

# Risk adapted treatment of acute myelocytic leukemia (AML).

No registrations found.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON27294

### Source

NTR

### Brief title

HOVON 29 AML/SAKK 30/95

### Health condition

Acute myelocytic leukemia.

## Sponsors and support

**Primary sponsor:** Stichting Hemato-Oncologie voor Volwassenen Nederland (HOVON)

P/a HOVON Data Center

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## Intervention

## Outcome measures

### Primary outcome

CR rate.

### Secondary outcome

1. Disease-free survival;
2. Overall survival.

## Study description

### Background summary

Study phase: phase III;

Study objective:

Evaluation of the effect of GCSF during induction treatment, evaluation of endpoints after Cycle III chemotherapy, PBSCT and Allo BMT. Evaluation of validity of previously established risk parameters. Assessment of the practical applicability of PBSCT in patients with AML. Assessment of the outcome after Allo BMT in comparison to PBSCT and Cycle III chemotherapy.

Patient population:

patients with newly diagnosed de novo AML, age 15-60 yrs inclusive.

Study design:

prospective, multicenter, randomized.

Duration of treatment:

expected duration of induction treatment is about 2 months.

### **Study objective**

The hypotheses to be tested are that the outcome:

1. In arm B is better than in arm A;
2. Following PBSCT is better than following Cycle III chemotherapy.

### **Study design**

N/A

### **Intervention**

Patients (except AML-M3 or t(15;17)) will be randomized on entry between:

Arm A:

Cycle I: idarubicin + cytarabin

Cycle II: amsacrin + cytarabin

Arm B:

Cycle I: idarubicin + cytarabin + G-CSF

Cycle II: amsacrin + cytarabin + G-CSF

Patients with AML-M3 or t(15;17) will receive arm A treatment.

Patients in CR with good risk will proceed to Cycle III: Mitoxantrone + VP-16.

Patients in CR with poor risk and a HLA matched donor will proceed to Allo BMT.

Patients in CR with poor risk without a HLA matched donor will be randomized between :

Cycle III chemotherapy and  
Busulfan/Cyclophosphamide marrow ablative treatment and PBSCT.

## Contacts

### Public

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## Eligibility criteria

### Inclusion criteria

First randomization:

1. Patients with newly diagnosed de novo AML (including all cytological subtypes M0-M7);
2. Age 15-60 yrs inclusive;
3. Patients have given informed consent;
4. Leucocytosis (WBC  $>30 \times 10^9/l$ ) is not an exclusion criterium, but it will require postponement of G-CSF administration until WBC have declined to  $20 \times 10^9/l$  on chemotherapy.

Patients after completion of CYCLE II and peripheral blood stem cell collection are eligible for second randomization if:

5. Complete remission continues (marrow cytology and blood evaluation);
6. Poor risk status according to criteria of Appendix III;
7. Not eligible for genotypically HLA matched allogeneic BMT;
8. Absence of congestive heart failure or pulmonary disease;
9. Serum bilirubin as parameter of liver function abnormalities not elevated above 3 x normal value;
10. Number of blood cells collected ("transplant"; PBSCT) being at least  $2 \times 10^8$  nucleated cells/kg or  $10 \times 10^4$  CFU-GM per kg or  $2 \times 10^6$  CD34-positive cells per kg. In case of no or insufficient PBSCT, an adequate autologous marrow graft must have been collected;
11. Performance status of WHO grade 0, 1 or 2 at time of randomization;
12. Informed consent.

## **Exclusion criteria**

First randomization:

1. Patients with a concurrent active malignancy, except stage I cervix carcinoma and basocellular carcinoma;
2. Patients previously treated with chemotherapy;
3. Leukemia following from a documented myelodysplasia with a duration of more than 6 months;
4. Blastic crisis of chronic myeloid leukemia or leukemia developing from myeloproliferative diseases (e.g. polycythemia vera, myelofibrosis);
5. Renal or liver function abnormalities, i.e., creatinine and bilirubin of more than 3 x normal value, except if directly attributable to the leukemia (high serum lysosymes, hyperuricemia, leukemic cell infiltration);
6. HIV positive serology;
7. Patients with severe cardiac, pulmonary or neurologic disease;

8. Pregnancy.

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	30-03-1995
Enrollment:	1105
Type:	Actual

## Ethics review

Positive opinion	
Date:	09-09-2005
Application type:	First submission

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

## Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register	ID
NTR-new	NL253
NTR-old	NTR291
Other	: HO29
ISRCTN	ISRCTN76815071

## Study results

### Summary results

1. G.E. de Greef, W.L. van Putten, M. Boogaerts, P.C. Huijgens, L.F. Verdonck, E. Vellenga, M. Theobald, E. Jacky and B. Löwenberg; The Dutch-Belgian Hemato-Oncology Co-operative Group HOVON; The Swiss Group for Clinical Cancer Research SAKK. Criteria for defining a complete remission in acute myeloid leukaemia revisited. An analysis of patients treated in HOVON-SAKK co-operative group studies. *British Journal of Haematology*, 128(2), 184-191. 2005 (also data of HOVON 4 and 4A);<br>
2. D.A. Breems, W.L. van Putten, P.C. Huijgens, G.J. Ossenkoppele, G.E. Verhoef, L.F. Verdonck, E. Vellenga, G.E. de Greef, E. Jacky, J. van der Lelie, M.A. Boogaerts and B. Löwenberg. Prognostic Index for Adult Patients With Acute Myeloid Leukemia in First Relapse. *Journal of Clinical Oncology*, 2005 Jan 4; [Epub ahead of print] (also data of HOVON 4 and 4A);<br>
3. B. Löwenberg, W. van Putten, M. Theobald, J. Gmür, L. Verdonck, P. Sonneveld, M. Fey, H. Schouten, G. de Greef, A. Ferrant, T. Kovacsovics, A. Gratwohl, S. Daenen, P. Huijgens, M. Boogaerts; Dutch-Belgian Hemato-Oncology Cooperative Group; Swiss Group for Clinical Cancer Research. Effect of priming with granulocyte colony-stimulating factor on the outcome of chemotherapy for acute myeloid leukemia. *The New England Journal of Medicine*, 349(8), 743-752. 2003;<br>
4. E. Vellenga, W.L.J. van Putten, M.A. Boogaerts, S.M.G.J. Daenen, G.E.G. Verhoef, A. Hagenbeek, A.R. Jonkhoff, P.C. Huijgens, L.F. Verdonck, J. van der Lelie, H.C. Schouten, J. Gmür, P. Wijermans, A. Gratwoh, U. Hess, M.F. Fey and B. Löwenberg. Peripheral blood stem cell transplantation as an alternative to autologous marrow transplantation in the treatment of acute myeloid leukemia. *Bone Marrow Transplantation*, 23, 1279-1282. 1999.