

### **Clinical Policy: Hydroxyprogesterone Caproate (Makena/compound)**

Reference Number: CP.PHAR.14

Effective Date: 11.20.17 Last Review Date: 05.24

Line of Business: Commercial, HIM, Medicaid

Coding Implications
Revision Log

See <u>Important Reminder</u> at the end of this policy for important regulatory and legal information.

### **Description**

Hydroxyprogesterone caproate (Makena®/compound) is a progestin.

### FDA Approved Indication(s)\*

Makena is indicated to reduce the risk of preterm birth in women with a singleton pregnancy who have a history of singleton spontaneous preterm birth. The effectiveness of Makena is based on improvement in the proportion of women who delivered < 37 weeks of gestation. There are no controlled trials demonstrating a direct clinical benefit, such as improvement in neonatal mortality and morbidity.

Limitation(s) of use: While there are many risk factors for preterm birth, safety and efficacy of Makena has been demonstrated only in women with a prior spontaneous singleton preterm birth. It is not intended for use in women with multiple gestations or other risk factors for preterm birth.

#### Policy/Criteria

Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of health plans affiliated with Centene Corporation<sup>®</sup> that Makena/compounded hydroxyprogesterone caproate is **medically necessary** when the following criteria are met:

#### I. Initial Approval Criteria

#### A. Prevention of Preterm Birth (must meet all):\*

\*CP.PMN.22/HNCA.CP.PMN.22 Brand Name Override policy does not apply

- 1. Provider attestation acknowledging FDA's withdrawal of Makena and its generics as a result of failure to demonstrate clinical benefit in the confirmatory PROLONG trial;
- 2. Request is for compounded hydroxyprogesterone caproate;
- 3. Current singleton pregnancy;
- 4. History of singleton spontaneous preterm birth (delivery at < 37 weeks of gestation following spontaneous preterm labor or premature rupture of membranes);
- 5. Hydroxyprogesterone caproate is not prescribed concurrently with Crinone® or Endometrin®;
- 6. Therapy to begin between 16 weeks, 0 days and 27 weeks, 6 days of gestation;
- 7. Dose does not exceed 250 mg (1 mL) IM or 275 mg (1.1 mL) SC once weekly.

<sup>\*</sup>The FDA withdrew its approval of Makena and its generics. Makena and its generics are no longer approved and cannot lawfully be distributed in interstate commerce (see Appendix D).



Approval duration: Up to a total of 21 doses to reach week 37 (through 36 weeks, 6 days) of gestation or delivery, whichever occurs first

#### **B.** Other diagnoses/indications (must meet 1 or 2):

- 1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
  - a. For drugs on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.33 for health insurance marketplace, and CP.PMN.255 for Medicaid; or
  - b. For drugs NOT on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the non-formulary policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.103 for health insurance marketplace, and CP.PMN.16 for Medicaid; or
- 2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid.

#### **II. Continued Therapy**

### A. Prevention of Preterm Birth (must meet all):\*

\*CP.PMN.22/HNCA.CP.PMN.22 Brand Name Override policy does not apply

- 1. Provider attestation acknowledging FDA's withdrawal of Makena and its generics as a result of failure to demonstrate clinical benefit in the confirmatory PROLONG trial;
- 2. Member meets one of the following (a or b):
  - a. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
  - b. Member is currently receiving medication and is enrolled in a state and product with continuity of care regulations (refer to state specific addendums for CC.PHARM.03A and CC.PHARM.03B);
- 3. Member is responding positively to therapy;
- 4. Member has not received more than 21 total doses for the current pregnancy;
- 5. Member has not reached week 37 of gestation;
- 6. If request is for a dose increase, new dose does not exceed 250 mg (1 mL) IM or 275 mg (1.1 mL) SC once weekly.

Approval duration: Up to a total of 21 doses to reach week 37 (through 36 weeks, 6 days) of gestation or delivery, whichever occurs first

#### **B.** Other diagnoses/indications (must meet 1 or 2):

- 1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
  - a. For drugs on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business:



- CP.CPA.190 for commercial, HIM.PA.33 for health insurance marketplace, and CP.PMN.255 for Medicaid; or
- b. For drugs NOT on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the non-formulary policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.103 for health insurance marketplace, and CP.PMN.16 for Medicaid; or
- 2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid.

#### III. Diagnoses/Indications for which coverage is NOT authorized:

- **A.** Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid or evidence of coverage documents;
- **B.** Use in women with multiple gestations.

#### IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key FDA: Food and Drug Administration

*Appendix B: Therapeutic Alternatives* Not applicable

#### Appendix C: Contraindications/Boxed Warnings

- Contraindication(s):
  - o Current or history of thrombosis or thromboembolic disorders
  - Known or suspected breast cancer, other hormone-sensitive cancer, or history of these conditions
  - o Undiagnosed abnormal vaginal bleeding unrelated to pregnancy
  - o Cholestatic jaundice of pregnancy
  - o Liver tumors, benign or malignant, or active liver disease
  - Uncontrolled hypertension
- Boxed warning(s): none reported

### Appendix D: General Information

• Data are inconclusive on the benefits of initiating hydroxyprogesterone therapy after 20 weeks, 6 days of gestation. However, a prospective cohort study by Centene Corporate evaluated whether providing 17 alpha-hydroxyprogesterone caproate (17P) to high-risk pregnant women (n = 193) who have a history of pre-term delivery in a Medicaid managed care population reduces the rate of recurrent preterm delivery and neonatal intensive care unit (NICU) admissions. The findings were that offering 17P as a benefit does have a statistically significantly different, positive effect on reducing the rate of recurrent pre-term delivery and rate of NICU admission in a managed Medicaid



population. There was no decrease in effectiveness with delay in initiation of 17P as long as it was started by 28 weeks of gestation.

- In response to the 2019 PROLONG confirmatory trial showing 17-alphahydroxyprogesterone caproate provided no benefit in preventing preterm birth, the American College of Obstetricians and Gynecologists and Society for Maternal-Fetal Medicine advise more research is needed before substantively changing practice guidance.
- The American College of Obstetricians and Gynecologists. Practice Bulletin No. 234 updated recommendations state the following:
  - O Vaginal progesterone may be considered as a treatment option for patients with a history of preterm birth, singleton gestation, and a shortened cervix. However, vaginal progesterone has not been proven effective in the absence of a shortened cervix and should not be considered as an alternative to 17-alpha hydroxyprogesterone caproate (17-OHPC).
  - o Intramuscular 17-OHPC is not recommended for the primary prevention of preterm birth in patients with a history of spontaneous preterm birth.
  - O Dependent upon cervical length measurement, prior pregnancy history, and past treatment, a discussion of the range of interventions available to prevent a recurrent preterm birth should occur and a collaborative action plan should be developed.
- On October 19, 2022 the FDA's Obstetrics, Reproductive, and Urologic Drugs Advisory Committee (ORUDAC) voted 14 to 1 to recommend the withdrawal of Makena from the market. The committee concluded that the PROLONG trial failed to verify the clinical benefit of Makena and the drug has not been shown to be effective on neonatal outcomes or in preventing preterm birth, nor did it show any treatment effect in different subgroups, including those with known risk factors for preterm birth. The FDA announced the final decision to withdraw approval of Makena on April 6, 2023. Makena and its generics are no longer approved and cannot lawfully be distributed in interstate commerce.

V. Dosage and Administration

Indication	Dosing Regimen	<b>Maximum Dose</b>
Prevention of	Inject 250 mg (1 mL) IM or 275 mg (1.1	IM: 250 mg/week, SC:
preterm birth	mL) SC once weekly (every 7 days) until	275 mg/week, until
	week 37 of gestation or delivery, whichever	week 37 of gestation or
	occurs first.	delivery, whichever
		occurs first
	Begin treatment between 16 weeks, 0 days	
	and 27 weeks, 6 days of gestation. Dose	
	should be administered by a healthcare	
	professional.	

#### VI. Product Availability

Drug Name	Availability
Makena	Multi-dose vial: 250 mg/mL
	Single-dose vial (preservative free): 250 mg/mL
	Prefilled syringe (preservative free): 250 mg/mL



Drug Name	Availability
Hydroxyprogesterone	Multi-dose vial: 250 mg/mL
caproate	Single-dose vial (preservative free): 250 mg/mL

