♦ Controls

Conclusion



- Epigenetic immune cell quantification allows complete immune cell profiling from a drop of blood dried on filter paper
- Drastically reduced sample logistic requirements
- Correct identification of PIDs/PIRDs such as SCID, XLA, IPEX and Neutropenia was demonstrated

### i.Mune<sup>™</sup> Tests\*



Relative and absolute quantification\*\* of T-, B- and NK lymphocytes from dried blood spots (DBS) or fresh blood

Relative and absolute quantification\*\* of TSDR+ regulatory T cells (Treg) and CD3+ T-cells from dried blood spots (DBS) or fresh blood

i.Mune<sup>TM</sup>

Comprehensive immune cell quantification\*\* from dried blood spots (DBS) or fresh blood \*i.Mune products are not registered as IVD products and have not been approved or cleared by a regulatory authority. Use for exploratory purposes, only.

\*\*Relative quantification (%) is possible for all sample types; absolute quantification (cells/µl) for fresh blood, only.

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