Sites of modulation of opioid tolerance

Receptor
- Desensitization
- Internalization/trafficking

Transduction systems
- Adenylyl cyclase
- G protein regulation
- RGS proteins
- Guanylyl cyclase

Neurotransmitters and their circuits
- Cholecystokinin
- δ Opioid receptor
- Enkephalin
- Glutamate transporter GLT-1
- Glutamine synthase
- Neuropeptide FF
- NO
- NMDA receptors/glutamate
- Orphanin FQ/nociceptin
- Superoxide dismutase

Pharmacokinetic
- P-glycoprotein

RGS, regulator of G-protein signaling.