Afinitor inhibits IL-2 and other cytokine receptor-dependent signal transduction mechanisms via action on mTOR and thereby blocks activation of T and B cells. mTOR is a protein encoded by the MTOR gene which regulates numerous cell growth properties. Thus, it is used in clinical practice as an immunosuppressant/antiproliferative medication.

Pre-Authorization Criteria: advanced hormone receptor-positive, HER2-negative breast cancer in postmenopausal women (in combination with exemestane and after letrozole or anastrozole failure); advanced, metastatic or unresectable pancreatic neuroendocrine tumors (PNET); renal angiomyolipoma with tuberous sclerosis complex (TSC) not requiring immediate surgery; advanced renal cell carcinoma (RCC) after sunitinib or sorafenib failure; prophylaxis of organ rejection in renal transplant patients; subependymal giant cell astrocytoma (SEGA) associated with TSC which requires intervention, but cannot be curatively resected; prophylaxis of organ rejection in liver transplantation (in combination with corticosteroids and reduced doses of tacrolimus)

Off-Label Uses: carcinoid tumors (progressive, advanced); Waldenström macroglobulinemia (relapsed or refractory)

Dosing: Dosing ranges from 2.5-10 mg per day but varies according to the disease being treated. See product literature

How Supplied: 2.5 mg, 5 mg, 7.5 mg, 10 mg oral tablets

Precautions*: angioedema; bone marrow suppression; graft thrombosis; infection (viral, bacterial protozoal, viral); skin cancer and lymphoma; hyperglycemia; hyperlipidemia; mucositis/stomatitis; nephrotoxicity; pulmonary toxicity; delayed wound healing

Drug Interactions: ACE inhibitors (increased ACEI toxicity); CYP3A4 Inducers (decreased serum concentration of everolimus); CYP3A Inhibitors, grapefruit juice (increased serum concentration of everolimus)

*NOTE: See product literature for details
REFERENCES


**HISTORY**

Reviewed and approved by Express Scripts Therapeutic Assessment Committee (TAC): 01/09/2013.
Revision History:
Date Approved by P&T Committee: 10/22/13
Date Reviewed/No Updates: 1/28/14 by C. Sanders MD
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Date Approved by P&T Committee: 1/26/16
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Date Approved by P&T Committee: 1/24/17
Date Reviewed/No Updates: 1/23/18 by C. Sanders, MD; R. Sterling, MD
Date Approved by P&T Committee: 1/23/18

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