



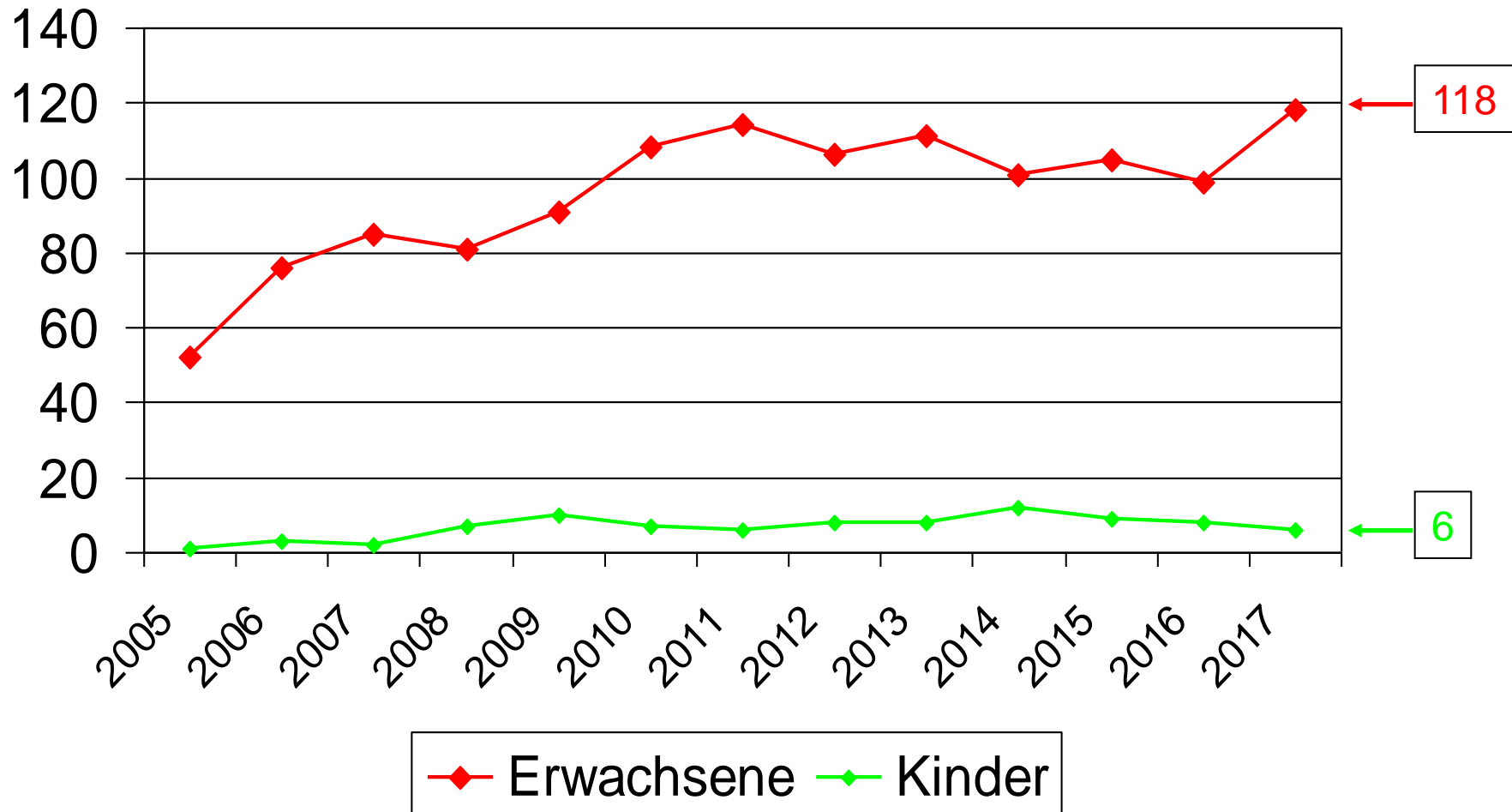
UNIVERSITÄTS  
KLINIKUM  
HEIDELBERG

# Allogene Stammzelltransplantation: JAHRESBERICHT 2017

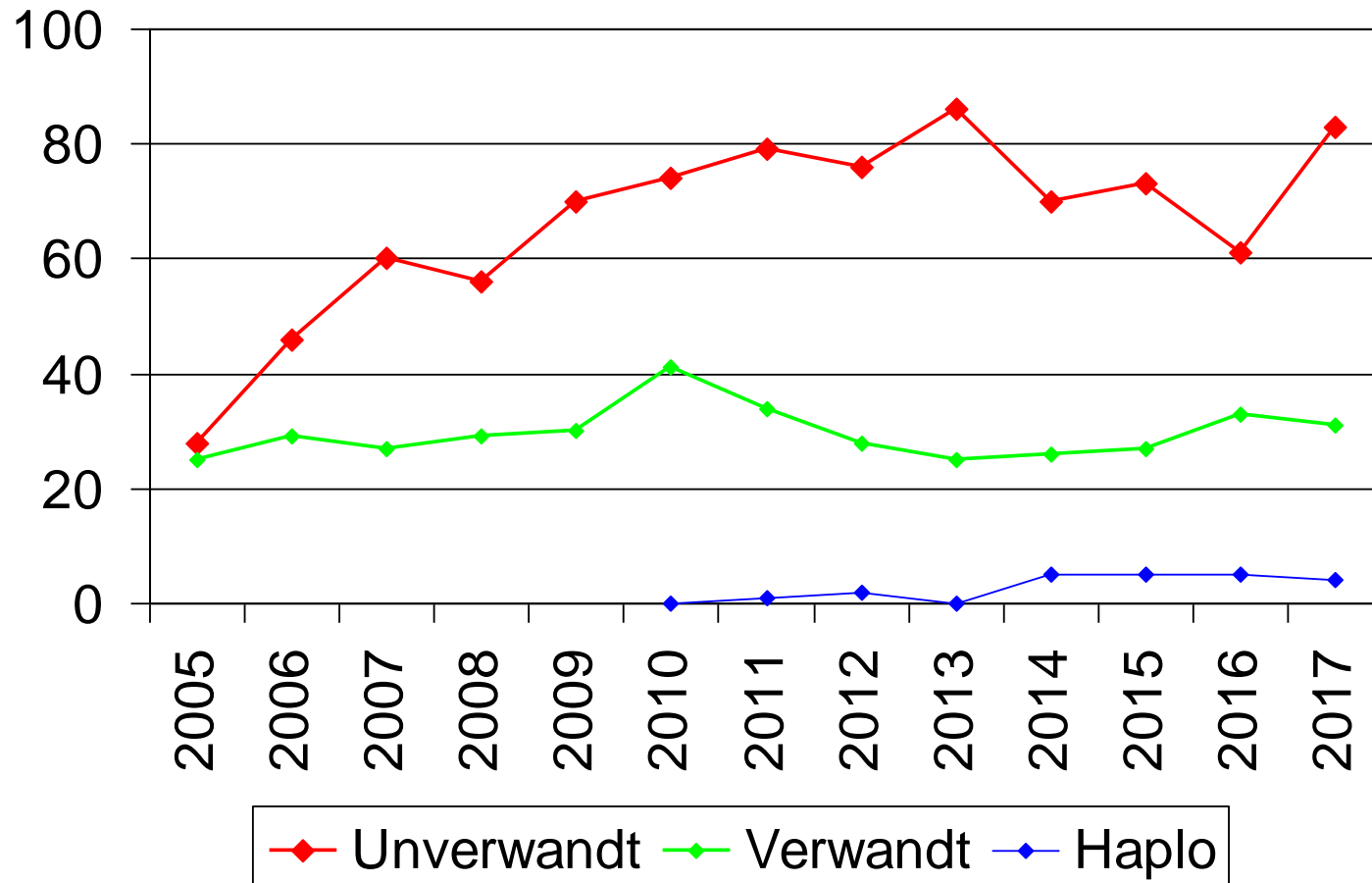
Sektion Stammzelltransplantation | Klinik Innere Medizin V | Universitätsklinikum Heidelberg |  
Prof. Dr. Peter Dreger

