

Relapses and treatment-related events contributed equally to poor prognosis in children with ABL-class fusion positive B-cell acute lymphoblastic leukemia treated according to AIEOP-BFM protocols

Gunnar Cario,^{1*} Veronica Leoni,^{2*} Valentino Conter,^{2*} Andishe Attarbaschi,³ Marketa Zaliova,⁴ Lucie Sramkova,⁴ Gianni Cazzaniga,² Grazia Fazio,² Rosemary Sutton,⁵ Sarah Elitzur,⁶ Shai Izraeli,⁶ Melchior Lauten,⁷ Franco Locatelli,⁸ Giuseppe Basso,⁹ Barbara Buldini,⁹ Anke K. Bergmann,¹⁰ Jana Lentes,¹⁰ Doris Steinemann,¹⁰ Gudrun Göhring,¹⁰ Brigitte Schlegelberger,¹⁰ Oskar A. Haas,³ Denis Schewe,¹ Swantje Buchmann,¹ Anja Moericke,¹ Deborah White,¹¹ Tamas Revesz,¹² Martin Stanulla,¹³ Georg Mann,³ Nicole Bodmer,¹⁴ Nira Arad-Cohen,¹⁵ Jan Zuna,⁴ Maria Grazia Valsecchi,² Martin Zimmermann,¹³ Martin Schrappe^{1#} and Andrea Biondi^{2#}

¹Pediatrics, University Hospital Schleswig-Holstein, Campus Kiel, Kiel, Germany; ²Clinica Pediatrica and Centro Ricerca Tettamanti, Università di Milano-Bicocca, Fondazione MBBM/ S.Gerardo Hospital, Monza, Italy; ³St. Anna Kinderspital and Children's Cancer Research Institute, Vienna, Austria; ⁴CLIP, Department of Pediatric Hematology and Oncology, 2nd Faculty of Medicine, Charles University and University Hospital Motol, Prague, Czech Republic; ⁵Molecular Diagnostics, Children's Cancer Institute, University of NSW, Sydney, NSW, Australia; ⁶Pediatric Hematology-Oncology, Schneider Children's Medical Center, Petah Tikva, and Sackler Faculty of Medicine, Tel Aviv University, Israel; ⁷Pediatrics, University Hospital Schleswig-Holstein, Campus Lübeck, Lübeck, Germany; ⁸Department of Pediatric Hematology and Oncology, Scientific Institute for Research and Healthcare (IRCCS) Children's Hospital Bambino Gesù, Sapienza, University of Rome, Rome, Italy; ⁹IIGM Torino and Pediatric Hemato-Oncology, SDB Department, University of Padova, Padova, Italy; ¹⁰Department of Human Genetics, Medical School Hannover, Hannover, Germany; ¹¹Cancer Theme, South Australian Health and Medical Research Institute, Adelaide, Australia; ¹²Women's and Children's Hospital, SA Pathology, University of Adelaide, Adelaide, Australia; ¹³Department of Pediatric Hematology/Oncology, Hannover Medical School, Hannover, Germany; ¹⁴University Children's Hospital Zurich, Zurich, Switzerland and ¹⁵Pediatric Hematology-Oncology Department, Ruth Rappaport Children's Hospital, Rambam Health Care Campus, Rappaport Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel

*GC, VL and VC contributed equally as co-first authors.

#MS and AB contributed equally as co-senior authors.

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Correspondence: GUNNAR CARIO - gunnar.cario@uksh.de

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Supplementary Material

Supplementary Tables and Figures

Table S1. Type of ABL class fusion and TKI treatment

Type of fusion and fusion partner	ABL-class fusion pos. cases	Treatment without additional TKI	Treatment with additional TKI
Total	46	33	13
ABL1	15	10	5
ETV6	5	3	2
NUB214	1	0	1
RANBP2	1	1	0
RCSD1	2	2	0
SHIP1	1	0	1
ZMIZ1	4	4	0
Not known	1	0	1
ABL2	5	4	1
RCSD1	2	2	0
ZC3HAV	2	2	0
Not known	1	0	1
CSF1R	3	2	1
MEF2D	1	1	0
SSBP2	2	1	1
PDGFRB	23	17	6
EBF1	19	14	5
ZNF608	1	1	0
not known	3	2	1