#### VII. References

- 1. Makena Prescribing Information. Waltham, MA: AMAG Pharmaceuticals, Inc.; December 2022. Available at https://dailymed.nlm.nih.gov/dailymed/fda/fdaDrugXsl.cfm?setid=a1998c1d-8337-4f00-
  - 8dcb-af3b54d39b77&type=display. Accessed January 8, 2024.
- 2. Clinical Pharmacology [database online]. Elsevier, Inc. Updated periodically. Available at: https://www.clinicalkey.com/pharmacology/. Accessed January 29, 2024.
- 3. Society for Maternal-Fetal Medicine Publications Committee. SMFM Statement: Use of 17-alpha hydroxyprogesterone caproate for prevention of recurrent preterm birth. Am J Obstet Gynecol. 2020 Jul;223(1):B16-B18.
- 4. Society for Maternal-Fetal Medicine Publications Committee. The choice of progestogen for the prevention of preterm birth in women with singleton pregnancy and prior preterm birth. Am J Obstet Gynecol. 2017 Mar;216(3):B11-B13.
- 5. Society for Maternal-Fetal Medicine Publications Committee, with assistance of Vincenzo Berghella. Progesterone and preterm birth prevention: translating clinical trials data into clinical practice. Am J Obstet Gynecol 2012;206:376-86.
- 6. Committee on Practice Bulletins—Obstetrics. The American College of Obstetricians and Gynecologists. Practice Bulletin No. 130: Prediction and prevention of preterm birth. Obstet Gynecol 2012 [reaffirmed 2016];120:964–73.
- 7. Committee on Practice Bulletins—Obstetrics. The American College of Obstetricians and Gynecologists. Practice Bulletin No. 234: Prediction and Prevention of Spontaneous Preterm Birth. Obstet Gynecol August 2021; 138 (2): e65-e90.
- 8. Mason MV, Poole-Yaeger A, Lucas B, et al. Effects of a pregnancy management program on birth outcomes in managed Medicaid. Managed Care. April 2011; 20(4): 39-46.
- 9. Mason MV, Poole-Yaeger A, Krueger C, et al. Impact of 17P usage on NICU admissions in a managed Medicaid population a five-year review. Manag Care. February 2010; 19(2): 46-52.
- 10. FDA News Release: FDA Commissioner and Chief Scientist Announce Decision to Withdraw Approval of Makena. April 6, 2023. Available at: https://www.fda.gov/news-events/press-announcements/fda-commissioner-and-chief-scientist-announce-decision-withdraw-approval-makena. Accessed January 29, 2024.
- 11. FDA.gov. Makena (hydroxyprogesterone caproate injection) Information. Updated April 6, 2023. Available at: https://www.fda.gov/drugs/postmarket-drug-safety-information-patients-and-providers/makena-hydroxyprogesterone-caproate-injection-information. Accessed January 29, 2024.
- 12. The American College of Obstetricians and Gynecologists. Practice Advisory: Updated Clinical Guidance for the Use of Progesterone Supplementation for the Prevention of Recurrent Preterm Birth. April 2023. Available at: https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2023/04/updated-guidance-use-of-progesterone-supplementation-for-prevention-of-recurrent-preterm-birth. Accessed January 29, 2024.



### **Coding Implications**

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J1726	Injection, hydroxyprogesterone caproate, (Makena), 10 mg
J1729	Injection, hydroxyprogesterone caproate, not otherwise specified, 10 mg

Reviews, Revisions, and Approvals	Date	P&T Approval Date
Added requirement precluding concurrent therapy with Crinone or Endometrin; PROLONG confirmatory trial synopsis added to general information appendix - related ACOG/SMFM citations added to reference section.		08.20
1Q 2021 annual review: no significant changes; generic formulation availability added for single and multi-dose vials for information; references to HIM.PHAR.21 revised to HIM.PA.154; added J1729 to coding implications; references reviewed and updated.	10.21.20	02.21
1Q 2022 annual review: no significant changes; references reviewed and updated.	11.16.21	02.22
Template changes applied to other diagnoses/indications and continued therapy section.	09.30.22	
1Q 2023 annual review: added the following requirements to continuation of therapy requests to support information contained in the approval duration: member has not received more than 21 total doses for the current pregnancy; member has not reached week 37 of gestation; added information to Appendix D regarding FDA advisory committee vote to withdraw Makena from the market; references reviewed and updated.	10.20.22	02.23
Added disclaimer about FDA withdrawal of Makena and its generics; added requirement for prescriber attestation of market withdrawal; for initial therapy added requirement that request is for compounded hydroxyprogesterone caproate as Makena and its generics are no longer approvable for patients initiating therapy.	04.06.23	05.23
2Q 2024 annual review: no significant changes; updated Appendix D to include information from ACOG updated practice advisory regarding progesterone supplementation; added HCPCS code J1729; references reviewed and updated.	01.08.24	05.24

#### **Important Reminder**

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program



approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. "Health Plan" means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan's affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions, and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment, or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

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#### Note:

**For Medicaid members**, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

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