Patienten

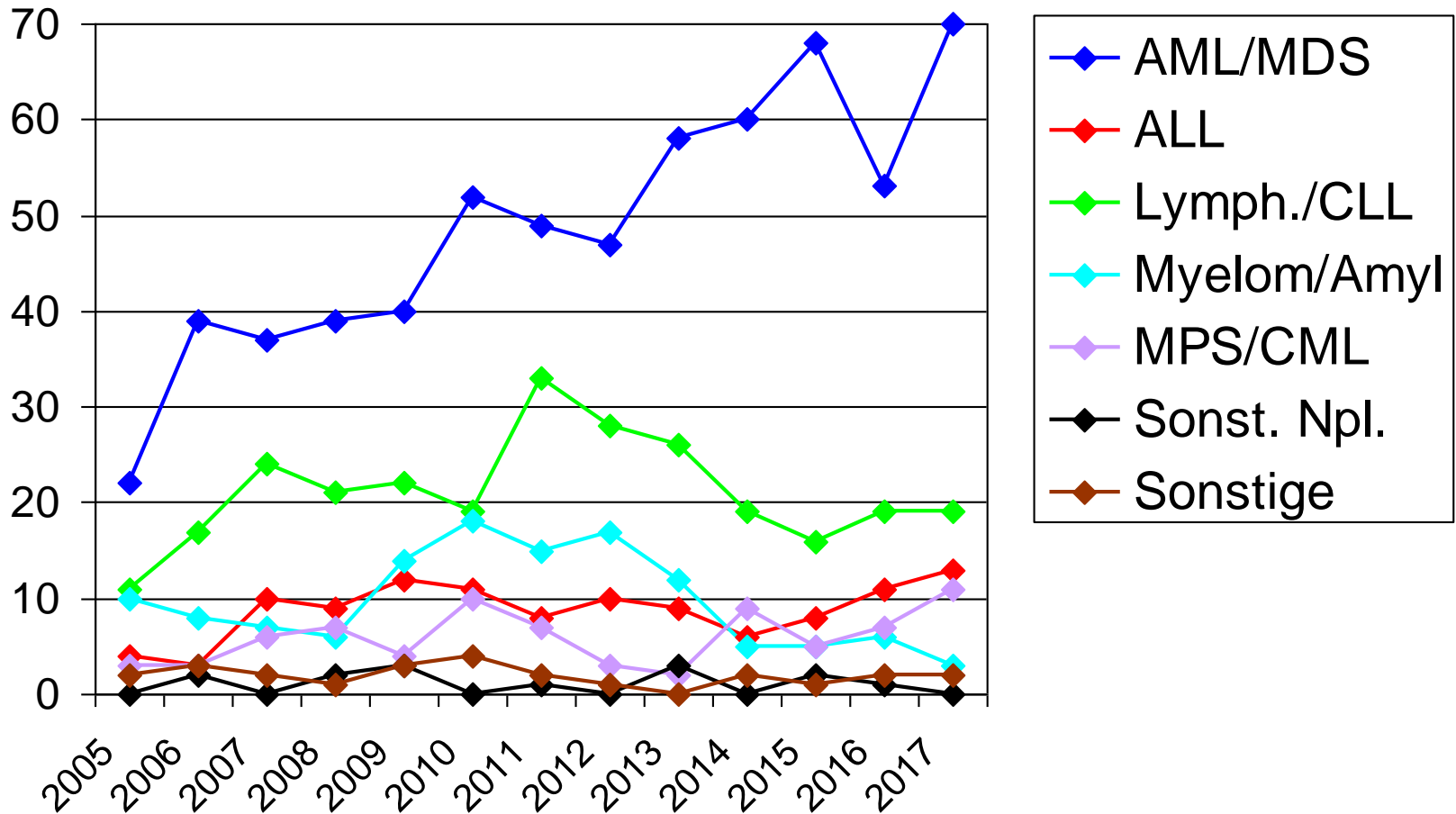
# Allogene Transplantationen



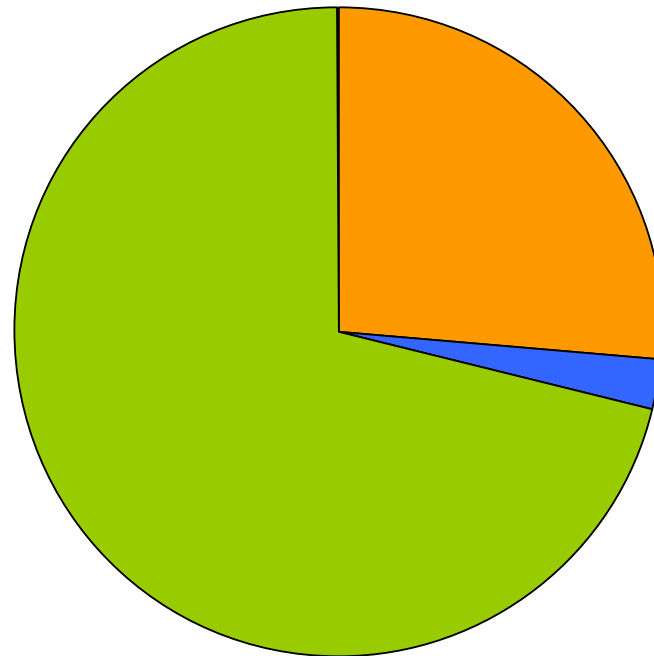
# Spender



# Indikationen

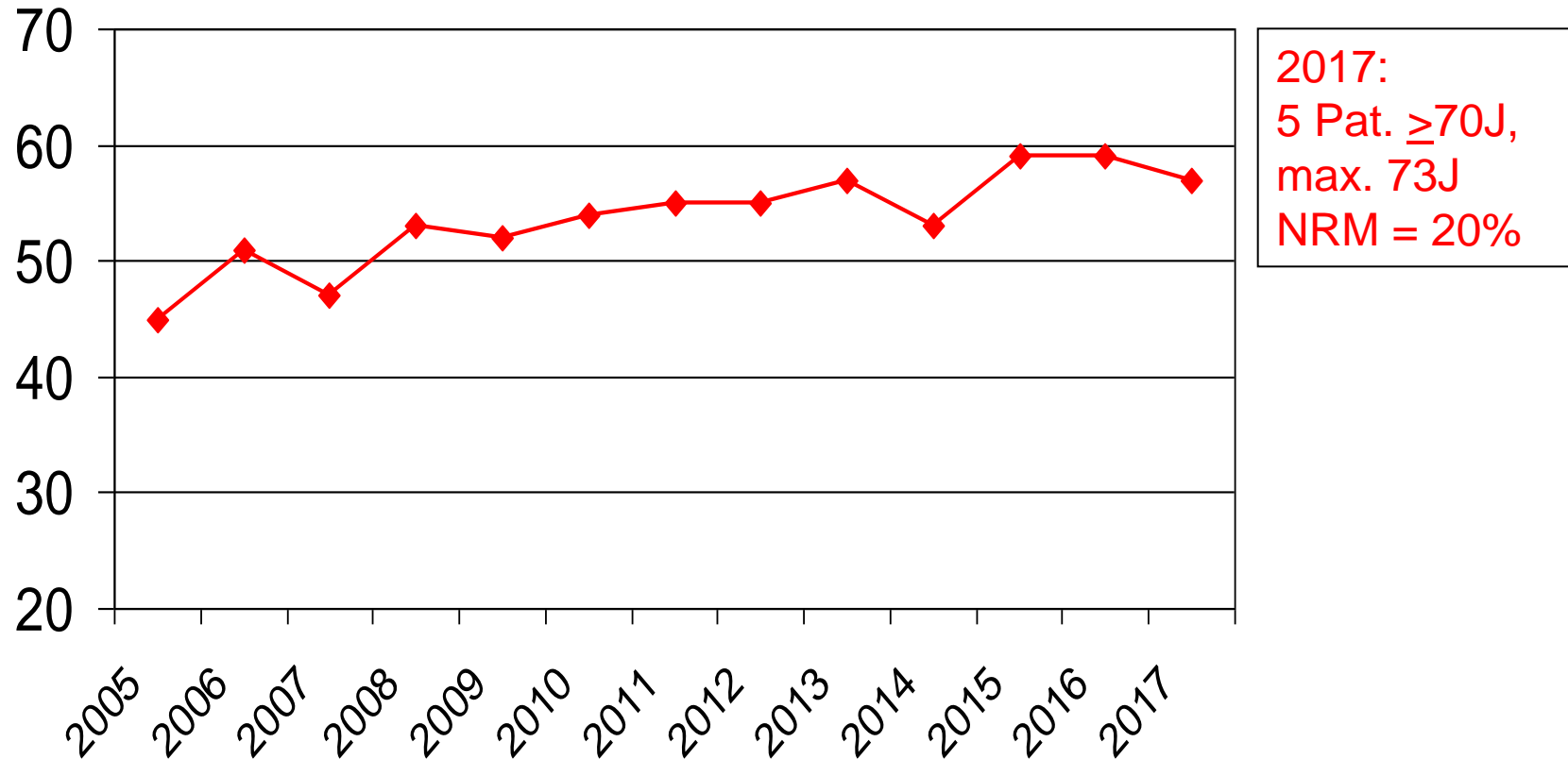


# Zuweiser 2017

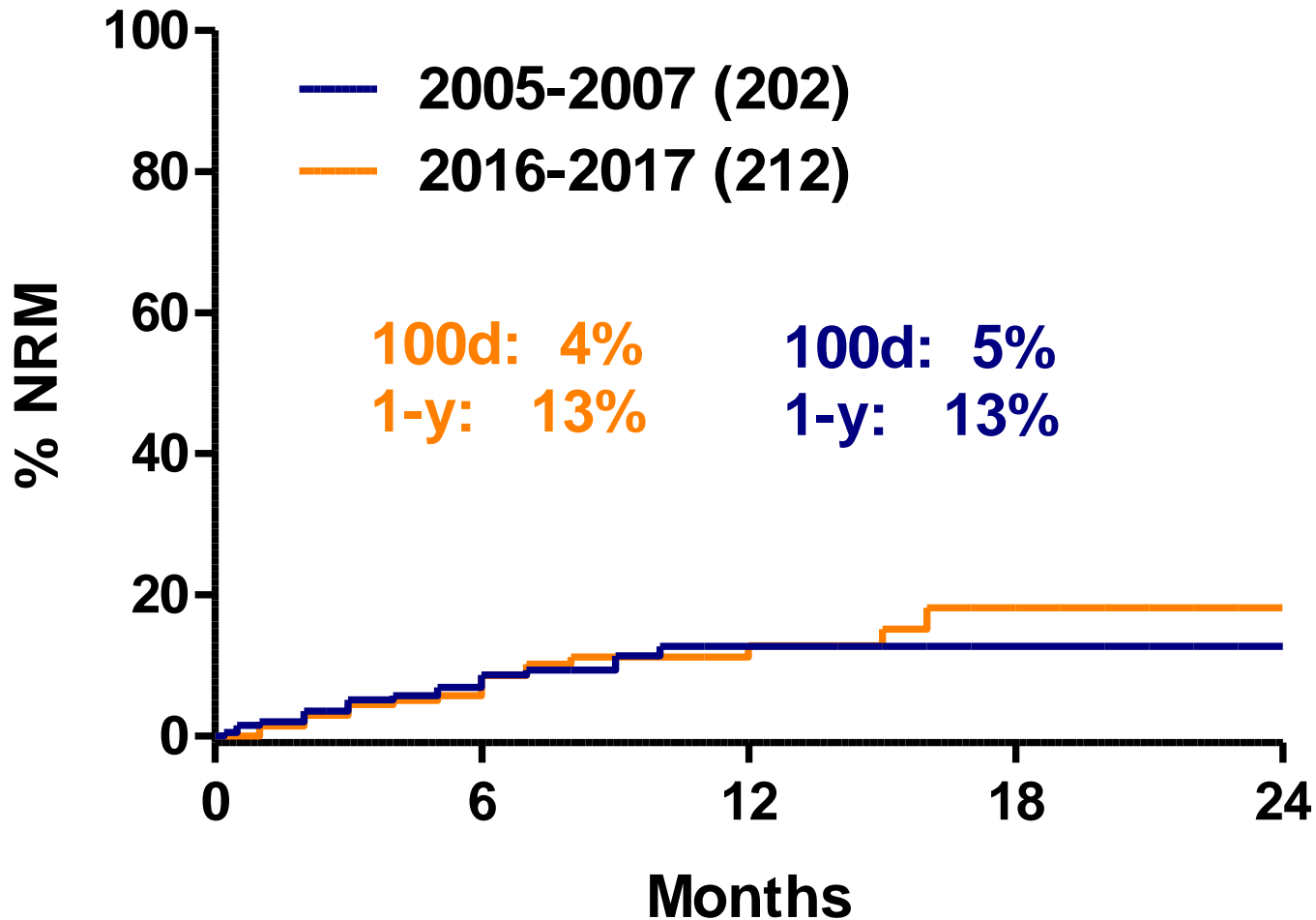


Ext. Zuweiser I.O. Sonstige

# Medianes Patientenalter

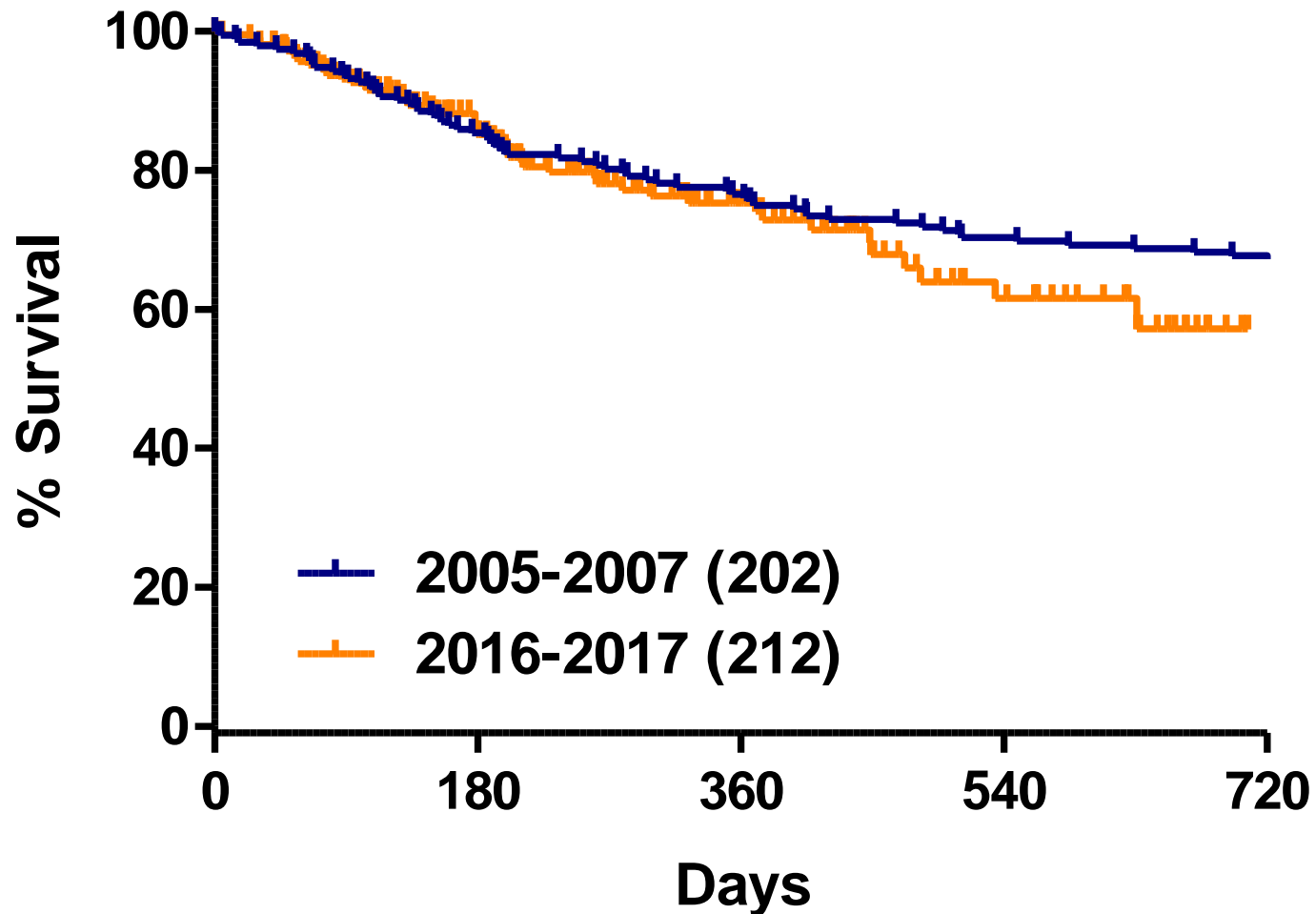


# Non-relapse mortality by period





# Overall survival by period



# Forschung und ihre Implikationen

# AlloHCT: Trial activity

| Study        | Study type    | Topic            | PI HD    | Sponsor  | n    |
|--------------|---------------|------------------|----------|----------|------|
| MC Flud T14  | Phase-3 AMG   | BuFlu vs TreoFlu | Luft     | medac    | 52   |
| Letermovir   | Phase-3 AMG   | CMV-Prophylaxe   | Schmitt  | MSD      | 19   |