¹TKI, tyrosine kinase inhibitor

Supplementary Figures

Figure S1: Type of fusion, treatment performed, type of TKI and EFS/follow-up time of those 13 patients treated with TKI in addition to chemotherapy. FLA(G), FLudarabin, Arabinosid C, (Granulocyte-Colony stimulating factor), HSCT, Hematopoietic stem cell transplantation

Figure S2. Treatment outcome of patients with pediatric ABL-class fusion positive ALL. Cumulative incidence (CI) of relapses (CIR) and of treatment related mortality (CI-TRM) at 5 years. A) in PDGFRB-fusion pos. cases, B) in ABL1-fusion positive cases and C) in others (ABL2 n=5, CSFR n=2) at 5 years.

Figure S3. Treatment outcome of patients with pediatric ABL-class fusion positive ALL comparing patients treated without tyrosine kinase inhibitor (TKI, no-TKI) and with TKI (TKI). Kaplan-Meier estimates: A) cumulative incidence (CI) of relapses (CIR) at 5 years, B) of treatment related mortality (TRM) at 5 years.

Figure S4. Treatment outcome of patients with pediatric ABL-class fusion positive ALL comparing patients receiving hematopoietic stem cell transplantation (HSCT) to those not transplanted (No-HSCT). In the No-HSCT group, only those patients were considered without an event until the median waiting time to HSCT within the group receiving HSCT. Kaplan-Meier estimates: A) event free survival (EFS) at 5 years, B) overall survival (OS) at 5 years for the entire cohort. C) Cumulative incidence of relapses (CIR) at 5 years, D) of treatment related mortality (CI-TRM) at 5 years for the No-TKI group.

Figure S5. Treatment outcome of patients with pediatric ABL-class fusion positive ALL according to End of Induction Minimal residual disease (EoI-MRD). Kaplan-Meier estimates: A) event free survival (EFS) at 5 years, B) Cumulative incidence of relapses (CIR) and of treatment related mortality (CI-TRM) at 5 years

Figure S6. Treatment outcome of patients with pediatric ABL-class fusion positive ALL according to End of Consolidation Minimal residual disease (EoC-MRD). Kaplan-Meier estimate of the event free survival (EFS) at 5 years. The proportion of patients who received hematopoietic stem cell transplantation is shown.

