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


40. Parikh SA, Kantarjian HM, Richie MA, et al. Experience with everolimus (RAD001), an oral mammalian target of


**HISTORY**

Reviewed and approved by Express Scripts Therapeutic Assessment Committee (TAC): 01/09/2013.

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<td>Catherine Sanders, MD; Robert Sterling, MD</td>
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