| LFG          | Phase-2/3 AMG | TMA              | Luft     | Novartis | 3    |
| STUD RIG     | Phase-2 AMG   | Ref aGVHD        | Dreger   | UK FR    | 2    |
| TFT2         | Phase-2 AMG   | Zweit-allo AML   | Dreger   | UK FR    | 7    |
| CHARLY       | Phase-2 AMG   | NHL haplo        | Dietrich | UK HD    | 2    |
| CART19       | Phase-1/2 AMG | ALL, CLL, NHL    | Schmitt  | UK HD    | -    |
| DP matching  | Observational | DP matching      | P Dreger | UK Essen | 40   |
| Restmaterial | Biobank       | GVHD, TMA etc    | Luft     | selbst   | 700+ |

# The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812

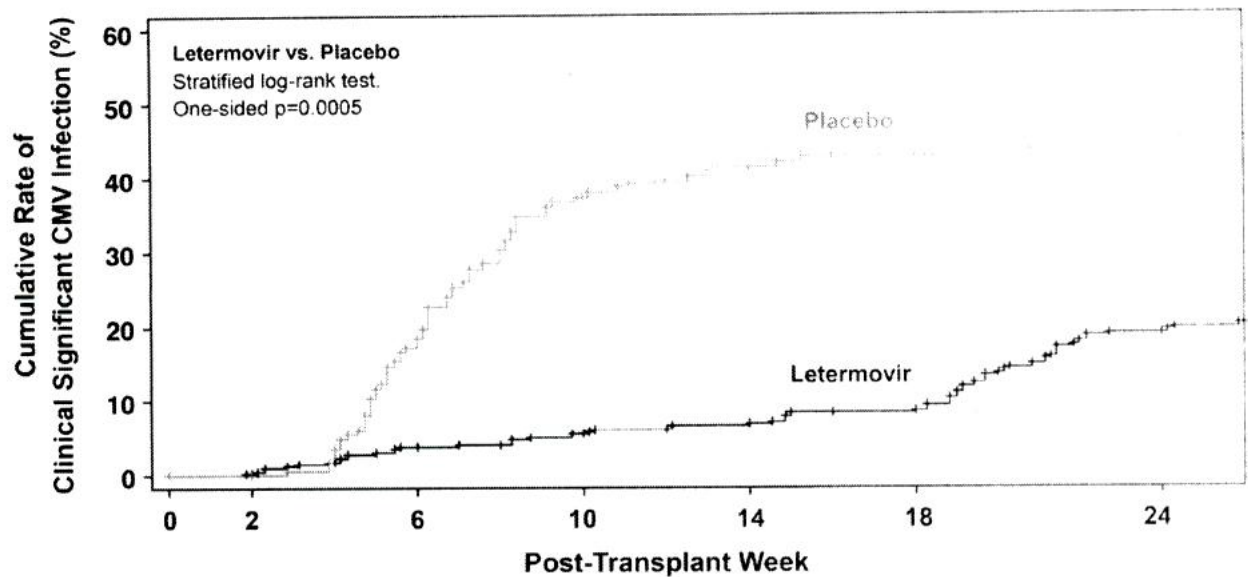
MAY 8, 2014

VOL. 370 NO. 19

## Letermovir for Cytomegalovirus Prophylaxis in Hematopoietic-Cell Transplantation

Roy F. Chemaly, M.D., Andrew J. Ullmann, M.D., Susanne Stoelben, M.D., Marie Paule Richard, M.D.

