2021 Virtual Nursing Forum:
**Advancing Oncology Nursing in Hematologic Malignancies™**

# Financial Toxicity in the Care of Patients with Hematologic Malignancies

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*City of Hope National Medical Center*

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# Learning Objectives

1. Review prevalence, risk factors, and consequences related to financial toxicity in patients treated for hematologic malignancies
2. Identify financial implications of new therapies approved to treat hematologic malignancies
3. Discuss techniques to reduce financial toxicity for patients

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# Financial Toxicity

- The National Cancer Institute defines financial toxicity as "problems a patient has related to the cost of medical care." (NCI, 2020)
- Khera's definition is "adverse economic consequences resulting from medical treatment" (Khera, 2014)
- Cancer is one of the five most expensive medical conditions to treat in the United States (NCI, 2021)
- The average cost of cancer medications in the United States during the 1980s was $100/month, by 2009 it had increased to $18,000/month (Lentz et al, 2019)
- The annual estimated cost of cancer care in the United States for 2020 was $157 billion (nabr.org, 2020)

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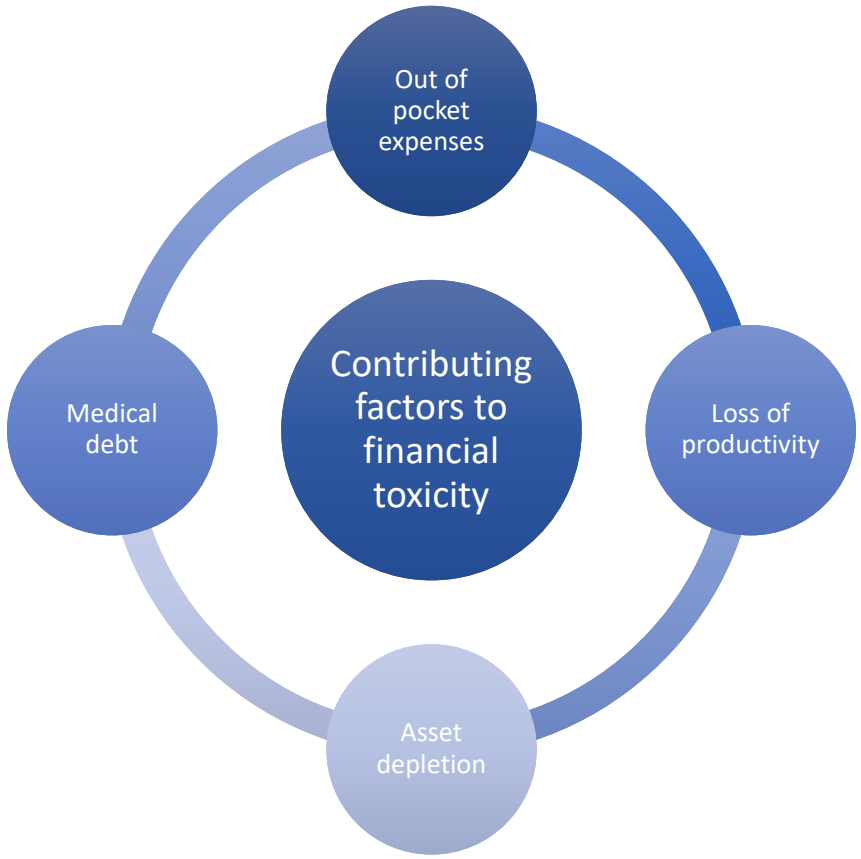
# Prevalence of Financial Toxicity


Cancer patients have a higher probability of experiencing financial toxicity than those without cancer (Sedhom et al., 2021)

Approximately one third of cancer patients with advanced disease state financial toxicity as more severe than their physical and emotional suffering (Sedhom et al., 2021)

22-64% of patients reported concern about paying for medical bills (NCI, 2020)

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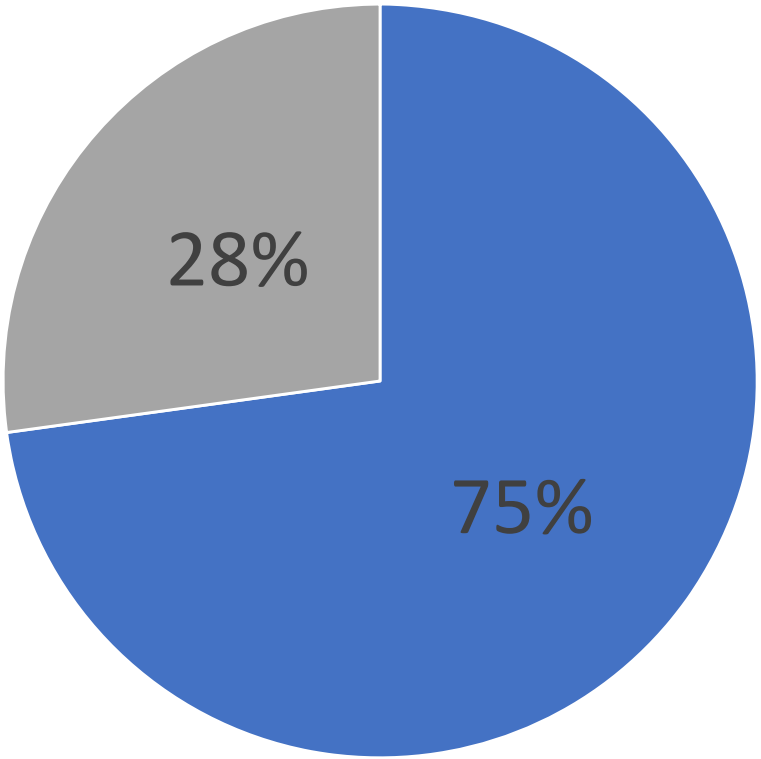


Henrikson et al., 2014

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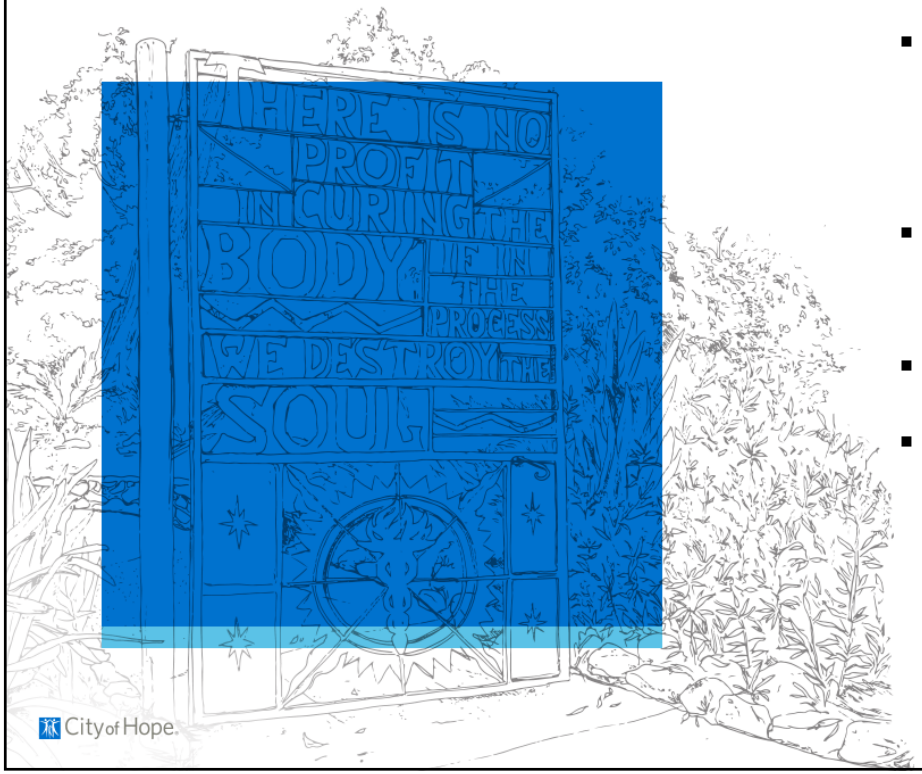
# Discussing the Cost of Care




- Is this a symptom of care that should be assessed in addition to the physical side effects of nausea, pain, fatigue etc.?
- Barriers include knowledge deficits, time, patient's desire to share financial details
- Clinical trials
- Tools: Distress thermometer, Comprehensive Score for Financial Toxicity (COST), and Personal Financial Wellness (PFW)

