#### HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use AFINITOR safely and effectively. See full prescribing information for AFINITOR.

AFINITOR® (everolimus) tablets for oral administration AFINITOR® DISPERZ (everolimus tablets for oral suspension) Initial U.S. Approval: 2009

#### 

#### -----INDICATIONS AND USAGE-----

2/2016

AFINITOR is a kinase inhibitor indicated for the treatment of:

Warnings and Precautions, Embryo-Fetal Toxicity (5.12)

- postmenopausal women with advanced hormone receptor-positive, HER2negative breast cancer (advanced HR+ BC) in combination with exemestane after failure of treatment with letrozole or anastrozole. (1.1)
- adults with progressive neuroendocrine tumors of pancreatic origin (PNET) and adults with progressive, well-differentiated, non-functional neuroendocrine tumors (NET) of gastrointestinal (GI) or lung origin that are unresectable, locally advanced or metastatic. AFINITOR is not indicated for the treatment of patients with functional carcinoid tumors.
- adults with advanced renal cell carcinoma (RCC) after failure of treatment with sunitinib or sorafenib. (1.3)
- adults with renal angiomyolipoma and tuberous sclerosis complex (TSC), not requiring immediate surgery. (1.4)

AFINITOR and AFINITOR DISPERZ are kinase inhibitors indicated for the treatment of:

 pediatric and adult patients with tuberous sclerosis complex (TSC) who have subependymal giant cell astrocytoma (SEGA) that requires therapeutic intervention but cannot be curatively resected. (1.5)

#### -----DOSAGE AND ADMINISTRATION-----

Advanced HR+ BC, advanced NET, advanced RCC, or renal angiomyolipoma with TSC:

- 10 mg once daily with or without food. (2.1)
- For patients with hepatic impairment, reduce the AFINITOR dose. (2.2)
- If moderate inhibitors of CYP3A4/P-glycoprotein (PgP) are required, reduce the AFINITOR dose to 2.5 mg once daily; if tolerated, consider increasing to 5 mg once daily. (2.2)
- If strong inducers of CYP3A4 are required, consider doubling the daily dose of AFINITOR using increments of 5 mg or less. (2.2)

#### SEGA with TSC:

- 4.5 mg/m<sup>2</sup> once daily; adjust dose to attain trough concentrations of 5-15 ng/mL. (2.3)
- Assess trough concentrations approximately 2 weeks after initiation of treatment, a change in dose, a change in co-administration of CYP3A4/PgP inducers or inhibitors, a change in hepatic function, or a change in dosage form between AFINITOR Tablets and AFINITOR DISPERZ. (2.3, 2.4)
- For patients with severe hepatic impairment reduce the starting dose of AFINITOR Tablets or AFINITOR DISPERZ. (2.3, 2.5)
- If concomitant use of moderate inhibitors of CYP3A4/PgP is required, reduce the dose of AFINITOR Tablets or AFINITOR DISPERZ by 50%. (2.3, 2.5)
- If concomitant use of strong inducers of CYP3A4/PgP is required, double the dose of AFINITOR Tablets or AFINITOR DISPERZ. (2.3, 2.5)

#### -----DOSAGE FORMS AND STRENGTHS-----

AFINITOR Tablets: 2.5 mg, 5 mg, 7.5 mg, and 10 mg tablets (3.1) AFINITOR DISPERZ Tablets, for oral suspension: 2 mg, 3 mg, and 5 mg tablets (3.2)

#### ------CONTRAINDICATIONS------

Hypersensitivity to everolimus, to other rapamycin derivatives, or to any of the excipients (4)

