

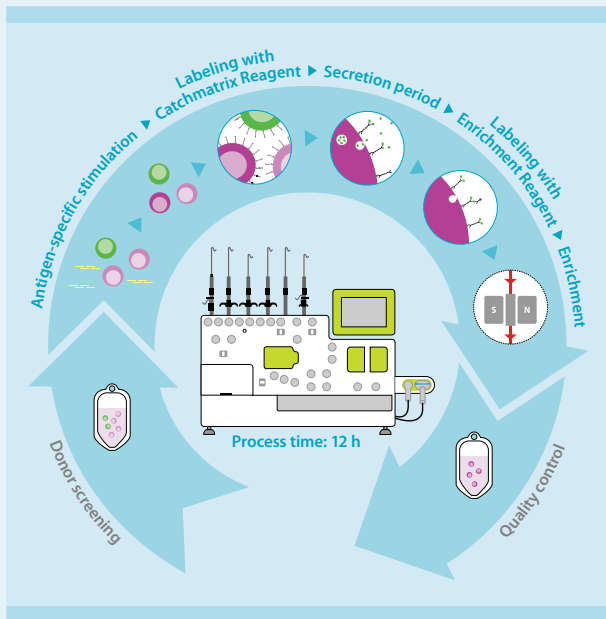
Fully automated

# Isolation of Virus-Specific T cells (VST)

## The CliniMACS® Cytokine Capture System (IFN-gamma)

- Fast: in as little as 12 hours
- Easy, safe, and robust: cell manufacturing in a completely closed and automated system
- CE approved medical devices
- US MasterFile available

► [miltenyibiotec.com](http://miltenyibiotec.com)



**Figure 1:** The CliniMACS Prodigy integrates and automates all critical steps of the CliniMACS Cytokine Capture System (IFN- $\gamma$ ): From antigen-specific T cell stimulation to magnetic isolation and final formulation within 12 h total time.

## Isolation of virus-specific T cells

Enjoy all the advantages of an automated manufacturing process with the combination of the CliniMACS Prodigy® and the CliniMACS® Cytokine Capture System (IFN- $\gamma$ ).

- Highly convenient and standardized process in a closed and sterile system
- Isolation of virus-specific T cells within 12 h total time
- Minimal hands-on time (1 h)
- Simultaneous isolation of CD4<sup>+</sup> and CD8<sup>+</sup> T cells
- No HLA-restriction
- No *in vitro* expansion required

## Antigen-specific T cell stimulation

During the manufacturing process, the automated antigen-specific stimulation of T cells can be performed with high quality and GMP-compliant reagents.

## MACS® GMP PepTivator® Peptide Pools

MACS GMP PepTivator Peptide Pools are overlapping oligopeptides covering the complete sequence of a respective antigen.

- Ensure efficient *in vitro* stimulation of CD4<sup>+</sup> and CD8<sup>+</sup> T cells
- Enable generation of multivirus-specific T cells
- Available for many virus specificities including CMV, AdV, EBV, BKV and for tumor antigens like WT-1 and NY-ESO-1<sup>1</sup>

Check our website for more MACS GMP PepTivators:  
[www.miltenyibiotec.com/MACSGMPPEpTivator](http://www.miltenyibiotec.com/MACSGMPPEpTivator)

## TexMACS™ GMP Medium

- Optimized medium, recommended for the use in combination with the CliniMACS Cytokine Capture System (IFN- $\gamma$ ).
- Serum-free application

## Published clinical data

- Protective immunity and the control of established AdV<sup>2,3</sup>, HCMV<sup>4,5</sup>, EBV<sup>6,7</sup> and BKV<sup>8</sup> infections could be restored after hematopoietic stem cell transplantations (HSCT).
- Small doses (i.e. 150 T cells/kg body weight<sup>7</sup>) of adoptively transferred T cells have been shown to restore antiviral immunity post HSCT<sup>2-7</sup>.
- Recent publications report minimal side effects and no acute toxicity (e.g. increased incidence of GvHD) so far.<sup>2-5,7,9</sup>

Would you like to learn more about the CliniMACS Prodigy and the CliniMACS Cytokine Capture System (IFN- $\gamma$ )? Contact your local representative and make an appointment: [www.miltenyibiotec.com/local](http://www.miltenyibiotec.com/local)

## References

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