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NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®)

# Distress Management

Version 2.2021 — January 5, 2021

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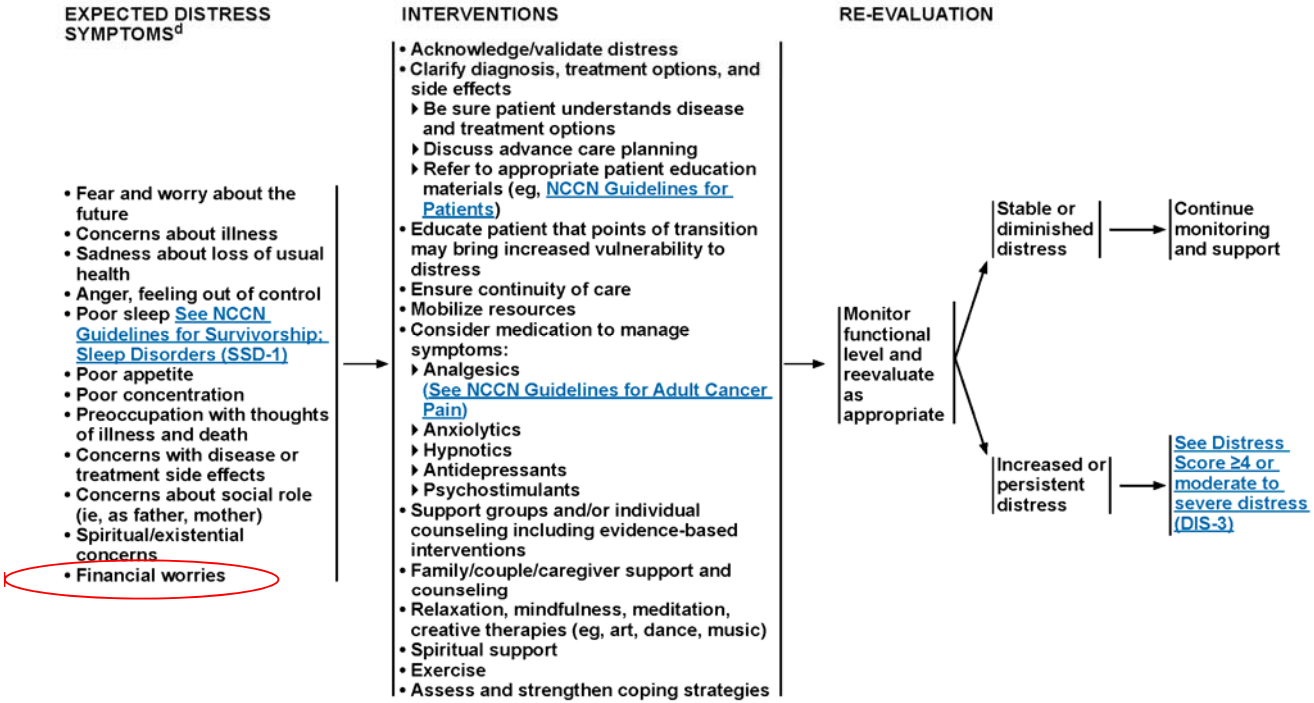
## MANAGEMENT OF EXPECTED DISTRESS SYMPTOMS




[d] See Psychosocial Distress Patient Characteristics (DIS-B).

**Note: All recommendations are category 2A unless otherwise indicated.**
**Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.**

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# Distress Management

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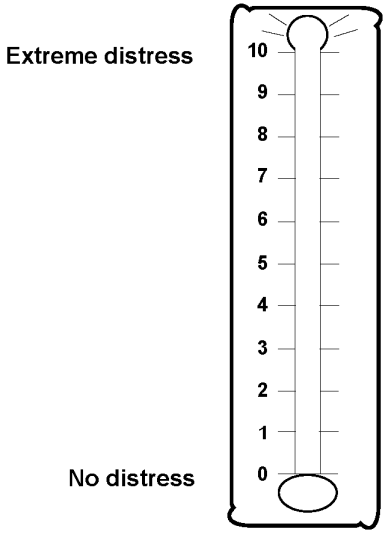
## NCCN DISTRESS THERMOMETER

Distress is an unpleasant experience of a mental, physical, social, or spiritual nature. It can affect the way you think, feel, or act. Distress may make it harder to cope with having cancer, its symptoms, or its treatment.

Instructions: Please circle the number (0–10) that best describes how much distress you have been experiencing in the past week including today.




## PROBLEM LIST

Please indicate if any of the following has been a problem for you in the past week including today.
Be sure to check YES or NO for each.

| YES | NO | Practical Problems |
|---|---|---|
| ❑ | ❑ | Child care |
| ❑ | ❑ | Food |
| ❑ | ❑ | Housing |
| ❑ | ❑ | Insurance/financial |
| ❑ | ❑ | Transportation |
| ❑ | ❑ | Work/school |
| ❑ | ❑ | Treatment decisions |
| | | **Family Problems** |
| ❑ | ❑ | Dealing with children |
| ❑ | ❑ | Dealing with partner |
| ❑ | ❑ | Ability to have children |
| ❑ | ❑ | Family health issues |
| | | **Emotional Problems** |
| ❑ | ❑ | Depression |
| ❑ | ❑ | Fears |
| ❑ | ❑ | Nervousness |
| ❑ | ❑ | Sadness |
| ❑ | ❑ | Worry |
| ❑ | ❑ | Loss of interest in usual activities |
| ❑ | ❑ | **Spiritual/Religious Concerns** |

| YES | NO | Physical Problems |
|---|---|---|
| ❑ | ❑ | Appearance |
| ❑ | ❑ | Bathing/dressing |
| ❑ | ❑ | Breathing |
| ❑ | ❑ | Changes in urination |
| ❑ | ❑ | Constipation |
| ❑ | ❑ | Diarrhea |
| ❑ | ❑ | Eating |
| ❑ | ❑ | Fatigue |
| ❑ | ❑ | Feeling swollen |
| ❑ | ❑ | Fevers |
| ❑ | ❑ | Getting around |
| ❑ | ❑ | Indigestion |
| ❑ | ❑ | Memory/concentration |
| ❑ | ❑ | Mouth sores |
| ❑ | ❑ | Nausea |
| ❑ | ❑ | Nose dry/congested |
| ❑ | ❑ | Pain |
| ❑ | ❑ | Sexual |
| ❑ | ❑ | Skin dry/itchy |
| ❑ | ❑ | Sleep |
| ❑ | ❑ | Substance use |
| ❑ | ❑ | Tingling in hands/feet |

Other Problems: _____

_____

**Note: All recommendations are category 2A unless otherwise indicated.**
**Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.**

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## PSYCHOSOCIAL DISTRESS PATIENT CHARACTERISTICS[1]

### PATIENTS AT INCREASED RISK FOR DISTRESS

- History of psychiatric disorder or substance use disorder
- History of depression/suicide attempt
- History of trauma and/or abuse (physical, sexual, emotional, verbal)
- Cognitive impairment
- Communication barriers[2]
- Severe comorbid illnesses
- Social issues:
  - Family/caregiver conflicts
  - Inadequate social support
  - Social isolation
  - Living alone
  - Financial problems
  - Limited access to medical care
  - Young or dependent children
  - Younger age[3]
  - Sexual health and fertility concerns[3]
  - Immigration
  - Discrimination (eg, racial, gender)
  - Loss of stable housing/shelter/living environment
  - Current substance use
  - Other stressors
- Spiritual/religious concerns
- Uncontrolled symptoms
- Cancer type associated with risk of depression (eg, pancreatic cancer, head and neck cancer)

### PERIODS OF INCREASED VULNERABILITY

- *Finding and investigating a suspicious* symptom
- During diagnostic workup
- Finding out the diagnosis
- Advanced cancer diagnosis
- Learning about genetic/familial cancer risk
- Awaiting treatment
- Increase in symptom burden
- Significant treatment-related complication(s)
- Admission to/discharge from hospital
- Change in treatment modality
- Treatment failure
- End of active treatment
- Medical follow-up and surveillance
- Transition to survivorship
- Recurrence/progression
- Transition to end-of-life care

[1]For site-specific symptoms with major psychosocial consequences, see Holland JC, Golant M, Greenberg DB, et al. Psycho-oncology: A quick reference on the psychosocial dimensions of cancer symptom management. Oxford University Press, 2015.
[2]Communication barriers include language, literacy, and physical barriers.
[3]See NCCN Guidelines for Adolescent and Young Adult (AYA) Oncology.

