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FIVE-YEAR FINAL RESULTS OF A PHASE 3 STUDY OF CPX-351 VERSUS 7+3 IN OLDER ADULTS WITH NEWLY DIAGNOSED HIGH-RISK/SECONDARY ACUTE MYELOID LEUKEMIA (AML)

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Objectives: CPX-351 (Vyxeos®; daunorubicin [D] and cytarabine [C] liposome for injection for intravenous use) is approved by the US FDA for the treatment of adults with newly diagnosed therapy-related AML or AML with myelodysplasia-related changes. Primary analysis of the pivotal phase 3 study (NCT01696084) that formed the basis for approval evaluated patients (pts) 60–75 y with newly diagnosed high-risk/secondary AML; after 20.7 mo median follow-up, induction then consolidation with CPX-351 significantly improved median overall survival (OS) vs conventional 7+3, with a comparable safety profile. We now report the prospectively planned, final 5-y follow-up results, including outcomes by age. **Materials and Methods:** Pts were randomized 1:1 to receive 1–2 induction cycles of CPX-351 (100 units/m² [C 100 mg/m² + D 44 mg/m²] as a 90-minute infusion on Days 1, 3, & 5 [2nd induction: Days 1 & 3]) or 7+3 (C 100 mg/m²/d continuously for 7 d + D 60 mg/m² on Days 1–3 [2nd induction: 5+2]). Pts achieving complete remission (CR) or CR with incomplete platelet/neutrophil recovery (CRi) could receive up to 2 consolidation cycles. Pts received hematopoietic cell transplantation (HCT) at the physician's discretion. Pts were followed until death or up to 5 y after randomization. **Results:** 309 pts were randomized to CPX-351 (n = 153) or 7+3 (n = 156). The Kaplan-Meier (KM)-estimated survival rates were higher for CPX-351 vs 7+3 at 3 y (21% vs 9%) and 5 y (18% vs 8%). Among pts who died, the most common primary cause of death was progressive leukemia (CPX-351: 56%; 7+3: 53%). After a reverse KM-estimated median follow-up of 60.65 mo, improved median OS with CPX-351 vs 7+3 was maintained (9.33 vs 5.95 mo; HR = 0.70 [95% CI: 0.55, 0.91]), with

an HR that was very stable and consistent with the primary analysis. Improved median OS with CPX-351 vs 7+3 was also maintained in pts 60–69 y (9.59 vs 6.87 mo; HR = 0.73 [95% CI: 0.54, 0.99]) and 70–75 y (8.87 vs 5.62 mo; HR = 0.52 [95% CI: 0.34, 0.77]). Among pts who underwent HCT (CPX-351: 35%; 7+3: 25%), the KM-estimated survival rate landmarked from the HCT date was higher for CPX-351 vs 7+3 at 3 y (56% vs 23%), and median OS landmarked from the HCT date was not reached for CPX-351 vs 10.25 mo for 7+3 (HR = 0.51 [95% CI: 0.28, 0.90]). Among pts who achieved CR+CRi (CPX-351: 48%; 7+3: 33%), the KM-estimated survival rate was higher for CPX-351 vs 7+3 at 3 y (36% vs 23%) and at 5 y (30% vs 19%), and median OS was longer with CPX-351 vs 7+3 (21.72 vs 10.41 mo; HR = 0.59 [95% CI: 0.39, 0.88]). Further, 41/73 (56%) pts in the CPX-351 arm and 24/52 (46%) in the 7+3 arm who achieved CR+CRi proceeded to HCT; in these pts, median OS landmarked from the HCT date was not reached for CPX-351 vs 11.65 mo for 7+3 (HR = 0.50 [95% CI: 0.26, 0.97]). **Discussion:** After 5 y of follow-up, improved OS with CPX-351 vs conventional 7+3 chemotherapy was maintained in this phase 3 study, overall and regardless of pt age, in pts who underwent HCT, and among pts who had HCT and those who achieved CR+CRi. The longer OS for CPX-351 vs 7+3 in pts who had HCT and those who achieved CR+CRi suggests potentially deeper responses may be achieved with CPX-351. **Conclusion:** These data support prior evidence that CPX-351 can produce or contribute to long-term remission and survival in older pts with newly diagnosed high-risk/secondary AML.

<https://doi.org/10.1016/j.htct.2020.10.257>

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HEMATOLOGIA MULTIPROFISSIONAL: UM ESTUDO DE CASO DE LLA



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Objetivo: Como em outras doenças hematológicas, a LLA tem suas peculiaridades de assistência, tratamento e transtornos sociais. Este estudo tem como objetivo descrever um caso de LLA do tipo B durante internação no Hemorio envolvendo a atuação das três áreas da residência: biomedicina, enfermagem e serviço social. **Método:** Qualitativo do tipo estudo de caso. As residentes acompanharam o paciente de codinome Tiê. Foram utilizados dados de prontuário, exames laboratoriais, exame físico e ficha social; além de observação em atividades práticas da residência. **Resultados:** Durante o período estudado foi possível fazer o seguinte relato: Tiê, sexo masculino, 60 anos, cor branca, hipertenso, 80 kg, 153 cm, brasileiro, natural do estado da Paraíba, reside no município de Itaboraí/RJ, religião católica, divorciado, quatro filhos, relatou ter ensino fundamental incompleto e trabalhar como auxiliar de serviços gerais. Proveniente do Hospital Municipal Dr. Celso Martins localizado em Cachoeiras de Macacu. Deu entrada no Serviço de Pronto Atendimento (SPA) do Hemorio no dia 07/03/2019 com indicação clínica de leucose aguda. Encaminhado à internação no 5º andar. Tiê teve seu