#### ------WARNINGS AND PRECAUTIONS-----

- Non-infectious pneumonitis: Monitor for clinical symptoms or radiological changes; fatal cases have occurred. Manage by dose reduction or discontinuation until symptoms resolve, and consider use of corticosteroids. (5.1)
- Infections: Increased risk of infections, some fatal. Monitor for signs and symptoms, and treat promptly. (5.2)
- Angioedema: Patients taking concomitant ACE inhibitor therapy may be at increased risk for angioedema. (5.3)
- Oral ulceration: Mouth ulcers, stomatitis, and oral mucositis are common.
   Management includes mouthwashes and topical treatments. (5.4)
- Renal failure: Cases of renal failure (including acute renal failure), some with a fatal outcome, have been observed. (5.5)
- Impaired wound healing: Increased risk of wound-related complications.
   Monitor signs and symptoms. Exercise caution in the peri-surgical period.
   (5.6)
- Laboratory test alterations: Elevations of serum creatinine, urinary protein, blood glucose, and lipids may occur. Decreases in hemoglobin, neutrophils, and platelets may also occur. Monitor renal function, blood glucose, lipids, and hematologic parameters prior to treatment and periodically thereafter.
   (5.8)
- Vaccinations: Avoid live vaccines and close contact with those who have received live vaccines. (5.11)
- Embryo-Fetal Toxicity: Can cause fetal harm. Advise females of reproductive potential of the potential risk to a fetus and to use effective contraception during treatment with AFINITOR and for 8 weeks after final dose. (5.12, 8.1, 8.3)

#### -----ADVERSE REACTIONS-----

Advanced HR+ BC, advanced NET, advanced RCC: Most common adverse reactions (incidence  $\geq$ 30%) include stomatitis, infections, rash, fatigue, diarrhea, edema, abdominal pain, nausea, fever, asthenia, cough, headache and decreased appetite. (6.1, 6.2, 6.3)

Renal angiomyolipoma with TSC: Most common adverse reaction (incidence  $\geq$  30%) is stomatitis. (6.4)

SEGA with TSC: Most common adverse reactions (incidence  $\geq$  30%) are stomatitis and respiratory tract infection. (6.5)

To report SUSPECTED ADVERSE REACTIONS, contact Novartis Pharmaceuticals Corporation at 1-888-669-6682 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

## -----DRUG INTERACTIONS-----

- Strong CYP3A4/PgP inhibitors: Avoid concomitant use. (2.2, 2.5, 5.9, 7.1)
- Moderate CYP3A4/PgP inhibitors: If combination is required, use caution and reduce dose of AFINITOR. (2.2, 2.3, 2.5, 5.9, 7.1)
- Strong CYP3A4/PgP inducers: Avoid concomitant use. If combination cannot be avoided, increase dose of AFINITOR. (2.2, 2.3, 2.5, 5.9, 7.2)

#### -----USE IN SPECIFIC POPULATIONS-----

- Lactation: Breast feeding not recommended. (8.2)
- Females and Males of Reproductive Potential: May impair fertility. (8.3)
- Hepatic impairment: For advanced HR+ BC, advanced NET, advanced RCC, or renal angiomyolipoma with TSC patients with hepatic impairment, reduce AFINITOR dose. For SEGA patients with severe hepatic impairment, reduce the starting dose of AFINITOR Tablets or AFINITOR DISPERZ. (2.2, 2.3, 2.5, 5.10, 8.8)

See 17 for PATIENT COUNSELING INFORMATION and FDA-approved patient labeling

Revised: 6/2016



#### FULL PRESCRIBING INFORMATION: CONTENTS\*

#### 1 INDICATIONS AND USAGE

- Advanced Hormone Receptor-Positive, HER2-Negative Breast Cancer (Advanced HR+ BC)
- 1.2 Advanced Neuroendocrine Tumors (NET)
- 1.3 Advanced Renal Cell Carcinoma (RCC)
- 1.4 Renal Angiomyolipoma with Tuberous Sclerosis Complex (TSC)
- Subependymal Giant Cell Astrocytoma (SEGA) with Tuberous Sclerosis Complex (TSC)

#### 2 DOSAGE AND ADMINISTRATION

- 2.1 Recommended Dose in Advanced Hormone Receptor-Positive, HER2-Negative Breast Cancer, Advanced NET, Advanced RCC, and Renal Angiomyolipoma with TSC
- 2.2 Dose Modifications in Advanced Hormone Receptor-Positive, HER2-Negative Breast Cancer, Advanced NET, Advanced RCC, and Renal Angiomyolipoma with TSC
- 2.3 Recommended Dose in SEGA with TSC
- 2.4 Therapeutic Drug Monitoring in SEGA with TSC
- 2.5 Dose Modifications in SEGA with TSC
- 2.6 Administration of AFINITOR Tablets in SEGA with TSC
- 2.7 Administration and Preparation of AFINITOR DISPERZ in SEGA with TSC

