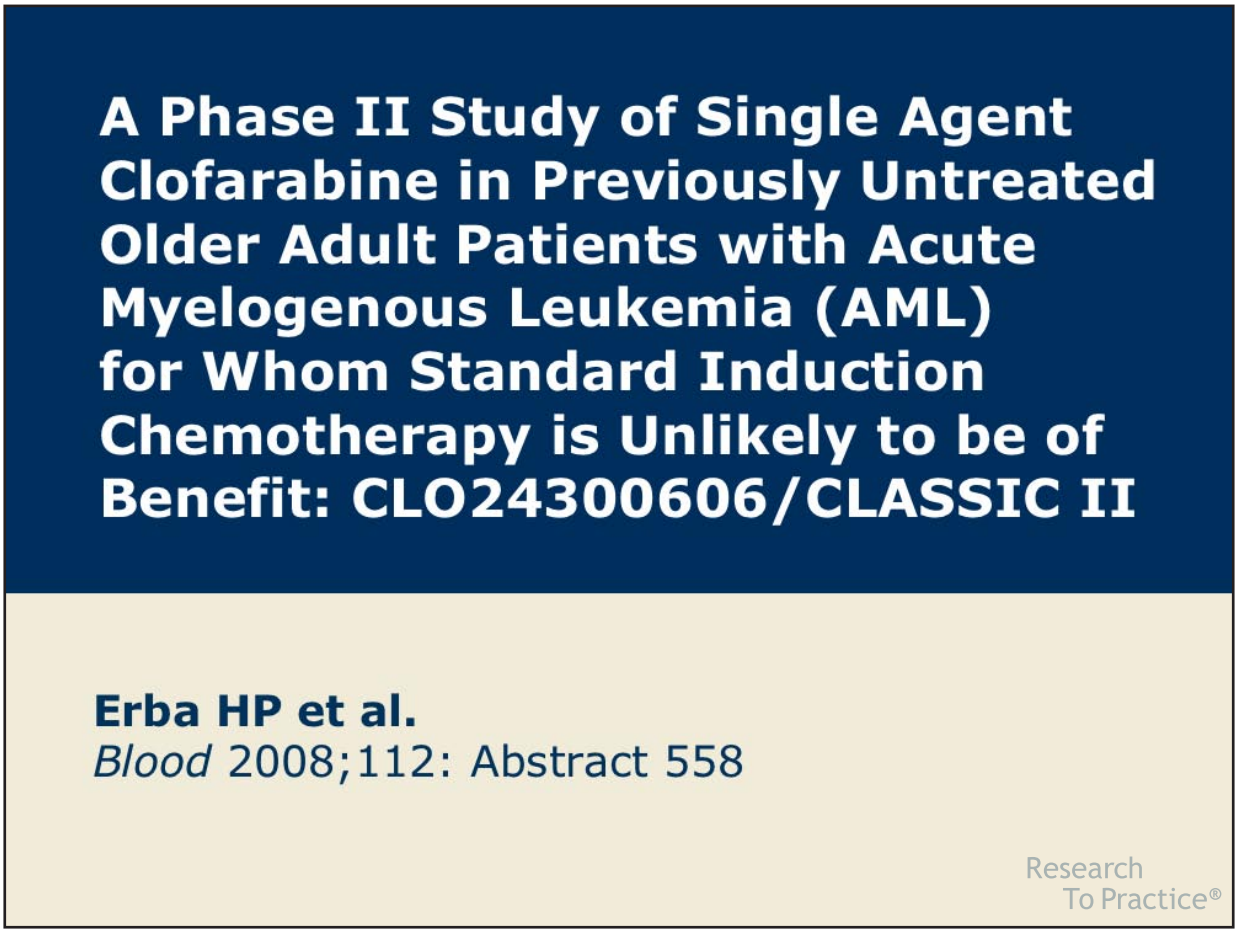
# Phase II Study of Clofarabine for Older Patients with Treatment-Naïve AML

## Presentations discussed in this issue:

Erba HP et al. **Phase II study of single agent clofarabine in previously untreated older adult patients with acute myelogenous leukemia (AML) unlikely to benefit from standard induction chemotherapy.** *Blood* 2008;112:558. **Abstract**

Kantarjian M et al. **Classic II: Updated remission duration and survival results of single agent clofarabine in previously untreated older adult patients with acute myelogenous leukemia and at least one unfavorable baseline prognostic factor.** *Haematologica* 2009;94;**Abstract 0835**.

