

## Programs and disposables COM.TEC®

| Programs   | Therapy  | Disposables |
|------------|--|-------------|
| TPE        | Therapeutic plasma exchange                        | PL1         |
| RBC        | Therapeutic red cell exchange or depletion         | PL1         |
| Adsorption | Therapeutic plasma treatment e.g. immunoadsorption | P1R         |
| Depletion  | Depletion of platelets or white blood cells        | C4L         |

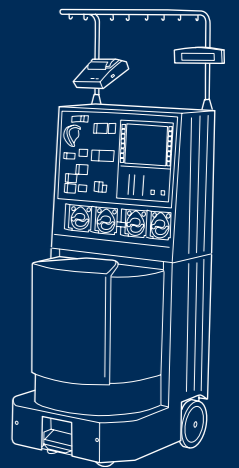
| Programs            | Leukocyte   | Disposables |
|---------------------|---|-------------|
| autoMNC stem cells  | Automatic collection of peripheral blood stem cells, mononuclear cell collection or depletion     | P1YA        |
| autoMNC lymphocytes | Automated collection of lymphocytes in dual needle mode for consecutive photochemotherapy or DLI* | P1YA        |
| MNC                 | Peripheral blood stem cell collection, mononuclear cell collection or depletion                   | P1Y         |
| BMSC                | Bone marrow stem cell processing in vitro   | P1Y + BMSC  |
| Granulocyte         | Granulocyte collection  | P1Y         |
| PBSC-Lymphocyte     | Peripheral blood stem cell collection, lymphocyte collection or depletion                         | C4Y         |
| RV-PBSC             | Peripheral blood stem cell collection, reduced collection volume                                  | RVY         |

| Programs  | Platelet   | Disposables |
|-----------|--|-------------|
| PLT 5d    | Platelet collection, 5-day storage (simultaneous plasma harvest possible), platelet depletion  | C5L         |
| PLT 5d    | Platelet collection, Triple-concentrates, 5-day storage (simultaneous plasma harvest possible) | C5LT        |
| PLT 5d-SN | Single needle platelet collection, 5-day storage (simultaneous plasma harvest possible)        | S5L         |

\*DLI (donor lymphocyte infusion)

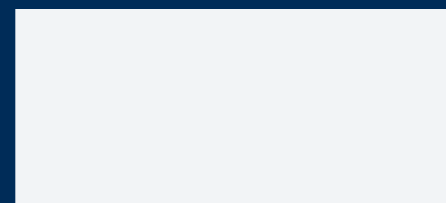
## COM.TEC®

THE MULTI-PROCEDURAL APHERESIS PLATFORM



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# COM.TEC® – the multi-procedural apheresis platform

## Highly efficient therapeutic protocols

- Plasma or red cell exchange
- Cell depletion
- Plasma treatment with active and passive columns

## Multi-procedural platform

- Cell collection
- Therapy
- Cell donation

## Leukocyte collection

- Stem cell collection
- Lymphocyte collection (for ECP)\*
- Granulocyte collection

COM.TEC® represents state of the art apheresis technology. The versatile applications for therapeutic plasma or red cell exchange, stem cell as well as platelet collections and cell depletions with only one device make the COM.TEC® the multi-procedural platform.

COM.TEC® offers reliable technology of camera controlled interface management for highly efficient procedures.

The easy to operate device is focussed on donor, patient and operator safety.

\* Extracorporeal Photopheresis

## The highlights:

- **Donor / patient tailored procedures**  
Donation as well as therapeutic protocols
- **Multiple safety systems = focus on donor / patient safety**  
e.g. hemolysis detector, air detector, centrifuge temperature sensor, ACD drip\* monitor, low extracorporeal volume, pressure monitors
- **Automatic or manual process management for all procedures**
- **Yield prediction for stem cell collection**
- **Automatic procedure printout – GMP\*\* compliance**