#### 3 DOSAGE FORMS AND STRENGTHS

- 3.1 AFINITOR Tablets
- 3.2 AFINITOR DISPERZ

#### CONTRAINDICATIONS

#### WARNINGS AND PRECAUTIONS

- 5.1 Non-infectious Pneumonitis
- 5.2 Infections
- 5.3 Angioedema with Concomitant Use of Angiotensin-Converting Enzyme (ACE) Inhibitors
- 5.4 Oral Ulceration
- 5.5 Renal Failure
- 5.6 Impaired Wound Healing
- 5.7 Geriatric Patients
- 5.8 Laboratory Tests and Monitoring
- 5.9 Drug-Drug Interactions
- 5.10 Hepatic Impairment
- 5.11 Vaccinations
- 5.12 Embryo-Fetal Toxicity

#### 6 ADVERSE REACTIONS

- 6.1 Clinical Study Experience in Advanced Hormone Receptor-Positive, HER2-Negative Breast Cancer
- 6.2 Clinical Study Experience in Advanced Neuroendocrine Tumors

- 6.3 Clinical Study Experience in Advanced Renal Cell Carcinoma
- 6.4 Clinical Study Experience in Renal Angiomyolipoma with Tuberous Sclerosis Complex
- 6.5 Clinical Study Experience in Subependymal Giant Cell Astrocytoma with Tuberous Sclerosis Complex
- 6.6 Postmarketing Experience

#### 7 DRUG INTERACTIONS

- 7.1 Agents That May Increase Everolimus Blood Concentrations
- 7.2 Agents That May Decrease Everolimus Blood Concentrations
- 7.3 Drugs That May Have Their Plasma Concentrations Altered by Everolimus

#### B USE IN SPECIFIC POPULATIONS

- 8.1 Pregnancy
- 8.2 Lactation
- 8.3 Females and Males of Reproductive Potential
- 8.4 Pediatric Use
- 8.5 Geriatric Use
- 8.7 Renal Impairment
- 8.8 Hepatic Impairment
- 10 OVERDOSAGE
- 11 DESCRIPTION

#### 12 CLINICAL PHARMACOLOGY

- 12.1 Mechanism of Action
- 12.2 Pharmacodynamics
- 12.3 Pharmacokinetics
- 12.6 QT/QTc Prolongation Potential

#### 13 NONCLINICAL TOXICOLOGY

- 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility
- 13.2 Animal Toxicology and/or Pharmacology

#### 14 CLINICAL STUDIES

- 14.1 Advanced Hormone Receptor-Positive, HER2-Negative Breast Cancer
- 14.2 Advanced Neuroendocrine Tumors
- 14.3 Advanced Renal Cell Carcinoma
- 14.4 Renal Angiomyolipoma with Tuberous Sclerosis Complex
- 14.5 Subependymal Giant Cell Astrocytoma with Tuberous Sclerosis Complex
- 15 REFERENCES
- 16 HOW SUPPLIED/STORAGE AND HANDLING
- 17 PATIENT COUNSELING INFORMATION
  - \* Sections or subsections omitted from the full prescribing information are not listed



#### FULL PRESCRIBING INFORMATION

#### 1 INDICATIONS AND USAGE

# 1.1 Advanced Hormone Receptor-Positive, HER2-Negative Breast Cancer (Advanced HR+ BC)

AFINITOR® is indicated for the treatment of postmenopausal women with advanced hormone receptor-positive, HER2-negative breast cancer (advanced HR+ BC) in combination with exemestane, after failure of treatment with letrozole or anastrozole.

### 1.2 Advanced Neuroendocrine Tumors (NET)

AFINITOR® is indicated for the treatment of adult patients with progressive neuroendocrine tumors of pancreatic origin (PNET) with unresectable, locally advanced or metastatic disease.

AFINITOR® is indicated for the treatment of adult patients with progressive, well-differentiated, non-functional neuroendocrine tumors (NET) of gastrointestinal (GI) or lung origin with unresectable, locally advanced or metastatic disease.

