

Technemab	MoAb 225.28S	Anti-HMW; murine mAb Fab ₂	(1996)	Sorin Biomedica	Diagnosis of cutaneous melanoma lesions	IV
Tysabri	Natalizumab	Anti- α 4 integrin; humanized IgG4 κ	2006 (2004)	Biogen IDEC	MS relapse	IV infusion
Vectibix	Panitumumab	Anti-EGFr; human IgG2 κ	2007 (2006)	Amgen	Treatment of patients with EGFr-expressing metastatic colorectal cancer	IV injection
Verluma	Nofetumomab	Anti-tumor antigen (40kDa glycoprotein); murine fab	1996	Boehringer Ingelheim and Dupont Merck	Imaging agent for lung cancer	IV injection
Xgeva	Denosumab	Human IgG2 monoclonal antibody that binds to human RANKL	(2010)	Amgen	Osteoporosis, treatment-induced bone loss, bone metastases, multiple myeloma, and giant cell tumor of bone	SC
Xolair	Omalizumab	Anti-IgE; humanized IgG1 κ	2005 (2003)	Genentech with Novartis and Tanox	IgE-mediated allergic asthma	SC
Yervoy	Ipilimumab	Anti-CTLA-4; human IgG1	2011 (2011)	Bristol-Myers Squibb	Metastatic melanoma	IV infusion
Zenapax	Daclizumab	Anti-IL2; humanized IgG1	1999 (1997)	Roche	Prophylaxis of acute organ rejection in patients receiving renal transplants	IV infusion
Zevalin	Ibritumomab-tiuxetan	Anti-CD20; murine IgG1 κ covalently linked to tiuxetan; radioimmunotherapy	2004 (2002)	IDEC	Non-Hodgkin's lymphoma, binds to CD20 antigen and irradiates cells with yttrium-90	IV infusion

IM, intramuscular; IV, intravenous; SC, subcutaneous.

^aUS approval dates in parentheses.