Learning about PRP using cell-based models.

Abstract:
Studies using in vitro cell models enable evaluation of the effects of different PRP products under very controlled and standardized conditions. Therefore the results of such studies build the basis for understanding the variable results of clinical studies on the use of PRPs. The main lessons learned through the use of in vitro cell models are that many different PRP products exist and researchers have to report on component variation within each product. These different products may have distinctive effects on the various cells treated in musculoskeletal injuries; therefore, some products might be more beneficial in certain indication than others. In its utilization in cell models, PRP may generate a variety of positive effects on cell proliferation, recovery, and inflammatory response. There might also be a benefit to adding PRP to current pharmacological therapies (e.g. corticosteroids) to prevent their commonly known negative effects on e.g. tendon and cartilage tissue.