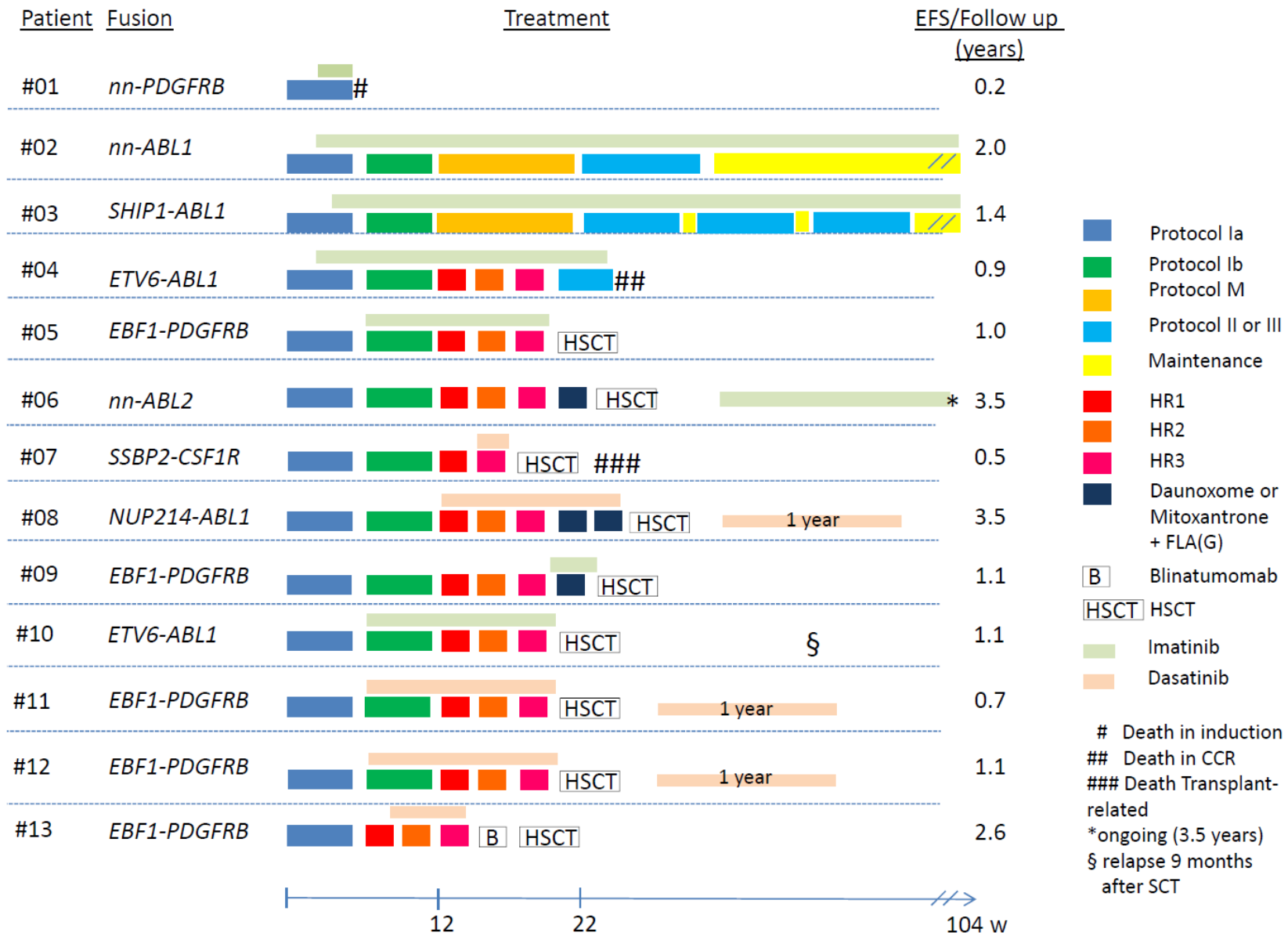


Figure S1