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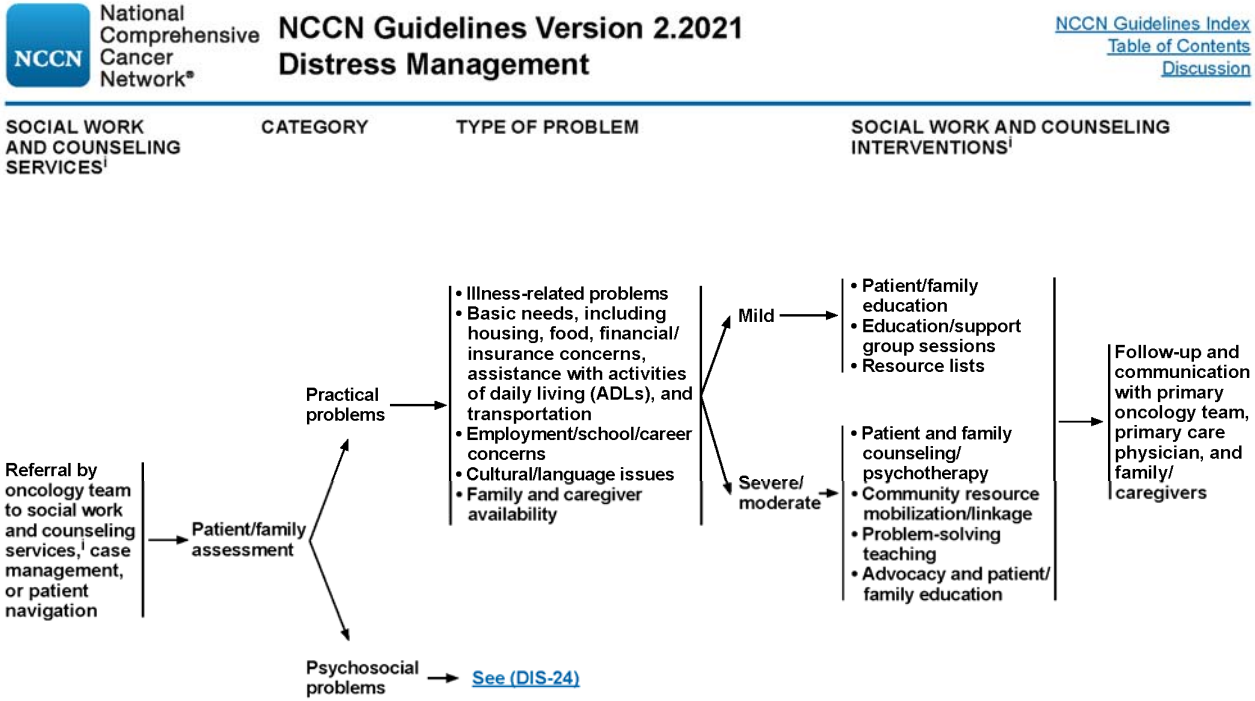


[i]Social work and counseling services include mental health care as described in the psychological/psychiatric treatment guidelines (See DIS-5).

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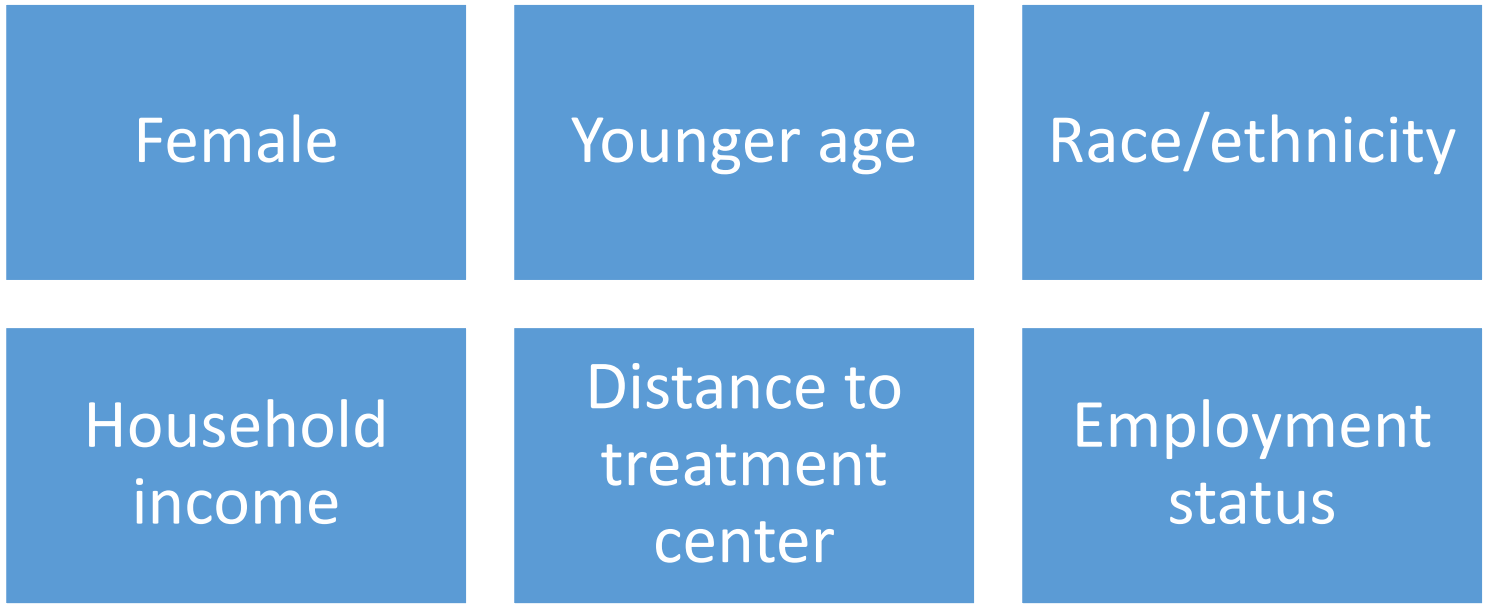
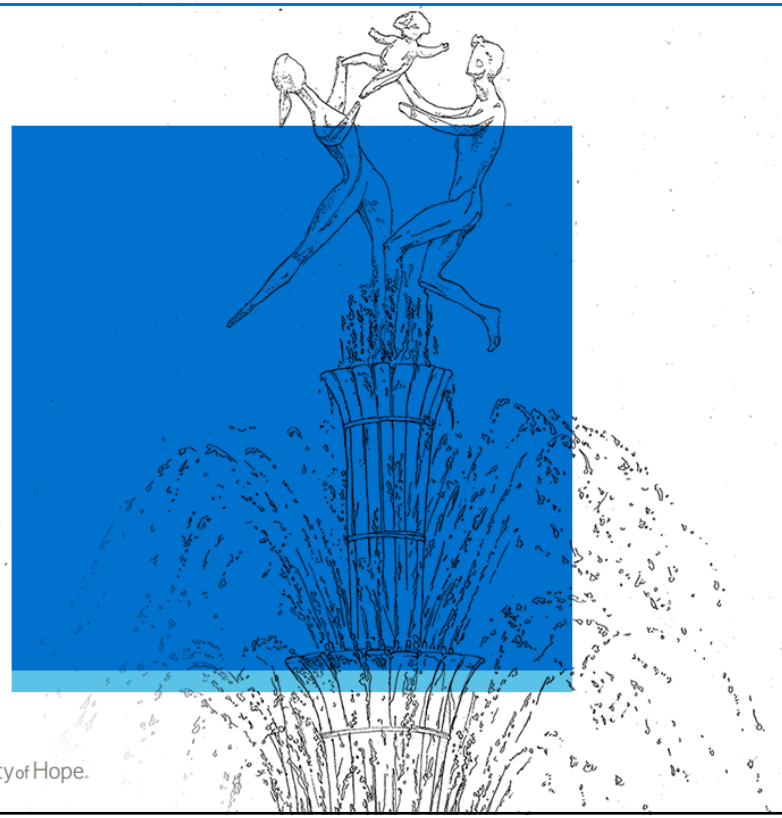
## Risk Factors for Financial Toxicity