diagnóstico fechado durante a internação. O Laboratório de Citometria de Fluxo realizou imunofenotipagem investigativa para leucemias com amostra de sangue periférico. Com isso, foi detectado 68% de blastos linfóides e marcadores compatíveis com Leucemia Linfoblástica Aguda de células B. Ainda nesse período, foi realizada entrevista e ficha social do paciente pelo Serviço Social. Constatou-se, que apesar de ter passado um mês internado em outra unidade, Tiê ainda não havia dado entrada em auxílio doença. O idoso e sua família apresentaram queixas sobre dificuldades financeiras. Foram orientados sobre a necessidade de requerimento deste benefício. Além do direito à saque do FGTS e PIS (devido à neoplasia maligna), e ainda do TFD – Tratamento Fora de Domicílio (município de origem do paciente deve se responsabilizar por seu deslocamento ao município da unidade em que faz tratamento). No geral, Tiê apresentou hemogramas com oscilações de hemoglobina, plaquetas e leucócitos de acordo com as transfusões realizadas. Por fim, Tiê recebeu alta hospitalar em 10/04 com parâmetros laboratoriais e hemodinâmicos aceitáveis. Retornou em 15/04 para realização de exames agendados no SPA relatando episódios diarreicos. Teve que permanecer internado e seguiu relatando dificuldades financeiras por não ter conseguido realizar o saque do FGTS e impasses no processo de auxílio-doença. **Conclusão:** A partir do acompanhamento de Tiê, foi possível concluir que o trabalho transdisciplinar é essencial para atenção integral ao paciente hematológico, visto que a doença envolve outros fatores além do físico. É necessário olhar para cada paciente como um todo, não só para suas condições clínicas; problemas financeiros podem acarretar em falta de fé, otimismo e persistência por parte do paciente. Além do tratamento da LLA que pode incluir quimioterapia, transfusão sanguínea, antibioticoterapia; o suporte familiar pode fazer a diferença. No caso descrito, Tiê possui quatro filhos que se revezavam para acompanhá-lo na internação e ainda contava com uma irmã que o ajudava na alimentação quando em casa. Isso o fez ficar mais confiante. Portanto, o presente estudo pode ajudar na motivação de profissionais da assistência a pacientes hematológicos a ter uma atuação integrada, visando o bem estar geral dos pacientes.

<https://doi.org/10.1016/j.htct.2020.10.258>

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HIGH FREQUENCY OF LEUKEMIC STEM CELLS IS ASSOCIATED WITH ADVERSE PROGNOSIS IN A BRAZILIAN COHORT OF ACUTE MYELOID LEUKEMIA WITH NORMAL KARYOTYPE

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Introduction: Normal karyotype in Acute Myeloid Leukemia (NK-AML) is present in 40-50% patients, commonly classified as intermediate-risk and for whom prognosis is less predictable. Other prognostic markers in NK-AML could refine disease assessment and therapeutic choices. Leukemic Stem Cells (LSCs) have been associated with initiation and persistence of AML. In this study, we aimed to assess the prognostic impact of the proportion of LSCs at diagnosis. **Methods:** Patients with de novo NK-AML (n = 54, 19-71 years old) from 7 Brazilian centers enrolled in the International Consortium of Acute Leukemias Study-IC-AML2015 had bone marrow samples taken to assessment of FLT3 and NPM1 mutations, RUNX1/RUNX1T1 and CBFB-MYH11 rearrangements, karyotype analysis by classical cytogenetics and immunophenotyping by multiparametric flow cytometry. Data regarding ELN2017-based risk stratification (without TP53, ASXL1 and RUNX1) and overall survival (OS) were collected. Treatment comprised two cycles of induction, and consolidation with one or two cycles of chemotherapy and/or BM transplantation, according to clinical appraisal. LSCs were evaluated according to the percentage of CD34+/CD38low/CD123+ cells among total blast cells (from SSC versus CD45 gating population) and to their absolute numbers. Analyses were performed with SPSS (V.20), considering a p-value of 0.05. **Results:** Patients were classified in two groups (LSC<1%; LSC>1%). The presence of LSC>1% was associated with higher WBC ($49.2 \times 10^9/\mu\text{L} \times 13.6 \times 10^3/\mu\text{L}$, $p = 0.02$), with combined NMP1 and FLT3-ITD mutations (88.9% of patients x 11.1%, $p < 0.001$) and with high FLT3-ITD allelic ratio (44.4% x 4.4%, $p < 0.001$). Complete remission rate 69% (n = 31) among the LSC<1% group, and 34% (n = 3) among the LSC>1% group. Within the whole cohort, those with LSC >1% (n = 9) had a mean OS of 6.3 months, while a 24.2 months OS was observed in patients of the LSC <1% group (n = 45). Among intermediate-risk patients, those with LSC >1% (n = 6) had a mean OS of 7.1 months, whereas the LSC <1% group (n = 25) had a 23.9 months OS. The logrank test demonstrated, however, equality of survival distributions

