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POSTER ABSTRACTS

616.ACUTE MYELOID LEUKEMIAS: INVESTIGATIONAL THERAPIES, EXCLUDING TRANSPLANTATION AND CELLULAR IMMUNOTHERAPIES

Venetoclax Plus '2 + 5' Modified Intensive Chemotherapy with Daunorubicin and Cytarabine in Fit Elderly Patients with Untreated De Novo Acute Myeloid Leukaemia: A Single-Centre Retrospective Analysis

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Background:
The treatment options for elderly patients with acute myeloid leukemia (AML) have been limited considering the poor tolerability of intensive standard chemotherapy. Recently, we report promising clinical outcomes in 13 untreated fit elderly patients with AML who received modified intensive induction of venetoclax in combination with '2 + 5' (daunorubicin and cytarabine) chemotherapy (modified DAV regimen), followed by venetoclax plus modified intermediate-dose cytarabine consolidation. Building on this foundation, we expanded the sample size and included 11 more patients who treated with modified DAV regimen and extended follow-up time to further explore the efficacy and safety of the modified DAV regimen for induction therapy in elderly AML patients.
Method:
24 elderly AML patients (aged ≥55 years) who were received induction chemotherapy that included daunorubicin (60mg/m2 days 1-2, intravenously), cytarabine (100 mg/m ^{2} days 1-5, intravenously), and venetoclax (100 mg day 3, 200 mg day 4, 400 mg days 5-10, orally) from March 2021 to May 2023 were retrospectively analyzed. After induction, patients received three cycles of venetoclax (400 mg days 1-14, orally) in combination with intermediate- dose cytarabine (1 g/m ^{2} days 1-3, intravenously) as consolidation treatment. Overall response rate, composite complete response (CRc) rate, overall survival (OS), duration of remission (DOR), and adverse events were analyzed.
Results:
24 de nove elderly patients with AML were were divided into favourable- (6), intermediate- (13), and adverse-risk groups (5) according to European LeukemiaNet (ELN) risk stratification. The cohort was consisted of 9 males (37.5%) and 15 females (62.5%) and the median (range) age of which was 64 (57-71) years. The last follow-up date was 15 July 2023, with 313 days of median follow-up.
After one cycle of induction, 20 patients (83.3%) achieved CR, 2 patients (8.33%) who achieved PR after one cycle of induction attained CR after receiving a second modified DAV induction. Thus, the CR rate was 91.7% after 2-cycle induction. 2 patients (8.33%) failed to achieve remission after induction therapy. In responders, 20 of the patients were measurable residual disease (MRD) negative after 2-cycle induction, detected by multi-parameter flow cytometry (MFC). Among 22 CR patients, 20 have completed the first consolidation cycle (one patient received consolidation regimen without venetoclax due to economic pressures, and another one did not receive consoliation treatment yet), 18 patients have completed the second consolidation cycle, and 16 patients have completed all cycles of consolidation chemotherapy. Of these, 3 patients relapsed during consolidation therapy and 4 patients relapsed after completion of consolidation therapy.
For the total of 24 patients, the median follow-up was 313 days. The median OS was not achieved and the median EFS was 384 days. Among the 16 patients who completed three courses of consolidation therapy, the median follow-up time was 314 days, and there were no deaths to date. The median OS was not achieved and the median EFS was 398 days.
The adverse events observed during the induction therapy in most patients were Grade 3-4 neutropenia (100%), anemia (100%), and thrombocytopenia (100%). For responders in the first induction cycle, the median (interquartile range [IQR]) time to blood cell count recovery (absolute neutrophil count ≥1 ×10 ^{9}/L and platelet count ≥50×10 ^{9}/L) in patients who had a

response following induction therapy was 20.0 (18.75-22.0) days. The most common non-haematological grade 3-4 adverse events observed during induction included febrile neutropenia (65.2%), pneumonia (34.8%), and constipation (15.4%).
Conclusions:
Our study demonstrated promising response and safety of modified DAV therapy in elderly fit de novo AML patients.

Disclosures No relevant conflicts of interest to declare.

	Overall (n=24)	Favourable risk (n=6)	Intermediate risk (n=13)	Adverse risk (n=5)
Overall response rate	91.7% [22]	100% [6]	84.6% [11]	100% [5]
Composite complete response rate	82.6% [20]	100% [6]	69.23% [9]	100% [5]
Complete response	82.6% [20]	100% [6]	69.23% [9]	100% [5]
Complete response with incomplete blood cell count recovery	0	0	0	0
Partial Response	8.33% [2] *	0	15.38% [2]	0
No response	8.33% [2]	0	15.38% [2]	0
Died during induction therapy	0	0	0	0
Measurable residual disease-negative after induction in patients with response	94.45% [21]	100% [5]	90.91% [10]	100% [5]
Duration of response, days	370	NR	356	370
Overall survival time, days	NR	NR	NR	NR
Event free survival time, days	384	NR	359	384
Time to blood cell count recovery after induction, days, %, median (IQR)	20.0 (18.75-22.0)	19.0 (18.25-19.75)	20.0 (16.0-23.0)	23.0 (21.0-25.0)
Time to absolute neutrophil count recovery to ≥ 0.5× 109/L, days, median (IQR)	17.0 (15.0-18.25)	14.5 (13.25-15.75)	17.0 (16.519.0)	18.0 (16.5-19.0)
Time to absolute neutrophil count recovery to ≥1 × 109/L, days, median (IQR)	18.0 (16.0-18.75)	16.0 (15.25-17.5)	17.5 (16.25-21.25)	19.5 (17.5-21.5)
Time to platelet count recovery to 20 × 109/L, days, median (IQR)	14.0 (12.5-16.0)	14.5 (14.0-15.25)	13.5 (12.0-16.0)	13.0 (11.5-15.0)
Time to platelet count recovery to 50 × 109/L, days, median (IQR)	18.0 (15.0-18.25)	17.0 (15.0-18.0)	16.6 (14.25-18.0)	19.0 (18.5-19.0)
Time to platelet count recovery to 100 × 109/L, days, median (IQR)	19.0 (17.0-21.75)	19.0 (18.0-20.0)	17.5 (16.0-19.75)	22.0 (21.0-25.0)

*2 PR patients achieved CR (MRD-) after secondary induction, the CRc rate was 91.7% after 2-cycle induction

Figure 1

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