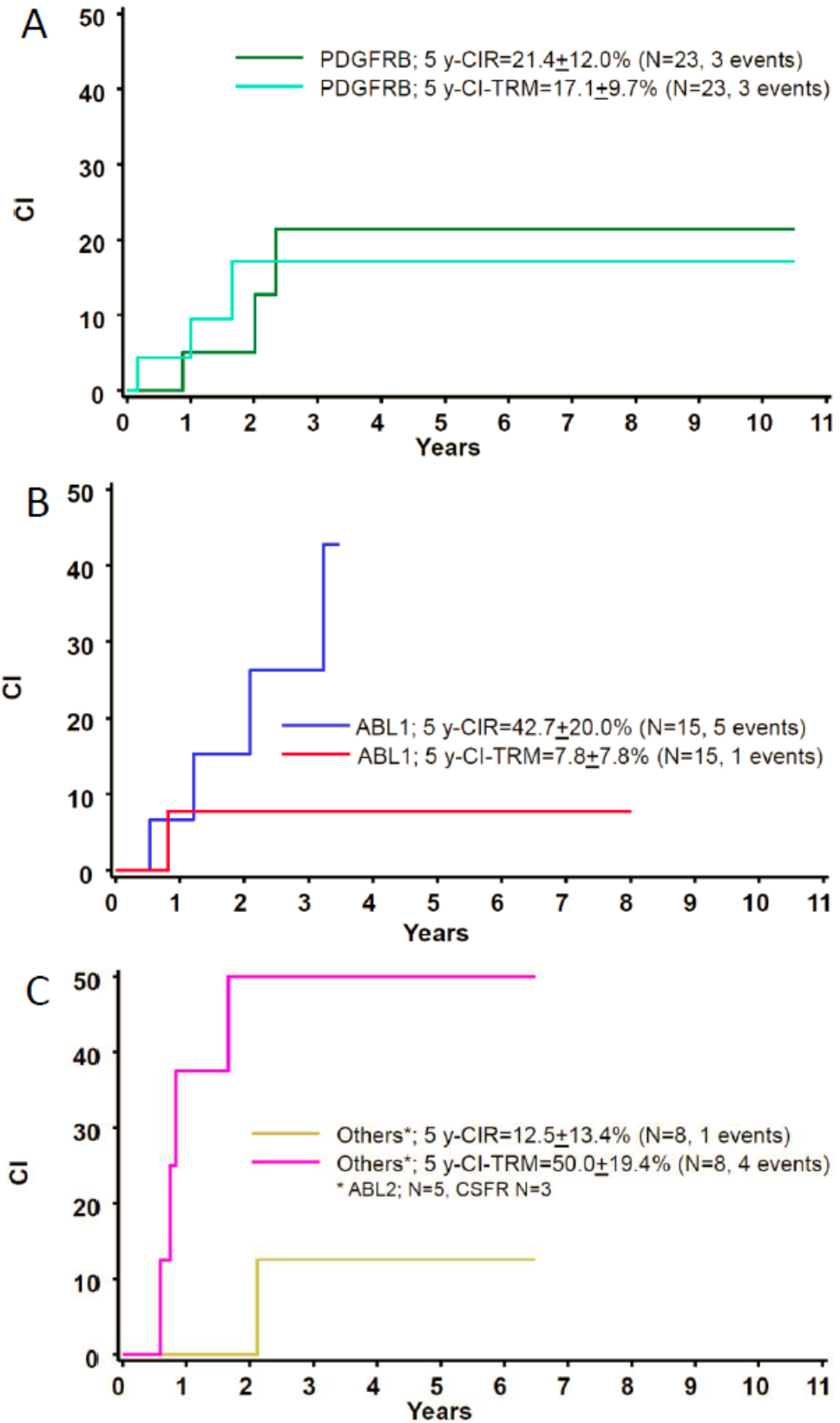


Figure S2

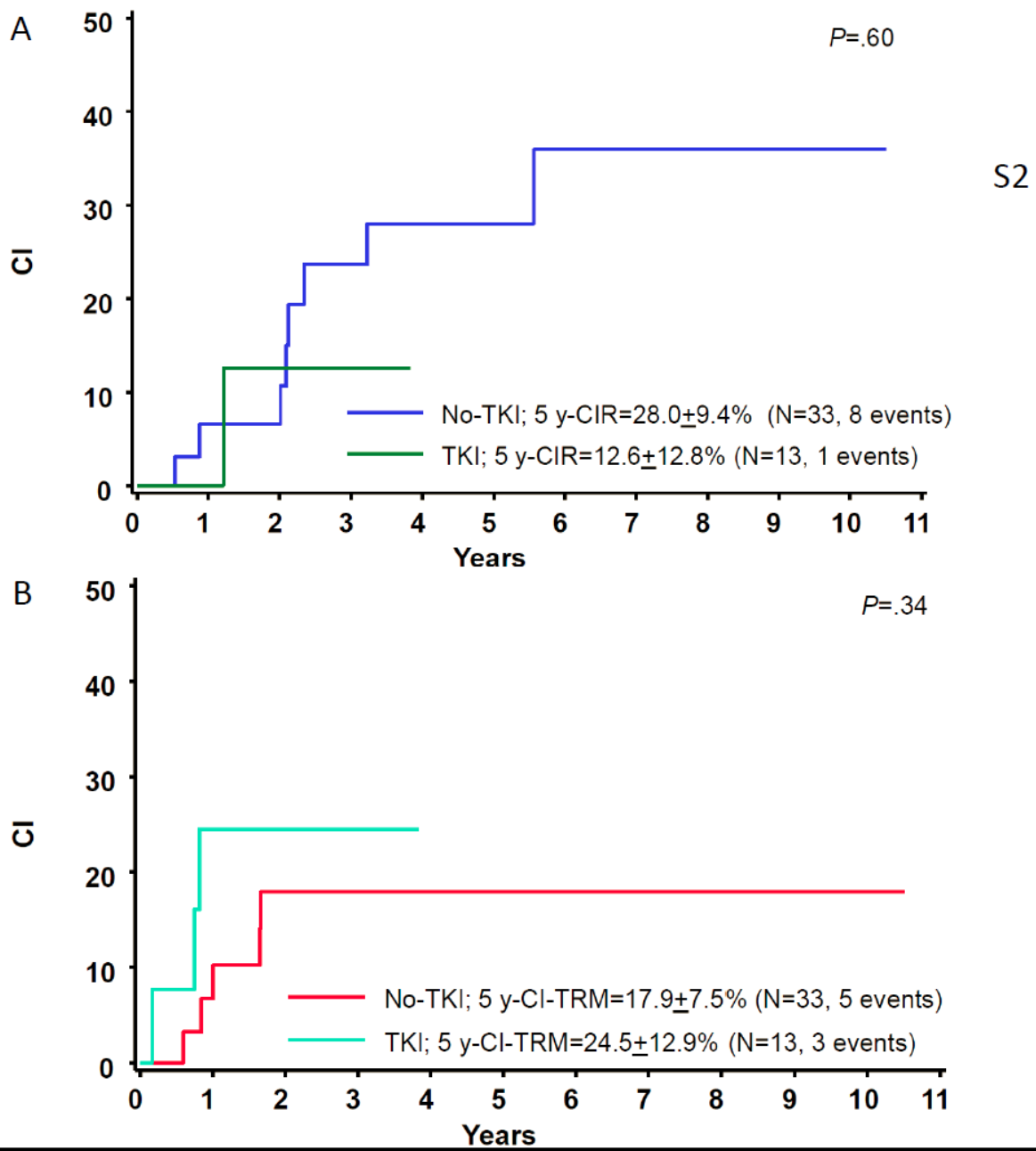


