

A conjugate comprising one or more bioactive components covalently attached to at least one linear or branched polyalkylene glycol, wherein said polyalkylene glycol does not comprise an alkoxyl group at any terminus and said polyalkylene glycol is attached to a single bioactive component at a single site on the polyalkylene glycol. The conjugate have reduced antigenicity and immunogenicity, compared to alkoxyl-containing polymers and conjugates of the same bioactive component prepared with alkoxyPEGs. The invention also provides compositions comprising such conjugates, kits containing such conjugates and compositions and methods of use of the conjugates and compositions in a variety of therapeutic and diagnostic regimens.