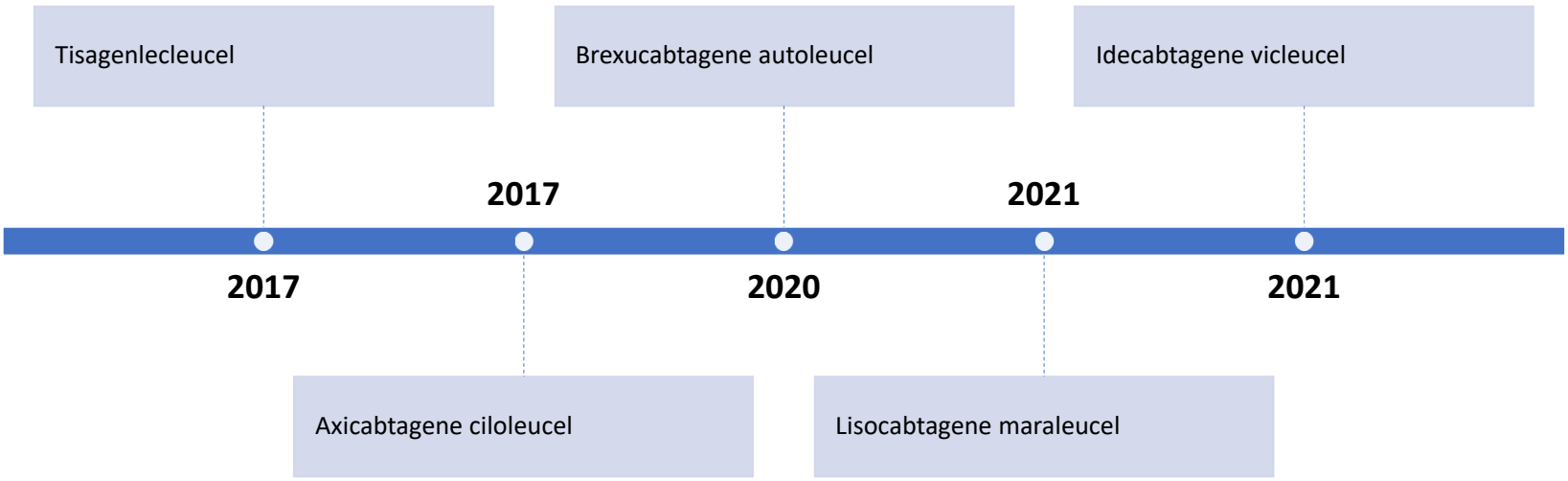


## Consequences of Financial Toxicity




- Non-adherence to therapy
- Worse outcomes
- Bankruptcy
- Foreclosure of home
- Symptom burden
- Health-related quality of life

# Immune Effector Cell Therapies Approved for Hematologic Malignancies

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# Cost of CAR T Cell Therapy

Five FDA approved therapies with an average cost of $373,000 for cellular therapy product (Chadwick, 2020)

Average cost for care including cell product: $419,238 (Chadwick, 2020)

Other expenses:

- Medical: Pre-therapy consultation, apheresis, lymphodepleting chemotherapy, medications, side effect management, follow up care and monitoring
- Non-medical: Transportation, lodging, lost work time and meals

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## New Therapies Approved for Hematologic Malignancies in 2020

- **TAFASITAMAB-CXIX**
- **ISATUXIMAB-IRFC**
- **BELANTAMAB MAFODOTIN-BLMF**
- **DECITABINE AND CEDAZURIDINE**

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## New Therapies Approved for Hematologic Malignancies in 2021

Loncastuximab tesirine-lpyl

Melphalan flufenamide

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# Multiple Myeloma

## NCCN Evidence Blocks™

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# Multiple Myeloma
## NCCN Evidence Blocks™

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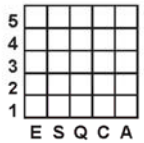
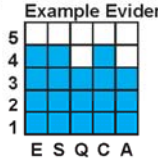
### NCCN EVIDENCE BLOCKS CATEGORIES AND DEFINITIONS




E = Efficacy of Regimen/Agent
S = Safety of Regimen/Agent
Q = Quality of Evidence
C = Consistency of Evidence
A = Affordability of Regimen/Agent

Example Evidence Block




**Efficacy of Regimen/Agent**

| | |
|---|---|
| 5 | **Highly effective:** Cure likely and often provides long-term survival advantage |
| 4 | **Very effective:** Cure unlikely but sometimes provides long-term survival advantage |
| 3 | **Moderately effective:** Modest impact on survival, but often provides control of disease |
| 2 | **Minimally effective:** No, or unknown impact on survival, but sometimes provides control of disease |
| 1 | **Palliative:** Provides symptomatic benefit only |

**Safety of Regimen/Agent**

| | |
|---|---|
| 5 | **Usually no meaningful toxicity:** Uncommon or minimal toxicities; no interference with activities of daily living (ADLs) |
| 4 | **Occasionally toxic:** Rare significant toxicities or low-grade toxicities only; little interference with ADLs |
| 3 | **Mildly toxic:** Mild toxicity that interferes with ADLs |
| 2 | **Moderately toxic:** Significant toxicities often occur but life threatening/fatal toxicity is uncommon; interference with ADLs is frequent |
| 1 | **Highly toxic:** Significant toxicities or life threatening/fatal toxicity occurs often; interference with ADLs is usual and severe |

**Note: For significant chronic or long-term toxicities, score decreased by 1**

**Quality of Evidence**

| | |
|---|---|
| 5 | **High quality:** Multiple well-designed randomized trials and/or meta-analyses |
| 4 | **Good quality:** One or more well-designed randomized trials |
| 3 | **Average quality:** Low quality randomized trial(s) or well-designed non-randomized trial(s) |
| 2 | **Low quality:** Case reports or extensive clinical experience |
| 1 | **Poor quality:** Little or no evidence |

**Consistency of Evidence**

| | |
|---|---|
| 5 | **Highly consistent:** Multiple trials with similar outcomes |
| 4 | **Mainly consistent:** Multiple trials with some variability in outcome |
| 3 | **May be consistent:** Few trials or only trials with few patients, whether randomized or not, with some variability in outcome |
| 2 | **Inconsistent:** Meaningful differences in direction of outcome between quality trials |
| 1 | **Anecdotal evidence only:** Evidence in humans based upon anecdotal experience |

**Affordability of Regimen/Agent (includes drug cost, supportive care, infusions, toxicity monitoring, management of toxicity)**

| | |
|---|---|
| 5 | Very inexpensive |
| 4 | Inexpensive |
| 3 | Moderately expensive |
| 2 | Expensive |
| 1 | Very expensive |

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# NCCN Guidelines Version 1.2022
# Multiple Myeloma
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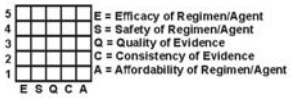


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### EVIDENCE BLOCKS FOR MULTIPLE MYELOMA THERAPY

| PRIMARY THERAPY FOR TRANSPLANT CANDIDATES | |
|---|---|
| **Preferred Regimens** | |
| Bortezomib/lenalidomide/dexamethasone | |
| **Other Recommended Regimens** | |
| Carfilzomib/lenalidomide/dexamethasone | |
| Daratumumab/lenalidomide/bortezomib/dexamethasone | |
| Ixazomib/lenalidomide/dexamethasone | |
| **Useful In Certain Circumstances** | |
| Bortezomib/cyclophosphamide/dexamethasone | |
| Bortezomib/doxorubicin/dexamethasone | |
| Carfilzomib/cyclosphosphamide/dexamethasone | |
| Ixazomib/cyclophosphamide/dexamethasone | |
| Bortezomib/thalidomide/dexamethasone | |
| Cyclophosphamide/lenalidomide/dexamethasone | |
| Daratumumab/carfilzomib/lenalidomide/dexamethasone | * |
| Daratumumab/cyclophosphamide/bortezomib/ dexamethasone | |
| Daratumumab/bortezomib/thalidomide/dexamethasone | |
| Dexamethasone/thalidomide/cisplatin/doxorubicin/ cyclophosphamide/etoposide/bortezomib (VTD-PACE) | |

| MAINTENANCE THERAPY | |
|---|---|
| **Preferred Regimens** | |
| Lenalidomide | |
| **Other Recommended Regimens** | |
| Ixazomib | |
| Bortezomib | |
| **Useful In Certain Circumstances** | |
| Bortezomib/lenalidomide ± dexamethasone | |