AFINITOR® is not indicated for the treatment of patients with functional carcinoid tumors [see Clinical Studies (14.2)].

#### 1.3 Advanced Renal Cell Carcinoma (RCC)

AFINITOR® is indicated for the treatment of adult patients with advanced renal cell carcinoma (RCC) after failure of treatment with sunitinib or sorafenib.

# 1.4 Renal Angiomyolipoma with Tuberous Sclerosis Complex (TSC)

AFINITOR® is indicated for the treatment of adult patients with renal angiomyolipoma and tuberous sclerosis complex (TSC), not requiring immediate surgery.

## 1.5 Subependymal Giant Cell Astrocytoma (SEGA) with Tuberous Sclerosis Complex (TSC)

AFINITOR® Tablets and AFINITOR® DISPERZ are indicated in pediatric and adult patients with tuberous sclerosis complex (TSC) for the treatment of subependymal giant cell astrocytoma (SEGA) that requires therapeutic intervention but cannot be curatively resected.

#### 2 DOSAGE AND ADMINISTRATION

AFINITOR is available in two dosage forms: tablets (AFINITOR Tablets) and tablets for oral suspension (AFINITOR DISPERZ).

- AFINITOR Tablets may be used for all approved indications.
- AFINITOR DISPERZ is approved for the treatment of patients with subependymal giant cell astrocytoma (SEGA) and tuberous sclerosis complex (TSC).

# 2.1 Recommended Dose in Advanced Hormone Receptor-Positive, HER2-Negative Breast Cancer, Advanced NET, Advanced RCC, and Renal Angiomyolipoma with TSC

The recommended dose of AFINITOR Tablets is 10 mg, to be taken once daily at the same time every day. Administer either consistently with food or consistently without food [see Clinical Pharmacology (12.3)]. AFINITOR Tablets should be swallowed whole with a glass of water. Do not break or crush tablets.

Continue treatment until disease progression or unacceptable toxicity occurs.



# 2.2 Dose Modifications in Advanced Hormone Receptor-Positive, HER2-Negative Breast Cancer, Advanced NET, Advanced RCC, and Renal Angiomyolipoma with TSC

#### Adverse Reactions

Management of severe or intolerable adverse reactions may require temporary dose interruption (with or without a dose reduction of AFINITOR therapy) or discontinuation. If dose reduction is required, the suggested dose is approximately 50% lower than the daily dose previously administered [see Warnings and Precautions (5)].

Table 1 summarizes recommendations for dose reduction, interruption or discontinuation of AFINITOR in the management of adverse reactions. General management recommendations are also provided as applicable. Clinical judgment of the treating physician should guide the management plan of each patient based on individual benefit/risk assessment.

Table 1: AFINITOR Dose Adjustment and Management Recommendation for Adverse Reactions

<b>Adverse Reaction</b>	Severity <sup>a</sup>	<b>AFINITOR Dose Adjustment<sup>b</sup> and Management Recommendations</b>
Non-infectious	Grade 1	No dose adjustment required.
pneumonitis	Asymptomatic, radiographic findings only	Initiate appropriate monitoring.
	Grade 2 Symptomatic, not interfering with ADL <sup>c</sup>	Consider interruption of therapy, rule out infection and consider treatment with corticosteroids until symptoms improve to ≤ Grade 1.  Re-initiate AFINITOR at a lower dose.  Discontinue treatment if failure to recover within 4 weeks.
	Grade 3 Symptomatic, interfering with $ADL^c$ ; $O_2$ indicated	Interrupt AFINITOR until symptoms resolve to ≤ Grade 1. Rule out infection, and consider treatment with corticosteroids. Consider re-initiating AFINITOR at a lower dose. If toxicity recurs at Grade 3, consider discontinuation.
	Grade 4 Life-threatening, ventilatory support indicated	Discontinue AFINITOR, rule out infection, and consider treatment with corticosteroids.
Stomatitis	Grade 1	No dose adjustment required.
	Minimal symptoms, normal diet	Manage with non-alcoholic or salt water (0.9%) mouth wash several times a day.
	Grade 2 Symptomatic but can eat and swallow modified diet	Temporary dose interruption until recovery to Grade ≤1.  Re-initiate AFINITOR at the same dose.  If stomatitis recurs at Grade 2, interrupt dose until recovery to Grade ≤1. Re-initiate AFINITOR at a lower dose.
		Manage with topical analgesic mouth treatments (e.g., benzocaine butyl aminobenzoate, tetracaine hydrochloride, menthol or phenol with or without topical corticosteroids (i.e., triamcinolone oral paste).
	Grade 3 Symptomatic and unable to adequately aliment or hydrate orally	Temporary dose interruption until recovery to Grade ≤1.  Re-initiate AFINITOR at a lower dose.  Manage with topical analgesic mouth treatments (i.e., benzocaine, butyl aminobenzoate, tetracaine hydrochloride, menthol or phenol with or without topical corticosteroids (i.e., triamcinolone oral paste).