## Slides from presentations at ASH 2008



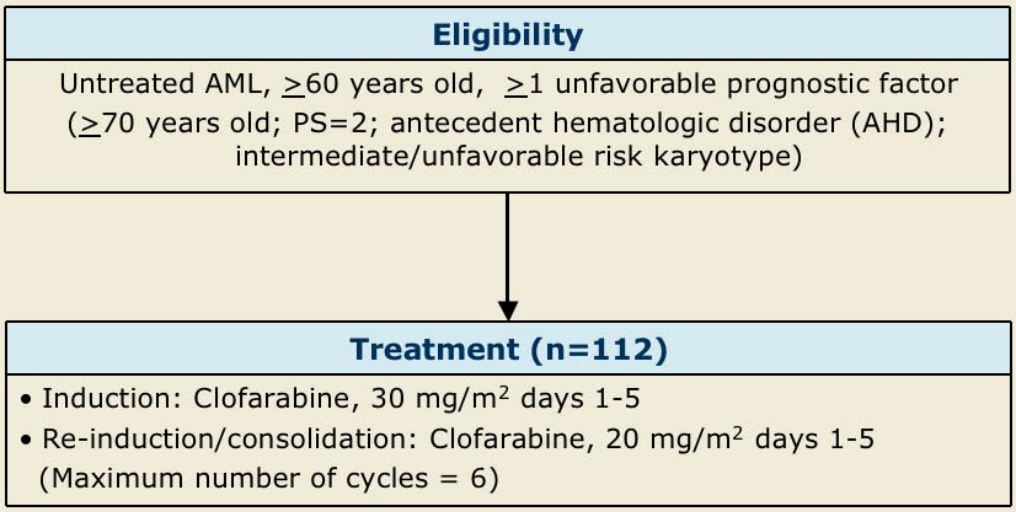
# Introduction

- Older patients with AML have inferior treatment outcomes due to increased incidence of patient- and disease-related adverse risk factors:
  - High treatment-related mortality rate
  - Lower CR rates and short remission duration
  - Inadequate outcomes with cytarabine and anthracycline induction therapy for patients with unfavorable prognostic risk factors
- **Current study objectives:**
  - Primary: Determine the overall remission rate (ORR) with clofarabine in patients ≥60 years old with untreated AML and ≥1 adverse prognostic factor
  - Secondary: 30-day mortality; disease-free survival (DFS); remission duration; overall survival (OS); safety and tolerability

Source: Erba HP et al. *Blood* 2008;112: Abstract 558

Research To Practice®

# Phase II Study of Clofarabine in Older Patients with AML




Source: Erba HP et al. *Blood* 2008;112: Abstract 558

Research To Practice®

# Results: Response by Independent Review Panel (IRRP) (n=112)

| Response | N | Response Rate, % (95% CI) |
|---|---|---|
| ORR | 51 | 46% (36, 55) |
| Complete remission (CR) | 42 | 38% (29, 47) |
| Complete remission with incomplete platelet recovery (CRp) | 9 | 8% (Not reported) |
| Partial remission | 4 | 4% (Not reported) |
| Remissions (CR + CRp) after cycle 1 (induction) | 38 | 8% (Not reported) |
| Remissions (CR + CRp) after cycle 2 (re-induction) | 13 | 25% (Not reported) |

Median time to ORR = 5.1 weeks
Median time to peripheral blood blast clearance: 5 days
Median duration of response for CR/CRp = 56 weeks*

Source: Erba HP et al. *Blood* 2008;112: Abstract 558
*Updated results, Kantarjian M et al. Haematologica 2009;94[S2];336. Abstract 0835



# Results: Survival

| Survival | |
|---|---|
| Median DFS (CR/CRp) | 37 weeks |
| Median OS | |
| All patients (n=112) | 41 weeks |
| Patients with CR/CRp | 59 weeks |
| Patients with CR | 72 weeks |
| 30-day mortality | |
| All patients (n=112) | 9.8% |
| Patients < 70 years old | 4.7% |
| Patients ≥ 70 years old | 13.0% |