*Evidence Block development in progress

Note: For more information regarding the categories and definitions used for the NCCN Evidence Blocks™, see page EB-1.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

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# Multiple Myeloma
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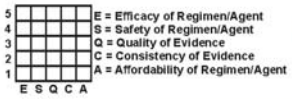


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### EVIDENCE BLOCKS FOR MULTIPLE MYELOMA THERAPY

| PRIMARY THERAPY FOR NON-TRANSPLANT CANDIDATES | |
|---|---|
| **Preferred Regimens** | |
| Bortezomib/lenalidomide/dexamethasone | |
| Daratumumab/lenalidomide/dexamethasone | |
| **Other Recommended Regimens** | |
| Carfilzomib/lenalidomide/dexamethasone | |
| Ixazomib/lenalidomide/dexamethasone | |
| Daratumumab/bortezomib/melphalan/prednisone | |
| Daratumumab/cyclophosphamide/bortezomib/dexamethasone | |
| **Useful In Certain Circumstances** | |
| Bortezomib/dexamethasone | |
| Bortezomib/cyclophosphamide/dexamethasone | |
| Cyclophosphamide/lenalidomide/dexamethasone | |
| Carfilzomib/cyclophosphamide/dexamethasone | |
| Lenalidomide/low-dose dexamethasone | |
| Bortezomib/lenalidomide/dexamethasone (VRD-lite) for frail patients | * |

| MAINTENANCE THERAPY | |
|---|---|
| **Preferred Regimens** | |
| Lenalidomide | |
| **Other Recommended Regimens** | |
| Ixazomib | * |
| Bortezomib | |
| **Useful In Certain Circumstances** | |
| Bortezomib/lenalidomide | |

*Evidence Block development in progress

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# Multiple Myeloma
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E S Q C A

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### EVIDENCE BLOCKS FOR THERAPY FOR PREVIOUSLY TREATED MULTIPLE MYELOMA

| Preferred Regimens for Early Relapses (1–3 prior therapies) *Order of regimens do not indicate comparative efficacy* | |
|---|---|
| Bortezomib/lenalidomide/dexamethasone | |
| Carfilzomib/lenalidomide/dexamethasone | |
| Daratumumab/bortezomib/dexamethasone | |
| Daratumumab/carfilzomib/dexamethasone | |
| Daratumumab/lenalidomide/dexamethasone | |
| Ixazomib/lenalidomide/dexamethasone | |
| Isatuximab-irfc/carfilzomib/dexamethasone | |
| *After two prior therapies including an IMiD and a PI and with disease progression on/within 60 days of completion of last therapy* | |
| Ixazomib/pomalidomide/dexamethasone | |
| Pomalidomide/bortezomib/dexamethasone | |
| *After two prior therapies including lenalidomide and a PI* | |
| Isatuximab-irfc/pomalidomide/dexamethasone | |
| Daratumumab/pomalidomide/dexamethasone | |

| Other Recommended Regimens for Early Relapses (1–3 prior therapies) | |
|---|---|
| Bendamustine/bortezomib/dexamethasone | |
| Bendamustine/lenalidomide/dexamethasone | |
| Bortezomib/liposomal doxorubicin/dexamethasone | |
| Bortezomib/cyclophosphamide/dexamethasone | |
| Carfilzomib/cyclophosphamide/dexamethasone | |
| Carfilzomib (twice weekly)/dexamethasone | |
| Cyclophosphamide/lenalidomide/dexamethasone | |
| Daratumumab/cyclophosphamide/bortezomib/dexamethasone | |
| Elotuzumab/bortezomib/dexamethasone | |
| Elotuzumab/lenalidomide/dexamethasone | |
| Ixazomib/cyclophosphamide/dexamethasone | |
| Panobinostat/bortezomib/dexamethasone | |
| Selinexor/bortezomib/dexamethasone (once weekly) | |
| *After two prior therapies including an IMiD and a PI and disease progression on/within 60 days of completion of last therapy* | |
| Pomalidomide/cyclophosphamide/dexamethasone | |
| Pomalidomide/carfilzomib/dexamethasone | |
| *After two prior therapies including lenalidomide and a PI* | |
| Elotuzumab/pomalidomide/dexamethasone | |

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### EVIDENCE BLOCKS FOR THERAPY FOR PREVIOUSLY TREATED MULTIPLE MYELOMA

**Useful In Certain Circumstances for Early Relapses (1–3 prior therapies)**
*If a regimen listed for previously treated multiple myeloma was used as a primary induction therapy and relapse is >6 months, the same regimen may be repeated*

- Bendamustine
- Bortezomib/dexamethasone
- Carfilzomib/cyclophosphamide/thalidomide/dexamethasone
- Carfilzomib (weekly)/dexamethasone
- High-dose or fractionated cyclophosphamide
- Ixazomib/dexamethasone
- Lenalidomide/dexamethasone
- Selinexor/daratumumab/dexamethasone
- Venetoclax/dexamethasone only for t(11;14) patients

*After at least three prior therapies including a PI and an IMiD or are double-refractory to a PI and an IMiD*

- Daratumumab

*After two prior therapies including bortezomib and an IMiD*

- Panobinostat/carfilzomib
- Panobinostat/lenalidomide/dexamethasone

*After two prior therapies including IMiD and a PI and with disease progression on/within 60 days of completion of last therapy*

- Pomalidomide/dexamethasone
- Selinexor/pomalidomide/dexamethasone

*For treatment of aggressive MM*

- Dexamethasone/cyclophosphamide/etoposide/cisplatin (DCEP)
- Dexamethasone/thalidomide/cisplatin/doxorubicin/cyclophosphamide/etoposide (DT-PACE) ± bortezomib (VTD-PACE)

**Therapies for Patients with Late Relapses (>3 prior therapies)**

*After at least four prior therapies, including an anti-CD38 monoclonal antibody, a PI, and an IMiD*

- Belantamab mafodotin-blmf
- Idecabtagene vicleucel
- Melphalan flufenamide/dexamethasone

*After least four prior therapies and whose disease is refractory to at least two proteasome inhibitors, at least two immunomodulatory agents, and an anti-CD38 monoclonal antibody*

- Selinexor/dexamethasone

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# Acute Myeloid Leukemia

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# NCCN Guidelines Version 3.2021
# Acute Myeloid Leukemia (Age ≥18 years)
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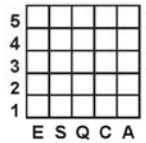
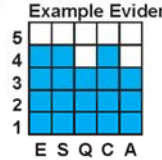
### NCCN EVIDENCE BLOCKS CATEGORIES AND DEFINITIONS




E = Efficacy of Regimen/Agent
S = Safety of Regimen/Agent
Q = Quality of Evidence
C = Consistency of Evidence
A = Affordability of Regimen/Agent

Example Evidence Block




E = 4
S = 4
Q = 3
C = 4
A = 3

**Efficacy of Regimen/Agent**

| | |
|---|---|
| 5 | **Highly effective:** Cure likely and often provides long-term survival advantage |
| 4 | **Very effective:** Cure unlikely but sometimes provides long-term survival advantage |
| 3 | **Moderately effective:** Modest impact on survival, but often provides control of disease |
| 2 | **Minimally effective:** No, or unknown impact on survival, but sometimes provides control of disease |
| 1 | **Palliative:** Provides symptomatic benefit only |

**Safety of Regimen/Agent**

| | |
|---|---|
| 5 | **Usually no meaningful toxicity:** Uncommon or minimal toxicities; no interference with activities of daily living (ADLs) |
| 4 | **Occasionally toxic:** Rare significant toxicities or low-grade toxicities only; little interference with ADLs |
| 3 | **Mildly toxic:** Mild toxicity that interferes with ADLs |
| 2 | **Moderately toxic:** Significant toxicities often occur but life threatening/fatal toxicity is uncommon; interference with ADLs is frequent |
| 1 | **Highly toxic:** Significant toxicities or life threatening/fatal toxicity occurs often; interference with ADLs is usual and severe |