\* ACD: Acid Citrate Dextrose

\*\* GMP: Good Manufacturing Practice

# COM.TEC® – state of the art in apheresis technology

## Chambers for 3 groups of procedures



Stem cell collection



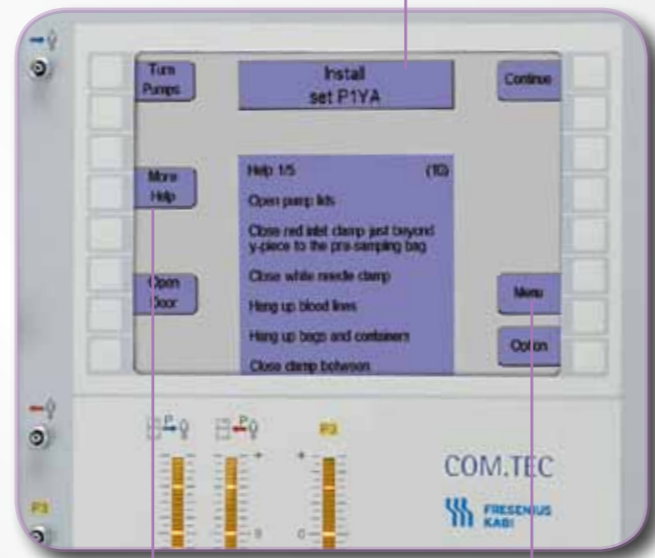
Platelet donation



Therapeutic and depletion

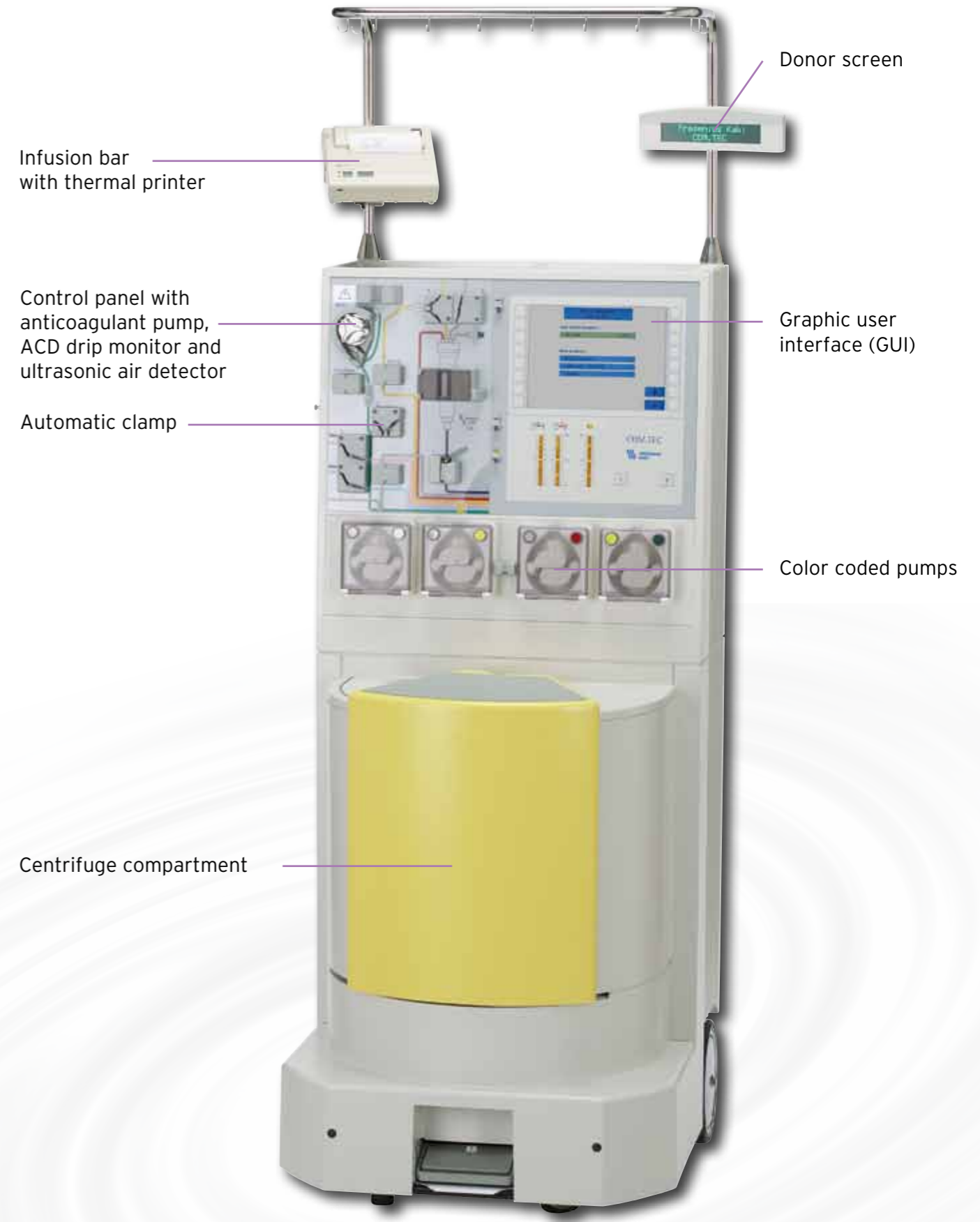
## Simple user guide on a self-acting guidance