Source: Kantarjian M et al. Haematologica 2009;94[S2];336. Abstract 0835

# Drug-Related Adverse Events in ≥10% of Patients

| Adverse Event | Number of Patients | | |
|---|---|---|---|
| | All Grades | Grade 3 | Grade 4/5 |
| Nausea | 69 | 4 | 0 |
| Febrile neutropenia | 49 | 46 | 2 |
| Vomiting | 43 | 0 | 0 |
| Diarrhea | 38 | 3 | 0 |
| Rash | 34 | 2 | 0 |
| Fatigue | 20 | 3 | 0 |
| Pneumonia | 17 | 9 | 5 |
| Anorexia | 15 | 3 | 0 |
| Mucosal inflammation | 13 | 3 | 0 |

Source: Erba HP et al. *Blood* 2008;112: Abstract 558



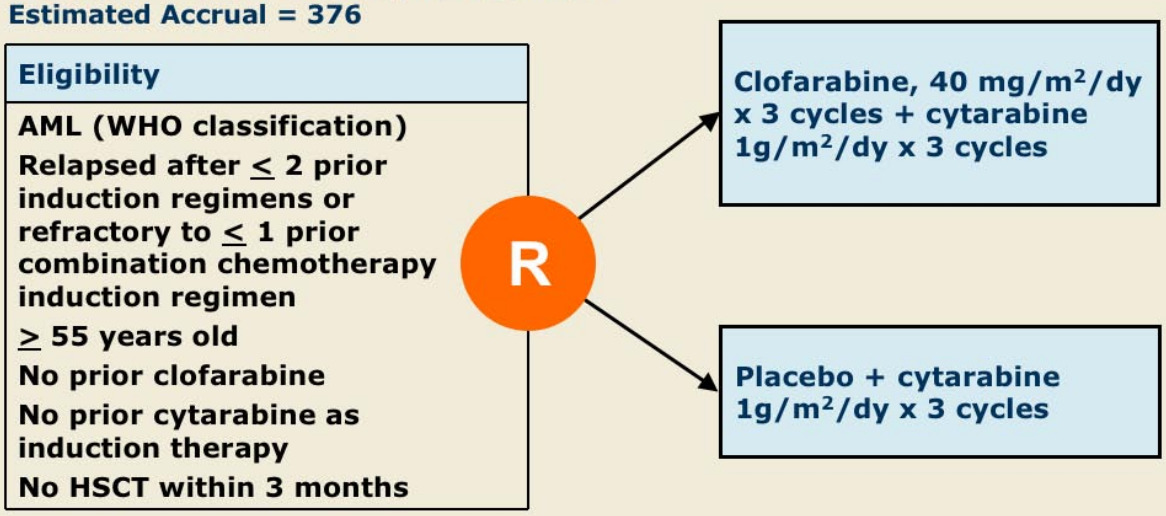
# Conclusions

- Single-agent clofarabine is an active agent with acceptable toxicity in a well-defined population of older patients with AML who do not typically benefit from standard induction chemotherapy
  - The response rate was not affected by adverse risk factors such as age ≥70 years, PS 2, AHD and unfavorable blast karyotype
  - DFS and OS compare favorably to historical experience with other regimens
    - Median DFS = 37 weeks; median OS = 41 weeks; all-cause 30-day mortality = 9.8%*
  - Complete remissions appear to be durable (median DOR = 56 weeks)
- A Phase III study of clofarabine with cytarabine versus cytarabine alone is currently open for enrollment: NCT00317642, CLASSIC I

Source: Erba HP et al. *Blood* 2008;112: Abstract 558
*Updated results, Kantarjian M et al. Haematologica 2009;94[S2];336. Abstract 0835

# CLASSIC I: Clofarabine and Cytarabine Versus Cytarabine for Relapsed/Refractory AML

**Protocol ID: CLO34100405; NCT00317642**
**Estimated Accrual = 376**




Source: NCI Physician Data Query; Clinicaltrials.gov, November 2009

Research To Practice®