**Figure 1. Time to Onset of Clinically Significant CMV Infection**  
*Subjects with undetectable CMV DNA at Randomization*



MK8228 Ph-III  
RCT  
(Marty et al,  
ASBMT2017)



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

9 November 2017  
EMA/CHMP/737340/2017  
Committee for Medicinal Products for Human Use (CHMP)

Prevymis  
letermovir

**Summary of opinion<sup>1</sup> (initial authorisation)**

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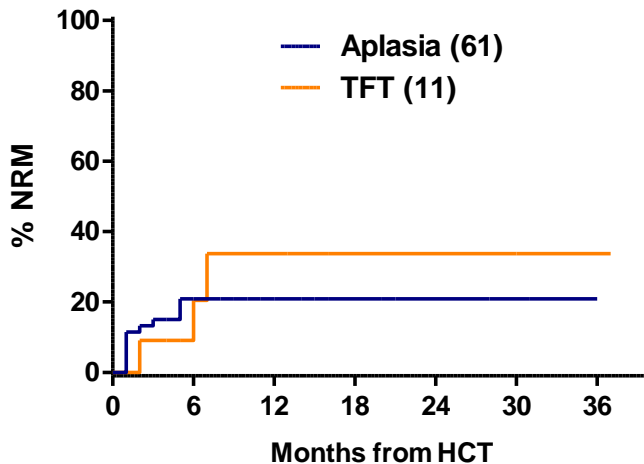
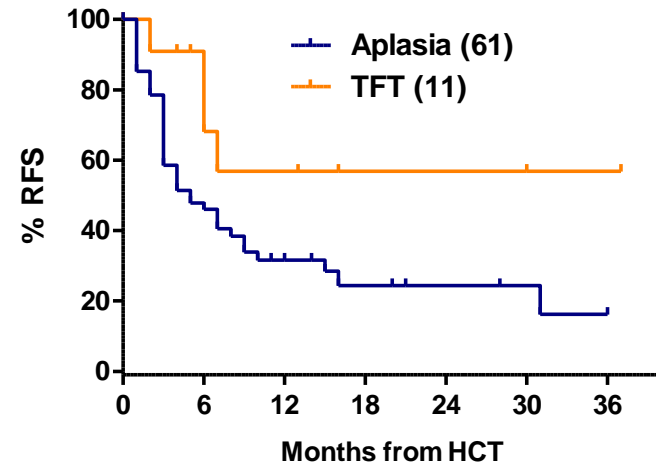
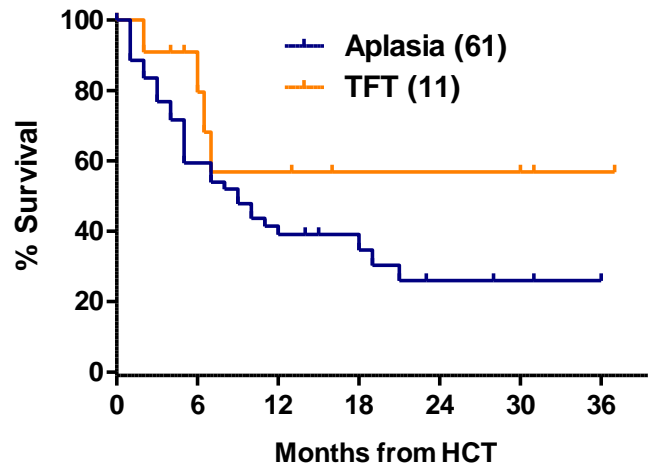
The full indication is: "Prevymis is indicated for prophylaxis of cytomegalovirus (CMV) reactivation and disease in adult CMV-seropositive recipients [R+] of an allogeneic haematopoietic stem cell transplant (HSCT)."

