HEMATOPOIETIC CELL TRANSPLANTATION FOR ACUTE MYELOID LEUKEMIA

Non-Discrimination Statement and Multi-Language Interpreter Services information are located at the end of this document.

Coverage for services, procedures, medical devices and drugs are dependent upon benefit eligibility as outlined in the member’s specific benefit plan. This Medical Coverage Guideline must be read in its entirety to determine coverage eligibility, if any.

This Medical Coverage Guideline provides information related to coverage determinations only and does not imply that a service or treatment is clinically appropriate or inappropriate. The provider and the member are responsible for all decisions regarding the appropriateness of care. Providers should provide BCBSAZ complete medical rationale when requesting any exceptions to these guidelines.

The section identified as “Description” defines or describes a service, procedure, medical device or drug and is in no way intended as a statement of medical necessity and/or coverage.

The section identified as “Criteria” defines criteria to determine whether a service, procedure, medical device or drug is considered medically necessary or experimental or investigational.

State or federal mandates, e.g., FEP program, may dictate that any drug, device or biological product approved by the U.S. Food and Drug Administration (FDA) may not be considered experimental or investigational and thus the drug, device or biological product may be assessed only on the basis of medical necessity.

Medical Coverage Guidelines are subject to change as new information becomes available.

For purposes of this Medical Coverage Guideline, the terms “experimental” and “investigational” are considered to be interchangeable.

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**Description:**

**Acute Myeloid Leukemia:**
Acute myeloid leukemia (AML) (also called acute nonlymphocytic leukemia) refers to a set of leukemias that arise from a myeloid precursor in the bone marrow. There is a high incidence of relapse which has prompted research into a variety of post-remission strategies using either allogeneic or autologous hematopoietic cell transplantation.
HEMATOPOIETIC CELL TRANSPLANTATION FOR ACUTE MYELOID LEUKEMIA (cont.)

**Description:** (cont.)

Hematopoietic Cell Transplantation (HCT): Hematopoietic stem cells form blood and immune cells. HCT is a procedure in which hematopoietic cells are infused into a recipient with deficient bone marrow function. Bone marrow stem cells may be obtained from the transplant recipient (autologous HCT) or a donor (allogeneic HCT). They can be harvested from bone marrow, peripheral blood, or umbilical cord blood and placenta shortly after a delivery. HCT may also be referred to as bone marrow transplant (BMT) or stem cell transplantation.

High-Dose Chemotherapy (HDC): HDC is the administration of myelotoxic agents at doses sufficient to cause bone marrow failure. Myeloablative chemotherapy eradicates cancerous cells from the blood and bone marrow and inhibits the immune response against the donor bone marrow. HDC may be given with or without total body radiation.

Nonmyeloablative Chemotherapy With Allogeneic Cell Transplantation (HCT): Nonmyeloablative or reduced-intensity conditioning (RIC) is the administration of a lower dose of chemotherapy that is sufficient to eradicate the hematopoietic cells but does not completely destroy the bone marrow. RIC regimens attempt to reduce adverse effects secondary to bone marrow toxicity and allow for relatively prompt hematopoietic recovery. Nonmyeloablative chemotherapy may also be referred to as RIC, “mini transplant” or “transplant lite”.

**Donor Types:**

- **Allogeneic:** From a third-party donor
- **Autologous:** From an individual’s own bone marrow and/or circulating blood

**Definitions:**

**Refractory/Primary Refractory:** The disease is resistant to treatment and does not achieve a complete remission.

**Relapse:** The recurrence of a disease or symptoms after apparent recovery.

**Remission:** Period of time when cancer is responding to treatment or is under control. In complete remission, all signs and symptoms of the disease have disappeared.
HEMATOPOIETIC CELL TRANSPLANTATION FOR ACUTE MYELOID LEUKEMIA (cont.)

Criteria:

All stem cell transplants will be reviewed by the medical director(s) and/or clinical advisor(s).

Human Leukocyte Antigen (HLA) typing and Matched Unrelated Donor (MUD) searches may be approved by the coordinator if medical necessity criteria are met. HLA typing may use serologic tissue and/or DNA (gene) for more precise matching.

Pretransplantation Evaluation:

The psychosocial criteria listed below must only be met prior to the actual transplant procedure.