**Note: For significant chronic or long-term toxicities, score decreased by 1**

**Quality of Evidence**

| | |
|---|---|
| 5 | **High quality:** Multiple well-designed randomized trials and/or meta-analyses |
| 4 | **Good quality:** One or more well-designed randomized trials |
| 3 | **Average quality:** Low quality randomized trial(s) or well-designed non-randomized trial(s) |
| 2 | **Low quality:** Case reports or extensive clinical experience |
| 1 | **Poor quality:** Little or no evidence |

**Consistency of Evidence**

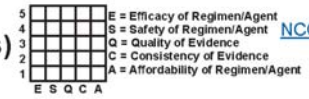
| | |
|---|---|
| 5 | **Highly consistent:** Multiple trials with similar outcomes |
| 4 | **Mainly consistent:** Multiple trials with some variability in outcome |
| 3 | **May be consistent:** Few trials or only trials with few patients, whether randomized or not, with some variability in outcome |
| 2 | **Inconsistent:** Meaningful differences in direction of outcome between quality trials |
| 1 | **Anecdotal evidence only:** Evidence in humans based upon anecdotal experience |

**Affordability of Regimen/Agent (includes drug cost, supportive care, infusions, toxicity monitoring, management of toxicity)**

| | |
|---|---|
| 5 | Very inexpensive |
| 4 | Inexpensive |
| 3 | Moderately expensive |
| 2 | Expensive |
| 1 | Very expensive |

National Comprehensive Cancer Network®

# NCCN Guidelines Version 3.2021
# Acute Myeloid Leukemia (Age ≥18 years)
## NCCN Evidence Blocks™

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EVIDENCE BLOCKS FOR AML TREATMENT (AGE <60 YEARS)

| TREATMENT STRATEGIES | INDUCTION REGIMENS | |
|---|---|---|
| Favorable-risk cytogenetics | Standard-dose cytarabine 200 mg/m$^2$ continuous infusion x 7 days with daunorubicin 60 mg/m$^2$ x 3 days and a single dose of gemtuzumab ozogamicin 3 mg/m$^2$ (up to one 4.5 mg vial) on day 1, or day 2, or day 3, or day 4; alternatively, three total doses on days 1, 4, and 7 (CD33-positive) (preferred) | |
| | Standard-dose cytarabine 100–200 mg/m$^2$ continuous infusion x 7 days and idarubicin 12 mg/m$^2$ x 3 days | |
| | Standard-dose cytarabine 100–200 mg/m$^2$ continuous infusion x 7 days and daunorubicin 60–90 mg/m$^2$ x 3 days | |
| | Fludarabine 30 mg/m$^2$ IV days 2–6, HiDAC 2 g/m$^2$ over 4 hours starting 4 hours after fludarabine on days 2–6, idarubicin 8 mg/m$^2$ IV days 4–6, and granulocyte colony-stimulating factor (G-CSF) subcutaneously (SC) daily days 1–7 | |
| Intermediate-risk cytogenetics and *FLT3*-mutated (ITD or TKD) | Standard-dose cytarabine 200 mg/m$^2$ continuous infusion x 7 days with daunorubicin 60 mg/m$^2$ x 3 days and oral midostaurin 50 mg every 12 hours, days 8–21 (*FLT3*-mutated AML) | |
| • Therapy-related AML other than CBF/APL<br>• Antecedent MDS/CMML<br>• Cytogenetic changes consistent with MDS (AML-MRC) | Standard-dose cytarabine 100–200 mg/m$^2$ continuous infusion x 7 days and idarubicin 12 mg/m$^2$ x 3 days | |
| | Standard-dose cytarabine 100–200 mg/m$^2$ continuous infusion x 7 days and daunorubicin 60–90 mg/m$^2$ x 3 days | |
| | Dual-drug liposomal encapsulation of daunorubicin 44 mg/m$^2$ and cytarabine 100 mg/m$^2$ IV over 90 min on days 1, 3, and 5 x 1 cycle | |
| Other recommended regimens for intermediate- or poor-risk disease | Standard-dose cytarabine 100–200 mg/m$^2$ continuous infusion x 7 days and idarubicin 12 mg/m$^2$ x 3 days | |
| | Standard-dose cytarabine 100–200 mg/m$^2$ continuous infusion x 7 days and daunorubicin 60–90 mg/m$^2$ x 3 days | |
| | Standard-dose cytarabine 200 mg/m$^2$ continuous infusion x 7 days with daunorubicin 60 mg/m$^2$ x 3 days and a single dose of gemtuzumab ozogamicin 3 mg/m$^2$ (up to one 4.5 mg vial) on day 1, or day 2, or day 3, or day 4; alternatively, three total doses on days 1, 4, and 7 (CD33-positive/intermediate-risk AML) | |
| | High-dose cytarabine (HiDAC) 2 g/m$^2$ every 12 hours x 6 days or 3 g/m$^2$ every 12 hours x 4 days with idarubicin 12 mg/m$^2$ x 3 days (1 cycle) | |
| | High-dose cytarabine (HiDAC) 2 g/m$^2$ every 12 hours x 6 days or 3 g/m$^2$ every 12 hours x 4 days with daunorubicin 60 mg/m$^2$ x 3 days (1 cycle) | |
| | Fludarabine 30 mg/m$^2$ IV days 2–6, HiDAC 2 g/m$^2$ over 4 hours starting 4 hours after fludarabine on days 2–6, idarubicin 8 mg/m$^2$ IV days 4–6, and granulocyte colony-stimulating factor (G-CSF) subcutaneously (SC) daily days 1–7 | |

Note: For more information regarding the categories and definitions used for the NCCN Evidence Blocks™, see page EB-1.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

# National Organization Resources

- Leukemia and Lymphoma Society
- Be the Match
- American Cancer Society
- CancerCare's financial assistance program
- Cancer Financial Assistance Coalition
- HealthWell Foundation
- Triage Cancer
- Cancer and Careers
- Cancer support community