- EU-Verfügbarkeit ab 15.02.2018

# AlloHCT: Trial activity

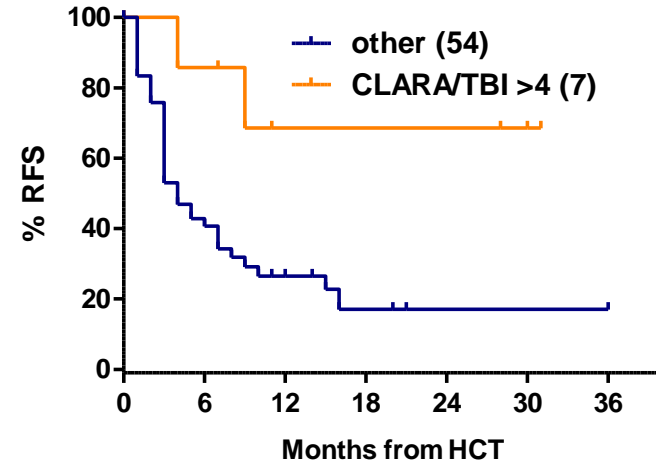
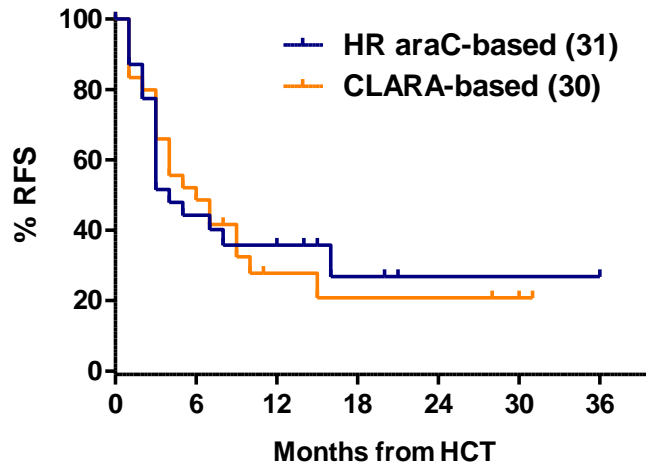
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| <b>TFT2</b>  | <b>Phase-2 AMG</b> | <b>Zweit-allo AML</b> | <b>Dreger</b> | <b>UK FR</b> | <b>8</b> |
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| DP matching  | Observational      | DP matching           | P Dreger      | UK Essen     | 40       |
| Restmaterial | Biobank            | GVHD, TMA etc         | Luft          | selbst       | 700+     |

# HR-AML: Aplasie- vs TFT-Konditionierung (2014-2017)



- Aplasia: alle refraktär oder unbehandelter REL
- TFT: alle Zweit-allo; 9/11 refraktär

# Aplasia conditioning in R/R AML: Impact of conditioning regimens



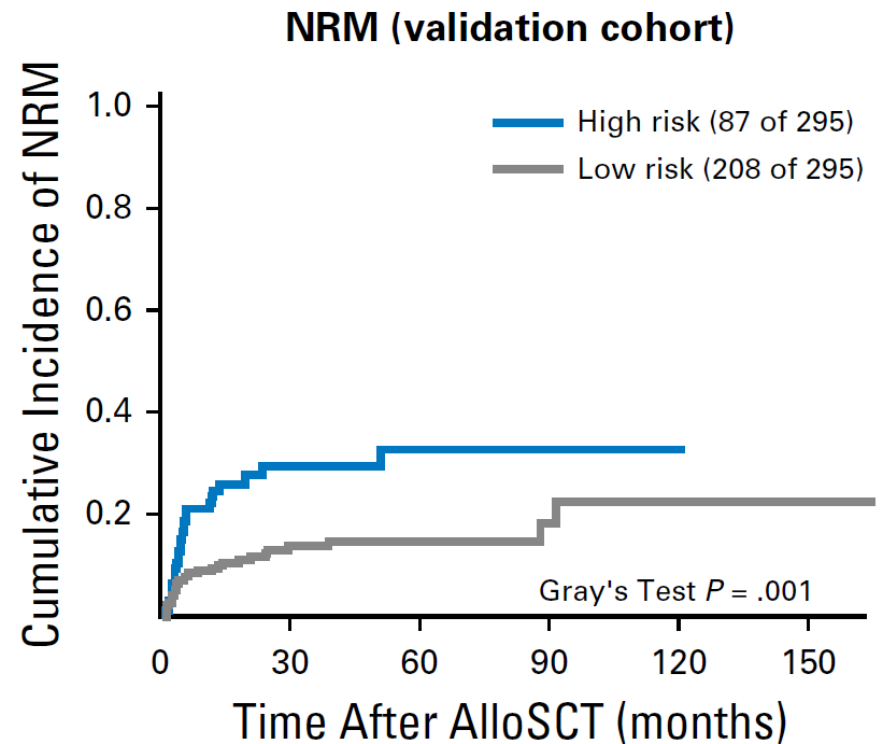
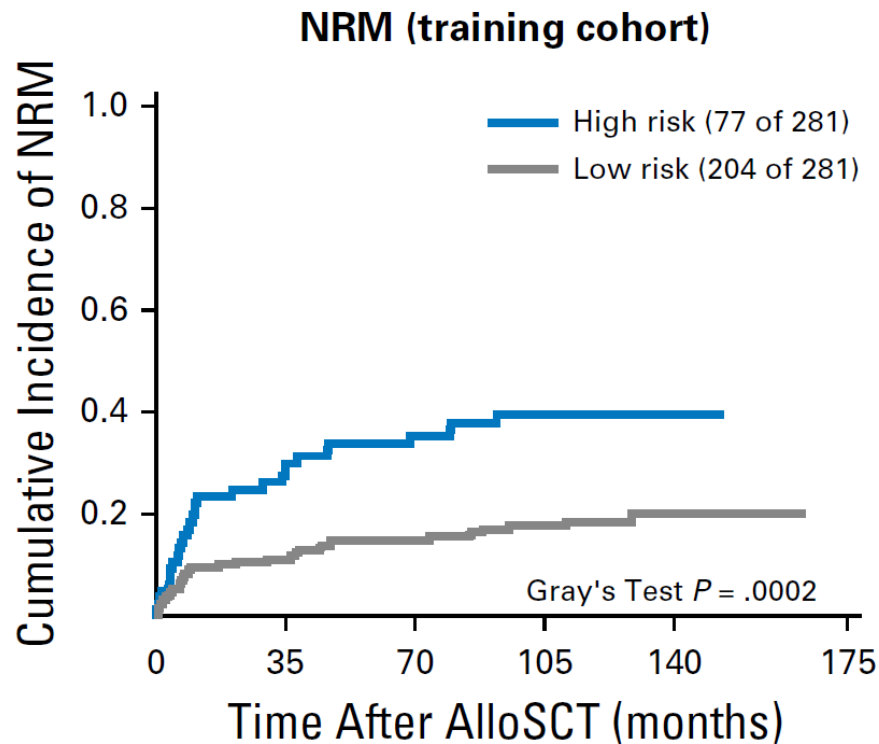


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| CHARLY       | Phase-2 AMG   | NHL haplo        | Dietrich | UK HD    | 2    |
| CART19       | Phase-1/2 AMG | ALL, CLL, NHL    | Schmitt  | UK HD    | -    |
| DP matching  | Observational | DP matching      | P Dreger | UK Essen | 51   |
| Restmaterial | Biobank       | GVHD, TMA etc    | Luft     | selbst   | 700+ |

# Single Nucleotide Polymorphisms in CD40L Predict Endothelial Complications and Mortality After Allogeneic Stem-Cell Transplantation

*Sivaramakrishna P. Rachakonda, Hao Dai, Olaf Penack, Olga Blau, Igor Wolfgang Blau, Aleksandar Radujkovic, Carsten Müller-Tidow, Rajiv Kumar, Peter Dreger, and Thomas Luft*