Figure S3

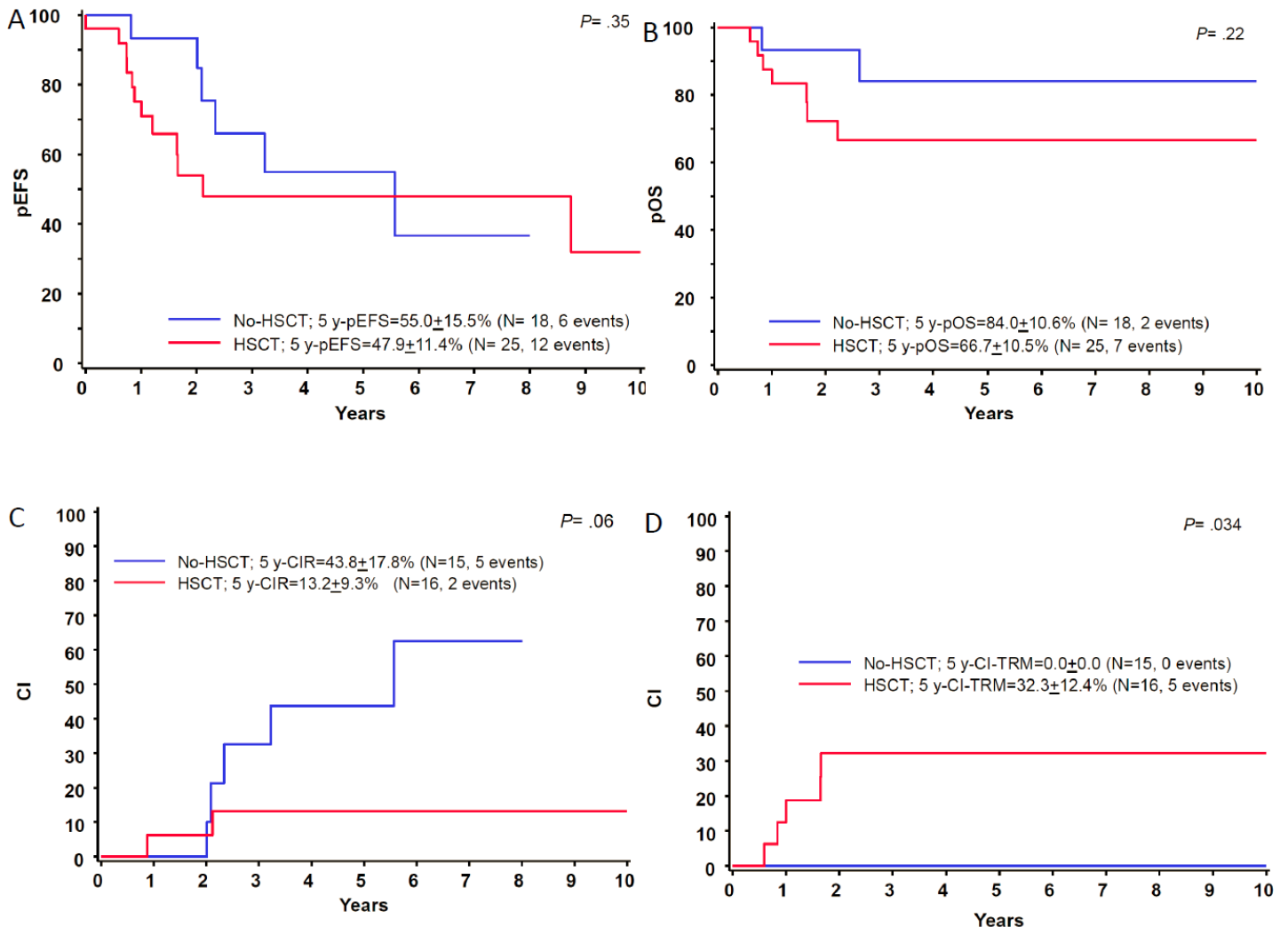