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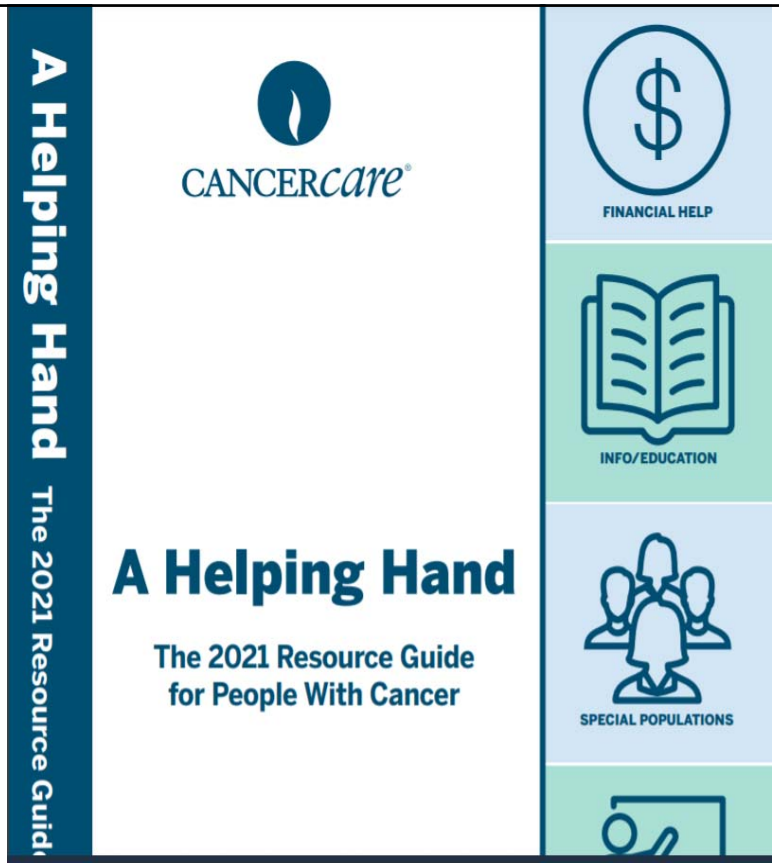
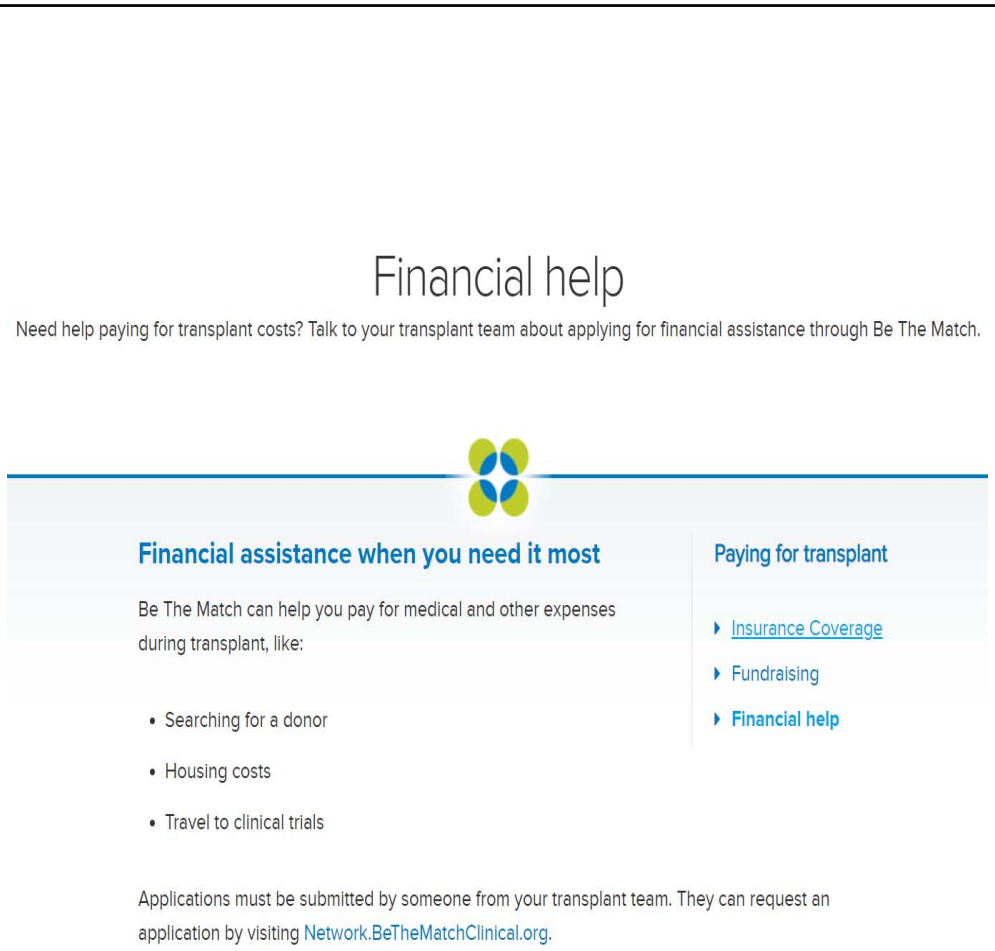
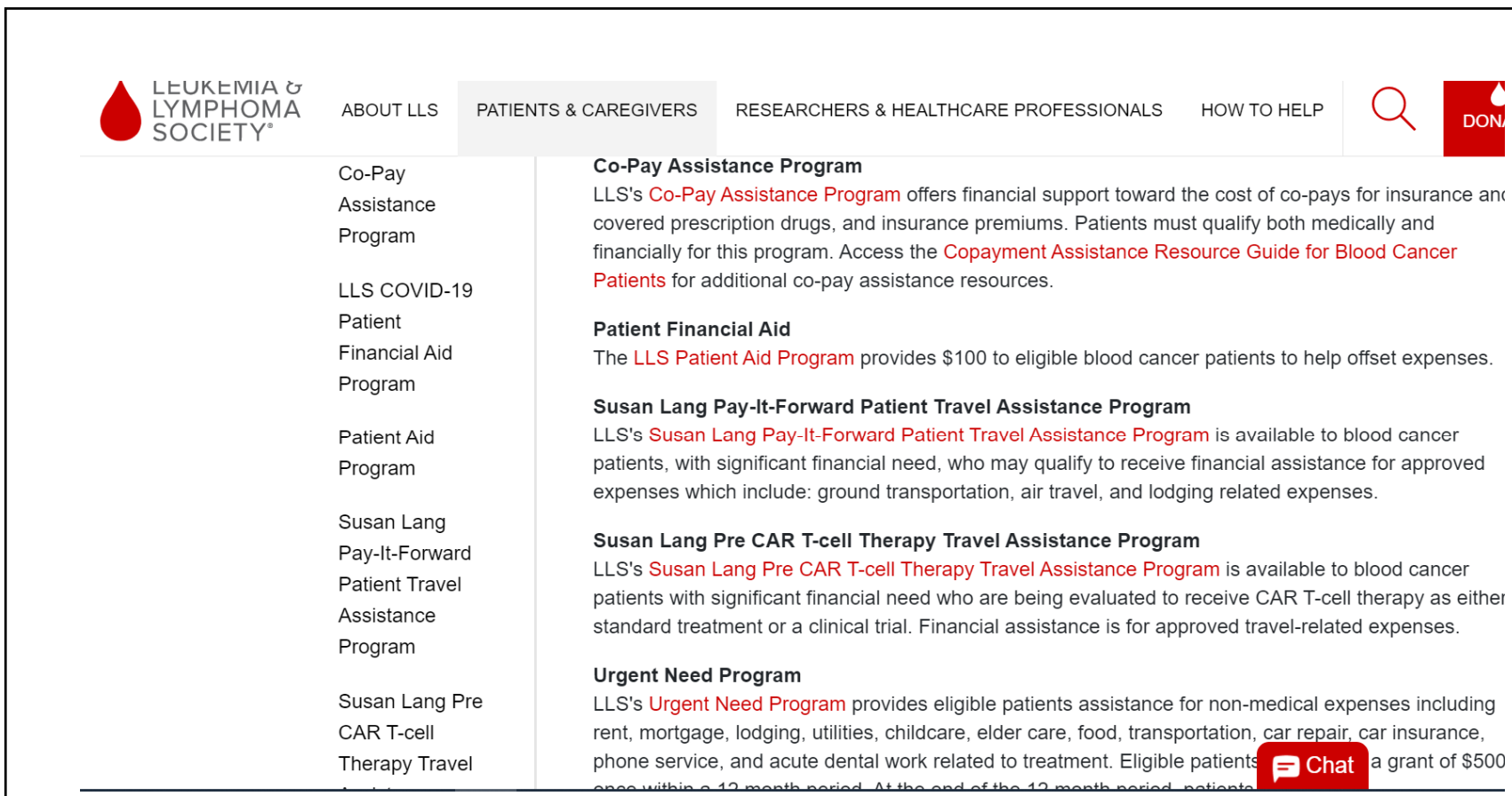
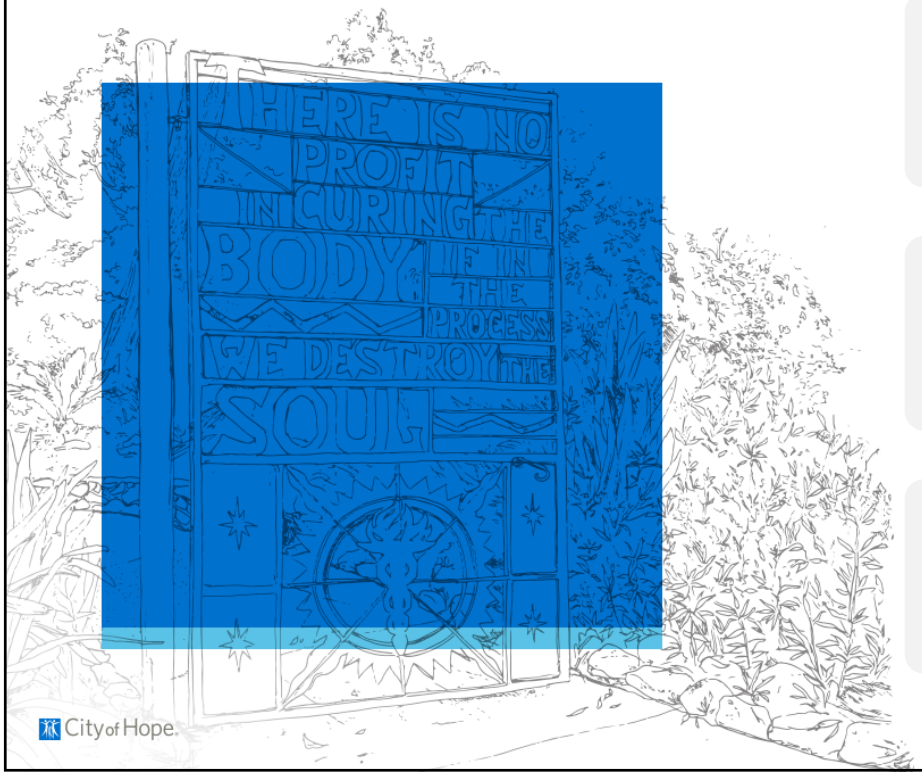


