

## Medical Coverage Policy | Progesterone Therapy as a Technique to Reduce Preterm Birth in High-Risk Pregnancies



**EFFECTIVE DATE:** 06/01/2018

**POLICY LAST UPDATED:** 05/15/2018

### OVERVIEW

Preterm birth is the leading cause of neonatal morbidity and mortality, and effective primary preventive interventions have remained elusive. In recent years, there has been renewed interest in the use of progesterone (injectable and intravaginal formulations) to prevent preterm birth. This policy addresses treatment with the use of progesterone (injectable) to prevent preterm birth.

Note: Intravaginal formulations are covered as part of the member's pharmacy benefit.

This policy is applicable to BlueCHiP for Medicare products only. For Commercial Products, see related policy section

### MEDICAL CRITERIA

Makena<sup>®</sup> (hydroxyprogesterone caproate) is medically necessary when all of the following criteria has been met:

#### Initial and Renewal Evaluation

The patient has a current singleton pregnancy **AND**

1. The patient is currently between 16 weeks 0 days and 20 weeks 6 days gestation **AND**
2. The patient has a history of spontaneous singleton preterm birth (defined as a birth occurring between 20 weeks 0 days through 36 weeks 6 days gestation. Birth occurring prior to 20 weeks is considered a miscarriage or spontaneous abortion) **AND**
3. The patient does not have any FDA labeled contraindications to therapy **AND**
4. The dose is 250 mg once weekly.

**Length of Approval:** up to 6 months or 36 weeks 6 days gestation, whichever occurs first.

### PRIOR AUTHORIZATION

Prior authorization is required for BlueCHiP for Medicare for brand name Makena only.

### POLICY STATEMENT

#### BlueCHiP for Medicare

#### Compounded 17P and Generic hydroxyprogesterone caproate

Progesterone therapy (Compounded 17P and Generic hydroxyprogesterone caproate) is medically necessary for women with a singleton pregnancy and prior history of spontaneous preterm birth before 37 weeks of gestation or for women with a singleton pregnancy and a short cervix (<20 mm). All other indications are not medically necessary that there is not any peer reviewed scientific evidence to support its efficacy.

#### Makena - Brand name hydroxyprogesterone caproate

If it is necessary for a patient to take the brand Makena rather than the compounded version 17P, Makena is medically necessary if the medical criteria above is met.

### COVERAGE

Benefits may vary between groups and contracts. Please refer to the appropriate Evidence of Coverage for applicable physician administered drug or specialty pharmacy benefits/coverage.

## BACKGROUND

Preterm birth is the leading cause of neonatal morbidity and mortality, and effective primary preventive interventions have remained elusive. In recent years, there has been renewed interest in the use of progesterone (injectable and intravaginal formulations) to prevent preterm birth.

There is sufficient evidence from randomized controlled trials (RCTs) and meta-analyses of RCTs that injectable and vaginal progesterone are associated with improved health outcomes in women with singleton pregnancies who have a history of prior preterm birth. In addition, there is sufficient evidence that progesterone improves health outcomes in women with singleton pregnancies and short cervical length. Thus, progesterone therapy may be considered medically necessary in these situations for selected women who meet clinical criteria.

Preterm labor and delivery are major determinants of neonatal morbidity and mortality. In the United States, the rate of preterm birth is 12%. A variety of diagnostic and prophylactic measures have been investigated including home uterine activity monitoring, subcutaneous terbutaline tocolytic therapy, and routine culture and antibiotic treatment of subclinical bacterial vaginosis. To date, none of these have made a significant demonstrable impact on the incidence of preterm delivery. In the past, intramuscular (IM) injections of hydroxyprogesterone caproate (ie, Delalutin) were used routinely to prevent premature labor. However, the drug was shown to have teratogenic properties, and FDA labeled the drug as Category D (ie, studies have demonstrated fetal risk, but use of the drug may outweigh the potential risk). Delalutin was voluntarily withdrawn from the market in 1999.