Figure S4

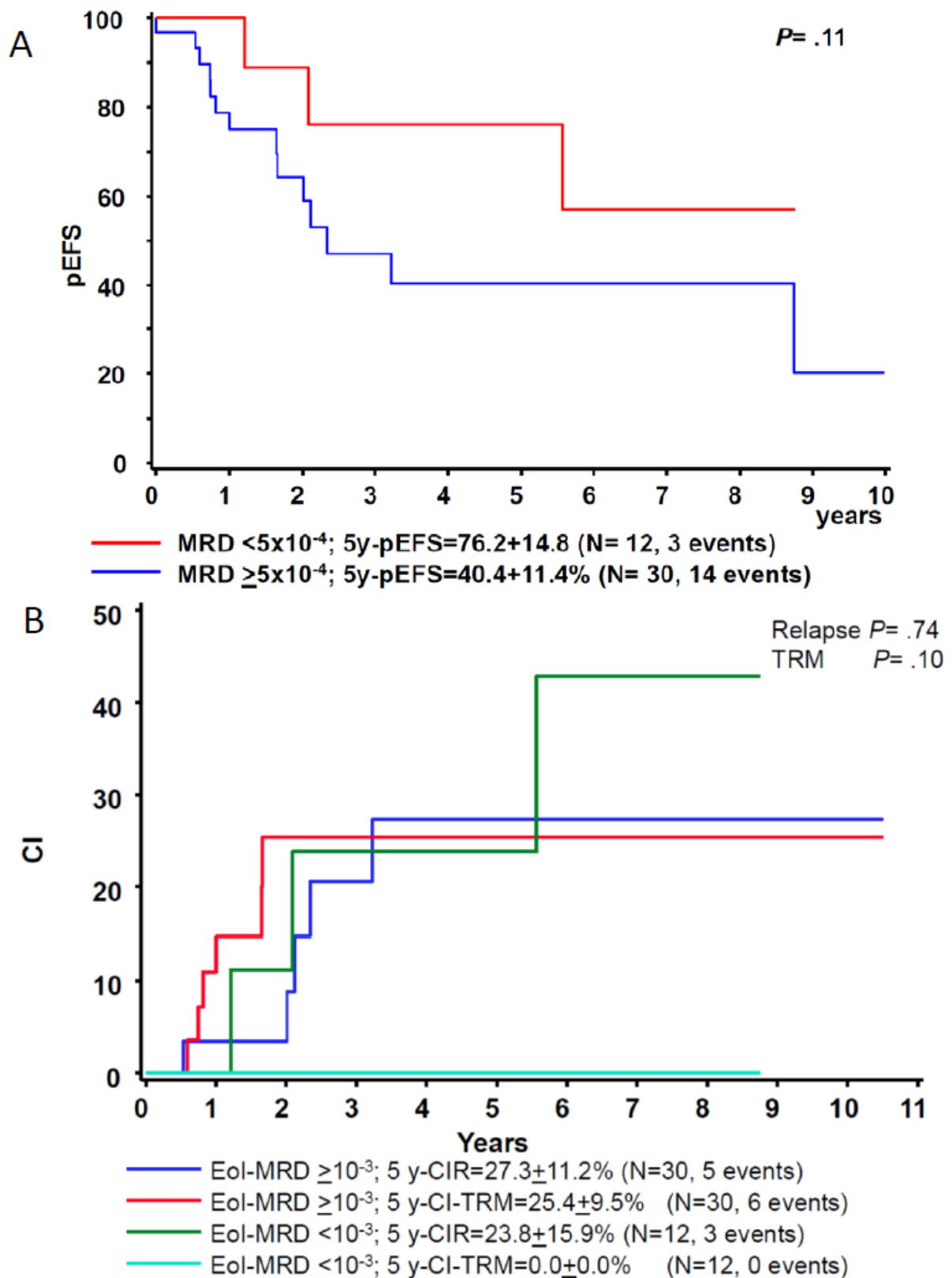