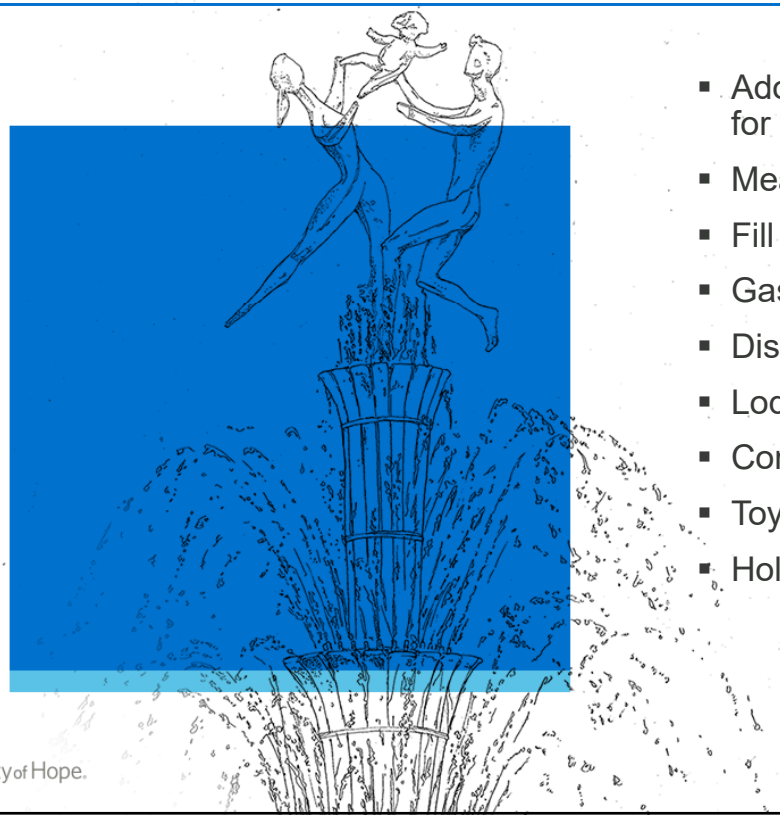


# Additional Resources



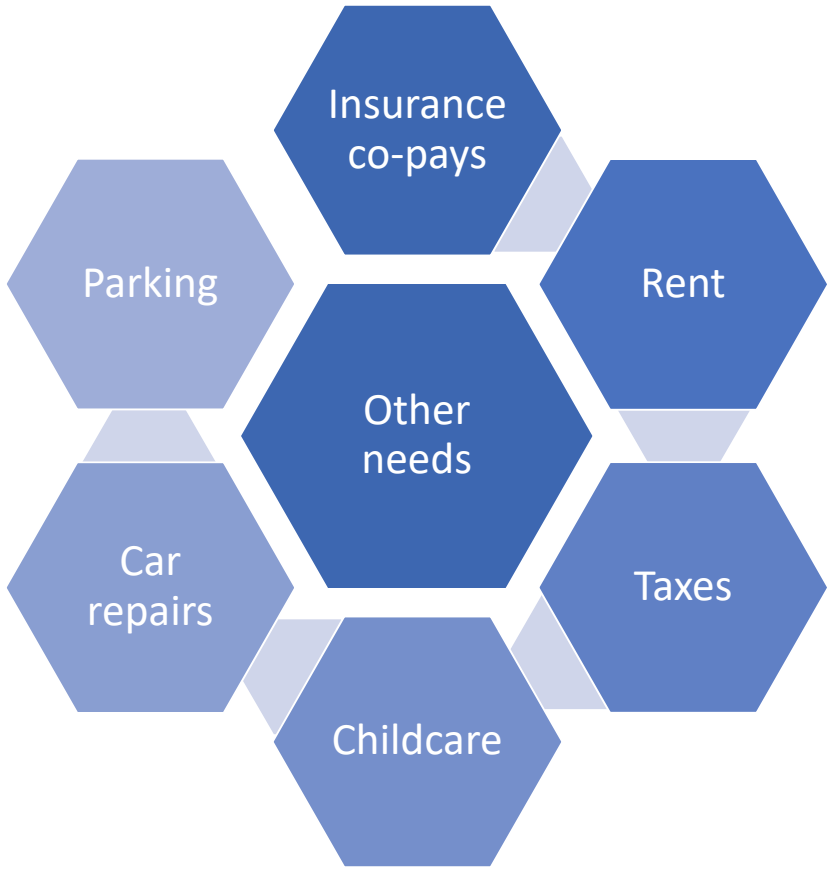

- Local food banks
- Fundraising events-online platforms, financial advisors/counselors
- Prescription assistance programs

# Institution Specific Resources



- Adopt a Family: Program around holidays for families in need
- Meal vouchers
- Fill the backpack
- Gas cards
- Discount store gift cards
- Lodging assistance
- Comfort cart
- Toy closet
- Holiday shopping event

(M. Rouse, personal communication, August 17, 2021)

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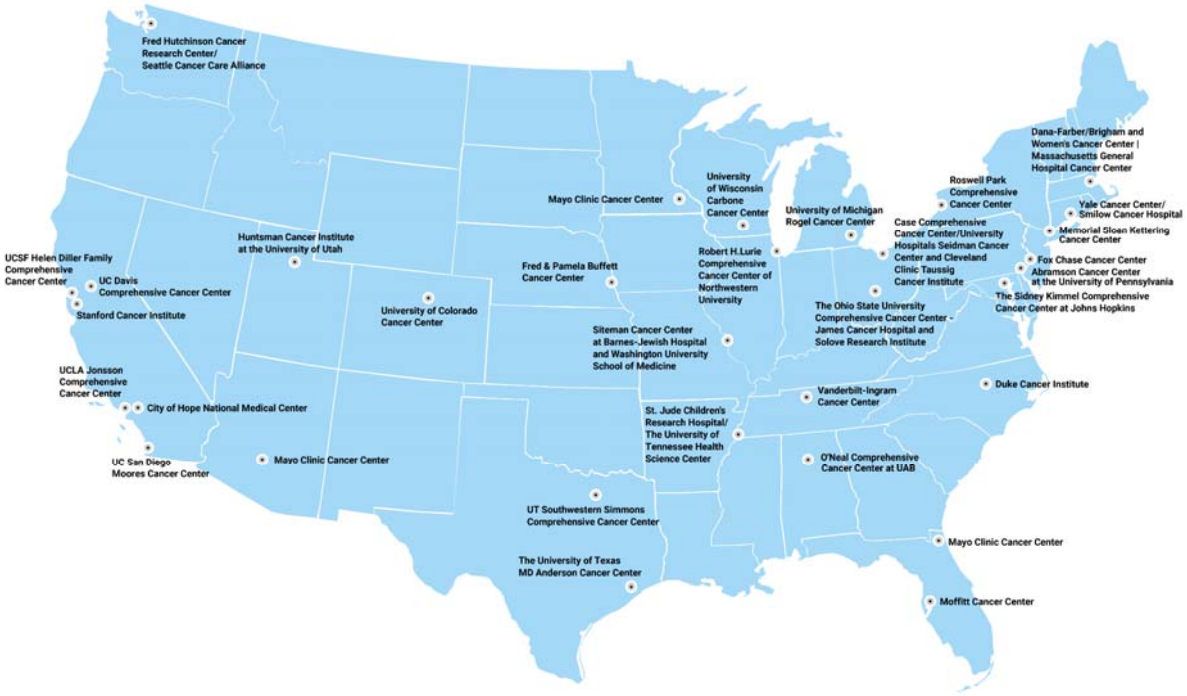
- **Who We Are**
  An alliance of leading cancer centers devoted to patient care, research, and education
- **Our Mission**
  To improve and facilitate quality, effective, efficient, and accessible cancer care so patients can live better lives
- **Our Vision**
  To define and advance high-quality, high-value, patient-centered cancer care globally

# NCCN Member Institutions

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