In recent years, there has been renewed research interest in IM injection of 17 $\beta$ -hydroxyprogesterone caproate (17P). 17P is a weakly acting, naturally occurring progesterone metabolite, which when coupled with caproate dextran works as a long-acting progestin when administered intramuscularly. 17P has been manufactured locally by compounding pharmacies. After an extended application process, Makena®, another injectable form of 17P was approved by FDA in February 2011. Intravaginal progesterone gel and suppositories have also been used.

The FDA reviewed the potency and purity data on the compounded versions of 17P, findings that all samples tested passed the USP tests for potency and total purity and stating that the compounded versions “do not raise safety concerns” and released a statement permitting the continued compounding of 17P despite the availability of Makena.

Although Makena and 17P contain the same active ingredient in the same concentration, with castor oil as an inactive ingredient, only Makena contains preservatives (benzyl benzoate and benzyl alcohol). Based on the active ingredient, compounded 17P is considered clinically interchangeable with Makena. The ACOG and the Society for Maternal Fetal Medicine (SMFM) released a joint statement: “[While] there are clear benefits to having an FDA-approved version of 17P, there is no evidence that Makena is more effective or safer than the currently used compounded version.”

Progesterone is used for the following indications:

For women with a singleton pregnancy and prior history of spontaneous preterm birth before 37 weeks of gestation, the following may be considered medically necessary:

- Weekly injections of 17 $\beta$ -hydroxyprogesterone caproate, performed in the office setting, initiated between 16 and 20 weeks of gestation and continued until 36 weeks 6 days
- Daily vaginal progesterone between 24 and 34 weeks of gestation
- For women with a singleton pregnancy and a short cervix (<20 mm), the following may be considered medically necessary:
  - Daily vaginal progesterone initiated between 20 and 23 weeks 6 days of gestation and continued until 36 weeks 6 days

Progesterone therapy as a technique to prevent preterm delivery is considered not medically necessary in pregnant women with other risk factors for preterm delivery, including but not limited to:

- twin or multiple gestation;
- prior episode of preterm labor in current pregnancy (ie, progesterone therapy in conjunction with tocolysis or following successful tocolysis);
- positive test for cervicovaginal fetal fibronectin;
- cervical cerclage; and/or
- Uterine anomaly.

There is sufficient evidence from randomized controlled trials (RCTs) and meta-analyses of RCTs that injectable and vaginal progesterone are associated with improved health outcomes in women with singleton pregnancies who have a history of prior preterm birth. In addition, there is sufficient evidence that progesterone improves health outcomes in women with singleton pregnancies and short cervical length. Thus, progesterone therapy may be considered medically necessary in the above situations for selected women who meet clinical criteria.

The evidence is insufficient that progesterone is effective for reducing preterm delivery in other situations such as women with twin or multiple gestations, women with preterm rupture of the membranes, or women with a prior episode of preterm labor in the current pregnancy (in conjunction with or following tocolysis) and thus these indications are considered investigational.

#### **CODING**

##### **BlueCHiP for Medicare**

##### **Brand Name- Makena**

The following HCPCS is medically necessary when criteria has been met

J1726 Injection, hydroxyprogesterone caproate, (makena), 10 mg (new code effective 1/1/2018)

Q9986 Injection, hydroxyprogesterone caproate (Makena), 10 mg (for dates of service 7/1/2017-12/31/2017)

##### **Compound Formula**

The following codes are covered

J1729 Injection, hydroxyprogesterone caproate, not otherwise specified, 10 mg (new code effective 1/1/2018)

Q9985 Injection, hydroxyprogesterone caproate, not otherwise specified, 10 mg (for dates of service 7/1/2017-12/31/2017)

#### **RELATED POLICIES**

Prior Authorization of Drugs

#### **PUBLISHED**

Provider Update June 2018

Provider Update August 2017

Provider Update November 2016

Provider Update Sept 2015

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