Figure S5

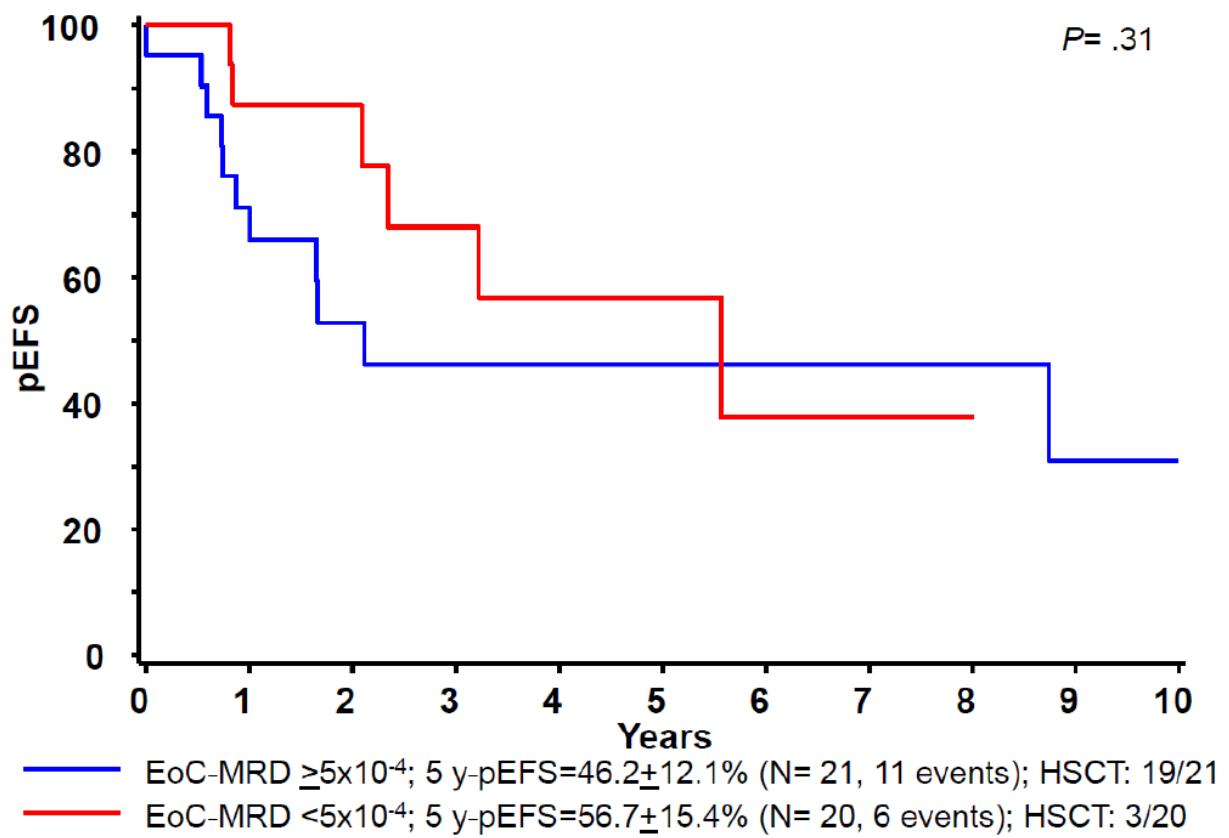


Figure S6