*Lancet Haematol*

# EASIX in patients with acute graft-versus-host disease: a retrospective cohort analysis

Published **Online**

*Thomas Luft, Axel Benner, Sonata Jodele, Christopher E Dandoy, Rainer Storb, Ted Gooley, Brenda M Sandmaier, Natalia Becker, Aleksandar Radujkovic, Peter Dreger, Olaf Penack*

July 18, 2017

## EASIX:

LDH (U/l) x creatinine (mg/dl)

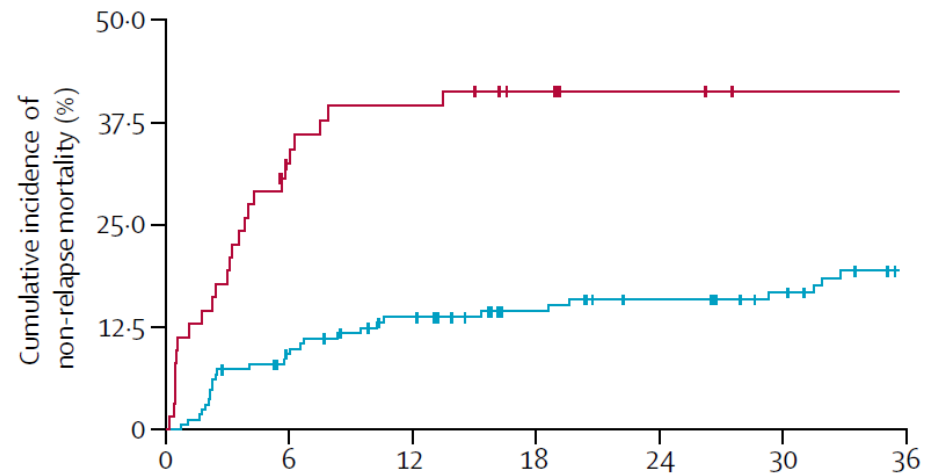
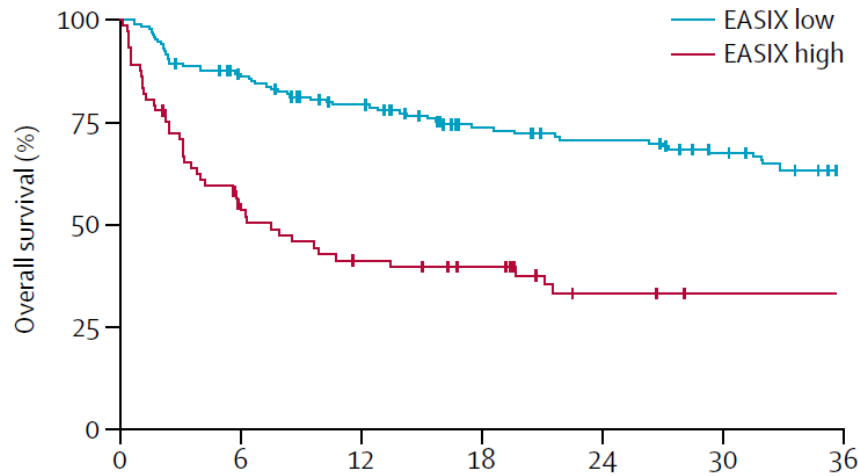
Platelets/nl

# EASIX in patients with acute graft-versus-host disease: a retrospective cohort analysis

Published Online

July 18, 2017

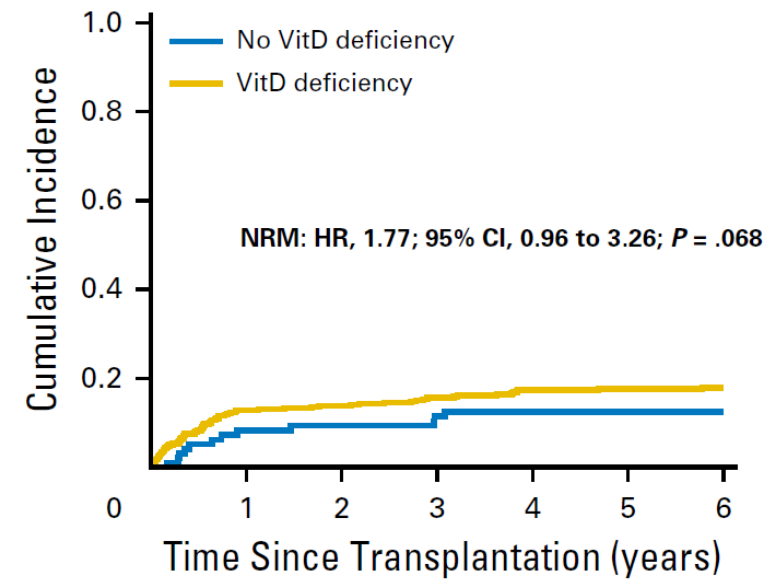
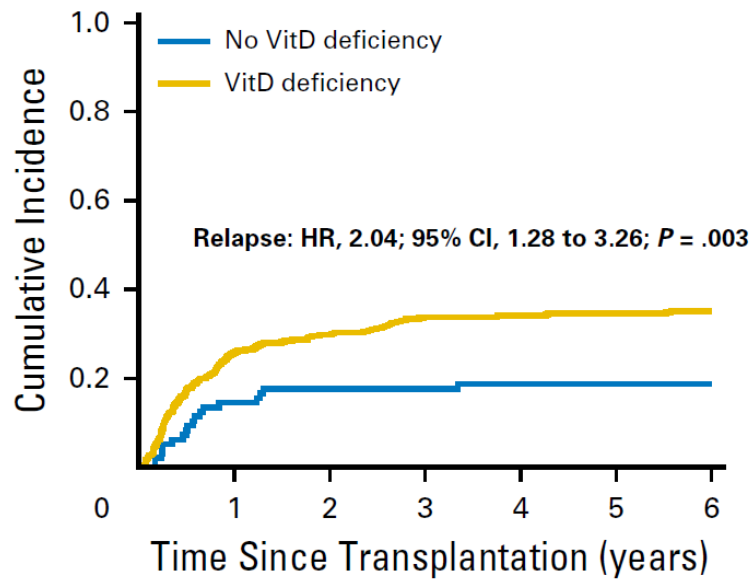
Thomas Luft, Axel Benner, Sonata Jodele, Christopher E Dandoy, Rainer Storb, Ted Gooley, Brenda M Sandmaier, Natalia Becker, Aleksandar Radujkovic, Peter Dreger, Olaf Penack



**Figure 3: Multivariable effect of EASIX on outcome after acute GVHD onset**

# Pretransplant Vitamin D Deficiency Is Associated With Higher Relapse Rates in Patients Allografted for Myeloid Malignancies

*Aleksandar Radujkovic, Lambros Kordelas, Julia Krzykalla, Dietrich W. Beelen, Axel Benner, Nicola Lehnert, Katharina Schmidt, Peter Dreger, and Thomas Luft*



VitD deficiency

|      |     |     |     |     |     |    |    |
|------|-----|-----|-----|-----|-----|----|----|
| No:  | 96  | 74  | 57  | 50  | 38  | 27 | 21 |
| Yes: | 396 | 240 | 192 | 138 | 100 | 73 | 51 |

