

Defintion: Agents or approaches which will modify the relationship between the tumor and the host by modifying the host's biological response to tumor cells, with resultant therapeutic benefit.

Biological response modifier class	Biological response modifier	Therapy	Mechanism	Applications
Growth factor signaling modulators	TNF	TNF gene therapy	Apoptosis/radiosensitisation/ Anti-angiogenesis	Ca. Pancreas, STS
	EGF	Anti-EGFR MAb (Cetuximab) Anti-Her-2/neu MAb (Herceptin) Gefitinib	Radiosensitisation & Anti-proliferation	Ca H&N Ca.Breast NSCLC
	RAS	Farnesyl Transferase Inhibitors (R115777)	Radiosensitiser	Ca. larynx
	RAF	RAF-1 AON	Radiosensitizer	Solid tumors
	IFN-alpha	rhIFN-alpha	Radiosensitizer	Melanoma
	G-CSF	rhG-CSF	Tumor cytotoxicity	Ca. H&N
	EPO	rhEPO	Increased RBC production	Ca. Cervix
Cox-2 inhibitors		Celecoxib	Radiosensitizer	Ca. Cervix
Steroid signaling modulators		Androgen ablation	Cytoreduction & radiosensitisation	Ca. Prostate
		Tamoxifen	Radiosensitisation	Ca. Breast
		Methyl prednisolone	Stabilize BBB	PCNSL
Immunomodulators	IL-2	rhIL-2	Potentiate cellular immunity	Ca H&N,RCC, NHL
	G-CSF	rhG-CSF	Immune stimulation	NSCLC
	Vaccines	Cytokine-modified cellular vaccine	Adaptive immunotherapy	Malignant glioma
Anti-angiogenic agents	VEGF	Anti-VEGF MAb (Bevacizumab)	Inhibits angiogenesis by neutralizing VEGF	CRC, Ca.Breast, NSCLC
		Thalidomide	Inhibits angiogenesis	NSCLC,Myeloma
Proteosome inhibitors		Bortezomib	Radiosensitiser	Myeloma,NHL