➢ Pretransplantation evaluation with documentation of ALL of the following:

1. Psychosocial screen with documentation of ALL of the following:
   - Drug/alcohol screen with documentation of ONE of the following:
     - No drug/alcohol abuse by history
     - Drug and alcohol free for a period greater than or equal to 6 months
   - Behavioral health disorder screening with documentation of ONE of the following:
     - No behavioral health disorder by history and physical exam
     - Behavioral health disorder treated

2. Adequate social/family support
3. Performance status\(^1\) with documentation of ONE of the following:
   - Karnofsky score greater than or equal to 70%
   - Eastern Cooperative Oncology Group (ECOG) score 0-2
   - For ages 10 or under: Lansky Play score greater than or equal to 70. A Lansky Play score less than 70 will be reviewed by the medical director(s) and/or clinical advisor(s).

\(^1\) Performance status tables are located at the end of the Criteria section.
HEMATOPOIETIC CELL TRANSPLANTATION FOR ACUTE MYELOID LEUKEMIA
(cont.)

Criteria: (cont.)

➢ HDC with allogeneic or autologous HCT for an individual with acute myeloid leukemia (AML) is considered medically necessary with documentation of ALL of the following:
   1. Pretransplantation evaluation criteria above is met
   2. ONE of the following:
      • 1st complete remission
      • 2nd complete remission
      • Primary refractory
      • Relapsed

➢ If above criteria not met, HDC with allogeneic or autologous HCT for an individual with acute myeloid leukemia is considered experimental or investigational based upon:
   1. Insufficient scientific evidence to permit conclusions concerning the effect on health outcomes, and
   2. Insufficient evidence to support improvement of the net health outcome, and
   3. Insufficient evidence to support improvement of the net health outcome as much as, or more than, established alternatives.

➢ Nonmyeloablative reduced-intensity conditioning (RIC) with allogeneic HCT for complete marrow and extramedullary (1st complete remission or beyond) remission in an individual with acute myeloid leukemia who meets criteria for allogeneic HCT but is medically unable to tolerate HDC is considered medically necessary.

2 Although specific transplantation procedures may be considered experimental or investigational and therefore not eligible for coverage under standard medical benefits, these procedures may be eligible for coverage based upon Arizona Revised Statutes §20-2326 concerning Cancer Clinical Trials.
HEMATOPOIETIC CELL TRANSPLANTATION FOR ACUTE MYELOID LEUKEMIA
(cont.)

Criteria: (cont.)

Performance Status Tables:

**Eastern Cooperative Oncology Group (ECOG) Score (Also known as Zubrod Score):**

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Asymptomatic. Fully active, able to carry on all pre-disease performance without restriction.</td>
</tr>
<tr>
<td>1</td>
<td>Symptomatic, fully ambulatory. Restricted in physically strenuous activity but able to carry out work of a light or sedentary nature.</td>
</tr>
<tr>
<td>2</td>
<td>Symptomatic, in bed less than 50% of the day. Capable of all self-care but unable to carry out any work activities.</td>
</tr>
<tr>
<td>3</td>
<td>Symptomatic, in bed or chair more than 50% of the day but not bedridden. Capable of only limited self-care.</td>
</tr>
<tr>
<td>5</td>
<td>Dead</td>
</tr>
</tbody>
</table>

**Karnofsky Performance Score:**

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>Able to carry on normal activity, no evidence of disease.</td>
</tr>
<tr>
<td>90%</td>
<td>Able to carry on normal activity, minor signs or symptoms of disease.</td>
</tr>
<tr>
<td>80%</td>
<td>Normal activity with effort, some signs and symptoms of disease.</td>
</tr>
<tr>
<td>70%</td>
<td>Cares for self, unable to carry on normal activity or to work.</td>
</tr>
<tr>
<td>60%</td>
<td>Requires occasional assistance from others but able to care for most needs</td>
</tr>
<tr>
<td>50%</td>
<td>Requires considerable assistance from others and frequent medical care</td>
</tr>
<tr>
<td>40%</td>
<td>Disabled, requires special care and assistance.</td>
</tr>
<tr>
<td>30%</td>
<td>Severe disability, hospitalization indicated, death not imminent.</td>
</tr>
<tr>
<td>20%</td>
<td>Very sick, hospitalization indicated, active support treatment necessary.</td>
</tr>
<tr>
<td>10%</td>
<td>Moribund</td>
</tr>
<tr>
<td>0%</td>
<td>Dead</td>
</tr>
</tbody>
</table>
HEMATOPOIETIC CELL TRANSPLANTATION FOR ACUTE MYELOID LEUKEMIA
(cont.)