Important procedure steps are explained in the user guide main route



More detailed descriptions as sub-menus are available on request by <Help> key

Menus for entry of initial donor/patient values for detailed calculations of product parameters for all protocols



# COM.TEC® – the complete range of procedures



## Stem cell collection

- Variable protocol selection due to different donor/patient conditions
- Protocol selection dependent on targets
- Lymphocyte collection for consecutive photo-chemotherapy or donor lymphocyte infusions (DLI)
- CD34+ prediction



## Granulocyte collection

- Automated granulocyte connection
- Automated interface control
- Emergency single needle option
- Additional plasma collection possible



## Therapeutic and depletion

- Completely automated interface setting and control
- Automated interface management available for all procedures
- Emergency single needle option

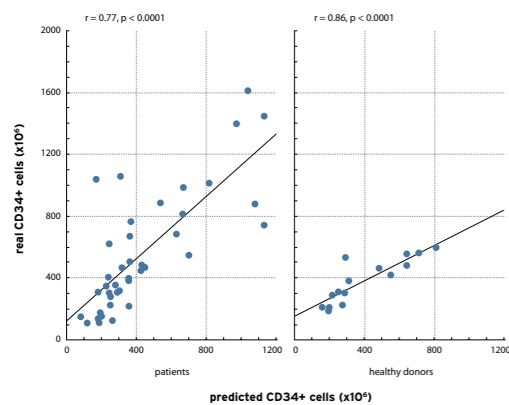
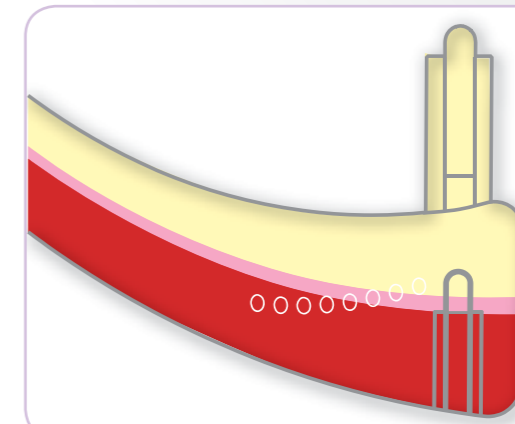


Figure 1: Correlation between predicted and real CD34+ cell counts in leukapheresis collections of patients ( $r = 0.77, p < 0.0001$ ) and donors ( $r = 0.86, p < 0.0001$ ). (Del Fante et al., Journal of Clinical Apheresis 2006; 21:227-232)

### Composition of 77 granulocyte concentrates\*

| Parameter   | Mean | ± | SD   |
|---|------|---|------|
| Volume (mL)   | 355  | ± | 42   |
| Total WBC content ( $\times 10^{10}$ )                    | 2.99 | ± | 0.8  |
| Total granulocyte content ( $\times 10^{10}$ )            | 1.98 | ± | 0.7  |
| Total platelet content ( $\times 10^{10}$ )               | 24.4 | ± | 6.4  |
| Total RBC content ( $\times 10^{12}$ )                    | 2.11 | ± | 4.64 |
| Dose of PMNs/concentrate/kg ( $\times 10^9$ )             | 0.78 | ± | 0.57 |
| Dose of PMNs/concentrate/m <sup>2</sup> ( $\times 10^9$ ) | 21.2 | ± | 11.4 |



Interface control

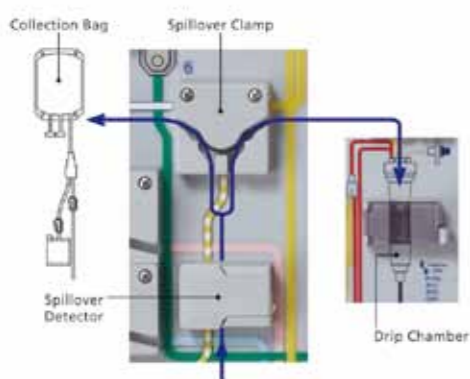


Figure 2: autoMNC procedure for automated collection: The spill-over sensor detects the passing cell fraction and triggers the spillover clamp from "return" to "collection". (internal data)

\*Sachs UJH., Reiter A, Walter T, Bein G, Woessmann W: Safety and efficacy of therapeutic early onset granulocyte transfusion in pediatric patients with neutropenia and severe infections, Transfusion 2006; 46: 1909-1914