

# Interaction photon/matter:comparison



Process	incident photon	electron interact.	nucleus interact	Medical use
Elastic scattering	disappear	outer shell oscillation	-	none
Inelastic Compton	scattered	outer shell eject :ions	-	Xray Dx.
Photoelectric effect	absorbed	inner shell eject:ions	-	Xray Dx.
Pair producing	absorbed	-	electron +positron	Xray Tx
Photonuclear r.	absorbed	-	neutron, other	Xray Tx

Dx=  
diagnostic

Tx=  
treatment