Criteria: (cont.)

Performance Status Tables: (cont.)

Lansky Play Score (Also known as Lansky Play - Performance Scale):

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Fully active, normal.</td>
</tr>
<tr>
<td>90</td>
<td>Minor restrictions in physically strenuous activity</td>
</tr>
<tr>
<td>80</td>
<td>Active, but tires more quickly.</td>
</tr>
<tr>
<td>70</td>
<td>Both greater restriction of and less time spent in play activity</td>
</tr>
<tr>
<td>60</td>
<td>Up and around, but minimal active play; keeps busy with quieter activities.</td>
</tr>
<tr>
<td>50</td>
<td>Gets dressed but lies around much of the day, no active play but able to participate in all quiet play and activities.</td>
</tr>
<tr>
<td>40</td>
<td>Mostly in bed; participates in quiet activities.</td>
</tr>
<tr>
<td>30</td>
<td>In bed; needs assistance even for quiet play.</td>
</tr>
<tr>
<td>20</td>
<td>Often sleeping; play entirely limited to very passive activities.</td>
</tr>
<tr>
<td>10</td>
<td>No play; does not get out of bed.</td>
</tr>
<tr>
<td>0</td>
<td>Unresponsive</td>
</tr>
</tbody>
</table>

Resources:

Literature reviewed 08/29/17. We do not include marketing materials, poster boards and non-published literature in our review.

The BCBS Association Medical Policy Reference Manual (MPRM) policy is included in our guideline review. References cited in the MPRM policy are not duplicated on this guideline.

Resources prior to 09/17/13 may be requested from the BCBSAZ Medical Policy and Technology Research Department.

HEMATOPOIETIC CELL TRANSPLANTATION FOR ACUTE MYELOID LEUKEMIA
(cont.)

Non-Discrimination Statement:

Blue Cross Blue Shield of Arizona (BCBSAZ) complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability or sex. BCBSAZ provides appropriate free aids and services, such as qualified interpreters and written information in other formats, to people with disabilities to communicate effectively with us. BCBSAZ also provides free language services to people whose primary language is not English, such as qualified interpreters and information written in other languages. If you need these services, call (602) 864-4884 for Spanish and (877) 475-4799 for all other languages and other aids and services.

If you believe that BCBSAZ has failed to provide these services or discriminated in another way on the basis of race, color, national origin, age, disability or sex, you can file a grievance with: BCBSAZ’s Civil Rights Coordinator, Attn: Civil Rights Coordinator, Blue Cross Blue Shield of Arizona, P.O. Box 13466, Phoenix, AZ 85002-3466, (602) 864-2288, TTY/TDD (602) 864-4823, crc@azblue.com. You can file a grievance in person or by mail or email. If you need help filing a grievance BCBSAZ’s Civil Rights Coordinator is available to help you. You can also file a civil rights complaint with the U.S. Department of Health and Human Services, Office for Civil Rights electronically through the Office for Civil Rights Complaint Portal, available at https://ocrportal.hhs.gov/ocr/portal/lobby.jsf, or by mail or phone at: U.S. Department of Health and Human Services, 200 Independence Avenue SW., Room 509F, HHH Building, Washington, DC 20201, 1–800–368–1019, 800–537–7697 (TDD). Complaint forms are available at http://www.hhs.gov/ocr/office/file/index.html

Multi-Language Interpreter Services:

Spanish: Si usted, o alguien a quien usted está ayudando, tiene preguntas acerca de Blue Cross Blue Shield of Arizona, tiene derecho a obtener ayuda e información en su idioma sin costo alguno. Para hablar con un intérprete, llame al 602-864-4884.

Navajo: Díí kweé atah níllígíí Blue Cross Blue Sheild of Arizona haadá yilt’éego bíná’ídííkidgo éí doodego Háida bijá aniyeedííi t’áadoo le’é yíná’ídííkidgo beebehaaz’áanii hólóp díí t’áad hazaadk’ehjí háhá a’dooowolgo bee hae’q doo báqíh ilínígóó. Ata’hálne’ilígíí kojí biči’jí hodiílíiní 877-475-4799.