	Grade 4	Discontinue AFINITOR and treat with appropriate medical
	Symptoms associated with life-threatening consequences	therapy.
Other non-hematologic toxicities (excluding metabolic events)	Grade 1	If toxicity is tolerable, no dose adjustment required.
		Initiate appropriate medical therapy and monitor.
	Grade 2	If toxicity is tolerable, no dose adjustment required.
		Initiate appropriate medical therapy and monitor.
		If toxicity becomes intolerable, temporary dose interruption until recovery to Grade ≤1. Reinitiate AFINITOR at the same dose.
		If toxicity recurs at Grade 2, interrupt AFINITOR until recovery to
		Grade ≤1. Reinitiate AFINITOR at a lower dose.
	Grade 3	Temporary dose interruption until recovery to Grade ≤1.
		Initiate appropriate medical therapy and monitor.
		Consider reinitiating AFINITOR at a lower dose. If toxicity recurs at Grade 3, consider discontinuation.
	Grade 4	Discontinue AFINITOR and treat with appropriate medical therapy.
Metabolic events	Grade 1	No dose adjustment required.
(e.g. hyperglycemia, dyslipidemia)		Initiate appropriate medical therapy and monitor.
	Grade 2	No dose adjustment required.
		Manage with appropriate medical therapy and monitor.
	Grade 3	Temporary dose interruption.
		Reinitiate AFINITOR at a lower dose.
		Manage with appropriate medical therapy and monitor.
	Grade 4	Discontinue AFINITOR and treat with appropriate medical therapy.

<sup>&</sup>lt;sup>a</sup> Severity grade description: 1 = mild symptoms; 2 = moderate symptoms; 3 = severe symptoms; 4 = life-threatening symptoms.

#### Hepatic Impairment

Hepatic impairment will increase the exposure to everolimus [see Warnings and Precautions (5.10) and Use in Specific Populations (8.8)]. Dose adjustments are recommended:

- Mild hepatic impairment (Child-Pugh class A) The recommended dose is 7.5 mg daily; the dose may be decreased to 5 mg if not well tolerated.
- Moderate hepatic impairment (Child-Pugh class B) The recommended dose is 5 mg daily; the dose may be decreased to 2.5 mg if not well tolerated.
- Severe hepatic impairment (Child-Pugh class C) If the desired benefit outweighs the risk, a dose of 2.5 mg daily may be used but must not be exceeded.

Dose adjustments should be made if a patient's hepatic (Child-Pugh) status changes during treatment.

# CYP3A4/P-glycoprotein (PgP) Inhibitors

Avoid the use of strong CYP3A4/PgP inhibitors (e.g., ketoconazole, itraconazole, clarithromycin, atazanavir, nefazodone, saquinavir, telithromycin, ritonavir, indinavir, nelfinavir, voriconazole) [see Warnings and Precautions (5.9) and Drug



<sup>&</sup>lt;sup>b</sup> If dose reduction is required, the suggested dose is approximately 50% lower than the dose previously administered.

<sup>&</sup>lt;sup>c</sup> Activities of daily living (ADL)

<sup>&</sup>lt;sup>d</sup> Avoid using agents containing alcohol, hydrogen peroxide, iodine, and thyme derivatives in management of stomatitis as they may worsen mouth ulcers.

# DOCKET

# Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

# **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

# **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

# **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

#### **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

#### **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

# **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

