

## Clinical Policy: Temsirolimus (Torisel)

Reference Number: PA.CP.PHAR.324

Effective Date: 01/18

Last Review Date: 11/17

[Coding Implications](#)  
[Revision Log](#)

### Description

The intent of the criteria is to ensure that patients follow selection elements established by Pennsylvania Health and Wellness<sup>®</sup> clinical policy for temsirolimus for injection (Torisel<sup>®</sup>).

### Policy/Criteria

It is the policy of Pennsylvania Health and Wellness<sup>®</sup> that Torisel is **medically necessary** when the following criteria are met:

#### I. Initial Approval Criteria

##### A. Renal Cell Carcinoma (must meet all):

1. Diagnosis of advanced renal cell carcinoma (RCC) (i.e., relapsed, metastatic or stage IV disease; clear cell or non-clear cell histology);
2. Prescribed dose does not exceed 25 mg once a week (50 mg once a week if used with a strong CYP3A4 inducer [e.g. dexamethasone, phenytoin, carbamazepine, rifampin, rifabutin, rifampacin, phenobarbital]);
3. Not prescribed concurrently with live vaccines (e.g., intranasal influenza, measles, mumps, rubella, oral polio, BCG [tuberculosis vaccine], yellow fever, varicella, TY21a typhoid vaccines);
4. Member does not have a bilirubin > 1.5 times the upper limit of normal (ULN).

**Approval duration: 3 months**

##### B. Other diagnoses/indications: Refer to PA.CP.PHAR.57 - Global Biopharm Policy.

1. The following NCCN recommended uses for Torisel, meeting NCCN categories 1, 2a, or 2b, are approved per the PA.CP.PHAR.57 Global Biopharm Policy:
  - a. The following soft tissue sarcomas:
    - i. Perivascular epithelioid cell tumor;
    - ii. Recurrent angiomyolipoma;
    - iii. Lymphangiomyomatosis;
  - b. Endometrial carcinoma.

#### II. Continued Approval

##### A. All Indications (must meet all):

1. Currently receiving medication via Pennsylvania Health and Wellness benefit or member has previously met all initial approval criteria; or the Continuity of Care policy (PA.LTSS.PHAR.01) applies;
2. Member has none of the following reasons to discontinue:
  - a. Disease progression or unacceptable toxicity;
  - b. Bilirubin > 1.5 times ULN.

**Approval duration: 6 months**

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

1. Currently receiving medication via Pennsylvania Health and Wellness benefit and documentation supports positive response to therapy; or the Continuity of Care policy (PA.LTSS.PHAR.01) applies; or
2. Refer to PA.CP.PHAR.57 - Global Biopharm Policy.

**Background**

*Description/Mechanism of Action:*

Temsirolimus is an inhibitor of mTOR (mammalian target of rapamycin). Temsirolimus binds to an intracellular protein (FKBP-12), and the protein-drug complex inhibits the activity of mTOR that controls cell division. Inhibition of mTOR activity resulted in a G1 growth arrest in treated tumor cells. When mTOR was inhibited, its ability to phosphorylate p70S6k and S6 ribosomal protein, which are downstream of mTOR in the PI3 kinase/AKT pathway was blocked. In *in vitro* studies using renal cell carcinoma cell lines, temsirolimus inhibited the activity of mTOR and resulted in reduced levels of the hypoxia-inducible factors HIF-1 and HIF-2 alpha, and the vascular endothelial growth factor.

*Formulations:*

Torisel (temsirolimus) injection, 25 mg/mL:

- Each kit is supplied in a single carton containing:
  - One single-use vial of 25 mg/mL of temsirolimus; and
  - One diluent vial which includes a deliverable volume of 1.8 mL.

*FDA Approved Indications:*

Torisel is a kinase inhibitor/intravenous formulation indicated for:

- Treatment of advanced renal cell carcinoma.

**Appendices**

**Appendix A: Abbreviation Key**

BCG: Bacille Calmette-Guerin

HIF: Hypoxia-inducible factors

RCC: Renal cell carcinoma

ULN: Upper limit of normal

**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
J9330	Injection, temsirolimus, 1 mg

Reviews, Revisions, and Approvals	Date	Approval Date

**References**

1. Torisel prescribing information. Philadelphia, PA: Pfizer, Inc.; July 2016. Available at <http://labeling.pfizer.com/showlabeling.aspx?id=490>. Accessed January 30, 2017.
2. Temsirolimus. In: National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at NCCN.org. Accessed January 30, 2017.
3. Kidney cancer (Version 2.2017). In: National Comprehensive Cancer Network Guidelines. Available at NCCN.org. Accessed January 30, 2017.