Chinese: 如果您，或是您正在協助的對象，有關於插入項目的名稱 Blue Cross Blue Shield of Arizona 方面的問題，您有權利免費以您的母語得到幫助和訊息。洽詢一位翻譯員，請撥電話 在此插入數字 877-475-4799。

Vietnamese: Nếu quý vị, hay người mà quý vị đang giúp đỡ, có câu hỏi về Blue Cross Blue Shield of Arizona quý vĩ sẽ có quyền được giúp và có thể thông tin bằng ngôn ngữ của mình miễn phí. Để nói chuyện với một thông dịch viên, xin gọi 877-475-4799.

Arabic: إن كان لديك أو لدى شخص تساعدته أسبلة يتكلم باللغة الإنجليزية، يمكنك الحصول على المساعدة والموارد من Blue Cross Blue Shield of Arizona. للتحدث باللغة العربية، يمكنك الاتصال ب 877-475-4799.
HEMATOPOIETIC CELL TRANSPLANTATION FOR ACUTE MYELOID LEUKEMIA 
(cont.)

Multi-Language Interpreter Services: (cont.)

Tagalog: Kung ikaw, o ang iyong tinutulungan, ay may mga katawanan tungkol sa Blue Cross Blue Shield of Arizona, may karapatang na ma makakuha ng tulong at impormasyon sa iyong wika ng walang gastos. Upang makaasap ang isang tagasalin, tumawag sa 877-475-4799.

Korean: 만약 귀하 또는 귀하를 돕고 있는 어떤 사람이 Blue Cross Blue Shield of Arizona에 관해서 질문이 있다면 귀하는 그러한 도움과 정보를 귀하의 언어로 비용 부담없이 얻을 수 있는 권리가 있습니다. 그렇게 통역사와 얘기하기 위해서는 877-475-4799로 전화하십시오.

French: Si vous, ou quelqu'un que vous êtes en train d'aider, a des questions à propos de Blue Cross Blue Shield of Arizona, vous avez le droit d'obtenir de l'aide et l'information dans votre langue à aucun coût. Pour parler à un interprète, appelez 877-475-4799.

German: Falls Sie oder jemand, dem Sie helfen, Fragen zum Blue Cross Blue Shield of Arizona haben, haben Sie das Recht, kostenlose Hilfe und Informationen in Ihrer Sprache zu erhalten. Um mit einem Dolmetscher zu sprechen, rufen Sie bitte die Nummer 877-475-4799 an.

Russian: Если у вас или лица, которому вы помогаете, имеются вопросы по поводу Blue Cross Blue Shield of Arizona, то вы имеете право на бесплатное получение помощи и информации на вашем языке. Для разговора с переводчиком позвоните по телефону 877-475-4799.

Japanese: ご本人様、またはお客様の身の回りの方々とも、Blue Cross Blue Shield of Arizonaについてご質問がございましたら、ご希望の言語でサポートを受けたり、情報を入手したりすることができます。料金はかかりません。通訳とお話される場合、877-475-4799までお電話ください。

Farsi: اگر شما، یا کسی که شما به او کمک می‌کنید، سوال در مورد اطلاعات به زبان خود را به طور رایگان دریافت نمایید 877-475-4799.

Assyrian: برا خو سویخو دوو بامه رودو دوو بامه نامه دوو بامه نامه مهار دوو بامه نامه بامه نامه نامه نامه نامه نامه 877-475-4799.

Serbo-Croatian: Ukoliko vi ili neko kome vi pomažete ima pitanje o Blue Cross Blue Shield of Arizona, imate pravo da besplatno dobijate pomoć i informacije na Vašem jeziku. Da biste razgovarali sa pravodocem, nazovite 877-475-4799.

Thai: หากคุณ มีเหตุผลที่จะต้องการความช่วยเหลือของ Blue Cross Blue Shield of Arizona คุณสามารถขอได้ตามข้อมูลและข้อมูลภาษาของคุณได้โดยไม่มีค่าใช้จ่าย ติดต่อจ่ายค่าโทรศัพท์ 877-475-4799.