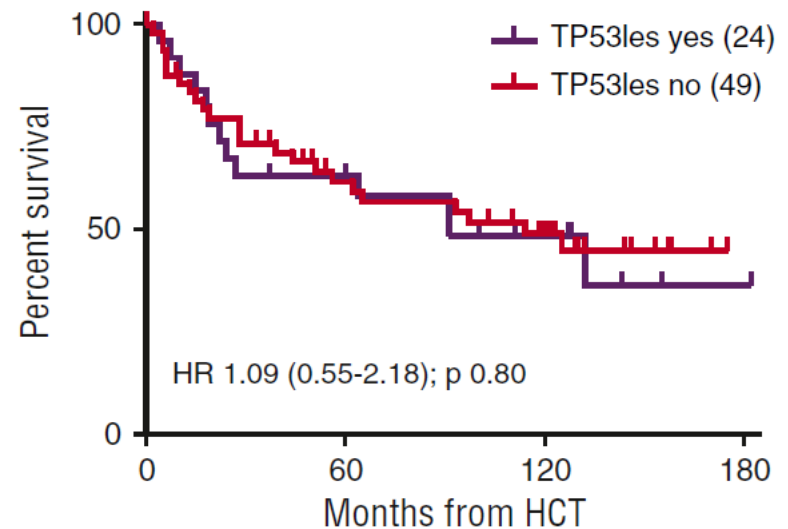
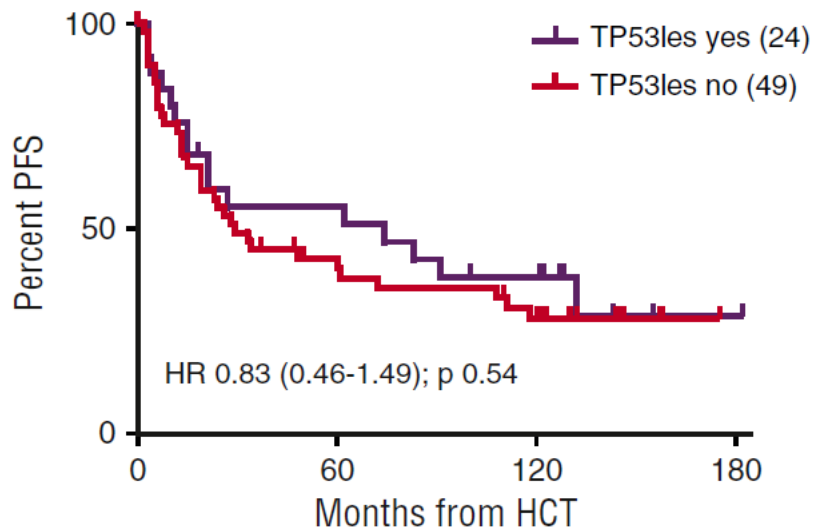
VitD deficiency

|      |     |     |     |     |     |    |    |
|------|-----|-----|-----|-----|-----|----|----|
| No:  | 96  | 74  | 57  | 50  | 38  | 27 | 21 |
| Yes: | 396 | 240 | 192 | 138 | 100 | 73 | 51 |



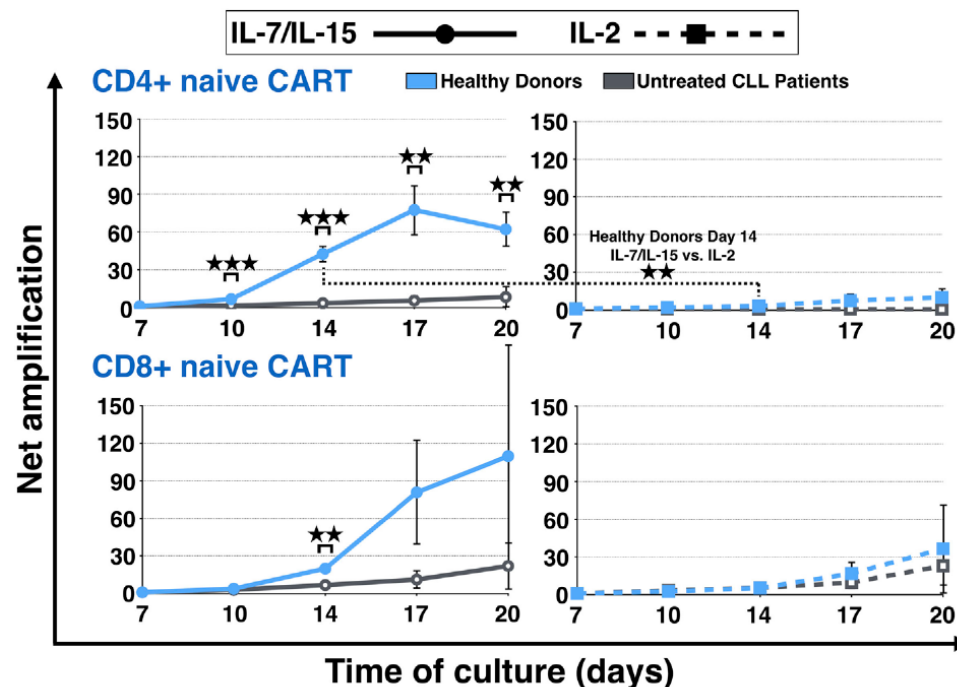
## Allogeneic hematopoietic cell transplantation for high-risk CLL: 10-year follow-up of the GCLLSG CLL3X trial

Isabelle Krämer, Stephan Stilgenbauer, Sascha Dietrich, Sebastian Böttcher, Matthias Zeis, Michael Stadler, Jörg Bittenbring, Lutz Uharek, Christof Scheid, Ute Hegenbart, Anthony Ho, Michael Hallek, Michael Kneba, Norbert Schmitz, Hartmut Döhner and Peter Dreger



# Differences in Expansion Potential of Naive Chimeric Antigen Receptor T Cells from Healthy Donors and Untreated Chronic Lymphocytic Leukemia Patients

Jean-Marc Hoffmann<sup>1†</sup>, Maria-Luisa Schubert<sup>1†</sup>, Lei Wang<sup>1</sup>, Angela Hückelhoven<sup>1</sup>, Leopold Sellner<sup>1,2</sup>, Sophia Stock<sup>1</sup>, Anita Schmitt<sup>1</sup>, Christian Kleist<sup>3</sup>, Ulrike Gern<sup>1</sup>, Angelica Loskog<sup>4</sup>, Patrick Wuchter<sup>1,5</sup>, Susanne Hofmann<sup>1</sup>, Anthony D. Ho<sup>1,2</sup>, Carsten Müller-Tidow<sup>1,2</sup>, Peter Dreger<sup>1,2</sup> and Michael Schmitt<sup>1,2\*</sup>



Impact



# Heidelberg alloHCT program: Top cited publications

| Jahr | Artikel                                 | Erstautor | Journal  | Zitate |
|------|---|-----------|----------|--------|
| 2007 | EBMT CLL transplant consensus           | Dreger    | Leukemia | 433    |
| 2010 | GCLLSG CLL3X trial outcome              | Dreger    | Blood    | 269    |
| 2008 | Allo-SCT in 17p- CLL EBMT               | Schetelig | JCO      | 177    |
| 2014 | Managing high-risk CLL in transition    | Dreger    | Blood    | 126    |
| 2011 | Refractory GVHD and endothelial markers | Luft      | Blood    | 94     |
| 2007 | CK18F as GVHD markers                   | Luft      | Blood    | 73     |

- Impact 2017 (Erst- u/o Letztautor a.d. Sektion): **104,215**
- Impact 2017 (Koautor aus der Sektion): **109,893**

Veranstaltungen



UniversitätsKlinikum Heidelberg

## Chronic lymphocytic leukemia: Where are we after the iwCLL 2017?

An International Symposium



**May 19-20, 2017**  
Medical Clinic, Lecture Hall



UniversitätsKlinikum Heidelberg

## Chronische lymphatische Leukämie und verwandte Erkrankungen: Was gibt es Neues?

Eine Informations- und Diskussionsveranstaltung  
für Patienten und Angehörige



**Samstag, 20. Mai 2017**  
Hörsaal, Medizinische Klinik Heidelberg  
Im Neuenheimer Feld 410



Medizinische Fakultät Heidelberg



## Immunotherapy in Lymphoma: At the dawn of a new era

**October 27, 2017**  
**14:00 - 18:30**

**An International Symposium**  
Organized by Medical Clinic V, University of Heidelberg

**Venue**  
Medical Clinic, Lecture Hall

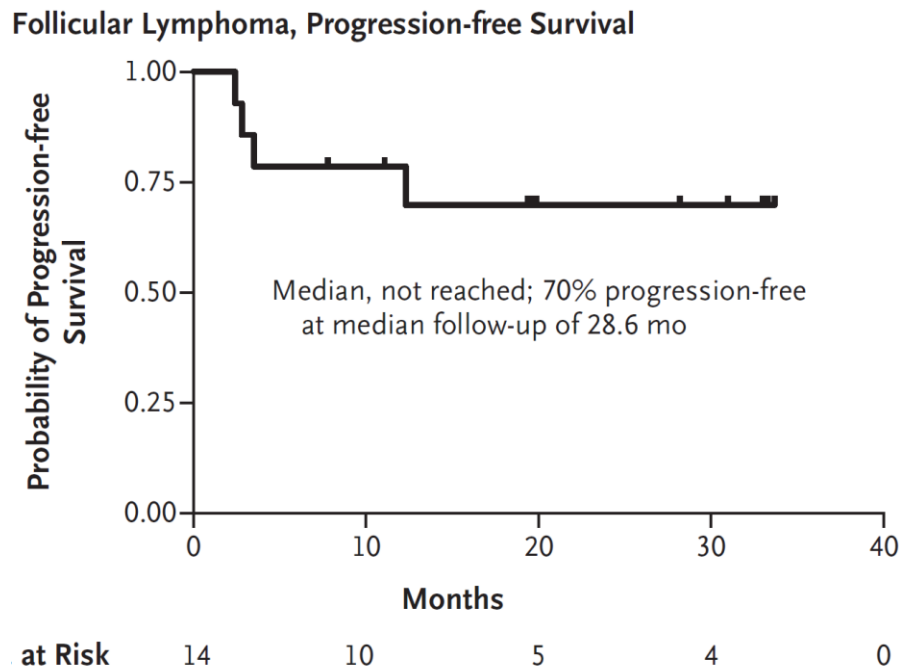
**Topics:**  
Checkpoint Inhibition,  
Cellular Immunotherapy, Costs

Es tut sich was...

...mit den CARTS

# Chimeric Antigen Receptor T Cells in Refractory B-Cell Lymphomas

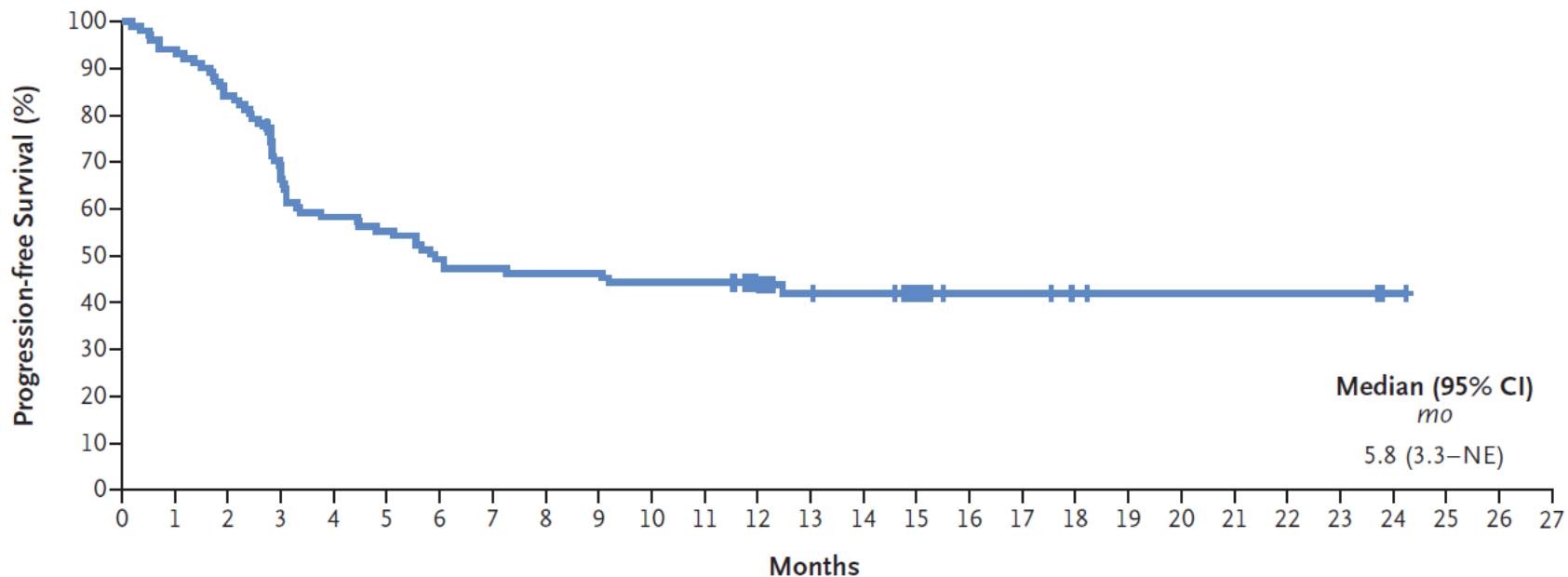
Stephen J. Schuster, M.D., Jakub Svoboda, M.D., Elise A. Chong, M.D.



This article was published on December 10, 2017, at NEJM.org.

# Axicabtagene Ciloleucel CAR T-Cell Therapy in Refractory Large B-Cell Lymphoma

S.S. Neelapu, F.L. Locke, N.L. Bartlett, L.J. Lekakis, D.B. Miklos, C.A. Jacobson,



No. at Risk 108 101 90 71 61 58 52 50 49 49 47 47 34 21 20 12 6 6 4 3 3 3 3 3 1 0

This article was published on December 10, 2017, at NEJM.org.

ZUMA-1 trial

# ...mit den CARTs in Heidelberg

**Investigator Initiated Trial  
(IIT)**

**Pharma-derived CARs**

**In-label**

**Clinical trials**

| <b>NCT-HD-CAR-1</b>  | <b>Novartis</b>                                   | <b>Kite/<br/>Gilead</b>                              | <b>Kite/<br/>Gilead</b>  | <b>Miltenyi</b>   | <b>Celgene</b>                   | <b>Novartis</b>                  |
|--|---|--|--------------------------|-------------------|----------------------------------|----------------------------------|
| GMP vector production<br>by Prof. Brenner, BCM             | Kymriah <sup>TM</sup><br>CD19+<br>ALL<br>< 26 y/o | Yescarta <sup>TM</sup><br>CD19+<br>DLBCL<br>≥ 18 y/o | ZUMA-7<br>CD19+<br>DLBCL | Melanom<br>a CD20 | BCMA+<br>Multiple<br>Myelom<br>a | BCMA+<br>Multiple<br>Myelom<br>a |
| GMP leukapheresis<br>by UKHD – Med. V                      |   |  |                          |                   |                                  |                                  |
| GMP culture & transduction by<br>GMP lab Med V (M Schmitt) |   |  |                          |                   |                                  |                                  |
| GCP application on HIS                                     |   |  |                          |                   |                                  |                                  |



# ...mit den CARTs in Heidelberg

- NCT-HD-CAR1: CD19 all comer, IIT, Sponsor UKHD, LKP M Schmitt – Start Q2/3 2018
- ZUMA-7: DLBCL 1. Relapse, Sponsor Kite/Gilead, LKP P Dreger – Start Q3 2018
- Yescarta: DLBCL, zugelassene Indikation, Launch in HD Q3/2018 (als 1. Zentrum in DE)

# “Allo” sind...

## „von Dusch“

**M Lommatzsch**

A Dugimont

...und das Team!

## Station

**M Schiller**

S Kierschke

D Finke

N Liebers

C Pabst

K Pashayeva

N Payer

ML Schubert

H Veelken

A Hoffmann

A Martin

## Sport

R Kühl

J Wiskemann

& Team

## Koordination

**P Stadtherr**

I Opitz

A Herrmann

## Ambulanz

T Luft

S Schönland

A Radujkovic

J Brandt

M Cremer

S Gröschel

S Raffel

J Tate

S Zink

## CART

**M Schmitt**

A Schmitt

& Team

## ECP

**A Schmitt**

R Alexi

& Team

## Case Manager

**A Bondong**

M Wegner

## Labor

**T Luft**

S Dietrich

M Hess

A Radujkovic

A Hof

R Schulz

S Kräker

## Psychologie

**D Tönnessen**

## Sucheinheit

**H Tran**

K Nerbel

& Team

## Sozialdienst

A Bergner

G Daiß

S Sontowski

## Studienzentrale

**J Klemmer**

AM Geueke

& Team

## I.O. und andere

### Affairs

M Geiss

JW Schmier

## Anleitung

U Hegenbart

P Dreger

## ...und natürlich auch

K Jordan

**C Müller-Tidow**

...alle Mitarbeiter der MedV !

